

SPECIAL MEETING

GRISWOLD BOARD OF EDUCATION

Griswold Middle School Cafeteria, First Floor
211 Slater Avenue
Griswold, Connecticut 06351

TUESDAY,
June 10th, 2025
6:00 PM

This meeting will be live-streamed on our District Facebook Page

1. Call to Order
2. Pledge of Allegiance
3. Approval of the Minutes
 - A. Special Meeting-May 21st, 2025
 - B. Regular Meeting-May 22nd, 2025
4. Communications
 - A. May 21st, 2025, Letter from State Representative Brian Lanoue to Governor Ned Lamont
5. Awards/Recognitions
 - A. Recognizing Matthew Perea, GHS Class M State Champion in Track & Field - Discuss
 - B. Recognizing Corey Beck, GPS Network Specialist, as the GPS *Outstanding Employee of the 4th Quarter* for the 2024/2025 School Year
 - C. Recognizing Laurie LaBossiere, GMS Library Media Specialist, for being Named Connecticut 2025 SchoolAI Educator of the Year
6. Consent Agenda (All routine items can be approved with one motion and without discussion. Points of clarification and discussion requests can be allowed.)
 - A. Review, Discussion, and Possible Action to Approve New Policy #5131.911 - Students - Connecticut School Climate Policy - Policy Statement, Second Reading
 - B. Review, Discussion, and Possible Action to Approve New Regulation #5131.911 - Students - Connecticut School Climate Policy - Policy Statement, Second Reading
 - C. Review, Discussion, and Possible Action to Approve the Maintenance & Facilities Checklists for Griswold Elementary School
 - D. Review, Discussion, and Possible Action to Approve the Maintenance & Facilities Checklists for Griswold Middle School
 - E. Review, Discussion, and Possible Action to Approve the Maintenance & Facilities Checklists for Griswold High School
 - F. Review, Discussion, and Possible Action to Approve the Maintenance & Facilities Checklists for Griswold Soule Street Academy
 - G. Review, Discussion, and Possible Action to Approve the Food Services Checklists
7. New Business
 - A. Review, Discussion, and Possible Action to Approve the Connecticut State Department of Education's Authorized Signature Change Form for the ED-099 Agreement for Child Nutrition Programs Agreement

- B. Review and Discussion on Revised Policy #4000.1/4200.1 - Personnel - Certified/Non-Certified - Sexual Harassment/Title IX - First Reading
 - C. Review and Discussion on Revised Policy #5145.44 - Students - Sexual Harassment/Title IX - First Reading
 - D. Review and Discussion on Revised Regulation #4000.1/4200.1 - Personnel - Certified/Non-Certified - Sexual Harassment/Title IX - First Reading
 - E. Review and Discussion on Revised Regulation #5145.44 - Students - Sexual Harassment/Title IX - First Reading
 - F. Review and Discussion on Revised Policy #6146 - Instruction - Graduation Requirements
 - G. Review and Discussion on Revised Policy 5142 - Students - School Safety: Preparation, Response, and After Action, First Reading
 - H. Review and Discussion on New Regulation #5142 - Students - School Safety: Preparation, Response, and After Action, First Reading
 - I. Review and Discussion on Revised Policy 5114 - Students - Suspension and Expulsion/Due Process, First Read
 - J. Gifts and Donations: Review, Discussion, and Possible Action to Accept The Home Depot Foundation Grant Award in the amount of \$1,922.23
 - K. Review and Discussion on the Wanda Brunette Scholarship Awardees
8. Old Business
- A. Review, Discussion, and Possible Action on the Initial Budget Proposal for the 2025-2026 School Year
 - B. Review, Discussion, and Possible Action to Approve the Potential Capital Committee Projects for the 2025-2026 School Year
9. Administrators' Reports
- A. Assistant Superintendent Spotlight on the Revised K-12 Math Curriculum--Glenn LaBossiere, Assistant Superintendent; Pat Feeney, Director of Instructional Improvement-Learner Diversity; and Jessica Gillespie, Director of Instructional Improvement-Innovation
10. Superintendent's Report
- A. Vacancies/Appointments/Resignations
 - B. Timely Updates
 - C. *End-of-the-Year Review and Discussion on the Superintendent's Goals and Objectives for the 2024-2025 School Year, per policy 2400
11. Committee/Board Reports
- A. Policy Subcommittee Update - Yvonne Palasky
 - B. Negotiations Subcommittee Update-Mary Beth Malin
 - C. Facilities Subcommittee Update-Cathy Waselik
12. Adjournment

*The Board may go into executive session on these items per Connecticut State Statute § 1-200 (6).

Board of Education Meeting Notes
SPECIAL MEETING
LIVE: GRISWOLD MIDDLE SCHOOL CAFETERIA
Tuesday, June 10th, 2025
6:00 PM Start Time
ADOPTED GOALS

1. *Griswold Public Schools will commit to the advancement of social and emotional competencies in inclusive and equitable learning environments so that all of our students can grow and thrive.*
2. *Griswold Public Schools will focus on promoting the implementation and expansion of Blended and Personalized Learning in all PreK (Early Childhood Program)-12 learning environments.*
3. *Griswold Public Schools will explore and implement research-based instruction to improve outcomes for all Griswold students.*

ENCLOSED ARE THE MEETING NORMS

NOTE: The purpose of the notes is to provide more context to each agenda item, so that our meeting times are productive and offer Board members the background information to ask for clarification, to ask for additional information, and to discuss matters they deem necessary. If there are any questions or information not included in the notes or packet and you have questions ahead of time, please let us know.

1. Call to Order
2. Pledge of Allegiance
3. Approval of the Minutes
 - A. Special Meeting— May 21st, 2025 - See enclosed.
 - B. Regular Meeting - May 22nd, 2025 - See enclosed.
4. Communications
 - A. May 21st, 2025, Letter from State Representative Brian Lanoue to Governor Ned Lamont - See enclosed.
5. Awards/Recognitions
 - A. Recognizing Matthew Perea, GHS Class M State Champion in Track & Field - Discus - We are so pleased to bring forward GHS senior, Matthew Perea, to celebrate his Class M State Championship title for the Discus in Track & Field.
 - B. Recognizing Corey Beck, GPS Network Specialist, as the GPS Outstanding Employee of the 4th Quarter of the 2024/2025 School Year - We are very pleased to bring forward Corey Beck, who works in our Technology Department as a Network Specialist and who also runs our Griswold Public Schools' Print Shop, as the district's choice for Outstanding Employee of the 4th Quarter for the 2024/2025 school year.
 - C. Recognizing Laurie LaBossiere, GMS Library Media Specialist, for being Named Connecticut 2025 SchoolAI Educator of the Year - It is with great pride and excitement that I share some outstanding news from our district. One of our own educators, Laurie LaBossiere, GMS Library Media Specialist,

has been named the **Connecticut 2025 SchoolIA Educator of the Year**. Please join me in celebrating and congratulating Laurie on this well deserved honor.

6. Consent Agenda (All routine items can be approved with one motion and without discussion. Points of clarification and discussion requests can be allowed)

NOTE: Given that the building/maintenance checklists are routine matters each year, we are including these items on the “consent agenda”. Tom Verville, Director of Facilities, will be available for any questions, etc. Of course, any consent agenda item can be discussed should any BOE member like to discuss and we always welcome Board Members to do so.

- A. Review, Discussion, and Action to Approve New Policy #5131.911 - Students - Connecticut School Climate Policy - Policy Statement, Second Reading
- B. Review, Discussion, and Action to Approve New Regulation #5131.911 - Students - Connecticut School Climate Policy - Policy Statement, Second Reading
- C. Review, Discussion, and Possible Action to Approve the Maintenance & Facilities Checklists for Griswold Elementary School
- D. Review, Discussion, and Possible Action to Approve the Maintenance & Facilities Checklists for Griswold Middle School
- E. Review, Discussion, and Possible Action to Approve the Maintenance & Facilities Checklists for Griswold High School
- F. Review, Discussion, and Possible Action to Approve the Maintenance & Facilities Checklists for Griswold Soule Street Academy
- G. Review, Discussion, and Possible Action to Approve the Food Services Checklists

7. New Business

- A. Review, Discussion, and Possible Action to Approve the Connecticut State Department of Education’s Authorized Signature Change Form for the ED-099 Agreement for Child Nutrition Programs Agreement - The ED-099 Agreement for Child Nutrition Programs requires the Griswold Board of Education to vote and approve the authorized signatures on the change form for the ED-099 Agreement. With the resignation and recent departure of Deb Martin as an authorized signer on the ED099, we must remove her name and add Erik Christensen’s name as the person to sign off until a new Business Manager is hired. As our Interim Director of Fiscal & Personnel Services, he will be the correct person to sign off on the Child Nutrition Programs along with myself as Superintendent of Schools.
- B. Review and Discussion on Revised Policy #4000.1/4200.1 - Personnel - Certified/Non-Certified - Sexual Harassment/Title IX - First Reading
- C. Review and Discussion on Revised Policy #5145.44 - Students - Sexual Harassment/Title IX - First Reading
- D. Review and Discussion on Revised Regulation #4000.1/4200.1 - Personnel - Certified/Non-Certified - Sexual Harassment/Title IX - First Reading
- E. Review and Discussion on Revised Regulation #5145.44 - Students - Sexual Harassment/Title IX - First Reading
- F. Review and Discussion on Revised Policy #6146 - Instruction - Graduation Requirements
- G. Review and Discussion on Revised Policy 5142 - Students - School Safety: Preparation, Response, and After Action, First Reading

H. Review and Discussion on New Regulation #5142 - Students - School Safety: Preparation, Response, and After Action, First Reading

I. Review and Discussion on Revised Policy 5114 - Students - Suspension and Expulsion/Due Process, First Reading

The Board's Policy subcommittee met on June 4th, 2025, and reviewed and revised all policies and regulations listed above and voted to send them forward to the full Griswold Board of Education for a first reading. For all Harassment/Title IX policies and regulations, the only change has been to identify Chris Champlin as the Title IX Coordinator.

J. Gifts and Donations: Review, Discussion, and Possible Action to Accept the Home Depot Foundation Grant Award in the Amount of \$1922.23 - I would ask the Board to accept the grant award from the Home Depot Foundation in the amount of \$1,922.23 with gratitude.

K. Review and Discussion on the Wanda Brunette Scholarship Awardees - Enclosed in your packets are a list of all Tier I, Tier II and Tier III recipients of the Gerard & Wanda Brunet scholarships for your review and discussion, if needed.

8. Old Business

The Board has decided to keep these items on the agenda until further notice. Board members are encouraged to discuss any matters related to the Initial Budget Proposal under this section. Given that the Town of Griswold, Board of Finance, is scheduled to meet on June 11th, 2025, I would suggest that we wait for direction from the BOF. Additionally, until our budget passes, no suggested changes will be brought forward.

A. Review, Discussion, and Possible Action on the Initial Budget Proposal for the 2025-2026 School Year

B. Review, Discussion, and Possible Action to Approve the Potential Capital Committee Projects for the 2025-2026 School Year

9. Administrators' Reports - Reports are enclosed/attached.

A. Assistant Superintendent Spotlight on the Revised K-12 Math Curriculum--Glenn LaBossiere, GPS Assistant Superintendent, Pat Feeney, Director of Instructional Improvement - Learner Diversity, and Jessica Gillespie, Director of Instructional Improvement - Innovation

10. Superintendent's Report

A. Vacancies/Appointments/Resignations - Report is enclosed/attached.

B. Timely Updates

C. *End-of-the-Year Review and Discussion on the Superintendent's Goals and Objectives for the 2024/2025 School Year, per Policy 2400 - This item will be taken up in executive session at the end of the special meeting for review and discussion.

11. Committee/Board Reports

A. Policy Subcommittee Update--Yvonne Palasky - Mrs. Palasky will provide an update.

B. Negotiations Subcommittee Update-- Mary Beth Malin - Mrs. Malin will provide an update.

C. Facilities Subcommittee Update - Cathay Waselik - Mrs. Waselik will provide an update.

12. Adjournment

BOE Meeting Norms

Norm	By . . .
<i>We adhere to clear meeting guidelines</i>	<ul style="list-style-type: none"> • Focusing on students • Having high expectations • Previewing topics and ensuring the essential items are included on the agenda • Staying on topic • Participating in an orderly way • Appreciating community members' participation • Notifying the chair or superintendent if we will be absent
<i>We are actively involved</i>	<ul style="list-style-type: none"> • Participating and sharing our thoughts • Asking questions and seeking clarity • Using all available information to make informed decisions
<i>We celebrate successes</i>	<ul style="list-style-type: none"> • Sharing celebrations at each meeting • Highlighting student successes
<i>We respect each other</i>	<ul style="list-style-type: none"> • Hearing all voices • Sharing different views • Maintaining positive relationships despite differing opinions • Being courteous

SPECIAL MEETING

GRISWOLD BOARD OF EDUCATION

**Griswold Learning Commons—2nd Floor
211 Slater Avenue
Griswold, Connecticut 06351**

**WEDNESDAY,
May 21st, 2025
5:00 PM**

1. Call to Order - A special meeting of the Griswold Board of Education was held on Wednesday, May 21st, 2025, in the Griswold Middle School Learning Commons/Library Media Center, located on the second floor, 211 Slater Avenue, Griswold, CT. The meeting was called to order at 5:00 PM by Mary Beth Malin, Griswold Board of Education Chair. At this time, Mary Beth Malin noted for the record that she would be recusing herself from items 2 and 3. She then turned the meeting over to Yvonne Palasky to Chair in her absence. Mary Beth Malin then left the meeting room.

PRESENT Mary Beth Malin, Griswold BOE Chair; Yvonne Palasky, Griswold BOE Vice-Chair, Jaimee O'Neill-Eaton, Griswold BOE Secretary; Stuart Norman, Jr. (entered at 5:03 PM), Jennifer Norman, and Cathy Waselik, Griswold BOE Members.

ALSO PRESENT Sean McKenna, GPS Superintendent of Schools; Jessica Kennedy, Legal Counsel for the Griswold Board of Education.

ABSENT Mary Beth Malin recused herself after calling the meeting to order at 5:00 PM.

2. *Review, Discussion, and Possible Action on Report on Investigation of Complaint Received by Board of Education – The Superintendent presented a report to the Griswold Board of Education for them to review regarding a complaint that was received.

Yvonne Palasky asked if any Board members have anything to say prior to entering executive session.

Mr. Stuart Norman, Jr. requested a correction to the report that was handed out to at this evening's Special BOE meeting. Mr. Stuart Norman, Jr. stated that the report indicated that Mr. Norman made a statement and he wanted it noted that it was not him. Mr. Stuart Norman, Jr. suggested that a correction be made in the report to say that Mr. "G" Norman would have been the person interviewed.

No action was taken.

The Board then motioned to enter into executive session at 5:07 PM for item #3 for review, discussion and action regarding pending claim of Board member against Board Chair.

MOTION

By Jaimee O'Neill-Eaton

Seconded by Cathy Waselik

That the Board enter into executive session for agenda item 3 to discuss a matter that would result in the disclosure of public records or the information contained therein as described in Connecticut General Statutes Sections 1-200(6) (B) and only invite the following individuals to attend the executive session: Sean McKenna, GPS Superintendent of Schools; and Jessica Kennedy, Counsel for the Griswold Board of Education.

Motion unanimously carried.

3. *Review, Discussion, and Possible Action Regarding Pending Claim of Board Member against Board Chair – This item was referred to and discussed in executive session.

The Board came out of executive session at 5:27 PM with no further action at this time.

4. Adjournment

MOTION

By Cathy Waselik

Seconded by Jaimee O'Neill-Eaton

To adjourn the special meeting at 5:27 PM.

Motion unanimously carried.

*The Board may go into executive session on these items per Connecticut State Statute § 1-200 (6).

**REGULAR MEETING
GRISWOLD BOARD OF EDUCATION**

**THURSDAY,
May 22nd, 2025**

DRAFT

1. Call to Order – A regular meeting of the Griswold Board of Education was held on Thursday, May 22nd, 2025, in the Griswold Middle School Cafeteria, located on the first floor, 211 Slater Avenue, Griswold, CT. The meeting was called to order at 6:00 PM by Mary Beth Malin, Griswold Board of Education Chair.

PRESENT

Mary Beth Malin, Griswold BOE Chair; Yvonne Palasky, Griswold BOE Vice-Chair, Jaimee O'Neill-Eaton, Griswold BOE Secretary; Stuart Norman, Jr.; Jennifer Norman, Cathy Waselik, and Donald Desrochers, Griswold BOE Members.

ALSO PRESENT

Sean McKenna, GPS Superintendent of Schools; Glenn LaBossiere, GPS Assistant Superintendent; Christopher Champlin, GPS Director of Student Services; Stephen Cravinho, GPS Campus Wide Activities & Athletic Director; Erin Palonen, GHS Principal; Arthur Howe, GHS Associate Principal; Louis Zubek, GMS Principal; and Joseph Bordeau, GES Principal.

ABSENT

Deborah Martin, GPS Director of Fiscal & Personnel Services; Steven Bourque, GMS Assistant Principal; and Jacqueline Love, GES Assistant Principal.

2. Pledge of Allegiance - The Board and the audience performed the Pledge of Allegiance.
3. Approval of the Minutes
 - A. Regular Meeting – May 8th, 2025

MOTION

By Yvonne Palasky
Seconded by Jaimee O'Neill-Eaton
To approve the regular meeting minutes of May 8th, 2025, as presented.
Motion unanimously carried.

4. Communications – There were no communications to share.
5. Awards/Recognitions
 - A. Recognizing CABA Student Leadership Award Recipients - GMS - Anna Jagielo, Claire Norman
 - B. Recognizing CABA Student Leadership Award Recipients - GHS - Alanna Sutherland, Micah Hamel
 - C. Recognizing Connecticut Association of Schools (CAS) Middle Level Scholar Leadership Award Recipients - GMS - Shreya Patel, Emily Tessier
 - D. Recognizing Connecticut Association of Schools (CAS) Scholar Athlete Award Recipients - GHS - Abigail Matheson, Tyler Silva

- E. Recognizing Connecticut Association of Schools (CAS) Visual Arts Award Recipient - GHS - Ayumi Margulies
- F. Recognizing Connecticut Association of Schools (CAS) Performing Arts Award Recipient - GHS - Natalie Obuchowski

The Board, the Superintendent, administration and audience members took time to recognize several of our students from Griswold Middle School and Griswold High School who were chosen as CABA (CT Association of Boards of Education) student leaders and CAS (CT Association of Schools) award recipients in the areas of middle level scholar leaders, scholar athletes, and visual and performing arts recipients.

- G. Honoring Griswold Public Schools' Retirees – The Board took time to recognize Griswold Public School employees who plan to retire at the conclusion of the 2024/2025 school year. Those in attendance who were recognized were: Kevin Kinsall, GES Music teacher, Renee Normand, GMS School Nurse and District Coordinator, and Donald Butremovic, GHS custodian. Those who are retiring and could not attend this evening's meeting include: Jacqueline Bill, GES Kindergarten teacher; Tammy Henn, GHS Café Manager, and Jo-Ann Pedersen, GES Café Service Provider.

The Board took a short recess at 6:25 PM.

The Board re-convened at 6:35 PM.

Mary Beth Malin asked that it be noted for the record that Jennifer Norman left the Griswold Board of Education meeting at 6:35 PM.

- 6. Public Comments – Wayne Malin of 11 Pequot Trail in Griswold shared that he recently attended a VFW event and there were students there from GHS along with GHS teacher, Cole Bocciarelli, and an alumni from GHS, Katarina Bromkamp. The students discussed topics related to artificial intelligence and what is real and what is fake news. Mr. Malin thought it was great to see young adults participating in conversations and taking an interest in politics.

7. New Business

- A. Review and Discussion to Approve New Policy #5131.911 – Students – Connecticut School Climate Policy – Policy Statement, First Reading – The Board had a first reading of new policy #5131.911 and will bring it back to the next BOE meeting for action to approve.
- B. Review and Discussion to Approve New Regulation #5131.911 – Students – Connecticut School Climate, First Reading – The Board had a first reading on new regulation #5131.911 and will bring it back to the next BOE meeting for action to approve.
- C. Review, Discussion, and Possible Action to Waive the Second Readings of Policy and Regulation of 6142.101 – Instruction – Student Nutrition and Physical Activity (School Wellness Policy) – The Board waived the 2nd readings for policy and regulation #6142.101.

MOTION

By Yvonne Palasky

Seconded by Jaimee O'Neill-Eaton

To waive the 2nd meeting requirement for policy and regulation #6142.101 – Instruction – Student Nutrition and Physical Activity (School Wellness Policy).

Motion unanimously carried.

- D. Review, Discussion, and Possible Action to Approve Revised Policy 6142.101 – Instruction – Student Nutrition and Physical Activity (School Wellness Policy), First Reading

MOTION

By Yvonne Palasky

Seconded by Jaimee O'Neill-Eaton

To approve revised policy #6142.101 – Instruction – Student Nutrition and Physical Activity (School Wellness Policy).

Motion unanimously carried.

- E. Review, Discussion, and Possible Action to Approve New Regulation #6142.101 – Instruction – Student Nutrition and Physical Activity (School Wellness Regulation), First Reading

MOTION

By Yvonne Palasky

Seconded by Jaimee O'Neill-Eaton

To approve revised regulation #6142.101 – Instruction – Student Nutrition and Physical Activity (School Wellness Regulation).

Motion unanimously carried.

- F. Review, Discussion, and Possible Action to Approve Job Description for Math Interventionist (PK-12)

MOTION

By Yvonne Palasky

Seconded by Jaimee O'Neill-Eaton

To approve job description for Math Interventionist (PK-12), as presented.

Motion unanimously carried.

- G. Review, Discussion, and Possible Action to Approve Job Description for Integrated Instruction Mentor

MOTION

By Yvonne Palasky

Seconded by Jaimee O'Neill-Eaton

To approve the job description for Integrated Instruction Mentor, as presented.

Motion unanimously carried.

- H. Review, Discussion, and Possible Action to Reschedule the Annual Evaluation of the Superintendent of Schools to a Board meeting in June

MOTION

By Jaimee O'Neill-Eaton

Seconded by Yvonne Palasky

To reschedule the annual evaluation of the Superintendent of Schools to a Board meeting in June.

Motion unanimously carried.

9. Old Business

A. Review, Discussion, and Possible Action on the Initial Budget Proposal for the 2025-2026 School Year with Proposed Adjustments

MOTION

By Jaimee O'Neill-Eaton

Seconded by Cathy Waselik

To table the topic on the initial budget proposal for the 2025/2026 school year.

Motion unanimously carried.

B. Review, Discussion, and Possible Action to Approve the Potential Capital Committee Projects for the 2025-2026 School Year

MOTION

By Jaimee O'Neill-Eaton

Seconded by Cathy Waselik

To table the topic of the potential capital committee projects for the 2025/2026 school year.

Motion unanimously carried.

10. Administrators' Reports

A. Assistant Superintendent

1. Professional Development – Glenn LaBossiere, GPS Assistant Superintendent, shared details of the professional development schedule for Friday, May 23rd. This will be the final professional development session for certified faculty and staff for the 2024/2025 school year.

2. Teacher of the Year Selection Process – Glenn LaBossiere, GPS Assistant Superintendent, shared details on the process for selecting the *Teacher of the Year* for Griswold Public Schools. He reported that the *Teacher of the Year* Selection Committee met today and the choice for Griswold *Teacher of the Year* will be announced within the next couple of weeks.

3. School Climate Surveys – Glenn LaBossiere, GPS Assistant Superintendent, shared details on the upcoming school climate survey that will be made available to students. He also noted that faculty and staff will also be expected to complete the surveys and the results will be reviewed and shared with the Board at the start of the 2025/2026 school year.

11. Superintendent's Report

- A. Vacancies/Appointments/Resignations – The Board received a list of vacancies, appointments, and resignations.
- B. Timely Updates – The Superintendent reported on the next financial update to the Board, the recent audit with the Food Service department, building checklists and spring athletic participation numbers.

12. Committee/Board Reports

- A. Public Relations Subcommittee Update—Jaimee O'Neill-Eaton – The Public Relations subcommittee meeting for this evening was canceled and there is no report for this evening.
- B. Negotiations Subcommittee Update – Mary Beth Malin – The Board received an update from Mary Beth Malin, Chair of the Negotiations subcommittee, on the recent work of the subcommittee.

13. Other Business That May Formerly Come Before this Board – Jaimee O'Neill-Eaton requested that the following be read into the record for this evening's Board of Education meeting:

Madam Chair, I would like to bring forward a matter that I believe is critical to the integrity and functionality of this board. As you are aware, there is currently a legal matter pending involving a claimant who is also a sitting member of this board. Despite their role as a claimant in this matter, they have continued to participate in board discussions involving our legal counsel and the superintendent. This raises a serious concern. The continued presence of the claimant in these discussions impedes the board's ability to engage in open, candid communication with our legal counsel. It creates an environment where board members may feel constrained or intimidated, whether directly or indirectly, in discussing legal strategy or expressing their views freely. For the sake of transparency, fairness, and to preserve the integrity of our decision-making process, I believe it is in the board's best interest to consider forming an Ad-Hoc Committee for legal matters. This committee would be composed of board members excluding both the claimant and any named respondents. Its purpose would be to provide a forum where the board can have unencumbered discussions about pending legal matters and receive legal guidance without concerns about conflict or undue influence. With that in mind, I respectfully request that the Chair poll the board to determine whether there is support for the creation of such a committee.

At this time, the Board chair polled each Board member on their support for the formation of an AdHoc committee, and the results were as follows:

Ayes – Cathy Waselik, Yvonne Palasky, Donald Desrochers, Jaimee O'Neill-Eaton

Nays – Stuart Norman, Jr.

Abstain –

The ayes prevailed.

Jaimee O'Neill-Eaton requested that a special Board of Education meeting be arranged within the next week to develop and vote on this Ad hoc committee. BOE Chair, Mary Beth Malin, reported that she would meet with the Superintendent to make the arrangement for a special Board of Education meeting and notify the Board. Mrs. Malin also shared that she will have Attorney Dan Murphy weigh in on this matter.

14. Adjournment

MOTION

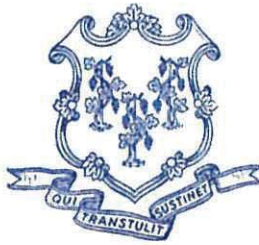
By Yvonne Palasky

Seconded by Cathy Waselik

To adjourn the regular Board of Education meeting at 6:54 PM.

Motion unanimously carried.

Minutes recorded by: Robin Drobiak



State of Connecticut

HOUSE OF REPRESENTATIVES
STATE CAPITOL
HARTFORD, CONNECTICUT 06106-1591

REPRESENTATIVE BRIAN LANOUE
FORTY-FIFTH ASSEMBLY DISTRICT

LEGISLATIVE OFFICE BUILDING, ROOM 4200
300 CAPITOL AVENUE
HARTFORD, CT 06106-1591

CAPITOL: (860) 240-8700
TOLL FREE: (800) 842-1423
Brian.Lanoue@cga.ct.gov

MEMBER
COMMITTEE ON CHILDREN
PUBLIC SAFETY AND SECURITY COMMITTEE
VETERANS' AFFAIRS COMMITTEE

Governor Ned Lamont
The Office of the Governor
210 Capitol Avenue
Hartford, CT 06106-1591

May 21, 2025

Dear Governor Lamont,

I hope this letter finds you well. I am writing with a continued request regarding the Education Cost Sharing (ECS). As you are aware, your proposed budget eliminated the hold harmless provision for all towns who were scheduled to lose state funding in the 2017 updated formula for the ECS grant. For several years now, this funding had been held harmless and my constituents have been relieved to see this policy continue. However, recently I have been told that the state budget for FY 26 and FY 27 may not contain this provision. It is of extreme importance that this does not happen, which is why I proposed H.B. 5126, a bill that would hold towns harmless for any reduction in grant amounts.

The school systems in eastern Connecticut are already at a disadvantage, with the amount of funds they receive being significantly less than that of other schools across the state due to demographic or other changes in the calculation of the components of the grant. Despite these challenges, the schools in my district have been exceptional at leading, teaching, and forming these young students into hard-working members of society.

Removing the hold harmless provision in ECS funding from these schools will only make what is already a challenging system even more difficult to navigate. These students require additional supplies, support, and funding, not less. Stripping the funding they currently receive from ECS will inevitably harm the education system in eastern Connecticut.

I respectfully request that you continue to hold harmless the ECS funding for schools in my district and other communities who have benefited in the past. Thank you for your consideration, and I welcome the opportunity to hear from you.

Sincerely,

Brian Lanoue

A handwritten signature in blue ink that reads "Brian I. Lanoue".

State Representative —45th District



Griswold Public Schools

211 Slater Avenue
Griswold, Connecticut 06351

Tel: (860) 376-7600 Fax: (860) 376-7607

Sean McKenna, Superintendent of Schools
Deborah A. Martin, Director of Fiscal & Personnel Services

Glenn LaBossiere, Assistant Superintendent of Schools
Christopher Champlin, Director of Student Services

June 5th, 2025

Matthew Perea
Ann Street
Jewett City, CT 06351

Dear Matthew,

On behalf of the Griswold Board of Education, I am pleased to extend our warmest congratulations to you on your outstanding achievement as the Class M State Champion in the discus for Outdoor Track. Your hard work, dedication, and exceptional performance have brought pride and recognition to our school community.

In honor of your accomplishment, we would like to formally recognize you at the upcoming Board of Education meeting. The meeting will be held on:

Date: Tuesday, June 10th, 2025

Time: 6:00 PM

Location: Griswold Middle School Cafeteria
211 Slater Avenue
Griswold, CT 06351

We invite you and your family to attend so that we may publicly acknowledge your success and present you with a certificate of recognition.

We look forward to celebrating your achievement and sharing this proud moment with the school community.

Sincerely,

Sean P. McKenna,
Superintendent of Schools

cc: GHS Administration
S. Cravinho, GPS Athletic Director
K. Tobler, GHS Track Coach
J. Fleming, GHS Assistant Track Coach
Griswold BOE



Griswold Public Schools

211 Slater Avenue
Griswold, Connecticut 06351

Tel: (860) 376-7600 Fax: (860) 376-7607

Sean McKenna, Superintendent of Schools
Deborah A. Martin, Director of Fiscal & Personnel Services

Glenn LaBossiere, Assistant Superintendent of Schools
Christopher Champlin, Director of Student Services

June 5th, 2025

Mr. Corey Beck
660 Route 32
North Franklin, CT 06254

Dear Corey,

I am pleased to notify you that you have been nominated and chosen as GPS's
"Outstanding Employee of the Fourth Quarter for the 2024/2025 school year!"

I would like to invite you to an upcoming Board of Education meeting to be recognized for this honor. The meeting is scheduled to take place on **Tuesday, June 10th, 2025 at 6:00 PM** in the GMS Cafeteria, located on the first floor, 211 Slater Avenue, Griswold, Connecticut. Please confirm with my Executive Assistant, Robin Drobiak, whether you will be able to attend.

I am looking forward to recognizing and seeing you at the meetingth! Congratulations on this well-deserved recognition!

Sincerely,

Sean P. McKenna,
Superintendent of Schools

cc: K. Gunderman, GPS Technology Director
BOE
Personnel File



Griswold Public Schools

211 Slater Avenue
Griswold, Connecticut 06351

Tel: (860) 376-7600 Fax: (860) 376-7607

Sean McKenna, Superintendent of Schools
Deborah A. Martin, Director of Fiscal & Personnel Services

Glenn LaBossiere, Assistant Superintendent of Schools
Christopher Champlin, Director of Student Services

June 5th, 2025

Mrs. Laurie LaBossiere
46 Shore Drive
Griswold, CT 06351

Dear Laurie,

Congratulations on being chosen as Connecticut's 2025 SchoolAI Educator of the Year, a well-deserved honor that reflects your innovative use of technology, your dedication to student learning, and your leadership in shaping the future of education.

To formally recognize your outstanding achievement, we would like to honor you at an upcoming Griswold Board of Education meeting.

Date: Tuesday, June 10th, 2025

Time: 6:00 PM

Location: Griswold Middle School Cafeteria
211 Slater Avenue
Griswold, CT 06351

Please confirm with my Executive Assistant, Robin Drobiak, whether you will be able to attend.

I am looking forward to recognizing and seeing you at the meeting! Congratulations on this well-deserved award!

Sincerely,

Sean P. McKenna,
Superintendent of Schools

cc: GMS Administration
BOE
Personnel File



Congratulations! You're Connecticut's 2025 SchoolAI Educator of the Year!

Dear Laurie,

You've been selected as Connecticut's 2025 SchoolAI Educator of the Year!

Your innovative approach to education shines brightly. We've been inspired by how you transform learning experiences, creating those meaningful moments where students light up with understanding.

Every educator impacts lives, but your dedication to meeting each student where they are truly stands out. As one principal recently shared with us, "The ripple effect of excellent teaching extends far beyond the classroom walls" - and your ripples are reaching throughout your community.

A mandated policy.

Students

Connecticut School Climate Policy

Policy Statement

All schools must support and promote teaching and learning environments where all students thrive academically and socially, have a strong and meaningful voice, and are prepared for lifelong success.

Implementation of the following set of guiding principles and systemic strategies will promote a positive school climate, which is essential to achieving these goals.

This policy sets forth the framework for an effective and informed school climate improvement process, which includes a continuous cycle of (i) planning and preparation, (ii) evaluation, (iii) action planning, and (iv) implementation, and serves to actualize the Connecticut School Climate Standards, as detailed herein.

The Board recognizes that improving school climate is contextual. Each school needs to consider its history, strengths, needs, and goals. Furthermore, this policy will support and promote the development of restorative action plans that will create and sustain safe and equitable learning environments.

The _____ District Board of Education adopts this policy.

Definitions

1. **"School climate"** means the quality and character of the school life, with a particular focus on the quality of the relationships within the school community, and which is based on patterns of people's experiences of school life and that reflects the norms, goals, values, interpersonal relationships, teaching, learning, leadership practices and organizational structures within the school community.
2. **"Positive Sustained School Climate"** is the foundation for learning and positive youth development and includes:
 - a. Norms, values, and expectations that support people feeling socially, emotionally, culturally, racially, intellectually, and physically safe.
 - b. People who treat one another with dignity and are engaged, respected and solve problems restoratively.
 - c. A school community that works collaboratively together to develop, live, and contribute to a shared school vision.
 - d. Adults who model and nurture attitudes that emphasize the benefits and satisfaction gained from learning; and
 - e. A school community that contributes to the operations of the school and the care of the physical environment.

Students

Connecticut School Climate Policy

Definitions (continued)

3. **“Social and emotional learning”** means the process through which children and adults achieve emotional intelligence through the competencies of self-awareness, self-management, social awareness, relationship skills and responsible decision-making.
4. **“Emotional intelligence”** means the ability to (A) perceive, recognize, and understand emotions in oneself or others, (B) use emotions to facilitate cognitive activities, including, but not limited to, reasoning, problem solving and interpersonal communication, (C) understand and identify emotions, and (D) manage emotions in oneself and others.
5. **“Bullying”** means unwanted and aggressive behavior among children in grades kindergarten to twelve, inclusive, that involves a real or perceived power imbalance.
6. **“School environment”** means a school-sponsored or school-related activity, function or program, whether on or off school grounds, including at a school bus stop or on a school bus or other vehicle owned, leased or used by a local or regional board of education, and may include other activities, functions or programs that occur outside of a school-sponsored or school-related activity, function or program if bullying at or during such other activities, functions or programs negatively impacts the school environment.
7. **“Cyberbullying”** means any act of bullying through the use of the Internet, interactive and digital technologies, cellular mobile telephone or other mobile electronic devices or any other electronic communication.
8. **“Teen dating violence”** means any act of physical, emotional or sexual abuse, including stalking, harassing and threatening, that occurs between two students who are currently in or who have recently been in a dating relationship.
9. **“Mobile electronic device”** means any hand-held or other portable electronic equipment capable of providing data communication between two or more individuals, including, but not limited to, a text messaging device, a paging device, a personal digital assistant, a laptop computer, equipment that is capable of playing a video game or a digital video disk or equipment on which digital images are taken or transmitted.
10. **“Electronic communication”** means any transfer of signs, signals, writing, images, sounds, data or intelligence of any nature transmitted in whole or in part by a wire, radio, electromagnetic, photoelectronic or photo-optical system.

Students

Connecticut School Climate Policy

Definitions (continued)

11. **"School climate improvement plan"** means a building-specific plan developed by the school climate committee, in collaboration with the school climate specialist, using school climate survey data and any other relevant information, through a process that engages all members of the school community and involves such members in a series of overlapping systemic improvements, school-wide instructional practices and relational practices that prevent, identify and respond to challenging behavior, including, but not limited to alleged bullying and harassment in the school environment.
12. **"Restorative practices"** means evidence and research-based system-level practices that focus on (A) building high-quality, constructive relationships among the school community, (B) holding each student accountable for any challenging behavior, and (C) ensuring each such student has a role in repairing relationships and reintegrating into the school community.
13. **"School climate survey"** means a research-based, validated and developmentally appropriate survey administered to students, school employees and families of students, in the predominant languages of the members of the school community, that measures and identifies school climate needs and tracks progress through a school climate improvement plan.
14. **"Connecticut school climate policy"** means the school climate policy developed, updated and approved by an association in the state that represents boards of education and adopted by the Social and Emotional Learning and School Climate Advisory Collaborative, established pursuant to section 10-222q of the general statutes, as amended by this act, that provides a framework for an effective and democratically informed school climate improvement process that serves to implement Connecticut school climate standards, and includes a continuous cycle of (A) planning and preparation, (B) evaluation, (C) action planning, and (D) implementation.
15. **"School employee"** means (A) a teacher, substitute teacher, administrator, school superintendent, school counselor, school psychologist, social worker, school nurse, physician, paraeducator or coach employed by a local or regional board of education, or (B) any other individual who, in the performance of his or her duties, has regular contact with students and who provides services to or on behalf of students enrolled in a public school, pursuant to a contract with a local or regional board of education.
16. **"School community"** means any individuals, groups, businesses, public institutions and nonprofit organizations that are invested in the welfare and vitality of a public school system and the community in which it is located, including, but not limited to, students and their families, members of the local or regional board of education, volunteers at a school and school employees.

Students

Connecticut School Climate Policy

Definitions (continued)

17. **“Challenging behavior”** means behavior that negatively impacts school climate or interferes, or is at risk of interfering, with the learning or safety of a student or the safety of a school employee.
18. **“Evidence Based Practices”** in education refers to instructional and school-wide improvement practices that systematic empirical research has provided evidence of statistically significant effectiveness.
19. **“Effective School Climate Improvement”** is a restorative process that engages all stakeholders in the following six essential practices:
 - A. Promoting decision-making that is collaborative and actively involves all stakeholders (e.g., school personnel, students, families, community members) with varied and meaningful roles and perspectives where all voices are heard;
 - B. Utilizing psychometrically sound quantitative (e.g., school climate survey, discipline data) and qualitative (e.g., interviews, focus groups) data to drive action planning, preventive and intervention practices and implementation strategies that continuously improve all dimensions of school climate, including regularly collecting data to evaluate progress and inform the improvement process;
 - C. Tailoring improvement goals to the unique needs of the students, educators, and broader school community. These goals shall be integrated into overall school improvement efforts thereby leveraging school strengths to address evidence-based areas of need, while sustaining the improvement process over time;
 - D. Fostering adult learning in teams and/or professional learning communities to build capacity building among school personnel and develop common staff skills to educate the whole child;
 - E. Basing curriculum, instruction, student supports, and interventions on scientific research and grounding in cognitive, social-emotional, and psychological theories of youth development. Interventions include strength-based programs and practices that together represent a comprehensive continuum of approaches to promote healthy student development and positive learning environments as well as address individual student barriers to learning and adult barriers to teaching; and
 - F. Strengthening policies and procedures related to:
 - a. climate and restorative informed teaching and learning environments;
 - b. infrastructure to facilitate data collection, analysis, and effective planning;
 - c. implementation of school climate improvement plans with the goal of becoming restorative;
 - d. evaluation of the school climate improvement process; and
 - e. sustainability of school climate and restorative improvement efforts.

Students

Connecticut School Climate Policy (continued)

School Climate Coordinator Roles and Responsibilities

For the school year commencing July 1, 2025, and each school year thereafter, the superintendent of schools for each school district, or an administrator appointed by the superintendent, shall serve as the school climate coordinator for the school district.

The school climate coordinator shall be responsible for:

1. providing district-level leadership and support for the implementation of the school climate improvement plan for each school;
2. collaborating with the school climate specialist, for each school to (A) develop a continuum of strategies to prevent, identify and respond to challenging behavior, including, but not limited to, alleged bullying and harassment in the school environment, and (B) communicate such strategies to the school community, including, but not limited to, through publication in the district student handbook;
3. collecting and maintaining data regarding school climate improvement, including, but not limited to, school discipline records, school climate assessments, attendance rates, social and emotional learning assessments, academic growth data, types and numbers of alleged and verified bullying complaints submitted by members of the school community, types and numbers of challenging behaviors addressed using the restorative practices response policy, and data concerning the implementation and outcome of restorative practices; and
4. meeting with the school climate specialist for each school at least twice during the school year to (A) identify strategies to improve school climate, including, but not limited to, by responding to challenging behavior and implementing evidence and research-based interventions, such as restorative practices, (B) propose recommendations for revisions to the school climate improvement plan, and (C) assist with the completion of the school climate survey.

School Climate Specialist

For the school year commencing July 1, 2025, and each school year thereafter, the principal of each school, or a school employee who holds professional certification pursuant to section 10-145 of the general statutes, is trained in school climate improvement or restorative practices and is designated as the school climate specialist by the school principal, shall serve as the school climate specialist for the school.

The school climate specialist shall be responsible for:

1. leading in the prevention, identification, and response to challenging behavior, including, but not limited to, reports of alleged bullying and harassment;

Students

Connecticut School Climate Policy

School Climate Specialist (continued)

2. implementing evidence and research-based interventions, including, but not limited to, restorative practices;
3. scheduling meetings for and leading the school climate committee; and
4. leading the implementation of the school climate improvement plan.

School Climate Committee

For the school year commencing July 1, 2025, and each school year thereafter, each school climate specialist shall appoint members to the school climate committee who are diverse, including members who are racially, culturally, and linguistically representative of various roles in the school community.

The school climate committee shall consist of:

1. the school climate specialist;
2. a teacher selected by the exclusive bargaining representative for certified employees chosen pursuant to section 10-153b of the general statutes;
3. a demographically representative group of students enrolled at the school, as developmentally appropriate;
4. families of students enrolled at the school; and
5. at least two members of the school community, as determined by the school climate specialist.

Membership of the school climate committee shall be annually reviewed and approved by the school climate specialist, in coordination with the school climate coordinator.

The school climate committee shall be responsible for:

1. assisting in the development, annual scheduling, and administration of the school climate survey, and reviewing of the school climate survey data.
2. using the school climate survey data to identify strengths and challenges to improve school climate, and to create or propose revisions to the school climate improvement plan.

Students

Connecticut School Climate Policy

School Climate Committee (continued)

3. assisting in the implementation of the school climate improvement plan and recommending any improvements or revisions to the plan.
4. advising on strategies to improve school climate and implementing evidence and research-based interventions, including, but not limited to, restorative practices, in the school community.
5. annually providing notice of the uniform challenging behavior and/or bullying complaint form, or similar complaint form used by the school, to the school community.

School Climate Survey

For the school year commencing July 1, 2025, and biennially thereafter, the school climate committee, for each school, shall administer a school climate survey to students, school employees and families of students, provided the parent or guardian of each student shall receive prior written notice of the content and administration of such school climate survey and shall have a reasonable opportunity to opt such student out of such school climate survey.

School Climate Improvement Plan

For the school year commencing July 1, 2025, and each school year thereafter, the school climate specialist, for each school, in collaboration with the school climate coordinator, shall develop, and update as necessary, a school climate improvement plan. Such plan shall be based on the results of the school climate survey, any recommendations from the school climate committee, including the protocols, supports, and any other data the school climate specialist and school climate coordinator deem relevant. Such plan shall be submitted to the school climate coordinator for review and approval on or before December thirty-first of each school year. Upon approval of such plan, a written or electronic copy of such plan shall be made available to members of the school community and such plan shall be used in the prevention of, identification of and response to all challenging behavior.

Additionally, districts may place the school climate improvement plans into their district and school improvement plans.

Training

For the school year commencing July 1, 2024, and each school year thereafter, each local and regional Board of Education shall provide resources and training to school employees regarding:

1. social and emotional learning;
2. school climate and culture and evidence and research-based interventions; and
3. restorative practices.

Students

Connecticut School Climate Policy

Training (continued)

Such resources and training may be made available at each school under the jurisdiction of such board and include technical assistance in the implementation of a school climate improvement plan. Any school employee may participate in any such training offered by the board under this section. The school climate coordinator, shall select, and approve, the individuals or organizations that will provide such training.

Funding

The school district shall in its discretion allocate sufficient funding to satisfy the requirements of this policy for all schools in the district. Such funding shall be distributed accordingly, with Superintendent approval, for assessments and professional development, as well as for school community outreach, training, and technical assistance.

Accountability

The Board shall adopt and allocate adequate resources to support the Connecticut School Climate Policy and adhere to state regulations set forth in Public Act 23-167.

Connecticut School Climate Standards

1. The school district community¹ has a shared vision and plan for promoting and sustaining a positive school climate² that focuses on prevention, identification, and response to all challenging behavior³.
2. The school district community adopts policies that promote:
 - a. a sound school environment that develops and sustains academic, social, emotional, ethical, civic, and intellectual skills; and
 - b. a restorative school environment focused on overcoming barriers to teaching and learning by building and supporting meaningful school-wide relationships, and intentionally re-engaging any disengaged students, educators, and families of students in the school community.

¹ School Community means any individuals, groups or businesses, public institutions and nonprofit organizations invested in the welfare and vitality of a public school system and the community in which it is located, including, but not limited to, students and their families, members of the local or regional board of education, volunteers at a school and school employees.

² School climate means the quality and character of the school life, with a particular focus on the quality of relationships within the school community, and which is based on patterns of people's experiences of school life, and that reflects the norms, goals, values and interpersonal relationships, teaching, learning, leadership practices and organizational structures within the school community.

³ Challenging behavior means behavior that negatively impacts school climate or interferes, or is at risk of interfering, with the learning or safety of a student or the safety of a school employee.

Students

Connecticut School Climate Policy

Connecticut School Climate Standards (continued)

3. The school community's practices are identified, prioritized, and supported to:
 - a. promote learning and the positive academic, social, emotional, ethical, and civic development of students;
 - b. enhance engagement in teaching, learning, and school-wide activities;
 - c. address barriers to teaching and learning; and
 - d. develop and sustain a restorative infrastructure that builds capacity, accountability, and sustainability.
4. The school community creates a school environment⁴ where *everyone* is safe, welcomed, supported, and included in all school-based activities.
5. The school community creates a restorative system that cultivates a sense of belonging through norms and activities that promote social and civic responsibility, and a dedication to cultural responsiveness, diversity, equity, and inclusion.

Policy adopted:

cps 11/23

⁴ School environment means a school-sponsored or school-related activity, function or program, whether on or off school grounds, including at a school bus stop or on a school bus or other vehicle owned, leased or used by a local or regional board of education, and may include other activities, functions or programs if bullying at or during such other activities, functions, or programs negatively impacts the school environment.

Challenging Behavior Reporting Form

This form is not required by law or policy but serves as a model challenging behavior reporting form that local and regional boards of education may adapt and adopt.

Instructions

This form is for **students, parents or guardians of students enrolled in the school, and school employees** to report any alleged challenging behavioral incidents. Challenging behavior is behavior that negatively impacts school climate or interferes, or is at risk with interfering, with the learning or safety of a student or the safety of a school employee. This form should also be used to report alleged bullying incidents, meaning: unwanted and aggressive behavior among children in grades kindergarten to twelve, inclusive, that involves a real or perceived power imbalance.

Complete this form electronically, or in writing, or go to your school climate specialist (principal, vice principal, or other certified administrator) who will assist you with completing this form. All completed reports require a response from the school climate specialist, and every student, parent or guardian, and school employee **who completed this form** will receive a copy of the "Response Process(es) Notification Form" describing the action steps taken, within three (3) school business days after an assessment has been completed.

The school climate specialist will assess the facts of a challenging behavior incident and complete the "Response Process(es) Notification Form" (located on page 5 of this document). A confirmation of receipt of the "challenging behavior reporting form" will be provided to the individual who completed this form within **three (3) school business days**, and the behavioral assessment will be finalized within a reasonable amount of time.

If this is an emergency, and you feel that you or someone else is in imminent danger, please call 911, or your municipal police department.

Name: First _____ Last _____ or check here ☐ for any student who would like to submit anonymously.

I am a: ☐ Student, ☐ Parent and/or Guardian or ☐ School Employee

Email: _____

Phone Number: _____

Contact me by: ☐ Phone ☐ Email

Was this previously reported to any school employee prior to this report? If yes, identify to whom, when, and what was reported? _____

Where did the incident occur? _____

Check any boxes that apply.

- ☐ On school property
- ☐ At a school-sponsored activity or off school property
- ☐ Electronic communication, internet, and social media

- ☐ On a school bus
- ☐ On the way to/from school
- ☐ Outside of school
- ☐ Other _____

Approximate date of incident (if known): _____

This form does not modify or eliminate any rights or obligations under state and federal laws, including, any constitutional and civil rights protections, or any applicable policies and procedures or collective bargaining agreements. All students' private and personal information will remain confidential throughout this process, subject to any waiver rights or disclosure responsibilities as permitted or required by law.

Please note: when a student exhibits challenging behavior, our priority is to ensure the safety of the students and the school, and to work with the student(s) to prevent the recurrence of such behavior, including making amends for any challenging behaviors that occurred. Federal law protects the privacy of each student. Therefore, you cannot be provided with any specific information concerning the student alleged to have engaged in the challenging behavior.

Please describe what happened?

Of the following statement(s) check any that may describe or include what happened:

- | | |
|--|---|
| ☐ Teasing, name-calling, intimidating, or threatening, in person or through electronic communication | ☐ Making intimidating, and/or threatening gestures or remarks |
| ☐ Spreading rumors or gossip | ☐ Getting another person to do any of the behaviors listed above |
| ☐ Hitting, kicking, shoving, spitting, hair pulling, or throwing something or other acts of physical aggression | ☐ Unwanted contact of a sexual nature (verbal, non-verbal, physical) |

Do you believe that the reported instance(s) of challenging behavior was in reference to a student's perceived or actual age, ancestry, color, learning disability, marital status, intellectual disability, national origin, physical disability, mental disability, race, religious creed, sex, gender identity or expression, sexual orientation, and status as a veteran? If so, why?

If known, provide the name(s) of any witness(es) of the alleged incident: _____

Date form submitted: _____

***For school climate specialist use only:**

Date received by school climate specialist: _____

Signature of receipt by school climate specialist: _____

This form does not modify or eliminate any rights or obligations under state and federal laws, including, any constitutional and civil rights protections, or any applicable policies and procedures or collective bargaining agreements. All students' private and personal information will remain confidential throughout this process, subject to any waiver rights or disclosure responsibilities as permitted or required by law.

Please note: when a student exhibits challenging behavior, our priority is to ensure the safety of the students and the school, and to work with the student(s) to prevent the recurrence of such behavior, including making amends for any challenging behaviors that occurred. Federal law protects the privacy of each student. Therefore, you cannot be provided with any specific information concerning the student alleged to have engaged in the challenging behavior.

Investigation Form

The purpose of this form is to provide a streamlined process to assess reported instances of challenging behavior.

This form is to be completed by the school climate specialist within a reasonable amount of time. Pursuant to the Federal Education Confidentiality Law (FERPA), students, parents or guardians, and school employees that completed the challenging behavior reporting form cannot receive a copy of this "Investigation Form" but will be provided with a copy of the "Response Process(es) Notification Form" after an assessment is completed.

Date "Challenging Behavior Reporting Form" received: _____

Today's Date: _____

Name of school climate specialist who received the report: _____

Were these events already reported to any school employee? If yes, please identify to whom, when, and what was reported _____

Name of school community member who is reporting the incident: (student, parent or guardian, school or district employee, bystander, anonymous): _____

Name of student or students who were allegedly subjected to the challenging behavior: _____

Name of person or persons who allegedly engaged in the challenging behavior: _____

Where did the alleged incident occur? _____

Date and time alleged incident occurred: (if known): _____

Description of the alleged incident: _____

What investigative processes occurred? Answer all of the following questions below. A single incident may require an assessment into multiple areas. Please check all that apply.

Was this investigated as bullying? YES ☐ NO ☐

Was this a verified act of bullying? YES ☐ NO ☐

Was this investigated as cyberbullying? YES ☐ NO ☐

Was this a verified act of cyberbullying? YES ☐ NO ☐

Was this investigated as teen dating violence? YES ☐ NO ☐

Was this verified teen dating violence? YES ☐ or NO ☐

Was this investigated as an assault? YES ☐ NO ☐

Was this a verified assault? YES ☐ or NO ☐

Was this investigated as an act of physical violence?
YES ☐ NO ☐

Was this a verified act of physical violence?
YES ☐ or NO ☐

Was this investigated as a protected class violation/
harassment? YES ☐ NO ☐

Was this a verified protected class violation/harassment?
YES ☐ NO ☐

Was this investigated as a Title IX violation? YES ☐ NO ☐

Was this a verified Title IX violation? YES ☐ or NO ☐

Was this a verified act of challenging behavior not listed
above? YES ☐ NO ☐

This form does not modify or eliminate any rights or obligations under state and federal laws, including, any constitutional and civil rights protections, or any applicable policies and procedures or collective bargaining agreements. All students' private and personal information will remain confidential throughout this process, subject to any waiver rights or disclosure responsibilities as permitted or required by law.

Please note: when a student exhibits challenging behavior, our priority is to ensure the safety of the students and the school, and to work with the student(s) to prevent the recurrence of such behavior, including making amends for any challenging behaviors that occurred. Federal law protects the privacy of each student. Therefore, you cannot be provided with any specific information concerning the student alleged to have engaged in the challenging behavior.

What was the response by the school climate specialist? (E.g., utilization of restorative practices, school-based threat assessment, safety plan, student support services) Additionally, provide the date of each response.

If applicable, please provide any additional notes, observations, or actions taken as a result of this incident:

Signature or E-signature of responding school climate specialist: _____

Printed name: _____

Date of response: _____

This form does not modify or eliminate any rights or obligations under state and federal laws, including, any constitutional and civil rights protections, or any applicable policies and procedures or collective bargaining agreements. All students' private and personal information will remain confidential throughout this process, subject to any waiver rights or disclosure responsibilities as permitted or required by law.

Please note: when a student exhibits challenging behavior, our priority is to ensure the safety of the students and the school, and to work with the student(s) to prevent the recurrence of such behavior, including making amends for any challenging behaviors that occurred. Federal law protects the privacy of each student. Therefore, you cannot be provided with any specific information concerning the student alleged to have engaged in the challenging behavior.

Response Process(es) Notification Form

The purpose of this form is to provide a template for transparency and accountability to a person(s) that submit(s) a report of challenging behavior.

The school climate specialist will complete and submit this form within three (3) school business days **after an assessment has been finalized** and submit it to the student(s), parent(s), or guardian(s), and/or school employee(s) who completed the "Challenging Behavior Reporting Form".

Describe the steps taken to address and prevent future instance(s) of challenging behavior(s). Responses may include:

- utilization of restorative practices;
- the completion of a school-based threat assessment;
- safety plan for student(s) involved in the instance of alleged challenging behavior;
- student support services;

Signature or E-signature of school climate specialist: _____

Printed name: _____

Date completed: _____

Definitions and Clarifying Terms

Restorative Practices: Evidence and research-based system-level practices that focus on (A) building high-quality, constructive relationships among the school community, (B) holding each student accountable for any challenging behavior, and (C) ensuring each such student has a role in repairing relationships and reintegrating into the school community.

School Based Threat Assessment: An evidence-based systematic evaluation process used to prevent violence, help troubled students, and avoid over-reactions to challenging behavior.

This form does not modify or eliminate any rights or obligations under state and federal laws, including, any constitutional and civil rights protections, or any applicable policies and procedures or collective bargaining agreements. All students' private and personal information will remain confidential throughout this process, subject to any waiver rights or disclosure responsibilities as permitted or required by law.

Please note: when a student exhibits challenging behavior, our priority is to ensure the safety of the students and the school, and to work with the student(s) to prevent the recurrence of such behavior, including making amends for any challenging behaviors that occurred. Federal law protects the privacy of each student. Therefore, you cannot be provided with any specific information concerning the student alleged to have engaged in the challenging behavior.

A regulation to consider. This is guidance from the Connecticut State Department of Education.

Students

Connecticut School Climate Regulation

Tiered Response

Beyond the above protocols and supports, the new school climate policy defines a specific subset of challenging behavior that requires districts to respond with certain tiered interventions (referred to hereinafter as “tiered response incidents”). Pursuant to C.G.S. Sec. 10-222hh(b)(6), a tiered response (as detailed in the table below) is required for an incident of challenging behavior that meets any of the following criteria:

- a. requires temporarily clearing a classroom or removing a majority of students to reduce the likelihood of injury;
- b. indicates a credible intention to cause bodily harm to self or others; or
- c. results in an injury requiring medical attention beyond first aid (or less severe injuries caused by the same person on more than one occasion, as verified by a school nurse or other medical professional). The law goes on to provide that, if a district determines that conduct meets the above criteria, school climate improvement plans must include the following responses:

Occasion Number – Tiered Response Incident	Tiered Intervention Required
First Offense	Principal must notify the parents/guardians of each student involved in a manner that complies with FERPA.
Second Offense	Principal must invite the parent/guardian of involved students to a meeting (virtual or in person) to discuss supports and interventions applicable to each student – including, but not limited to, restorative practices.
Multiple Subsequent Offenses (or single incident that causes severe harm)	Principal must notify the parents/guardians of involved students of other resources for supports and interventions, including, but not limited to the following: the 2-1-1 Infoline Program; services/programs available through the Behavioral Health Partnership, established through C.G.S. Sec. 17a-22h; or other resources for professional services, support, or crisis intervention.

Students

Connecticut School Climate Regulation

Tiered Response (continued)

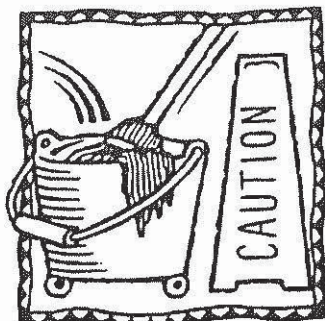
In addition, for tiered response incidents, there must be a meeting between an administrator and the school employee who witnessed the incident. The purpose of the meeting, which must occur within two days of the incident, is to determine the supports and interventions required to address the needs of students and school employees, although supports and interventions for special education students must be determined by the student's Planning and Placement Team (PPT).² In addition, protocols and supports must include a process by which a teacher may request a behavior intervention meeting.³

Regulation approved:

cps 4/25

² For special education students, notice of the incident must be submitted to the PPT no more than two days after the incident occurred.

³ C.G.S. Sec. 10-236c(b) permits any teacher of record in a classroom to request a behavior intervention meeting with the school's crisis intervention team "for any student whose behavior has caused a serious disruption to the instruction of other students, or caused self-harm or physical harm to such teacher or another student or staff member in such teacher's classroom."



Building and Grounds Maintenance Checklist

Name: thomas verville

School: griswold elementary School

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. BUILDING MAINTENANCE SUPPLIES

	Yes	No	N/A
1a. Developed appropriate procedures and stocked supplies for spill control	☒	☐	☐
1b. Reviewed supply labels	☒	☐	☐
1c. Ensured that air from chemical and trash storage areas vents to the outdoors	☒	☐	☐
1d. Stored chemical products and supplies in sealed, clearly labeled containers	☒	☐	☐
1e. Researched and selected the safest products available	☒	☐	☐
1f. Ensured that supplies are being used according to manufacturers' instructions	☒	☐	☐
1g. Ensured that chemicals, chemical-containing wastes, and containers are disposed of according to manufacturers' instructions	☒	☐	☐
1h. Substituted less- or non-hazardous materials (where possible)	☒	☐	☐
1i. Scheduled work involving odorous or hazardous chemicals for periods when the school is unoccupied	☒	☐	☐
1j. Ventilated affected areas during and after the use of odorous or hazardous chemicals	☒	☐	☐

2. GROUNDS MAINTENANCE SUPPLIES

2a. Stored grounds maintenance supplies in appropriate area(s)	☒	☐	☐
2b. Ensured that supplies are used and stored according to manufacturers' instructions	☒	☐	☐
2c. Established and followed procedures to minimize exposure to fumes from supplies	☒	☐	☐
2d. Reviewed and followed manufacturers' guidelines for maintenance	☒	☐	☐
2e. Replaced portable gas cans with low-emission cans	☒	☐	☐
2f. Stored chemical products and supplies in sealed, clearly-labeled containers	☒	☐	☐
2g. Ensured that chemicals, chemical-containing wastes, and containers are disposed of according to manufacturers' instructions	☒	☐	☐

3. DUST CONTROL

3a. Installed and maintained barrier mats for entrances	☒	☐	☐
3b. Used high efficiency vacuum bags	☒	☐	☐
3c. Used proper dusting techniques	☒	☐	☐
3d. Wrapped feather dusters with a dust cloth	☐	☐	☒
3e. Cleaned air return grilles and air supply vents	☒	☐	☐

4. FLOOR CLEANING

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4a. Established and followed schedule for vacuuming and mopping floors | ☒ | ☐ | ☐ |
| 4b. Cleaned spills on floors promptly (as necessary) | ☒ | ☐ | ☐ |
| 4c. Performed restorative maintenance (as necessary) | ☐ | ☐ | ☐ |

5. DRAIN TRAPS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 5a. Poured water down floor drains once per week (about 1 quart of water) | ☒ | ☐ | ☐ |
| 5b. Ran water in sinks at least once per week (about 2 cups of water) | ☒ | ☐ | ☐ |
| 5c. Flushed toilets once each week (if not used regularly) | ☒ | ☐ | ☐ |

6. MOISTURE, LEAKS, AND SPILLS

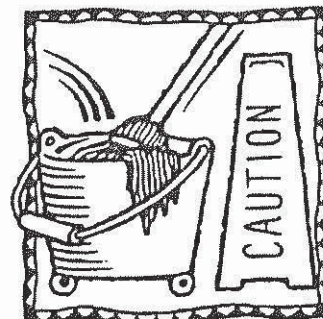
- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 6a. Checked for moldy odors | ☒ | ☐ | ☐ |
| 6b. Inspected ceiling tiles, floors, and walls for leaks or discoloration (may indicate periodic leaks) | ☒ | ☐ | ☐ |
| 6c. Checked areas where moisture is commonly generated (e.g., kitchens, locker rooms, and bathrooms) | ☒ | ☐ | ☐ |
| 6d. Checked that windows, windowsills, and window frames are free of condensate | ☒ | ☐ | ☐ |
| 6e. Checked that indoor surfaces of exterior walls and cold water pipes are free of condensate | ☒ | ☐ | ☐ |
| 6f. Ensured the following areas are free from signs of leaks and water damage: | | | |
| Indoor areas near known roof or wall leaks | ☒ | ☐ | ☐ |
| Walls around leaky or broken windows | ☒ | ☐ | ☐ |
| Floors and ceilings under plumbing | ☒ | ☐ | ☐ |
| Duct interiors near humidifiers, cooling coils, and outdoor air intakes | ☒ | ☐ | ☐ |

7. COMBUSTION APPLIANCES

- | | | | |
|--|----------------------------------|----------------------------------|-----------------------|
| 7a. Checked for odors from combustion appliances | ☒ | ☐ | ☐ |
| 7b. Checked appliances for backdrafting (using chemical smoke) | ☐ | ☒ | ☐ |
| 7c. Inspected exhaust components for leaks, disconnections, or deterioration | ☒ | ☐ | ☐ |
| 7d. Inspected flue components for corrosion and soot | ☒ | ☐ | ☐ |

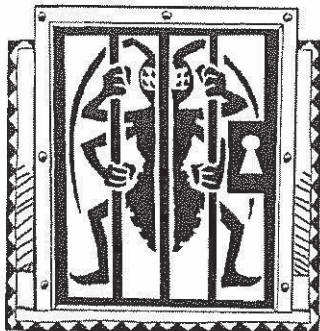
8. PEST CONTROL

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 8a. Completed the <i>Integrated Pest Management Checklist</i> | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|



NOTES

there are some stained ceiling tiles



Integrated Pest Management Checklist

Name: thomas verville

School: griswold elementary school

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OFFICIAL POLICY STATEMENT

- 1a. Developed or located the school's official policy statement for integrated pest management (IPM) ☒ Yes ☐ No ☐ N/A

2. DESIGNATING PEST MANAGEMENT ROLES

- 2a. Assigned and trained a qualified person to be the pest manager ☒ Yes ☐ No ☐ N/A
- 2b. Involved decision makers in the IPM program ☒ Yes ☐ No ☐ N/A
- 2c. Educated students and staff (the occupants of the building) about IPM and asked them to keep their areas clean and free of clutter ☒ Yes ☐ No ☐ N/A
- 2d. Encouraged parents to learn about IPM practices and implement them at home ☒ Yes ☐ No ☐ N/A
- 2e. Developed a program to educate and train all IPM participants ☒ Yes ☐ No ☐ N/A
- 2f. Included language about IPM into contracts with pest management professionals ☒ Yes ☐ No ☐ N/A

3. SETTING PEST MANAGEMENT OBJECTIVES

- 3a. Set appropriate pest management objectives for school buildings (such as preventing pests from interfering with students' learning environment and preserving the integrity of the building structure) ☒ Yes ☐ No ☐ N/A
- 3b. Set appropriate pest management objectives for school grounds (such as providing safe playing areas and the best athletic surfaces possible) ☒ Yes ☐ No ☐ N/A

4. INSPECTING, IDENTIFYING, AND MONITORING

- 4a. Inspected all buildings and grounds for pest evidence, entry points, food, water, and harborage sites ☒ Yes ☐ No ☐ N/A
- 4b. Identified potential pest habitats in buildings and grounds ☒ Yes ☐ No ☐ N/A
- 4c. Pinpointed the source of any current pest problems ☒ Yes ☐ No ☐ N/A
- 4d. Monitored to determine the extent of pest problems and to estimate pest populations ☒ Yes ☐ No ☐ N/A
- 4e. Developed plans to modify habitat (for example, exclusion, repair, and sanitation efforts) to prevent or resolve any pest problems ☒ Yes ☐ No ☐ N/A
- 4f. Established a monitoring program that consists of routine inspections to estimate pest population levels and identify evidence of pests and potential habitat ☒ Yes ☐ No ☐ N/A

5. SETTING ACTION THRESHOLDS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 5a. Evaluated all available data obtained through inspecting, identifying, and monitoring | ☒ | ☐ | ☐ |
| 5b. Determined how many pests the school buildings, grounds, and occupants can tolerate | ☒ | ☐ | ☐ |
| 5c. Set action thresholds | ☒ | ☐ | ☐ |

6. PREVENTIVE STRATEGIES

INDOOR SITES

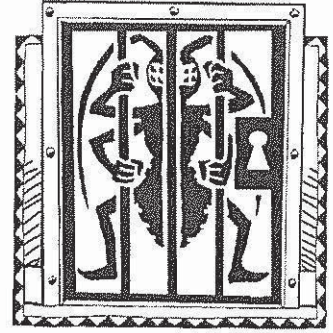
- 6a. Implemented appropriate strategies to prevent pests from inhabiting the following areas:
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| • Entryways | ☒ | ☐ | ☐ |
| • Classrooms | ☒ | ☐ | ☐ |
| • Gymnasiums | ☒ | ☐ | ☐ |
| • Locker rooms | ☒ | ☐ | ☐ |
| • Offices | ☒ | ☐ | ☐ |
| • Staff lounges | ☒ | ☐ | ☐ |
| • Bathrooms | ☒ | ☐ | ☐ |
| • Food preparation and serving areas | ☒ | ☐ | ☐ |
| • Rooms with extensive plumbing | ☒ | ☐ | ☐ |
| • Maintenance areas | ☒ | ☐ | ☐ |
| • Other | ☐ | ☐ | ☐ |

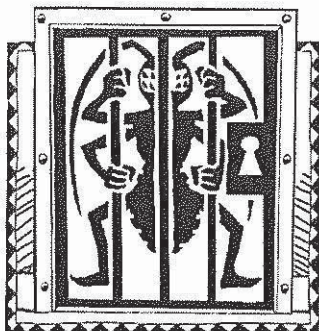
OUTDOOR SITES

- 6b. Implemented appropriate strategies to prevent pests from inhabiting the following areas:
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| • Playgrounds | ☒ | ☐ | ☐ |
| • Parking lots | ☒ | ☐ | ☐ |
| • Lawns and athletic fields | ☒ | ☐ | ☐ |
| • Teaching gardens or greenhouses | ☒ | ☐ | ☐ |
| • Loading docks | ☒ | ☐ | ☐ |
| • Dumpsters | ☒ | ☐ | ☐ |
| • Areas with ornamental shrubs and trees | ☒ | ☐ | ☐ |
| • Other | ☒ | ☐ | ☐ |

7. PESTICIDE USE AND STORAGE

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 7a. Explored alternative pest management methods before concluding that pesticides were necessary | ☒ | ☐ | ☐ |
| 7b. Ensured that pest management professionals integrate IPM into their pest management methods | ☒ | ☐ | ☐ |
| 7c. Identified the least toxic, target-specific chemical (or pesticide formulation) that is the most effective to address the pest problem, preferably as baits and granules | ☒ | ☐ | ☐ |
| 7d. Reviewed and followed all label instructions on pesticides and learned how to properly apply and handle these chemicals | ☒ | ☐ | ☐ |
| 7e. Used spot-treatment (or bait, crack, and crevice applications) to apply pesticides whenever possible and only treated the obviously infested plants in the area | ☒ | ☐ | ☐ |
| 7f. Used protective clothing or equipment when applying pesticides | ☒ | ☐ | ☐ |
| 7g. Placed all pesticides in tamper-resistant bait boxes or locations that are inaccessible to children and non-target species | ☒ | ☐ | ☐ |





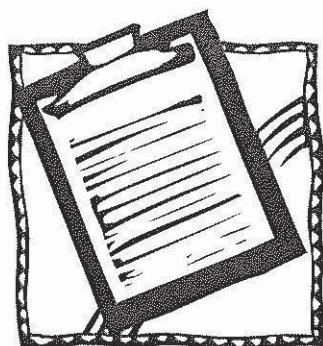
7. PESTICIDE USE AND STORAGE (cont.)

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 7h. Locked or fastened lids of all bait boxes and placed bait away from the runway of the box | ☒ | ☐ | ☐ |
| 7i. Applied pesticides when occupants were not present or in areas where they would not be exposed to the chemicals | ☒ | ☐ | ☐ |
| 7j. Ensured that school occupants (students and staff) are notified of upcoming pesticide applications through posted notices and/or letters | ☒ | ☐ | ☐ |
| 7k. Ensured that parents are notified of upcoming pesticide applications through letters | ☒ | ☐ | ☐ |
| 7l. Kept copies of current pesticide labels and information on pesticides easily accessible | ☒ | ☐ | ☐ |
| 7m. Stored pesticides off site or in areas that are locked and accessible only to designated personnel | ☒ | ☐ | ☐ |
| 7n. Ensured that storage areas are adequately ventilated and are located away from areas prone to flooding or where spills or leaks may contaminate the environment | ☒ | ☐ | ☐ |
| 7o. Ensured that flammable liquids are stored away from ignition sources | ☒ | ☐ | ☐ |
| 7p. Ensured that pesticides are stored in their original containers and all lids are securely fastened | ☒ | ☐ | ☐ |
| 7q. Ensured that air in the storage space cannot mix with the air in the central ventilation system | ☒ | ☐ | ☐ |

8. EVALUATING RESULTS AND RECORD KEEPING

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 8a. Ensured that accurate, up-to-date records of IPM practices and a pest management log for each property are kept | ☒ | ☐ | ☐ |
| 8b. Ensured that pesticide records necessary to meet all state, local, and school board requirements are maintained | ☒ | ☐ | ☐ |
| 8c. Ensured that each log book contains the following items: | | | |
| • Copy of the pest management plan | ☒ | ☐ | ☐ |
| • Service schedules for maintenance of buildings and grounds | ☒ | ☐ | ☐ |
| • Current EPA-registered labels | ☒ | ☐ | ☐ |
| • Current Material Safety Data Sheets (MSDS) for each pesticide project | ☒ | ☐ | ☐ |
| • Pest surveillance data sheets | ☒ | ☐ | ☐ |
| • Diagram noting the location of pest activity, traps, and bait stations | ☐ | ☐ | ☐ |

NOTES



Walkthrough Inspection Checklist

Name:	thomas verville		
School:	griswold elementary school		
Room or Area:	building wide	Date Completed:	2-24-25
Signature:	thomas verville		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. GROUND LEVEL

	Yes	No	N/A
1a. Ensured that ventilation units operate properly	☒	☐	☐
1b. Ensured there are no obstructions blocking air intakes	☒	☐	☐
1c. Checked for nests and droppings near outdoor air intakes	☒	☐	☐
1d. Determined that dumpsters are located away from doors, windows, and outdoor air intakes	☒	☐	☐
1e. Checked potential sources of air contaminants near the building (chimneys, stacks, industrial plants, exhaust from nearby buildings)	☒	☐	☐
1f. Ensured that vehicles avoid idling near outdoor air intakes	☒	☐	☐
1g. Minimized pesticide application	☒	☐	☐
1h. Ensured that there is proper drainage away from the building (including roof downspouts)	☒	☐	☐
1i. Ensured that sprinklers spray away from the building and outdoor air intakes	☒	☐	☐
1j. Ensured that walk-off mats are used at exterior entrances and that they are cleaned regularly	☒	☐	☐

2. ROOF

While on the roof, consider inspecting the HVAC units (use the Ventilation Checklist).

2a. Ensured that the roof is in good condition	☒	☐	☐
2b. Checked for evidence of water ponding	☒	☐	☐
2c. Checked that ventilation units operate properly (air flows in)	☒	☐	☐
2d. Ensured that exhaust fans operate properly (air flows out)	☒	☐	☐
2e. Ensured that air intakes remain open, even at minimum setting	☒	☐	☐
2f. Checked for nests and droppings near outdoor air intakes	☒	☐	☐
2g. Ensured that air from plumbing stacks and exhaust outlets flows away from outdoor air intakes	☒	☐	☐

3. ATTIC

3a. Checked for evidence of roof and plumbing leaks	☐	☐	☒
3b. Checked for birds and animal nests	☐	☐	☒

4. GENERAL CONSIDERATIONS

4a. Ensured that temperature and humidity are maintained within acceptable ranges	☒	☐	☐
4b. Ensured that no obstructions exist in supply and exhaust vents	☒	☐	☐
4c. Checked for odors	☒	☐	☐
4d. Checked for signs of mold and mildew growth	☒	☐	☐

4. GENERAL CONSIDERATIONS (continued)

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4e. Checked for signs of water damage | ☒ | ☐ | ☐ |
| 4f. Checked for evidence of pests and obvious food sources | ☒ | ☐ | ☐ |
| 4g. Noted and reviewed all concerns from school occupants | ☒ | ☐ | ☐ |

5. BATHROOMS AND GENERAL PLUMBING

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 5a. Ensured that bathrooms and restrooms have operating exhaust fans | ☒ | ☐ | ☐ |
| 5b. Ensured proper drain trap maintenance: | | | |
| Water is poured down floor drains once per week (approx. 1 quart of water) | ☒ | ☐ | ☐ |
| Water is poured into sinks at least once per week (about 2 cups of water) | ☒ | ☐ | ☐ |
| Toilets are flushed at least once per week | ☒ | ☐ | ☐ |

6. MAINTENANCE SUPPLIES

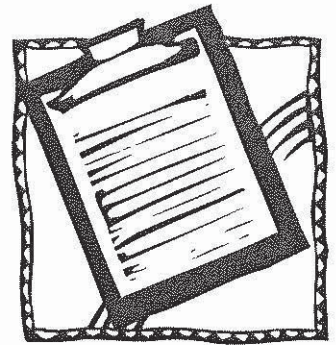
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 6a. Ensured that chemicals are used only with adequate ventilation and when building is unoccupied | ☒ | ☐ | ☐ |
| 6b. Ensured that vents in chemical and trash storage areas are operating properly | ☒ | ☐ | ☐ |
| 6c. Ensured that portable fuel containers are properly closed | ☒ | ☐ | ☐ |
| 6d. Ensured that power equipment, like snowblowers and lawn mowers, have been serviced and maintained according to manufacturers' guidelines | ☒ | ☐ | ☐ |

7. COMBUSTION APPLIANCES

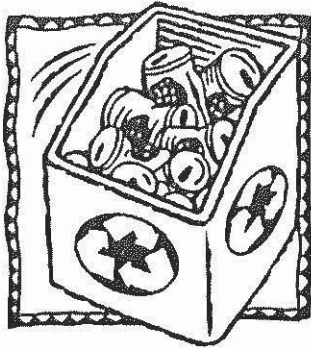
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 7a. Checked for combustion gas and fuel odors | ☒ | ☐ | ☐ |
| 7b. Ensured that combustion appliances have flues or exhaust hoods | ☒ | ☐ | ☐ |
| 7c. Checked for leaks, disconnections, and deterioration | ☒ | ☐ | ☐ |
| 7d. Ensured there is no soot on inside or outside of flue components | ☒ | ☐ | ☐ |

8. OTHER

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 8a. Checked for peeling and flaking paint (if the building was built before 1980, this could be a lead hazard) | ☒ | ☐ | ☐ |
| 8b. Determined date of last radon test | ☒ | ☐ | ☐ |



NOTES



Waste Management Checklist

Name: Thomas Verville

School: griswold elementary school

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verwill

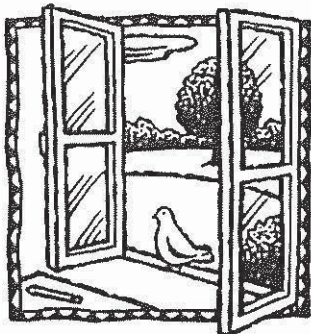
Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. WASTE MANAGEMENT

	Yes	No	N/A
1a. Ensured that waste containers are appropriate for use (for example, food waste containers should have lids)	☒	☐	☐
1b. Ensured that waste containers are lined	☒	☐	☐
1c. Ensured that waste from art, science, vocational classes, etc., are handled separately	☒	☐	☐
1d. Labeled recycling bins clearly	☒	☐	☐
1e. Ensured number of bins and dumpsters is adequate	☒	☐	☐
1f. Ensured appropriate location of dumpsters (i.e., away from air intakes, doors, and operable windows in relation to prevailing winds)	☒	☐	☐
1g. Ensured waste containers are emptied regularly	☒	☐	☐
1h. Ensured appropriate waste removal schedule	☒	☐	☐
1i. Ensured waste is stored in a well-ventilated room	☒	☐	☐
1j. Ensured any exhaust fans in the room are operating properly	☒	☐	☐
1k. Checked waste storage areas for odors, contaminants, or signs of vermin	☒	☐	☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Elementary

Unit Ventilator/AHU No: ges eru-1

Room or Area: 1248-1222 Date Completed: 3-4-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

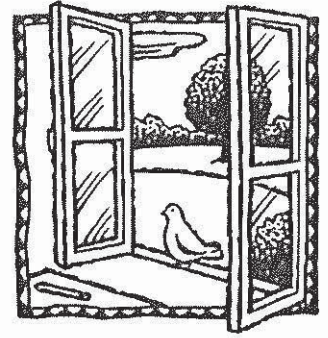
ACTIVITY 11: CONTROL COMPONENTS

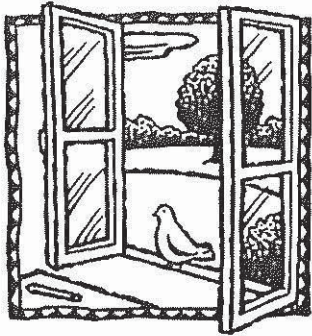
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

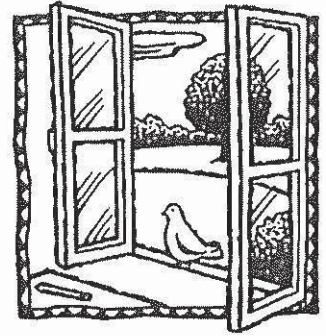
5. EXHAUST SYSTEMS

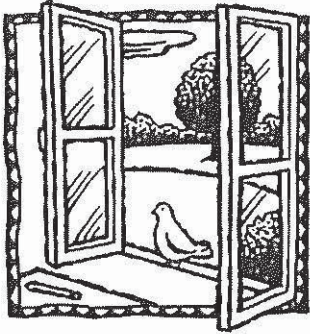
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

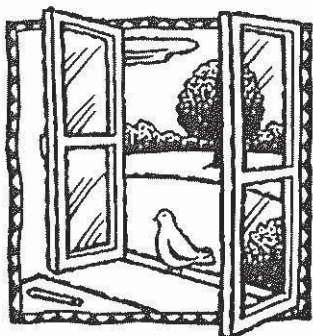
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Elementary School

Unit Ventilator/AHU No: eru-2

Room or Area: 1201-1218 Date Completed: 3-4-25

Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) **Yes** ☒ **No** ☐ **N/A** ☐
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode **Yes** ☒ **No** ☐ **N/A** ☐

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ ☐ ☐
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ ☐ ☐

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ ☐ ☐
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ ☐ ☐
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ ☐ ☐

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ ☐ ☐
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ ☐ ☐

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ ☐ ☐
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ ☐ ☐
- 2c. Vacuumed filter areas before installing new filters ☒ ☐ ☐
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ ☐ ☐
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ ☐ ☐

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

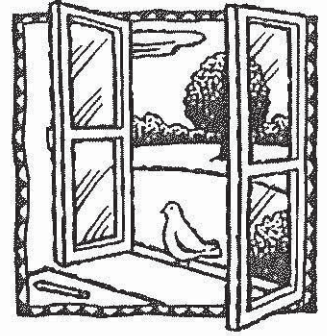
ACTIVITY 11: CONTROL COMPONENTS

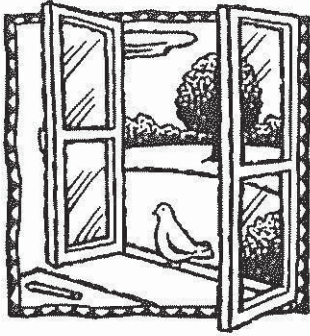
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|----------------------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☒ | ☐ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

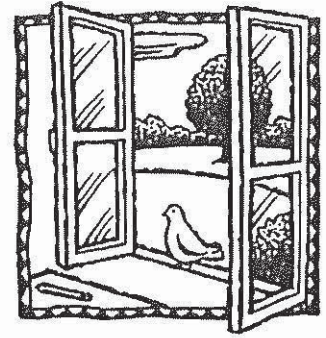
5. EXHAUST SYSTEMS

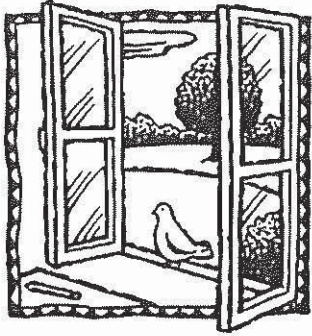
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

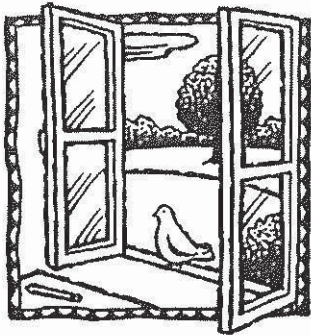
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	eru-3		
Room or Area:	d-wing	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

- Read the *IAQ Backgrounder* and the Background Information for this checklist.
- Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
- Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
- Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) .. | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

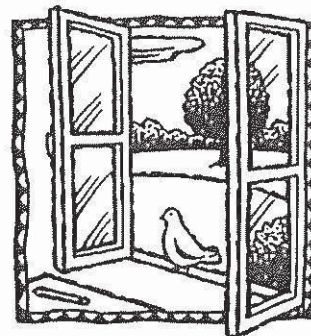
ACTIVITY 11: CONTROL COMPONENTS

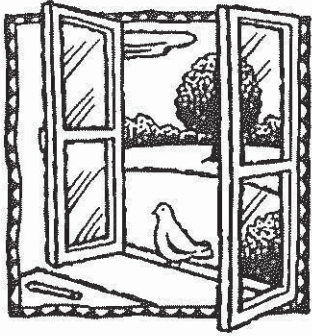
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|-----------------------|----------------------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☐ | ☒ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☐ | ☒ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied)..... **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required..... ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

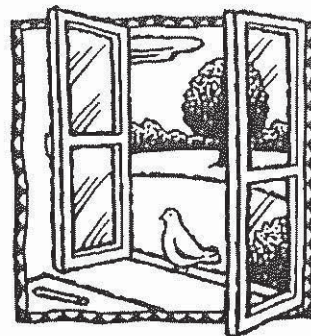
5. EXHAUST SYSTEMS

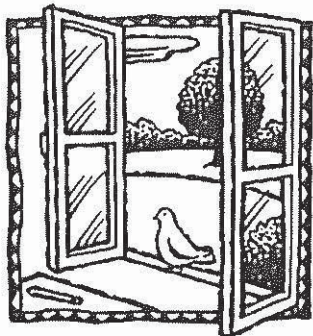
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

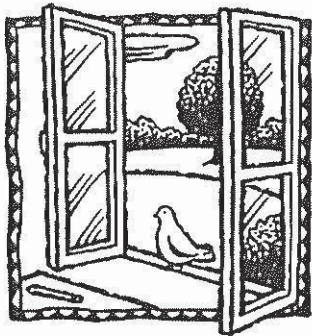
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Elementary School

Unit Ventilator/AHU No: eru-3

Room or Area: d-wing Date Completed: 3-4-25

Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

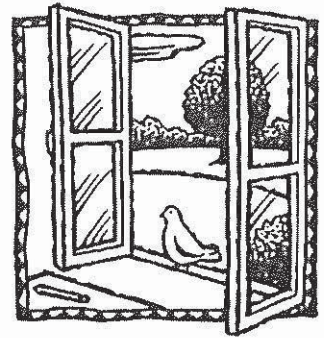
ACTIVITY 11: CONTROL COMPONENTS

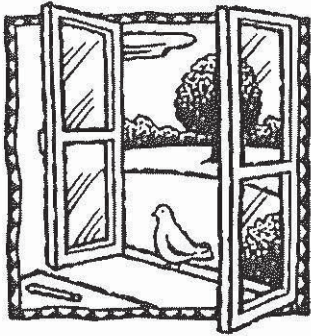
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|-----------------------|----------------------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☐ | ☒ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☐ | ☒ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

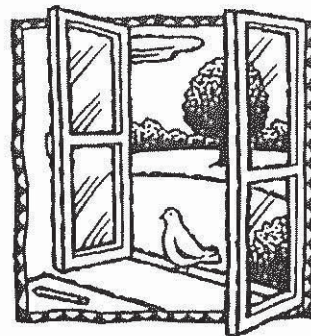
5. EXHAUST SYSTEMS

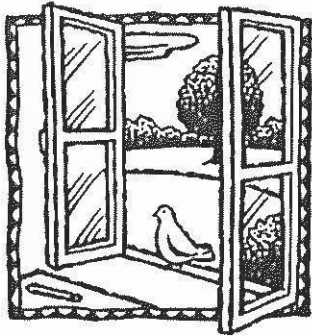
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

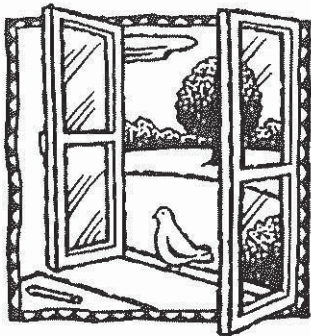
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	eru-4		
Room or Area:	1001-1018	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

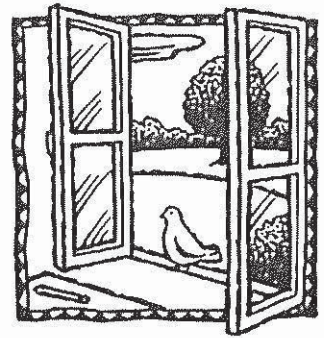
ACTIVITY 11: CONTROL COMPONENTS

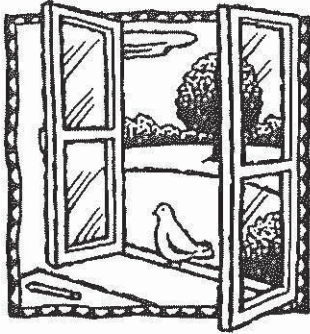
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☐ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|----------------------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☒ | ☐ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☒ | ☐ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

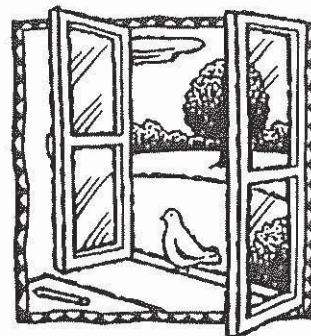
5. EXHAUST SYSTEMS

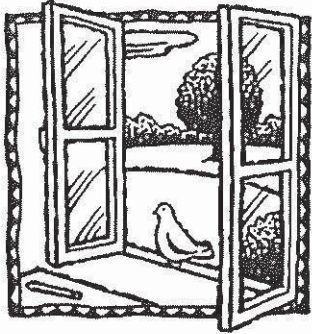
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

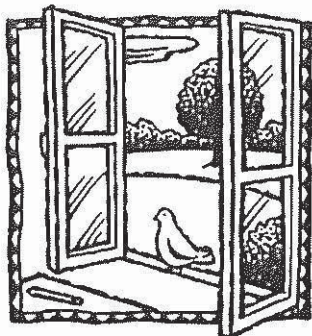
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Elementary School

Unit Ventilator/AHU No: eru-5

Room or Area: 1022-1047 Date Completed: 3-4-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

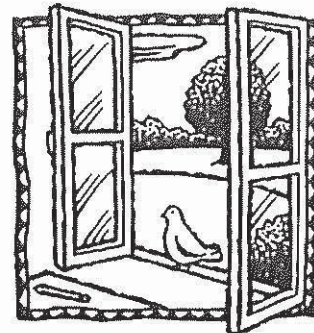
ACTIVITY 11: CONTROL COMPONENTS

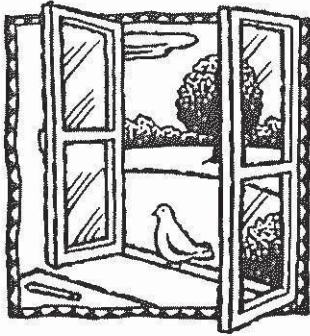
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☐ ☒
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☐ ☒
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

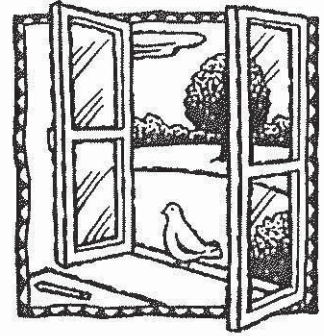
5. EXHAUST SYSTEMS

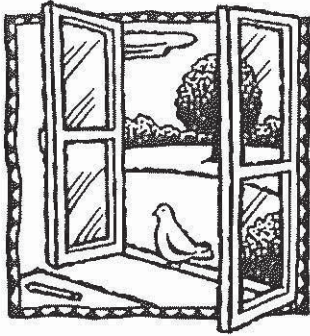
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

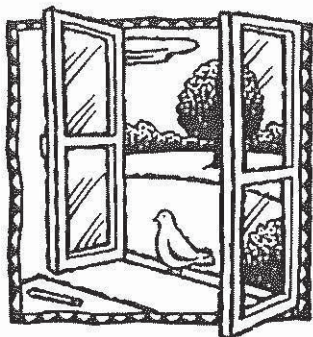
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	mau-1		
Room or Area:	kitchen	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

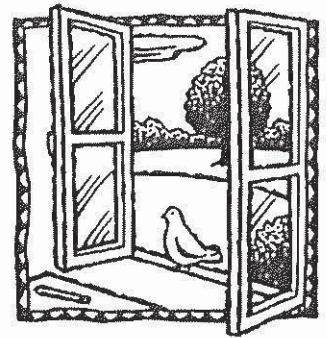
ACTIVITY 11: CONTROL COMPONENTS

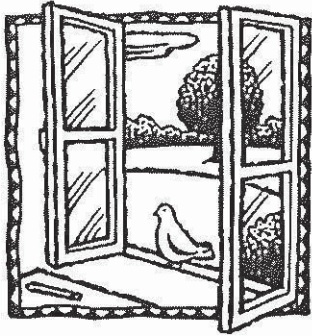
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

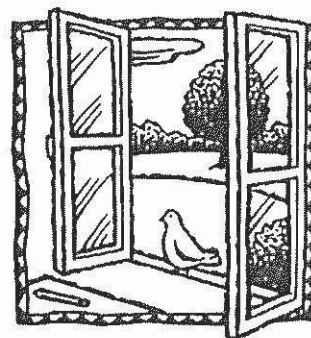
5. EXHAUST SYSTEMS

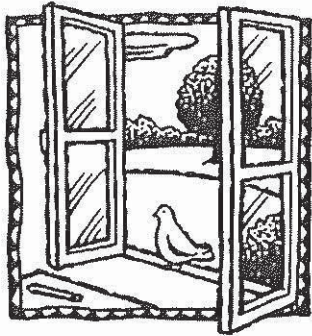
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

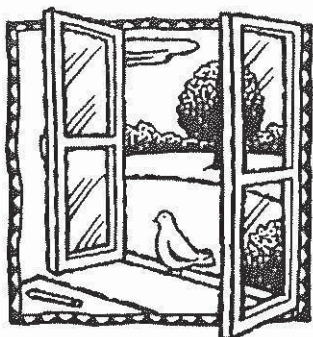
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	RTU_1a		
Room or Area:	LMC	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

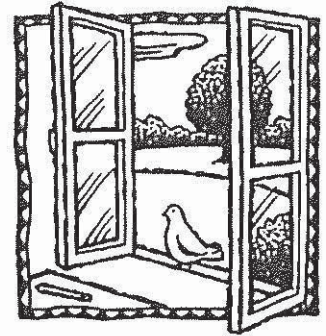
ACTIVITY 11: CONTROL COMPONENTS

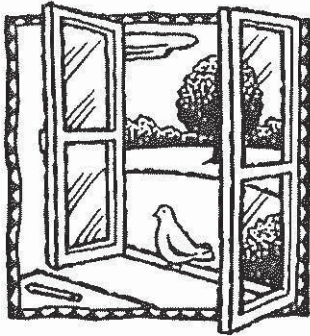
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied)..... **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required..... ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

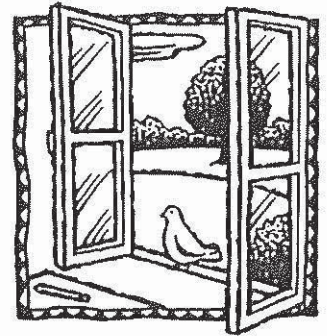
5. EXHAUST SYSTEMS

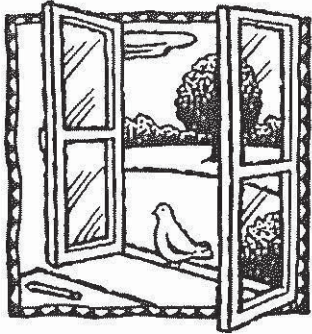
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

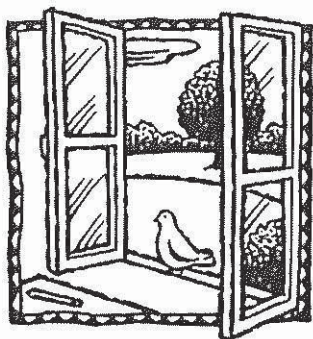
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	RTU1-b		
Room or Area:	LMC	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) .. | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☐ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

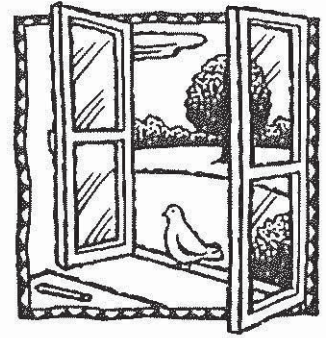
- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

ACTIVITY 11: CONTROL COMPONENTS

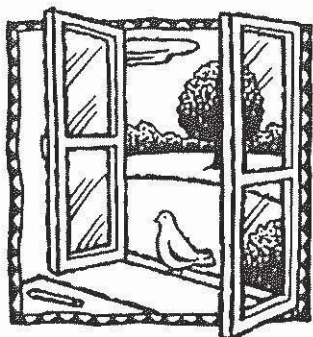
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |



NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.



3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator..... | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

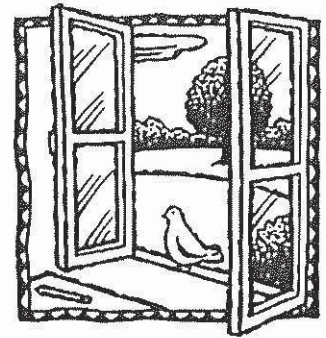
5. EXHAUST SYSTEMS

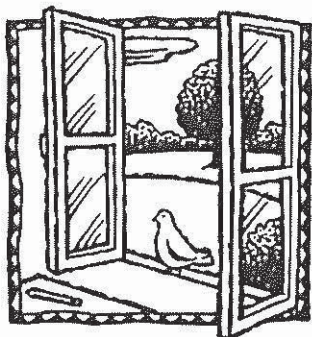
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

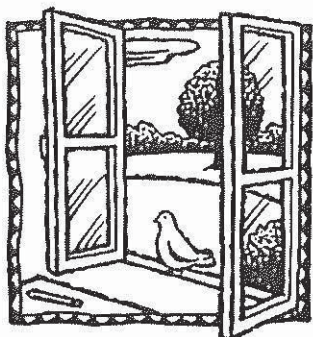
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	RTU_2		
Room or Area:	CAFE	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

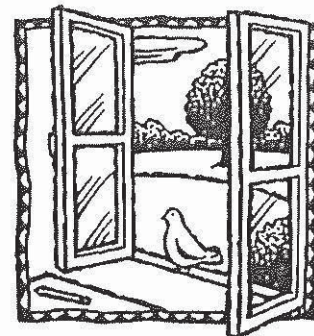
ACTIVITY 11: CONTROL COMPONENTS

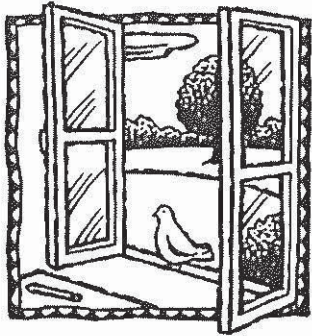
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

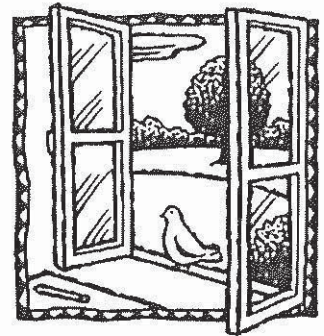
5. EXHAUST SYSTEMS

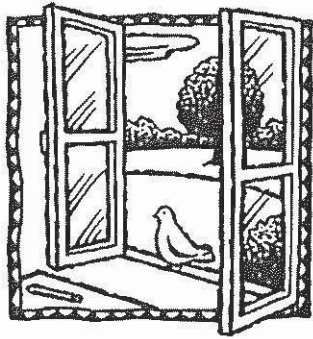
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

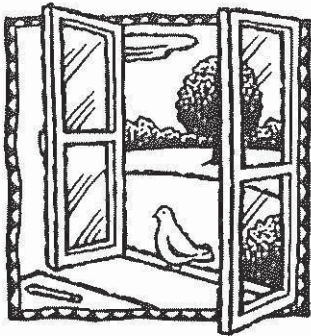
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	RTU_3		
Room or Area:	music rooms	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

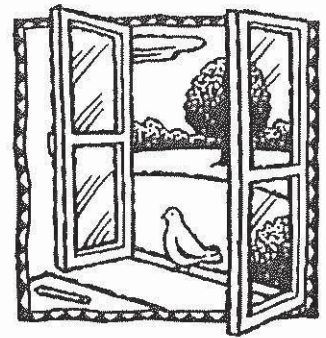
ACTIVITY 11: CONTROL COMPONENTS

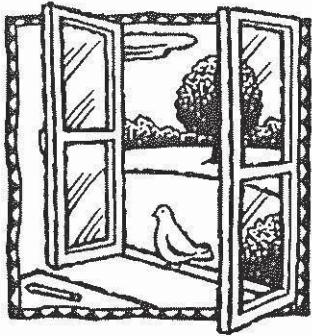
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☐ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied)..... **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required..... ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning..... ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows)..... ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked..... ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply..... ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes..... ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents..... ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities..... ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals..... ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings)..... ☐ ☒ ☐

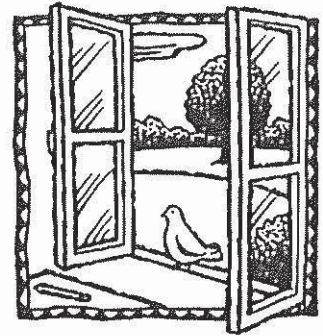
5. EXHAUST SYSTEMS

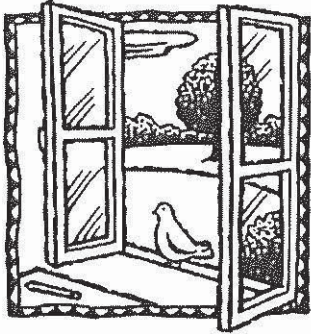
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s)..... ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☐ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

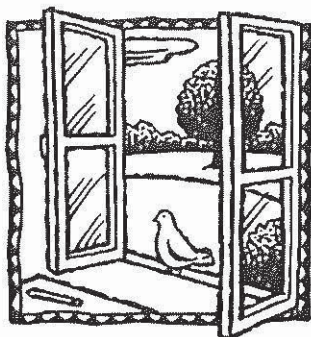
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	RTU_3		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	RTU_4		
Room or Area:	gym	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

- Read the *IAQ Background* and the Background Information for this checklist.
- Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
- Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
- Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) .. | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

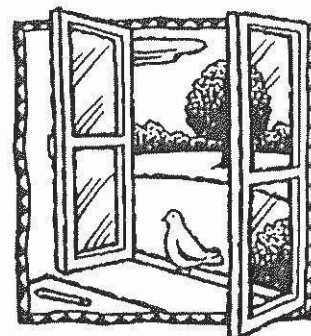
ACTIVITY 11: CONTROL COMPONENTS

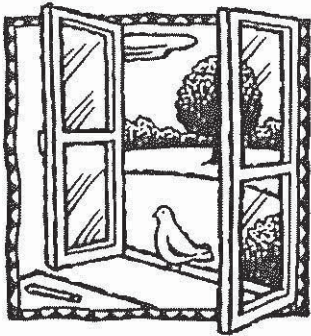
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☐ ☐

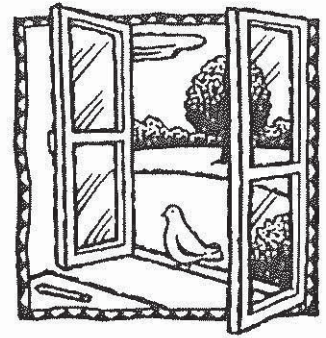
5. EXHAUST SYSTEMS

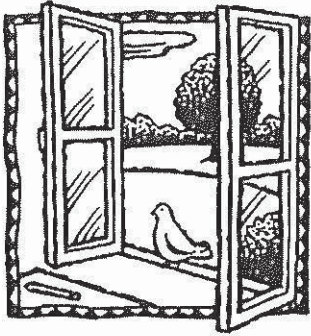
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

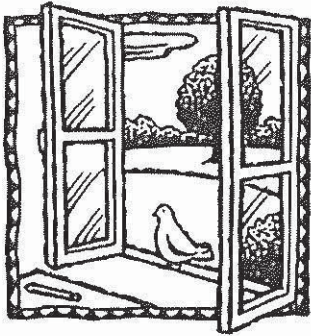
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Elementary School		
Unit Ventilator/AHU No:	RTU_5		
Room or Area:	main office	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☐ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

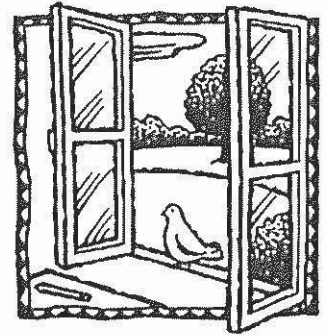
- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

ACTIVITY 11: CONTROL COMPONENTS

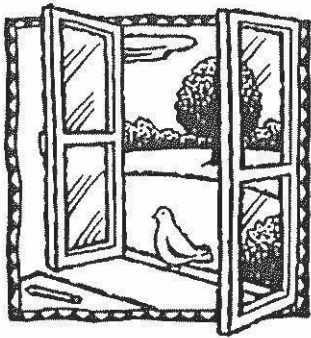
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |



NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.



3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied).....**Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required.....☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows)☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents☐ ☒ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities☐ ☒ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals☐ ☒ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings)☐ ☒ ☐

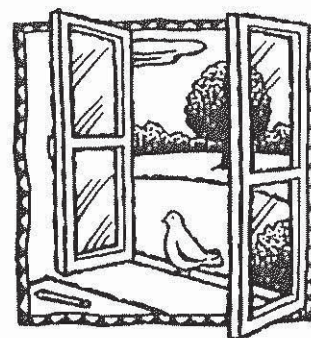
5. EXHAUST SYSTEMS

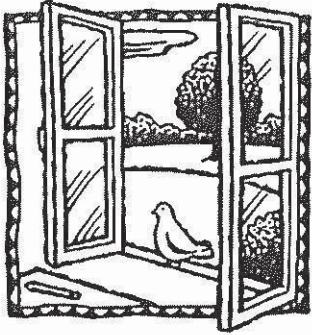
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s)☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☐ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

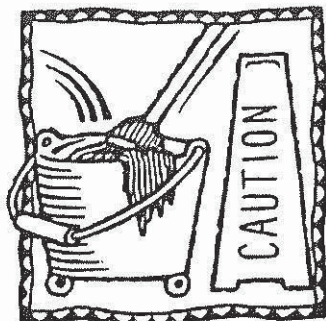
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Building and Grounds Maintenance Checklist

Name: thomas verville
 School: griswold middle School
 Room or Area: building wide Date Completed: 2-24-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.

2. Keep the Background Information and make a copy of the checklist for future reference.

3. Complete the Checklist.

- Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)

- Make comments in the "Notes" section as necessary.

4. Return the checklist portion of this document to the IAQ Coordinator.

1. BUILDING MAINTENANCE SUPPLIES

	Yes	No	N/A
1a. Developed appropriate procedures and stocked supplies for spill control	☒	☐	☐
1b. Reviewed supply labels	☒	☐	☐
1c. Ensured that air from chemical and trash storage areas vents to the outdoors	☒	☐	☐
1d. Stored chemical products and supplies in sealed, clearly labeled containers	☒	☐	☐
1e. Researched and selected the safest products available	☒	☐	☐
1f. Ensured that supplies are being used according to manufacturers' instructions	☒	☐	☐
1g. Ensured that chemicals, chemical-containing wastes, and containers are disposed of according to manufacturers' instructions	☒	☐	☐
1h. Substituted less- or non-hazardous materials (where possible)	☒	☐	☐
1i. Scheduled work involving odorous or hazardous chemicals for periods when the school is unoccupied	☒	☐	☐
1j. Ventilated affected areas during and after the use of odorous or hazardous chemicals	☒	☐	☐

2. GROUNDS MAINTENANCE SUPPLIES

2a. Stored grounds maintenance supplies in appropriate area(s)	☒	☐	☐
2b. Ensured that supplies are used and stored according to manufacturers' instructions	☒	☐	☐
2c. Established and followed procedures to minimize exposure to fumes from supplies	☒	☐	☐
2d. Reviewed and followed manufacturers' guidelines for maintenance	☒	☐	☐
2e. Replaced portable gas cans with low-emission cans	☒	☐	☐
2f. Stored chemical products and supplies in sealed, clearly-labeled containers	☒	☐	☐
2g. Ensured that chemicals, chemical-containing wastes, and containers are disposed of according to manufacturers' instructions	☒	☐	☐

3. DUST CONTROL

3a. Installed and maintained barrier mats for entrances	☒	☐	☐
3b. Used high efficiency vacuum bags	☒	☐	☐
3c. Used proper dusting techniques	☒	☐	☐
3d. Wrapped feather dusters with a dust cloth	☐	☐	☒
3e. Cleaned air return grilles and air supply vents	☒	☐	☐

4. FLOOR CLEANING

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4a. Established and followed schedule for vacuuming and mopping floors | ☒ | ☐ | ☐ |
| 4b. Cleaned spills on floors promptly (as necessary) | ☒ | ☐ | ☐ |
| 4c. Performed restorative maintenance (as necessary) | ☐ | ☐ | ☐ |

5. DRAIN TRAPS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 5a. Poured water down floor drains once per week (about 1 quart of water) | ☒ | ☐ | ☐ |
| 5b. Ran water in sinks at least once per week (about 2 cups of water) | ☒ | ☐ | ☐ |
| 5c. Flushed toilets once each week (if not used regularly) | ☒ | ☐ | ☐ |

6. MOISTURE, LEAKS, AND SPILLS

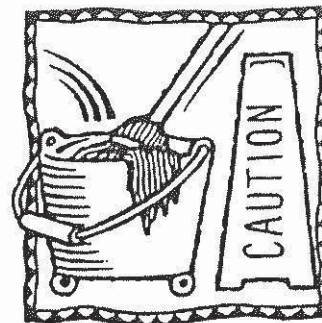
- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 6a. Checked for moldy odors | ☒ | ☐ | ☐ |
| 6b. Inspected ceiling tiles, floors, and walls for leaks or discoloration (may indicate periodic leaks) | ☒ | ☐ | ☐ |
| 6c. Checked areas where moisture is commonly generated (e.g., kitchens, locker rooms, and bathrooms) | ☒ | ☐ | ☐ |
| 6d. Checked that windows, windowsills, and window frames are free of condensate | ☒ | ☐ | ☐ |
| 6e. Checked that indoor surfaces of exterior walls and cold water pipes are free of condensate | ☒ | ☐ | ☐ |
| 6f. Ensured the following areas are free from signs of leaks and water damage: | | | |
| Indoor areas near known roof or wall leaks | ☒ | ☐ | ☐ |
| Walls around leaky or broken windows | ☒ | ☐ | ☐ |
| Floors and ceilings under plumbing | ☒ | ☐ | ☐ |
| Duct interiors near humidifiers, cooling coils, and outdoor air intakes | ☒ | ☐ | ☐ |

7. COMBUSTION APPLIANCES

- | | | | |
|---|----------------------------------|----------------------------------|-----------------------|
| 7a. Checked for odors from combustion appliances | ☒ | ☐ | ☐ |
| 7b. Checked appliances for backdrafting (using chemical smoke) | ☐ | ☒ | ☐ |
| 7c. Inspected exhaust components for leaks, disconnections, or deterioration | ☒ | ☐ | ☐ |
| 7d. Inspected flue components for corrosion and soot | ☒ | ☐ | ☐ |

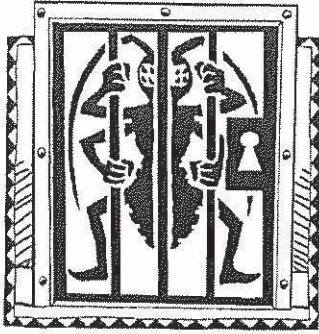
8. PEST CONTROL

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 8a. Completed the <i>Integrated Pest Management Checklist</i> | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|



NOTES

there are some stained ceiling tiles



Integrated Pest Management Checklist

Name: thomas verville

School: griswold middle school

Room or Area: building wide Date Completed: 1-24-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OFFICIAL POLICY STATEMENT

- 1a. Developed or located the school's official policy statement for integrated pest management (IPM) ☒ Yes ☐ No ☐ N/A

2. DESIGNATING PEST MANAGEMENT ROLES

- 2a. Assigned and trained a qualified person to be the pest manager ☒ Yes ☐ No ☐ N/A
- 2b. Involved decision makers in the IPM program ☒ Yes ☐ No ☐ N/A
- 2c. Educated students and staff (the occupants of the building) about IPM and asked them to keep their areas clean and free of clutter ☒ Yes ☐ No ☐ N/A
- 2d. Encouraged parents to learn about IPM practices and implement them at home ☒ Yes ☐ No ☐ N/A
- 2e. Developed a program to educate and train all IPM participants ☒ Yes ☐ No ☐ N/A
- 2f. Included language about IPM into contracts with pest management professionals ☒ Yes ☐ No ☐ N/A

3. SETTING PEST MANAGEMENT OBJECTIVES

- 3a. Set appropriate pest management objectives for school buildings (such as preventing pests from interfering with students' learning environment and preserving the integrity of the building structure) ☒ Yes ☐ No ☐ N/A
- 3b. Set appropriate pest management objectives for school grounds (such as providing safe playing areas and the best athletic surfaces possible) ☒ Yes ☐ No ☐ N/A

4. INSPECTING, IDENTIFYING, AND MONITORING

- 4a. Inspected all buildings and grounds for pest evidence, entry points, food, water, and harborage sites ☒ Yes ☐ No ☐ N/A
- 4b. Identified potential pest habitats in buildings and grounds ☒ Yes ☐ No ☐ N/A
- 4c. Pinpointed the source of any current pest problems ☒ Yes ☐ No ☐ N/A
- 4d. Monitored to determine the extent of pest problems and to estimate pest populations ☒ Yes ☐ No ☐ N/A
- 4e. Developed plans to modify habitat (for example, exclusion, repair, and sanitation efforts) to prevent or resolve any pest problems ☒ Yes ☐ No ☐ N/A
- 4f. Established a monitoring program that consists of routine inspections to estimate pest population levels and identify evidence of pests and potential habitat ☒ Yes ☐ No ☐ N/A

5. SETTING ACTION THRESHOLDS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 5a. Evaluated all available data obtained through inspecting, identifying, and monitoring | ☒ | ☐ | ☐ |
| 5b. Determined how many pests the school buildings, grounds, and occupants can tolerate | ☒ | ☐ | ☐ |
| 5c. Set action thresholds | ☒ | ☐ | ☐ |

6. PREVENTIVE STRATEGIES

INDOOR SITES

6a. Implemented appropriate strategies to prevent pests from inhabiting the following areas:

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| • Entryways | ☒ | ☐ | ☐ |
| • Classrooms | ☒ | ☐ | ☐ |
| • Gymnasiums | ☒ | ☐ | ☐ |
| • Locker rooms | ☒ | ☐ | ☐ |
| • Offices | ☒ | ☐ | ☐ |
| • Staff lounges | ☒ | ☐ | ☐ |
| • Bathrooms | ☒ | ☐ | ☐ |
| • Food preparation and serving areas | ☒ | ☐ | ☐ |
| • Rooms with extensive plumbing | ☒ | ☐ | ☐ |
| • Maintenance areas | ☒ | ☐ | ☐ |
| • Other | ☐ | ☐ | ☐ |

OUTDOOR SITES

6b. Implemented appropriate strategies to prevent pests from inhabiting the following areas:

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| • Playgrounds | ☒ | ☐ | ☐ |
| • Parking lots | ☒ | ☐ | ☐ |
| • Lawns and athletic fields | ☒ | ☐ | ☐ |
| • Teaching gardens or greenhouses | ☒ | ☐ | ☐ |
| • Loading docks | ☒ | ☐ | ☐ |
| • Dumpsters | ☒ | ☐ | ☐ |
| • Areas with ornamental shrubs and trees | ☒ | ☐ | ☐ |
| • Other | ☒ | ☐ | ☐ |

7. PESTICIDE USE AND STORAGE

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 7a. Explored alternative pest management methods before concluding that pesticides were necessary | ☒ | ☐ | ☐ |
| 7b. Ensured that pest management professionals integrate IPM into their pest management methods | ☒ | ☐ | ☐ |
| 7c. Identified the least toxic, target-specific chemical (or pesticide formulation) that is the most effective to address the pest problem, preferably as baits and granules | ☒ | ☐ | ☐ |
| 7d. Reviewed and followed all label instructions on pesticides and learned how to properly apply and handle these chemicals | ☒ | ☐ | ☐ |
| 7e. Used spot-treatment (or bait, crack, and crevice applications) to apply pesticides whenever possible and only treated the obviously infested plants in the area | ☒ | ☐ | ☐ |
| 7f. Used protective clothing or equipment when applying pesticides | ☒ | ☐ | ☐ |
| 7g. Placed all pesticides in tamper-resistant bait boxes or locations that are inaccessible to children and non-target species | ☒ | ☐ | ☐ |





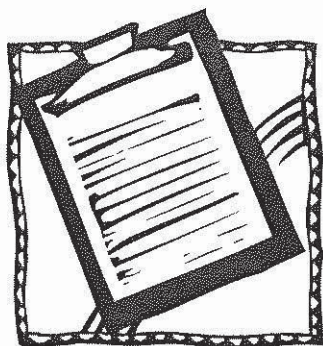
7. PESTICIDE USE AND STORAGE (cont.)

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 7h. Locked or fastened lids of all bait boxes and placed bait away from the runway of the box | ☒ | ☐ | ☐ |
| 7i. Applied pesticides when occupants were not present or in areas where they would not be exposed to the chemicals | ☒ | ☐ | ☐ |
| 7j. Ensured that school occupants (students and staff) are notified of upcoming pesticide applications through posted notices and/or letters | ☒ | ☐ | ☐ |
| 7k. Ensured that parents are notified of upcoming pesticide applications through letters | ☒ | ☐ | ☐ |
| 7l. Kept copies of current pesticide labels and information on pesticides easily accessible | ☒ | ☐ | ☐ |
| 7m. Stored pesticides off site or in areas that are locked and accessible only to designated personnel | ☒ | ☐ | ☐ |
| 7n. Ensured that storage areas are adequately ventilated and are located away from areas prone to flooding or where spills or leaks may contaminate the environment | ☒ | ☐ | ☐ |
| 7o. Ensured that flammable liquids are stored away from ignition sources | ☒ | ☐ | ☐ |
| 7p. Ensured that pesticides are stored in their original containers and all lids are securely fastened | ☒ | ☐ | ☐ |
| 7q. Ensured that air in the storage space cannot mix with the air in the central ventilation system | ☒ | ☐ | ☐ |

8. EVALUATING RESULTS AND RECORD KEEPING

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 8a. Ensured that accurate, up-to-date records of IPM practices and a pest management log for each property are kept | ☒ | ☐ | ☐ |
| 8b. Ensured that pesticide records necessary to meet all state, local, and school board requirements are maintained | ☒ | ☐ | ☐ |
| 8c. Ensured that each log book contains the following items: | | | |
| • Copy of the pest management plan | ☒ | ☐ | ☐ |
| • Service schedules for maintenance of buildings and grounds | ☒ | ☐ | ☐ |
| • Current EPA-registered labels | ☒ | ☐ | ☐ |
| • Current Material Safety Data Sheets (MSDS) for each pesticide project | ☒ | ☐ | ☐ |
| • Pest surveillance data sheets | ☒ | ☐ | ☐ |
| • Diagram noting the location of pest activity, traps, and bait stations | ☐ | ☐ | ☐ |

NOTES



Walkthrough Inspection Checklist

Name:	thomas verville		
School:	griswold middle school		
Room or Area:	building wide	Date Completed:	2-24-25
Signature:	thomas verville		

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. GROUND LEVEL

	Yes	No	N/A
1a. Ensured that ventilation units operate properly	☒	☐	☐
1b. Ensured there are no obstructions blocking air intakes	☒	☐	☐
1c. Checked for nests and droppings near outdoor air intakes	☒	☐	☐
1d. Determined that dumpsters are located away from doors, windows, and outdoor air intakes	☒	☐	☐
1e. Checked potential sources of air contaminants near the building (chimneys, stacks, industrial plants, exhaust from nearby buildings)	☒	☐	☐
1f. Ensured that vehicles avoid idling near outdoor air intakes	☒	☐	☐
1g. Minimized pesticide application	☒	☐	☐
1h. Ensured that there is proper drainage away from the building (including roof downspouts)	☒	☐	☐
1i. Ensured that sprinklers spray away from the building and outdoor air intakes	☒	☐	☐
1j. Ensured that walk-off mats are used at exterior entrances and that they are cleaned regularly	☒	☐	☐

2. ROOF

While on the roof, consider inspecting the HVAC units (use the Ventilation Checklist).

2a. Ensured that the roof is in good condition	☒	☐	☐
2b. Checked for evidence of water ponding	☒	☐	☐
2c. Checked that ventilation units operate properly (air flows in)	☒	☐	☐
2d. Ensured that exhaust fans operate properly (air flows out)	☒	☐	☐
2e. Ensured that air intakes remain open, even at minimum setting	☒	☐	☐
2f. Checked for nests and droppings near outdoor air intakes	☒	☐	☐
2g. Ensured that air from plumbing stacks and exhaust outlets flows away from outdoor air intakes	☒	☐	☐

3. ATTIC

3a. Checked for evidence of roof and plumbing leaks	☐	☐	☒
3b. Checked for birds and animal nests	☐	☐	☒

4. GENERAL CONSIDERATIONS

4a. Ensured that temperature and humidity are maintained within acceptable ranges	☒	☐	☐
4b. Ensured that no obstructions exist in supply and exhaust vents	☒	☐	☐
4c. Checked for odors	☒	☐	☐
4d. Checked for signs of mold and mildew growth	☒	☐	☐

4. GENERAL CONSIDERATIONS (continued)

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4e. Checked for signs of water damage | ☒ | ☐ | ☐ |
| 4f. Checked for evidence of pests and obvious food sources | ☒ | ☐ | ☐ |
| 4g. Noted and reviewed all concerns from school occupants | ☒ | ☐ | ☐ |

5. BATHROOMS AND GENERAL PLUMBING

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 5a. Ensured that bathrooms and restrooms have operating exhaust fans | ☒ | ☐ | ☐ |
| 5b. Ensured proper drain trap maintenance: | | | |
| Water is poured down floor drains once per week (approx. 1 quart of water) | ☒ | ☐ | ☐ |
| Water is poured into sinks at least once per week (about 2 cups of water) | ☒ | ☐ | ☐ |
| Toilets are flushed at least once per week | ☒ | ☐ | ☐ |

6. MAINTENANCE SUPPLIES

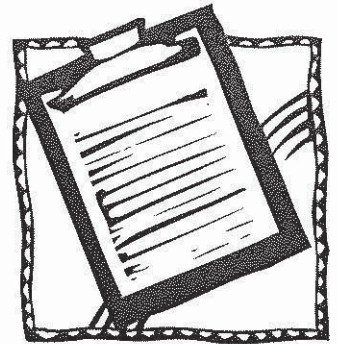
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 6a. Ensured that chemicals are used only with adequate ventilation and when building is unoccupied | ☒ | ☐ | ☐ |
| 6b. Ensured that vents in chemical and trash storage areas are operating properly | ☒ | ☐ | ☐ |
| 6c. Ensured that portable fuel containers are properly closed | ☒ | ☐ | ☐ |
| 6d. Ensured that power equipment, like snowblowers and lawn mowers, have been serviced and maintained according to manufacturers' guidelines | ☒ | ☐ | ☐ |

7. COMBUSTION APPLIANCES

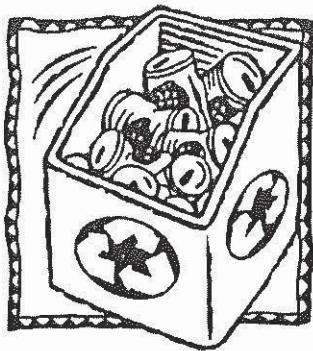
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 7a. Checked for combustion gas and fuel odors | ☒ | ☐ | ☐ |
| 7b. Ensured that combustion appliances have flues or exhaust hoods | ☒ | ☐ | ☐ |
| 7c. Checked for leaks, disconnections, and deterioration | ☒ | ☐ | ☐ |
| 7d. Ensured there is no soot on inside or outside of flue components | ☒ | ☐ | ☐ |

8. OTHER

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 8a. Checked for peeling and flaking paint (if the building was built before 1980, this could be a lead hazard) | ☒ | ☐ | ☐ |
| 8b. Determined date of last radon test | ☒ | ☐ | ☐ |



NOTES



Waste Management Checklist

Name: Thomas Verville

School: griswold middle school

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verville

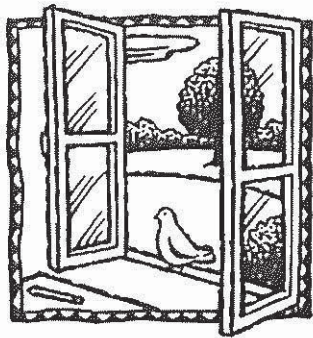
Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. WASTE MANAGEMENT

	Yes	No	N/A
1a. Ensured that waste containers are appropriate for use (for example, food waste containers should have lids)	☒	☐	☐
1b. Ensured that waste containers are lined	☒	☐	☐
1c. Ensured that waste from art, science, vocational classes, etc., are handled separately	☒	☐	☐
1d. Labeled recycling bins clearly	☒	☐	☐
1e. Ensured number of bins and dumpsters is adequate	☒	☐	☐
1f. Ensured appropriate location of dumpsters (i.e., away from air intakes, doors, and operable windows in relation to prevailing winds)	☒	☐	☐
1g. Ensured waste containers are emptied regularly	☒	☐	☐
1h. Ensured appropriate waste removal schedule	☒	☐	☐
1i. Ensured waste is stored in a well-ventilated room	☒	☐	☐
1j. Ensured any exhaust fans in the room are operating properly	☒	☐	☐
1k. Checked waste storage areas for odors, contaminants, or signs of vermin	☒	☐	☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold Middle School
 Unit Ventilator/AHU No: fau-3
 Room or Area: super wing Date Completed: 3-4-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

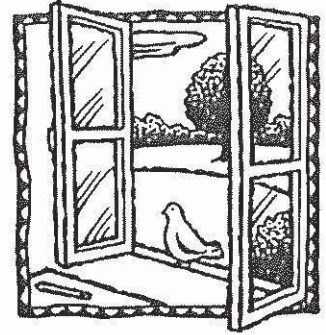
ACTIVITY 11: CONTROL COMPONENTS

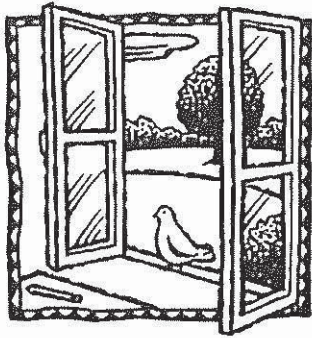
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

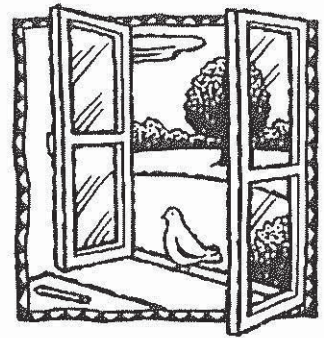
5. EXHAUST SYSTEMS

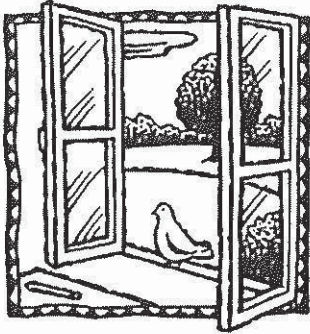
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

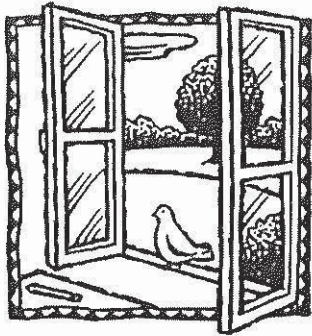
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Middle School		
Unit Ventilator/AHU No:	fau-7		
Room or Area:	building a	Date Completed:	3-4-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) .. | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

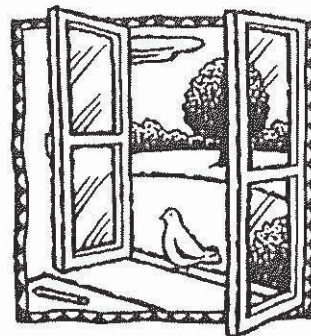
ACTIVITY 11: CONTROL COMPONENTS

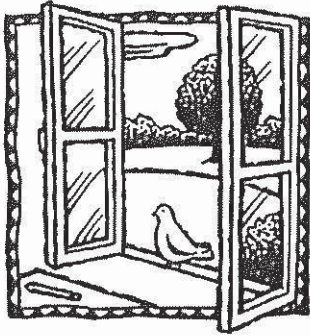
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied).....**Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required.....☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning☐ ☐ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows)☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings)☐ ☒ ☐

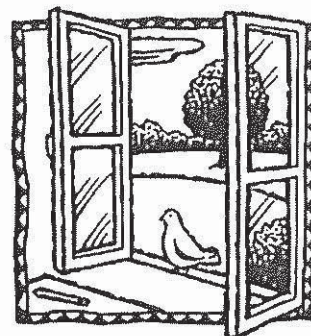
5. EXHAUST SYSTEMS

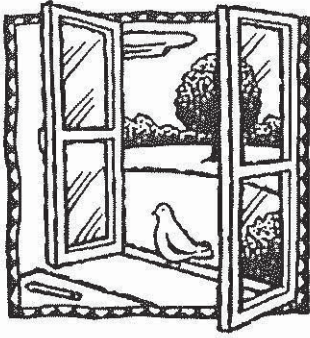
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s)☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces.....

Yes	No	N/A
☐	☒	☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake

☐	☒	☐
-----------------------	----------------------------------	-----------------------

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition

☐	☒	☐
-----------------------	----------------------------------	-----------------------

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit

☐	☒	☐
-----------------------	----------------------------------	-----------------------
- 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration

☐	☒	☐
-----------------------	----------------------------------	-----------------------
- 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c)

☐	☒	☐
-----------------------	----------------------------------	-----------------------

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1

☐	☒	☐
-----------------------	----------------------------------	-----------------------
- 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1

☐	☒	☐
-----------------------	----------------------------------	-----------------------

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Middle School

Unit Ventilator/AHU No: mau1

Room or Area: kitchen Date Completed: 3-4-25

Signature: Thomas Verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

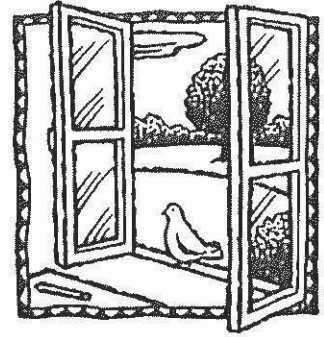
ACTIVITY 11: CONTROL COMPONENTS

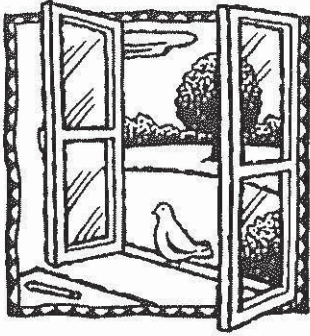
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

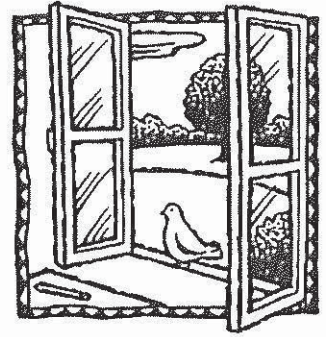
5. EXHAUST SYSTEMS

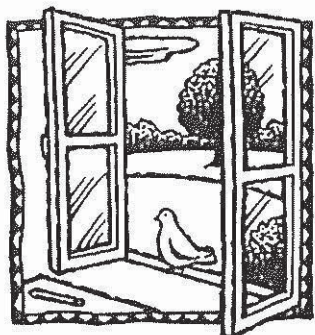
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

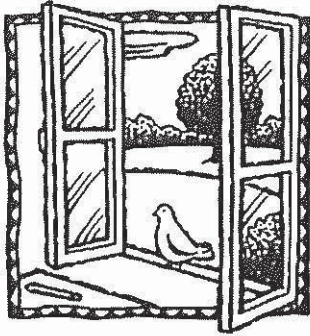
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Middle School

Unit Ventilator/AHU No: RTU_1

Room or Area: LMC Date Completed: 3-4-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☐ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

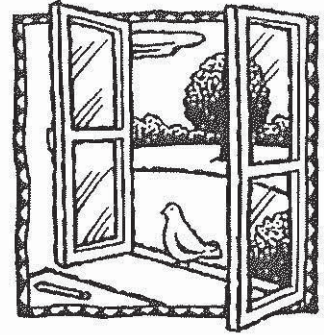
ACTIVITY 11: CONTROL COMPONENTS

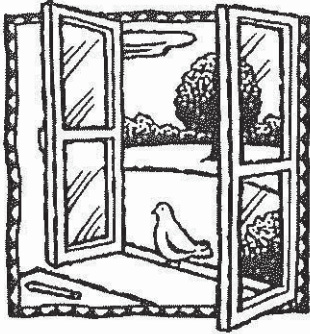
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied)..... **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required..... ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☐ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

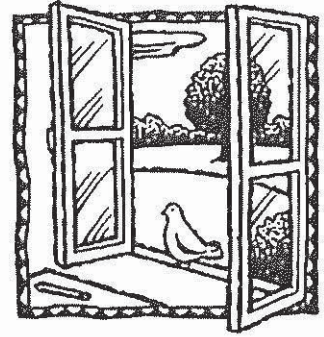
5. EXHAUST SYSTEMS

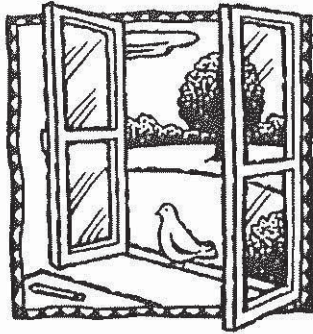
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces..... **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition..... ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

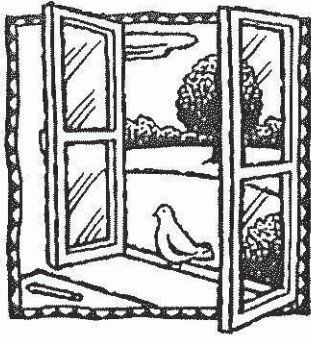
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration..... ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Thomas Verville

Unit Ventilator/AHU No: RTU_2

Room or Area: Auditorium Date Completed: 3-4-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

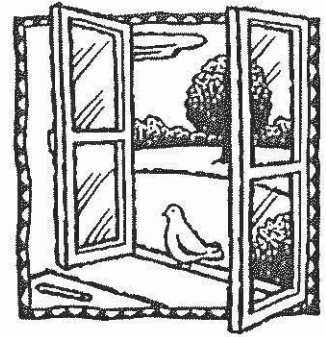
ACTIVITY 11: CONTROL COMPONENTS

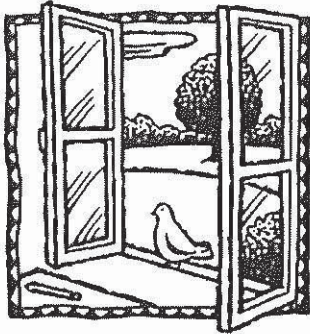
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☐ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ Yes ☒ No ☐ N/A
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ Yes ☒ No ☐ N/A

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ Yes ☐ No ☐ N/A
- 4d. Ensured that supply and return vents are open and unblocked ☒ Yes ☐ No ☐ N/A

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ Yes ☒ No ☐ N/A
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ Yes ☒ No ☐ N/A
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ Yes ☐ No ☐ N/A
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ Yes ☐ No ☐ N/A
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ Yes ☐ No ☐ N/A

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ Yes ☒ No ☐ N/A

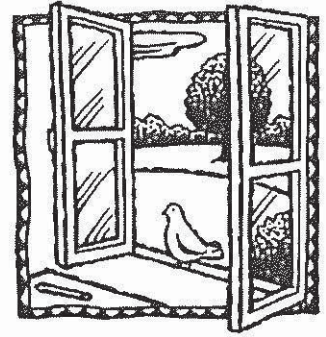
5. EXHAUST SYSTEMS

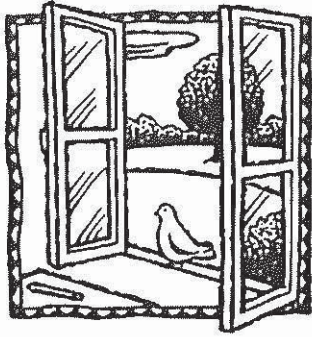
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ Yes ☒ No ☐ N/A

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

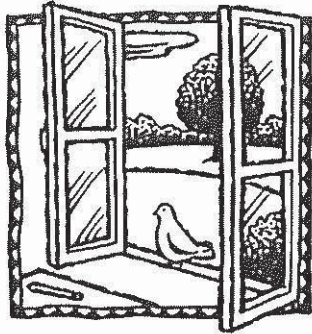
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Middle School

Unit Ventilator/AHU No: RTU_3

Room or Area: 3rd floor building b Date Completed: 3-4-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

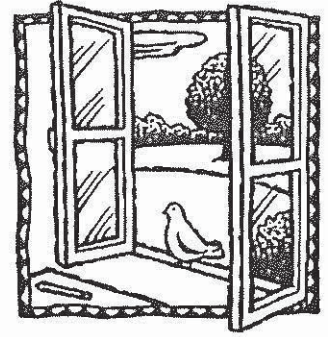
- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

ACTIVITY 11: CONTROL COMPONENTS

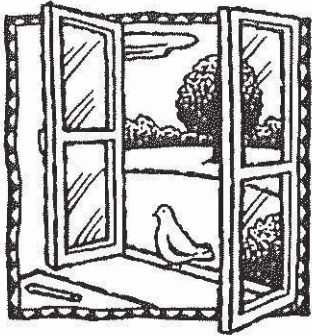
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |



NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.



3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals
- OR
- 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped)
- 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F
- 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting

ACTIVITY 15: ECONOMIZERS

- 3x. Confirmed proper economizer settings based on design specifications or local practices

NOTE: The dry-bulb is typically set at 65°F or lower.

- 3y. Checked that sensor on the economizer is shielded from direct sunlight
- 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☐ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☐ ☒
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☐ ☒
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

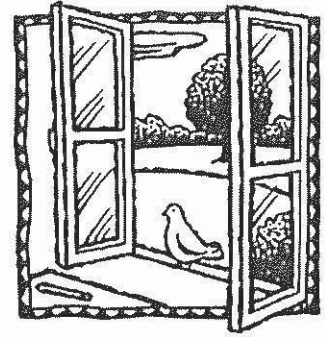
5. EXHAUST SYSTEMS

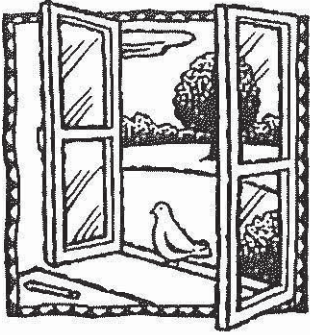
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

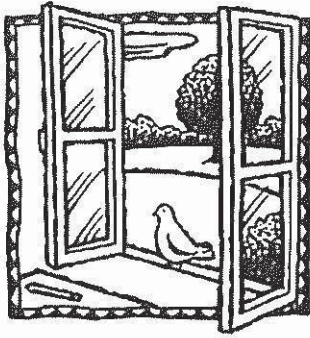
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Middle School

Unit Ventilator/AHU No: RTU_4

Room or Area: Science 2nd floor Date Completed: 3-6-25

Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) **Yes** ☒ **No** ☐ **N/A** ☐
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode **Yes** ☒ **No** ☐ **N/A** ☐

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers **Yes** ☒ **No** ☐ **N/A** ☐
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) **Yes** ☒ **No** ☐ **N/A** ☐

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) **Yes** ☒ **No** ☐ **N/A** ☐
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) **Yes** ☒ **No** ☐ **N/A** ☐
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) **Yes** ☒ **No** ☐ **N/A** ☐

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) **Yes** ☒ **No** ☐ **N/A** ☐
- 1i. Confirmed that outdoor air is entering the intake appropriately **Yes** ☒ **No** ☐ **N/A** ☐

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule **Yes** ☒ **No** ☐ **N/A** ☐
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) **Yes** ☒ **No** ☐ **N/A** ☐
- 2c. Vacuumed filter areas before installing new filters **Yes** ☒ **No** ☐ **N/A** ☐
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter **Yes** ☒ **No** ☐ **N/A** ☐
- 2e. Confirmed proper installation of filters (correct direction for airflow) **Yes** ☒ **No** ☐ **N/A** ☐

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

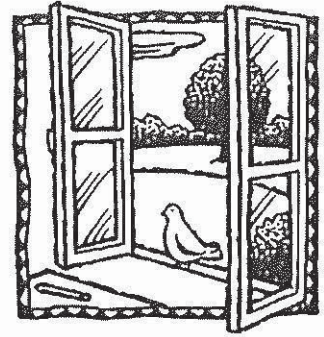
ACTIVITY 11: CONTROL COMPONENTS

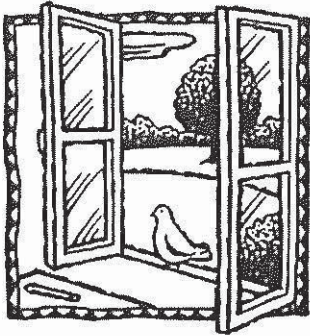
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☒ | ☐ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☒ | ☐ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☒ | ☐ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☒ | ☐ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☒ | ☐ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☒ | ☐ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☒ | ☐ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☒ | ☐ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☒ | ☐ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☒ | ☐ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☒ | ☐ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

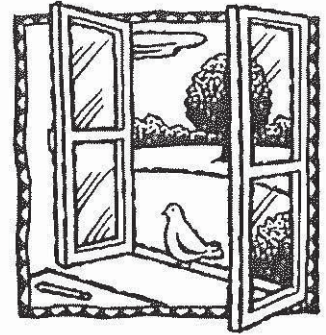
5. EXHAUST SYSTEMS

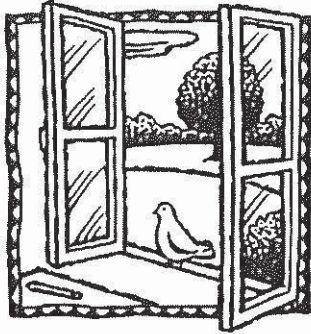
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

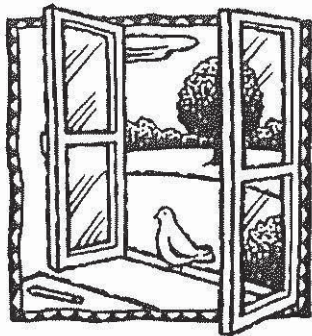
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☐ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold Middle School
 Unit Ventilator/AHU No: RTU_5
 Room or Area: second floor b building Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

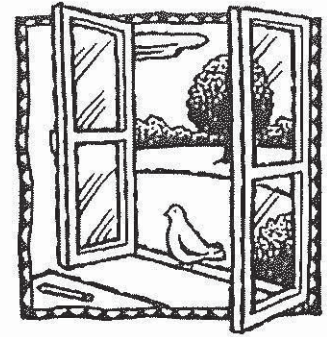
ACTIVITY 11: CONTROL COMPONENTS

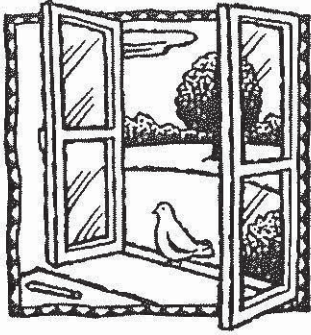
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☒ | ☐ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☒ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

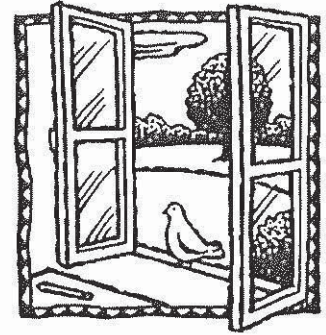
5. EXHAUST SYSTEMS

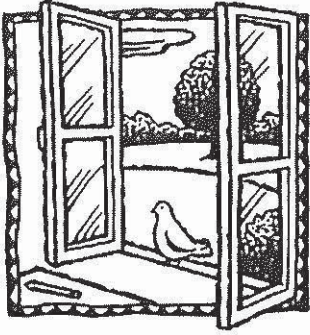
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

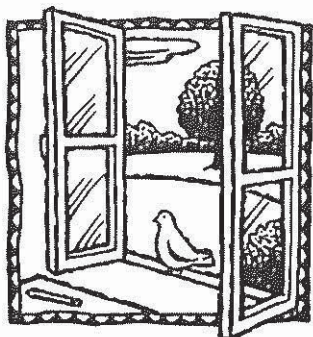
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Middle School		
Unit Ventilator/AHU No:	rtu-6		
Room or Area:	1st floor b building	Date Completed:	3-11-25
Signature:	<i>thomas verville</i>		

Instructions

- Read the *IAQ Backgrounder* and the Background Information for this checklist.
- Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
- Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
- Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

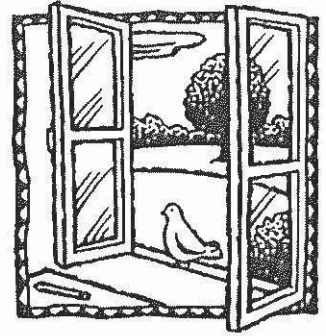
ACTIVITY 11: CONTROL COMPONENTS

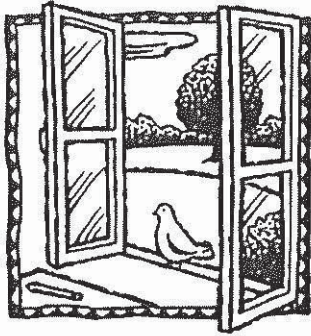
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

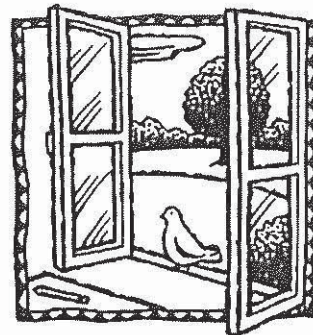
5. EXHAUST SYSTEMS

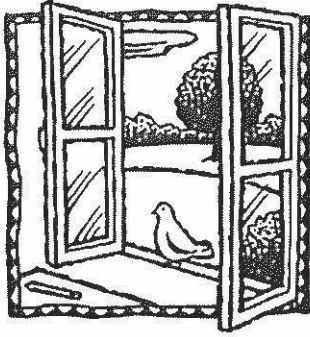
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces

Yes	No	N/A
☐	☒	☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake

☐	☒	☐
-----------------------	----------------------------------	-----------------------

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition

☐	☒	☐
-----------------------	----------------------------------	-----------------------

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit

☐	☒	☐
-----------------------	----------------------------------	-----------------------
- 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration

☐	☒	☐
-----------------------	----------------------------------	-----------------------
- 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c)

☐	☒	☐
-----------------------	----------------------------------	-----------------------

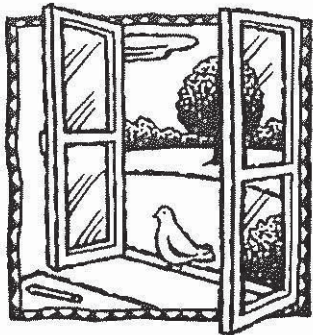
ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1

☐	☒	☐
-----------------------	----------------------------------	-----------------------
- 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1

☐	☒	☐
-----------------------	----------------------------------	-----------------------

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold Middle School
 Unit Ventilator/AHU No: rtu-7
 Room or Area: gym Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- thomas verville*
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

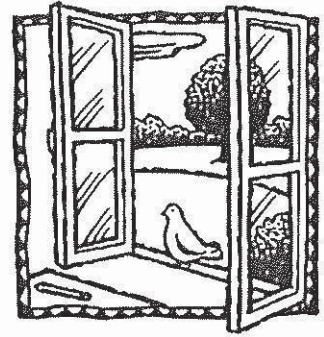
ACTIVITY 11: CONTROL COMPONENTS

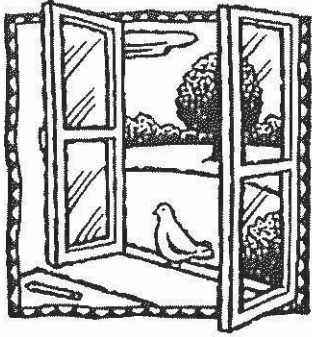
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

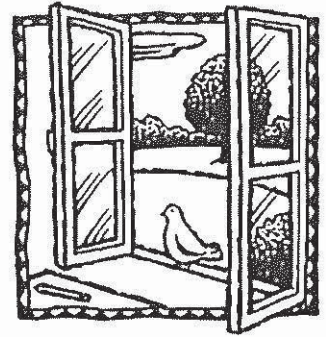
5. EXHAUST SYSTEMS

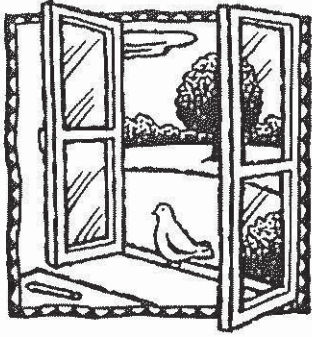
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

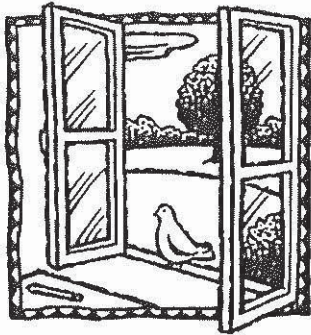
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Middle School		
Unit Ventilator/AHU No:	rtu-8		
Room or Area:	gym	Date Completed:	3-11-25
Signature:	<i>thomas verville</i>		

Instructions

- Read the *IAQ Background* and the Background Information for this checklist.
- Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
- Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
- Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

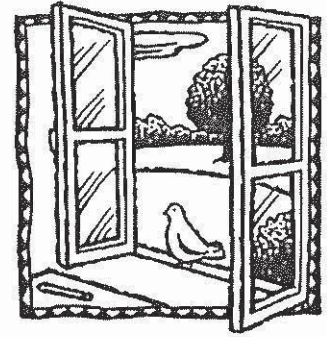
ACTIVITY 11: CONTROL COMPONENTS

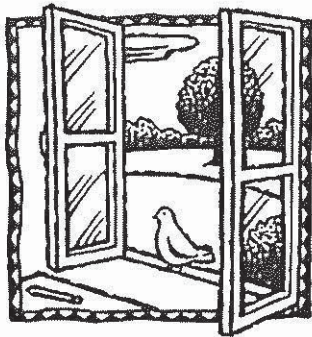
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

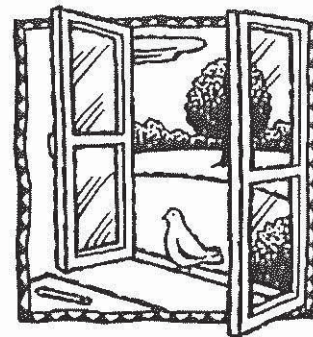
5. EXHAUST SYSTEMS

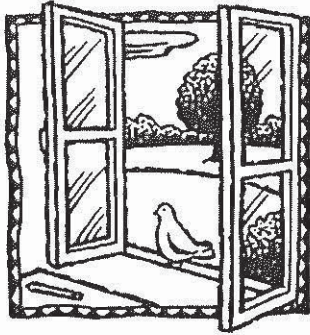
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

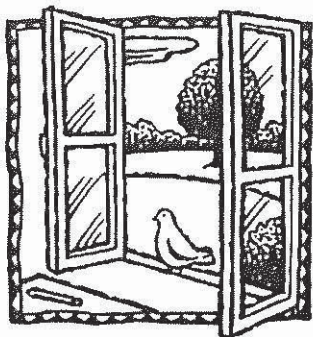
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Middle School

Unit Ventilator/AHU No: rtu-9

Room or Area: locker rooms Date Completed: 3-11-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

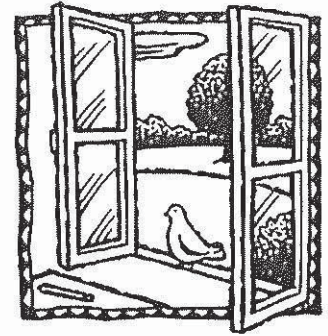
- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

ACTIVITY 11: CONTROL COMPONENTS

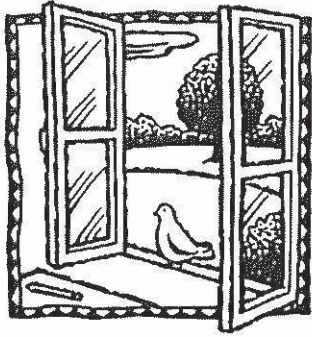
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |



NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.



3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

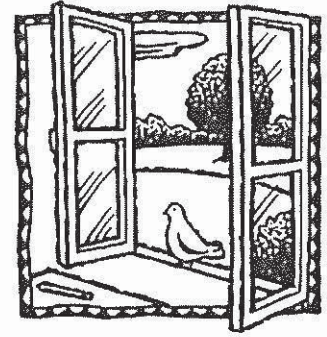
5. EXHAUST SYSTEMS

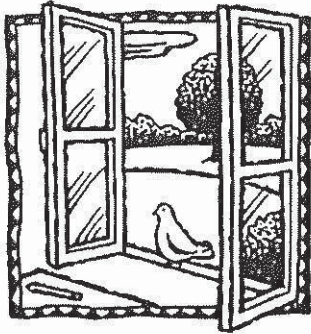
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

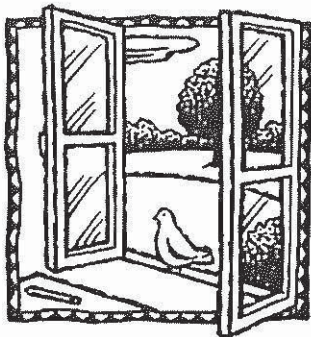
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold Middle School		
Unit Ventilator/AHU No:	RTU_10		
Room or Area:	main office	Date Completed:	3-11-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

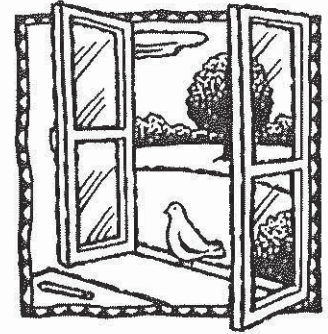
- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

ACTIVITY 11: CONTROL COMPONENTS

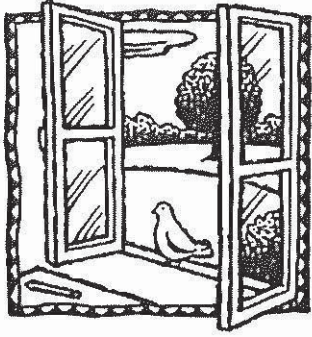
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |



NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.



3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☐ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☒ ☐ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☒ ☐ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☐ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

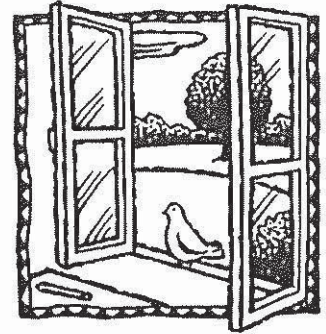
5. EXHAUST SYSTEMS

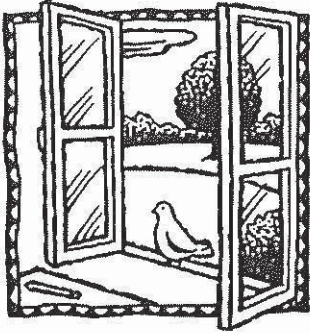
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces..... **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition..... ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

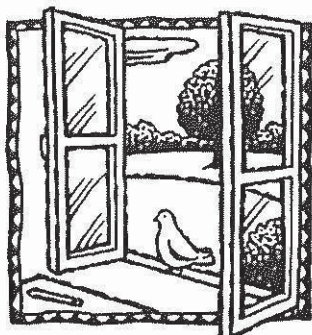
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration..... ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: main office
 School: Griswold Middle School
 Unit Ventilator/AHU No: RTU_11
 Room or Area: servery Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

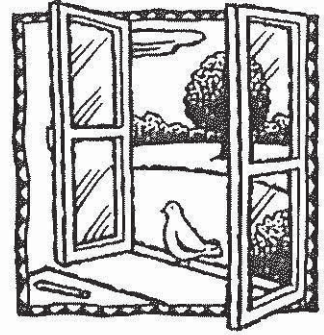
ACTIVITY 11: CONTROL COMPONENTS

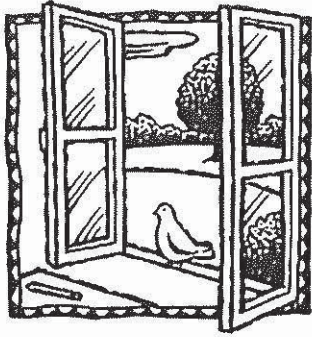
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals ☐ ☒ ☐
- OR
- 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) ☐ ☒ ☐
- 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats ☐ ☒ ☐

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F ☒ ☐ ☐
- 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting ☒ ☐ ☐

ACTIVITY 15: ECONOMIZERS

- 3x. Confirmed proper economizer settings based on design specifications or local practices ☐ ☒ ☐

NOTE: The dry-bulb is typically set at 65°F or lower.

- 3y. Checked that sensor on the economizer is shielded from direct sunlight ☐ ☒ ☐
- 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications ☐ ☒ ☐

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

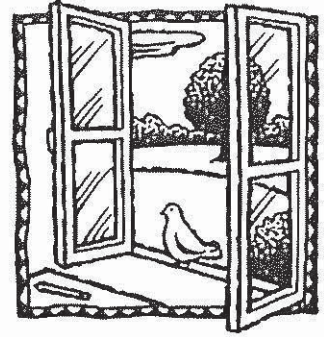
5. EXHAUST SYSTEMS

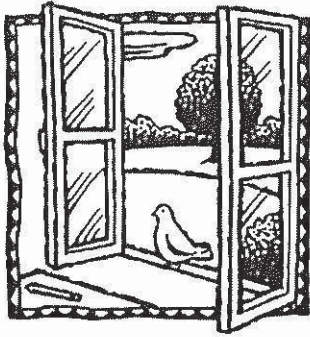
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

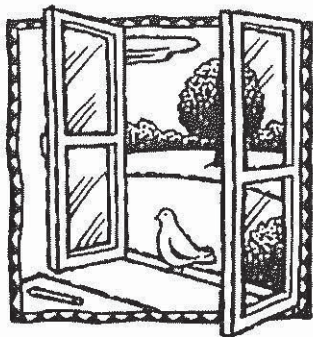
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Middle School

Unit Ventilator/AHU No: RTU_12

Room or Area: band room Date Completed: 3-11-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☐ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☐ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

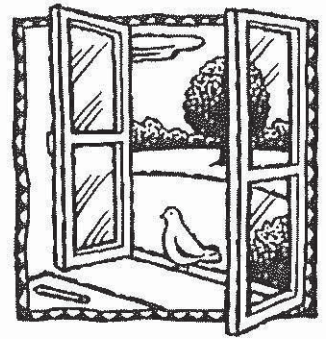
ACTIVITY 11: CONTROL COMPONENTS

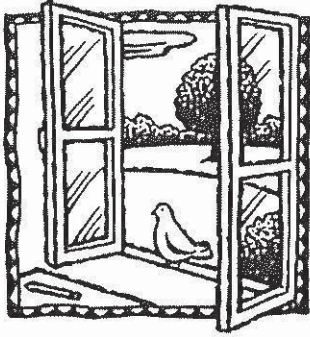
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☐ ☒
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☐ ☒
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

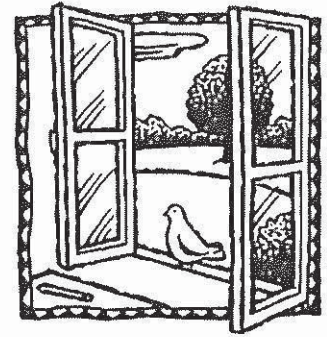
5. EXHAUST SYSTEMS

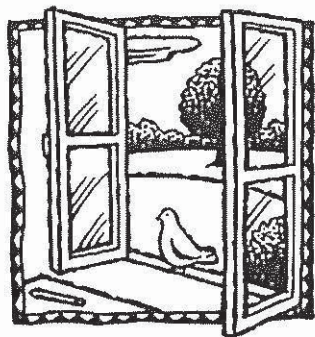
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces..... **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

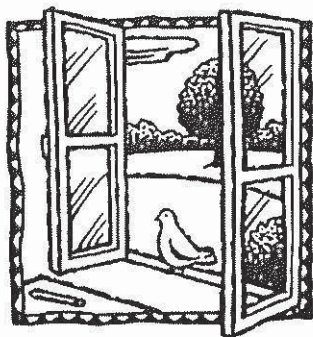
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold Middle School
 Unit Ventilator/AHU No: RTU_13
 Room or Area: cafe Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

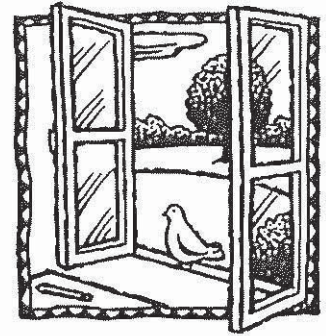
ACTIVITY 11: CONTROL COMPONENTS

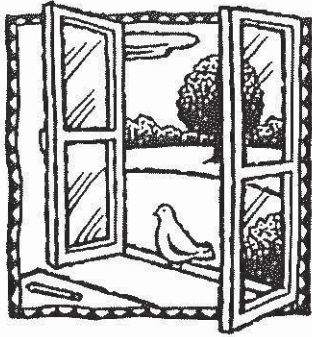
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☐ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied).....☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required.....☐ ☐ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning.....☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows)☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings).....☐ ☒ ☐

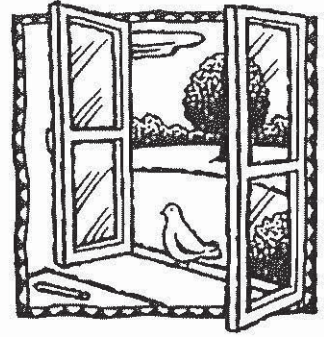
5. EXHAUST SYSTEMS

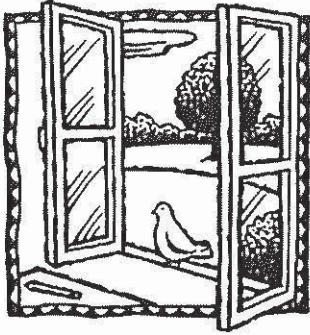
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s)☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

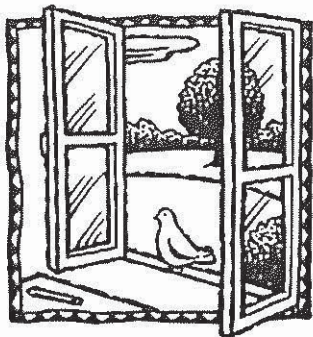
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Middle School

Unit Ventilator/AHU No: RTU_14

Room or Area: 2nd floor science c building Date Completed: 3-11-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☐ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

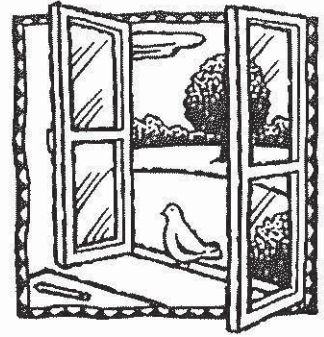
ACTIVITY 11: CONTROL COMPONENTS

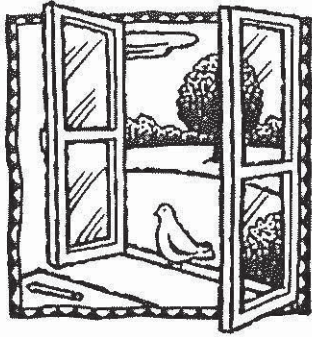
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☐ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☐ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied).....☐ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required.....☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows)☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings)☐ ☒ ☐

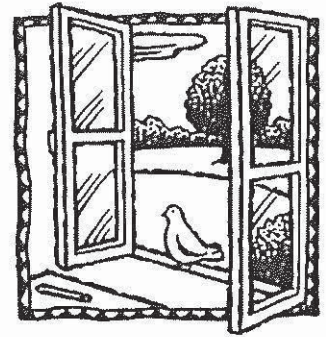
5. EXHAUST SYSTEMS

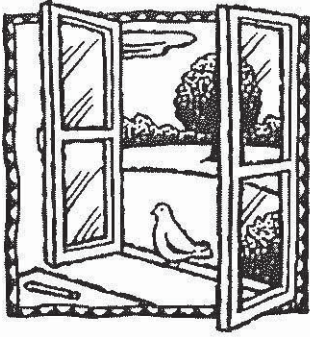
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s)☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

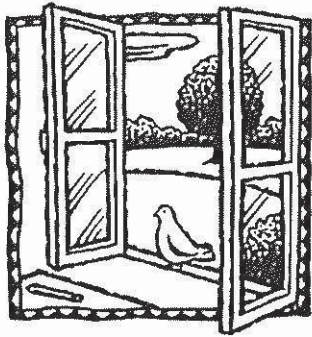
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☐ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold Middle School

Unit Ventilator/AHU No: RTU_15

Room or Area: head end room Date Completed: 3-11-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

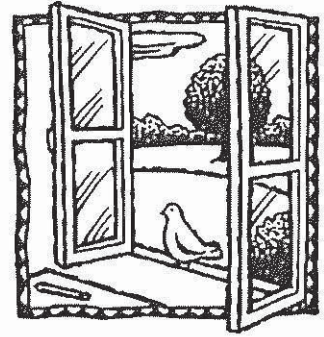
ACTIVITY 11: CONTROL COMPONENTS

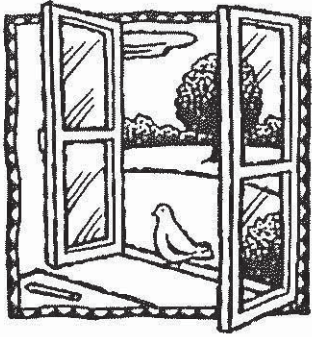
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☐ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☐ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

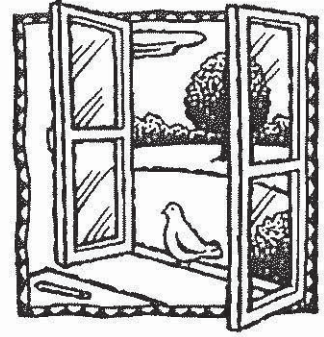
5. EXHAUST SYSTEMS

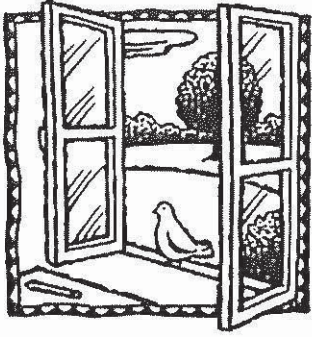
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces ☐ Yes ☐ No ☐ N/A

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

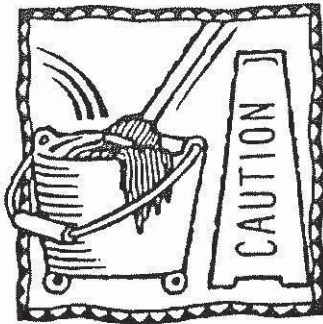
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
- 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
- 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
- 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Building and Grounds Maintenance Checklist

Name: thomas verville

School: griswold high School

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. BUILDING MAINTENANCE SUPPLIES

	Yes	No	N/A
1a. Developed appropriate procedures and stocked supplies for spill control	☒	☐	☐
1b. Reviewed supply labels	☒	☐	☐
1c. Ensured that air from chemical and trash storage areas vents to the outdoors	☒	☐	☐
1d. Stored chemical products and supplies in sealed, clearly labeled containers	☒	☐	☐
1e. Researched and selected the safest products available	☒	☐	☐
1f. Ensured that supplies are being used according to manufacturers' instructions	☒	☐	☐
1g. Ensured that chemicals, chemical-containing wastes, and containers are disposed of according to manufacturers' instructions	☒	☐	☐
1h. Substituted less- or non-hazardous materials (where possible)	☒	☐	☐
1i. Scheduled work involving odorous or hazardous chemicals for periods when the school is unoccupied	☒	☐	☐
1j. Ventilated affected areas during and after the use of odorous or hazardous chemicals	☒	☐	☐

2. GROUNDS MAINTENANCE SUPPLIES

2a. Stored grounds maintenance supplies in appropriate area(s)	☒	☐	☐
2b. Ensured that supplies are used and stored according to manufacturers' instructions	☒	☐	☐
2c. Established and followed procedures to minimize exposure to fumes from supplies	☒	☐	☐
2d. Reviewed and followed manufacturers' guidelines for maintenance	☒	☐	☐
2e. Replaced portable gas cans with low-emission cans	☒	☐	☐
2f. Stored chemical products and supplies in sealed, clearly-labeled containers	☒	☐	☐
2g. Ensured that chemicals, chemical-containing wastes, and containers are disposed of according to manufacturers' instructions	☒	☐	☐

3. DUST CONTROL

3a. Installed and maintained barrier mats for entrances	☒	☐	☐
3b. Used high efficiency vacuum bags	☒	☐	☐
3c. Used proper dusting techniques	☒	☐	☐
3d. Wrapped feather dusters with a dust cloth	☐	☐	☒
3e. Cleaned air return grilles and air supply vents	☒	☐	☐

4. FLOOR CLEANING

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4a. Established and followed schedule for vacuuming and mopping floors | ☒ | ☐ | ☐ |
| 4b. Cleaned spills on floors promptly (as necessary) | ☒ | ☐ | ☐ |
| 4c. Performed restorative maintenance (as necessary) | ☐ | ☐ | ☐ |

5. DRAIN TRAPS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 5a. Poured water down floor drains once per week (about 1 quart of water) | ☒ | ☐ | ☐ |
| 5b. Ran water in sinks at least once per week (about 2 cups of water) | ☒ | ☐ | ☐ |
| 5c. Flushed toilets once each week (if not used regularly) | ☒ | ☐ | ☐ |

6. MOISTURE, LEAKS, AND SPILLS

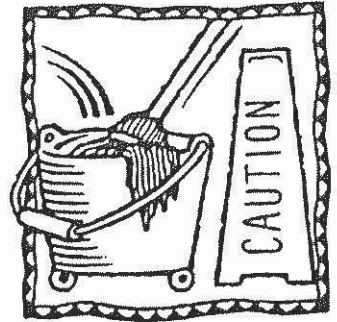
- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 6a. Checked for moldy odors | ☒ | ☐ | ☐ |
| 6b. Inspected ceiling tiles, floors, and walls for leaks or discoloration (may indicate periodic leaks) | ☒ | ☐ | ☐ |
| 6c. Checked areas where moisture is commonly generated (e.g., kitchens, locker rooms, and bathrooms) | ☒ | ☐ | ☐ |
| 6d. Checked that windows, windowsills, and window frames are free of condensate | ☒ | ☐ | ☐ |
| 6e. Checked that indoor surfaces of exterior walls and cold water pipes are free of condensate | ☒ | ☐ | ☐ |
| 6f. Ensured the following areas are free from signs of leaks and water damage: | | | |
| Indoor areas near known roof or wall leaks | ☒ | ☐ | ☐ |
| Walls around leaky or broken windows | ☒ | ☐ | ☐ |
| Floors and ceilings under plumbing | ☒ | ☐ | ☐ |
| Duct interiors near humidifiers, cooling coils, and outdoor air intakes | ☒ | ☐ | ☐ |

7. COMBUSTION APPLIANCES

- | | | | |
|---|----------------------------------|----------------------------------|-----------------------|
| 7a. Checked for odors from combustion appliances | ☒ | ☐ | ☐ |
| 7b. Checked appliances for backdrafting (using chemical smoke) | ☐ | ☒ | ☐ |
| 7c. Inspected exhaust components for leaks, disconnections, or deterioration | ☒ | ☐ | ☐ |
| 7d. Inspected flue components for corrosion and soot | ☒ | ☐ | ☐ |

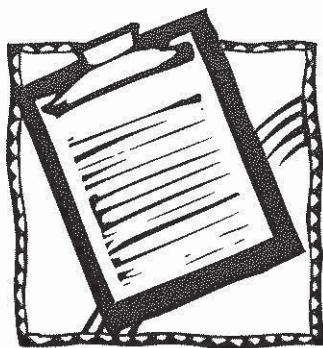
8. PEST CONTROL

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 8a. Completed the <i>Integrated Pest Management Checklist</i> | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|



NOTES

there are some stained ceiling tiles



Walkthrough Inspection Checklist

Name: thomas verville
 School: griswold high school
 Room or Area: building wide Date Completed: 2-24-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. GROUND LEVEL

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 1a. Ensured that ventilation units operate properly | ☒ | ☐ | ☐ |
| 1b. Ensured there are no obstructions blocking air intakes | ☒ | ☐ | ☐ |
| 1c. Checked for nests and droppings near outdoor air intakes | ☒ | ☐ | ☐ |
| 1d. Determined that dumpsters are located away from doors, windows, and outdoor air intakes | ☒ | ☐ | ☐ |
| 1e. Checked potential sources of air contaminants near the building (chimneys, stacks, industrial plants, exhaust from nearby buildings) | ☒ | ☐ | ☐ |
| 1f. Ensured that vehicles avoid idling near outdoor air intakes | ☒ | ☐ | ☐ |
| 1g. Minimized pesticide application | ☒ | ☐ | ☐ |
| 1h. Ensured that there is proper drainage away from the building (including roof downspouts) | ☒ | ☐ | ☐ |
| 1i. Ensured that sprinklers spray away from the building and outdoor air intakes | ☒ | ☐ | ☐ |
| 1j. Ensured that walk-off mats are used at exterior entrances and that they are cleaned regularly | ☒ | ☐ | ☐ |

2. ROOF

While on the roof, consider inspecting the HVAC units (use the Ventilation Checklist).

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2a. Ensured that the roof is in good condition | ☒ | ☐ | ☐ |
| 2b. Checked for evidence of water ponding | ☒ | ☐ | ☐ |
| 2c. Checked that ventilation units operate properly (air flows in) | ☒ | ☐ | ☐ |
| 2d. Ensured that exhaust fans operate properly (air flows out) | ☒ | ☐ | ☐ |
| 2e. Ensured that air intakes remain open, even at minimum setting | ☒ | ☐ | ☐ |
| 2f. Checked for nests and droppings near outdoor air intakes | ☒ | ☐ | ☐ |
| 2g. Ensured that air from plumbing stacks and exhaust outlets flows away from outdoor air intakes | ☒ | ☐ | ☐ |

3. ATTIC

- | | | | |
|---|-----------------------|-----------------------|----------------------------------|
| 3a. Checked for evidence of roof and plumbing leaks | ☐ | ☐ | ☒ |
| 3b. Checked for birds and animal nests | ☐ | ☐ | ☒ |

4. GENERAL CONSIDERATIONS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 4a. Ensured that temperature and humidity are maintained within acceptable ranges | ☒ | ☐ | ☐ |
| 4b. Ensured that no obstructions exist in supply and exhaust vents | ☒ | ☐ | ☐ |
| 4c. Checked for odors | ☒ | ☐ | ☐ |
| 4d. Checked for signs of mold and mildew growth | ☒ | ☐ | ☐ |

4. GENERAL CONSIDERATIONS (continued)

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4e. Checked for signs of water damage | ☒ | ☐ | ☐ |
| 4f. Checked for evidence of pests and obvious food sources | ☒ | ☐ | ☐ |
| 4g. Noted and reviewed all concerns from school occupants | ☒ | ☐ | ☐ |

5. BATHROOMS AND GENERAL PLUMBING

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 5a. Ensured that bathrooms and restrooms have operating exhaust fans | ☒ | ☐ | ☐ |
| 5b. Ensured proper drain trap maintenance: | | | |
| Water is poured down floor drains once per week (approx. 1 quart of water) | ☒ | ☐ | ☐ |
| Water is poured into sinks at least once per week (about 2 cups of water) | ☒ | ☐ | ☐ |
| Toilets are flushed at least once per week | ☒ | ☐ | ☐ |

6. MAINTENANCE SUPPLIES

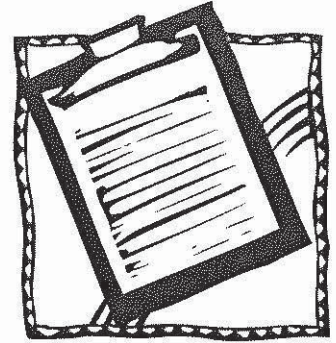
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 6a. Ensured that chemicals are used only with adequate ventilation and when building is unoccupied | ☒ | ☐ | ☐ |
| 6b. Ensured that vents in chemical and trash storage areas are operating properly | ☒ | ☐ | ☐ |
| 6c. Ensured that portable fuel containers are properly closed | ☒ | ☐ | ☐ |
| 6d. Ensured that power equipment, like snowblowers and lawn mowers, have been serviced and maintained according to manufacturers' guidelines | ☒ | ☐ | ☐ |

7. COMBUSTION APPLIANCES

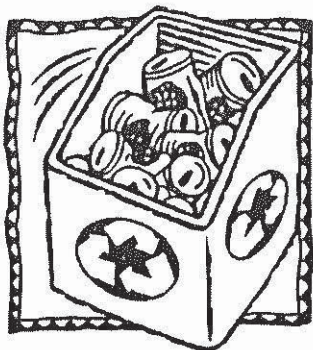
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 7a. Checked for combustion gas and fuel odors | ☒ | ☐ | ☐ |
| 7b. Ensured that combustion appliances have flues or exhaust hoods | ☒ | ☐ | ☐ |
| 7c. Checked for leaks, disconnections, and deterioration | ☒ | ☐ | ☐ |
| 7d. Ensured there is no soot on inside or outside of flue components | ☒ | ☐ | ☐ |

8. OTHER

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 8a. Checked for peeling and flaking paint (if the building was built before 1980, this could be a lead hazard) | ☒ | ☐ | ☐ |
| 8b. Determined date of last radon test | ☒ | ☐ | ☐ |



NOTES



Waste Management Checklist

Name: Thomas Verville
 School: griswold high school
 Room or Area: building wide Date Completed: 2-24-25
 Signature: thomas verville

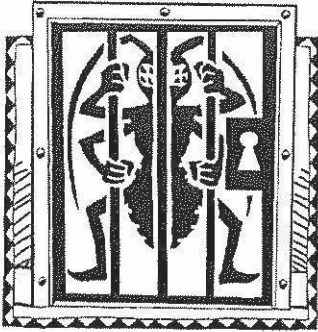
Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. WASTE MANAGEMENT

	Yes	No	N/A
1a. Ensured that waste containers are appropriate for use (for example, food waste containers should have lids)	☒	☐	☐
1b. Ensured that waste containers are lined	☒	☐	☐
1c. Ensured that waste from art, science, vocational classes, etc., are handled separately	☒	☐	☐
1d. Labeled recycling bins clearly	☒	☐	☐
1e. Ensured number of bins and dumpsters is adequate	☒	☐	☐
1f. Ensured appropriate location of dumpsters (i.e., away from air intakes, doors, and operable windows in relation to prevailing winds)	☒	☐	☐
1g. Ensured waste containers are emptied regularly	☒	☐	☐
1h. Ensured appropriate waste removal schedule	☒	☐	☐
1i. Ensured waste is stored in a well-ventilated room	☒	☐	☐
1j. Ensured any exhaust fans in the room are operating properly	☒	☐	☐
1k. Checked waste storage areas for odors, contaminants, or signs of vermin	☒	☐	☐

NOTES



Integrated Pest Management Checklist

Name: thomas verville

School: griswold high school

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OFFICIAL POLICY STATEMENT

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 1a. Developed or located the school's official policy statement for integrated pest management (IPM) | ☒ | ☐ | ☐ |

2. DESIGNATING PEST MANAGEMENT ROLES

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Assigned and trained a qualified person to be the pest manager | ☒ | ☐ | ☐ |
| 2b. Involved decision makers in the IPM program | ☒ | ☐ | ☐ |
| 2c. Educated students and staff (the occupants of the building) about IPM and asked them to keep their areas clean and free of clutter | ☒ | ☐ | ☐ |
| 2d. Encouraged parents to learn about IPM practices and implement them at home | ☒ | ☐ | ☐ |
| 2e. Developed a program to educate and train all IPM participants | ☒ | ☐ | ☐ |
| 2f. Included language about IPM into contracts with pest management professionals | ☒ | ☐ | ☐ |

3. SETTING PEST MANAGEMENT OBJECTIVES

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3a. Set appropriate pest management objectives for school buildings (such as preventing pests from interfering with students' learning environment and preserving the integrity of the building structure) | ☒ | ☐ | ☐ |
| 3b. Set appropriate pest management objectives for school grounds (such as providing safe playing areas and the best athletic surfaces possible) | ☒ | ☐ | ☐ |

4. INSPECTING, IDENTIFYING, AND MONITORING

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 4a. Inspected all buildings and grounds for pest evidence, entry points, food, water, and harborage sites | ☒ | ☐ | ☐ |
| 4b. Identified potential pest habitats in buildings and grounds | ☒ | ☐ | ☐ |
| 4c. Pinpointed the source of any current pest problems | ☒ | ☐ | ☐ |
| 4d. Monitored to determine the extent of pest problems and to estimate pest populations | ☒ | ☐ | ☐ |
| 4e. Developed plans to modify habitat (for example, exclusion, repair, and sanitation efforts) to prevent or resolve any pest problems | ☒ | ☐ | ☐ |
| 4f. Established a monitoring program that consists of routine inspections to estimate pest population levels and identify evidence of pests and potential habitat | ☒ | ☐ | ☐ |

5. SETTING ACTION THRESHOLDS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 5a. Evaluated all available data obtained through inspecting, identifying, and monitoring | ☒ | ☐ | ☐ |
| 5b. Determined how many pests the school buildings, grounds, and occupants can tolerate | ☒ | ☐ | ☐ |
| 5c. Set action thresholds | ☒ | ☐ | ☐ |

6. PREVENTIVE STRATEGIES

INDOOR SITES

- 6a. Implemented appropriate strategies to prevent pests from inhabiting the following areas:

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| • Entryways | ☒ | ☐ | ☐ |
| • Classrooms | ☒ | ☐ | ☐ |
| • Gymnasiums | ☒ | ☐ | ☐ |
| • Locker rooms | ☒ | ☐ | ☐ |
| • Offices | ☒ | ☐ | ☐ |
| • Staff lounges | ☒ | ☐ | ☐ |
| • Bathrooms | ☒ | ☐ | ☐ |
| • Food preparation and serving areas | ☒ | ☐ | ☐ |
| • Rooms with extensive plumbing | ☒ | ☐ | ☐ |
| • Maintenance areas | ☒ | ☐ | ☐ |
| • Other | ☐ | ☐ | ☐ |

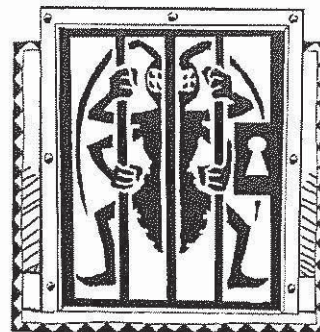
OUTDOOR SITES

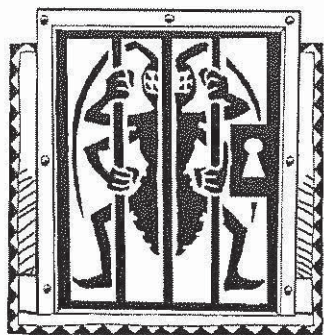
- 6b. Implemented appropriate strategies to prevent pests from inhabiting the following areas:

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| • Playgrounds | ☒ | ☐ | ☐ |
| • Parking lots | ☒ | ☐ | ☐ |
| • Lawns and athletic fields | ☒ | ☐ | ☐ |
| • Teaching gardens or greenhouses | ☒ | ☐ | ☐ |
| • Loading docks | ☒ | ☐ | ☐ |
| • Dumpsters | ☒ | ☐ | ☐ |
| • Areas with ornamental shrubs and trees | ☒ | ☐ | ☐ |
| • Other | ☒ | ☐ | ☐ |

7. PESTICIDE USE AND STORAGE

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 7a. Explored alternative pest management methods before concluding that pesticides were necessary | ☒ | ☐ | ☐ |
| 7b. Ensured that pest management professionals integrate IPM into their pest management methods | ☒ | ☐ | ☐ |
| 7c. Identified the least toxic, target-specific chemical (or pesticide formulation) that is the most effective to address the pest problem, preferably as baits and granules | ☒ | ☐ | ☐ |
| 7d. Reviewed and followed all label instructions on pesticides and learned how to properly apply and handle these chemicals | ☒ | ☐ | ☐ |
| 7e. Used spot-treatment (or bait, crack, and crevice applications) to apply pesticides whenever possible and only treated the obviously infested plants in the area | ☒ | ☐ | ☐ |
| 7f. Used protective clothing or equipment when applying pesticides | ☒ | ☐ | ☐ |
| 7g. Placed all pesticides in tamper-resistant bait boxes or locations that are inaccessible to children and non-target species | ☒ | ☐ | ☐ |





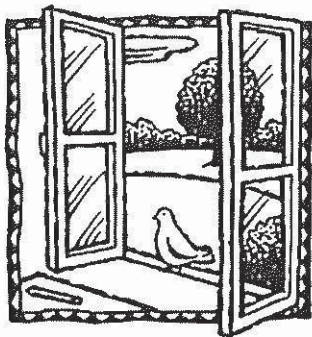
7. PESTICIDE USE AND STORAGE (cont.)

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 7h. Locked or fastened lids of all bait boxes and placed bait away from the runway of the box | ☒ | ☐ | ☐ |
| 7i. Applied pesticides when occupants were not present or in areas where they would not be exposed to the chemicals | ☒ | ☐ | ☐ |
| 7j. Ensured that school occupants (students and staff) are notified of upcoming pesticide applications through posted notices and/or letters | ☒ | ☐ | ☐ |
| 7k. Ensured that parents are notified of upcoming pesticide applications through letters | ☒ | ☐ | ☐ |
| 7l. Kept copies of current pesticide labels and information on pesticides easily accessible | ☒ | ☐ | ☐ |
| 7m. Stored pesticides off site or in areas that are locked and accessible only to designated personnel | ☒ | ☐ | ☐ |
| 7n. Ensured that storage areas are adequately ventilated and are located away from areas prone to flooding or where spills or leaks may contaminate the environment | ☒ | ☐ | ☐ |
| 7o. Ensured that flammable liquids are stored away from ignition sources | ☒ | ☐ | ☐ |
| 7p. Ensured that pesticides are stored in their original containers and all lids are securely fastened | ☒ | ☐ | ☐ |
| 7q. Ensured that air in the storage space cannot mix with the air in the central ventilation system | ☒ | ☐ | ☐ |

8. EVALUATING RESULTS AND RECORD KEEPING

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 8a. Ensured that accurate, up-to-date records of IPM practices and a pest management log for each property are kept | ☒ | ☐ | ☐ |
| 8b. Ensured that pesticide records necessary to meet all state, local, and school board requirements are maintained | ☒ | ☐ | ☐ |
| 8c. Ensured that each log book contains the following items: | | | |
| • Copy of the pest management plan | ☒ | ☐ | ☐ |
| • Service schedules for maintenance of buildings and grounds | ☒ | ☐ | ☐ |
| • Current EPA-registered labels | ☒ | ☐ | ☐ |
| • Current Material Safety Data Sheets (MSDS) for each pesticide project | ☒ | ☐ | ☐ |
| • Pest surveillance data sheets | ☒ | ☐ | ☐ |
| • Diagram noting the location of pest activity, traps, and bait stations | ☐ | ☐ | ☐ |

NOTES



Ventilation Checklist

Name: Thomas Verville

School: Griswold High School

Unit Ventilator/AHU No: ahu1

Room or Area: cafe Date Completed: 3-11-25

Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

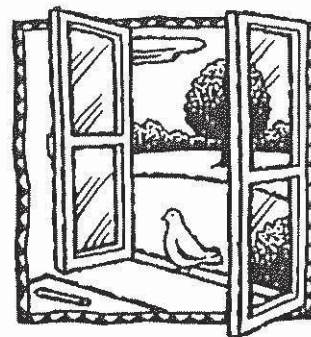
ACTIVITY 11: CONTROL COMPONENTS

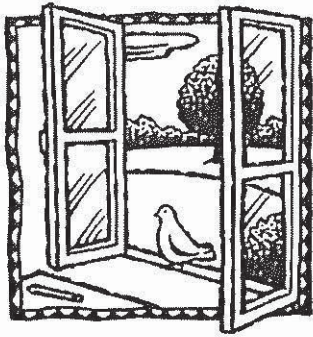
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☐ | ☒ |
|--|-----------------------|-----------------------|----------------------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☐ | ☒ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☐ | ☒ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☐ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

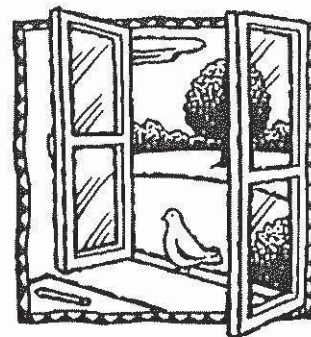
5. EXHAUST SYSTEMS

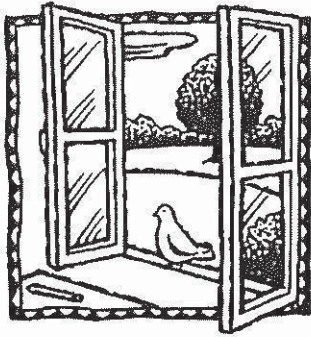
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

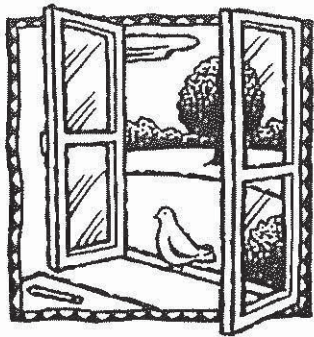
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold High School
 Unit Ventilator/AHU No: ahu2
 Room or Area: LMC Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

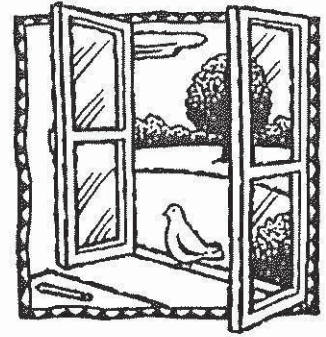
ACTIVITY 11: CONTROL COMPONENTS

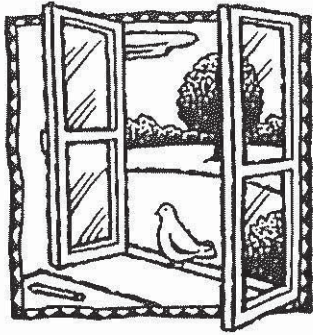
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

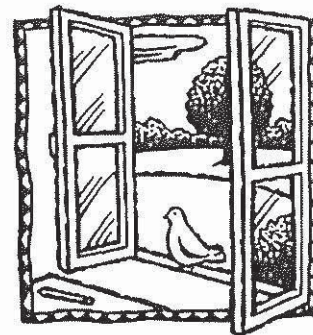
NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.



4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

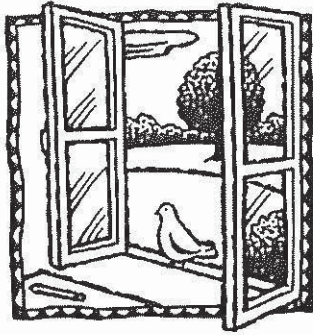
5. EXHAUST SYSTEMS

ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt



5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

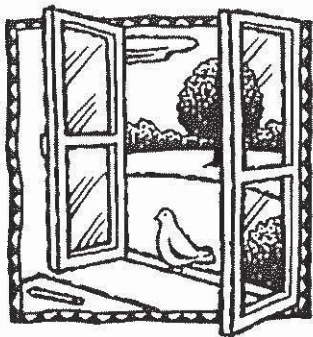
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold High School
 Unit Ventilator/AHU No: ahu5
 Room or Area: music Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

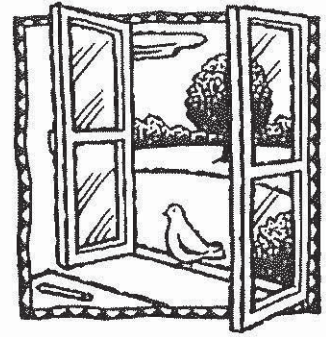
ACTIVITY 11: CONTROL COMPONENTS

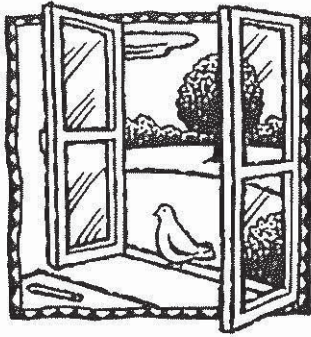
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied).....☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required.....☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows)☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings)☐ ☒ ☐

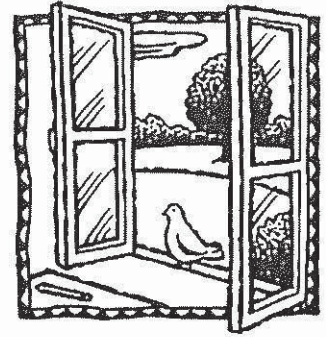
5. EXHAUST SYSTEMS

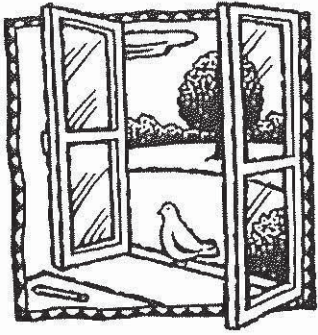
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s)☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

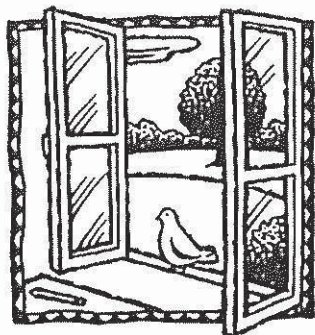
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold High School
 Unit Ventilator/AHU No: ahu6
 Room or Area: auditorium Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

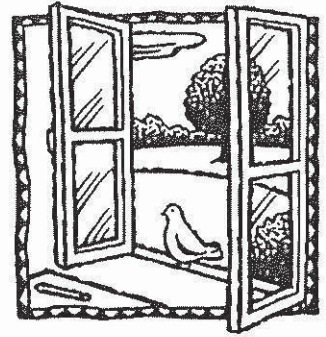
ACTIVITY 11: CONTROL COMPONENTS

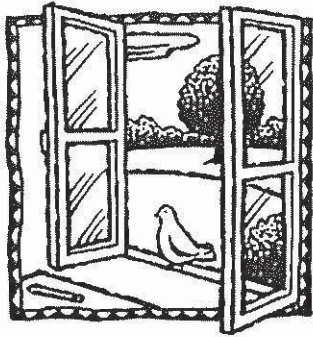
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals ☐ ☒ ☐
- OR
- 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) ☐ ☒ ☐
- 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats ☐ ☒ ☐

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F ☒ ☐ ☐
- 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting ☒ ☐ ☐

ACTIVITY 15: ECONOMIZERS

- 3x. Confirmed proper economizer settings based on design specifications or local practices ☐ ☒ ☐

NOTE: The dry-bulb is typically set at 65°F or lower.

- 3y. Checked that sensor on the economizer is shielded from direct sunlight ☐ ☒ ☐
- 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications ☐ ☒ ☐

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

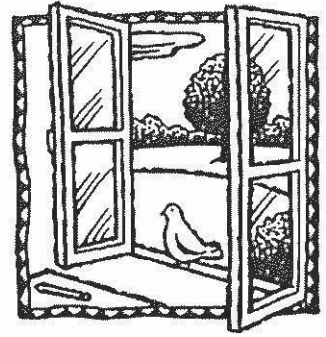
5. EXHAUST SYSTEMS

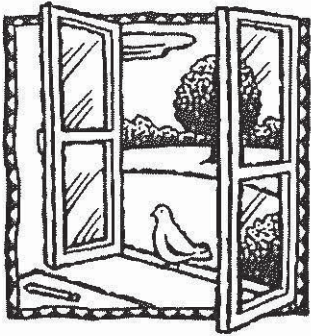
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

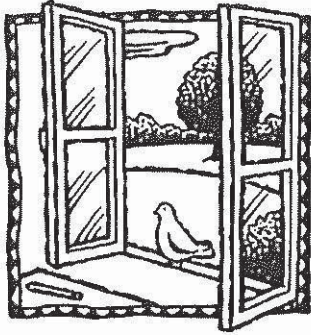
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	thomas verville		
School:	Griswold High school		
Unit Ventilator/AHU No:	ahu 7		
Room or Area:	GYM	Date Completed:	3-11-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

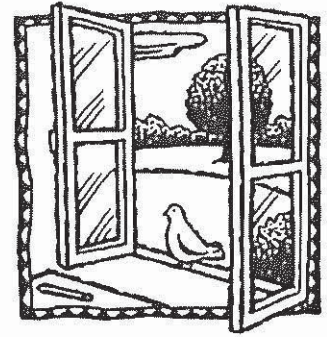
ACTIVITY 11: CONTROL COMPONENTS

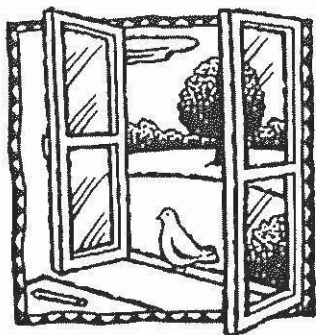
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☐ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

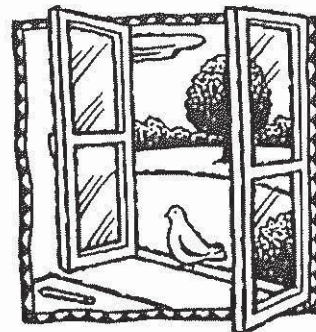
NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied)..... **Yes** ☒ **No** ☐ **N/A** ☐

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.



4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required..... ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

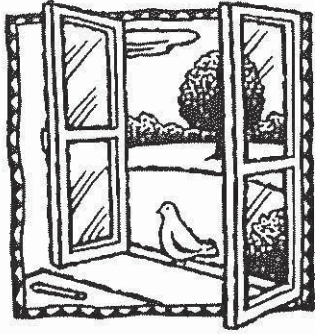
5. EXHAUST SYSTEMS

ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt



5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

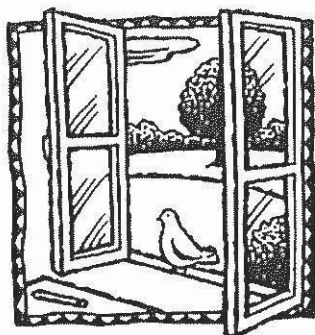
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold High School
 Unit Ventilator/AHU No: ahu8
 Room or Area: gym Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

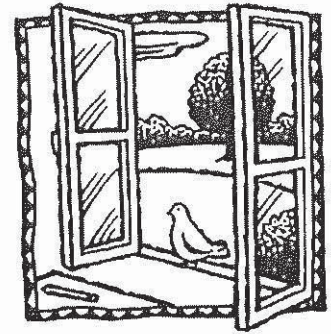
ACTIVITY 11: CONTROL COMPONENTS

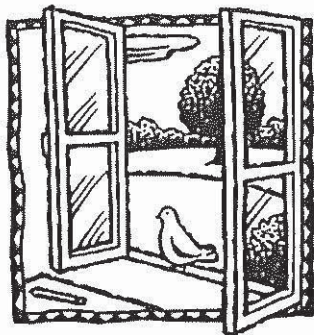
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

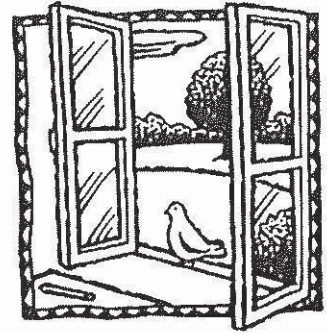
5. EXHAUST SYSTEMS

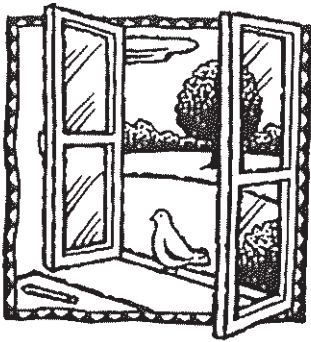
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

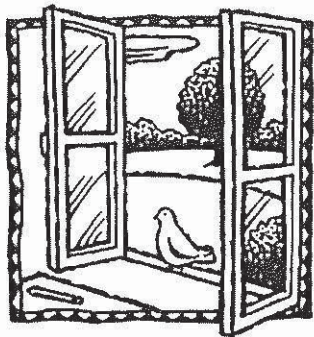
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold High School
 Unit Ventilator/AHU No: ahu9
 Room or Area: aux gym Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

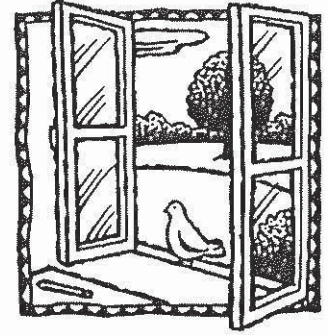
- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

ACTIVITY 11: CONTROL COMPONENTS

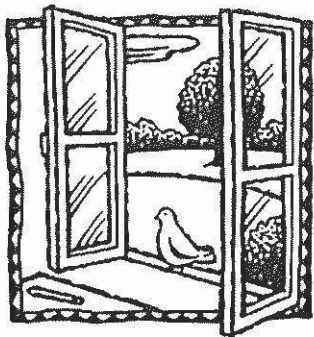
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |



NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.



3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied).....☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required.....☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning.....☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows).....☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked.....☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply.....☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes.....☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents.....☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities.....☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals.....☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings).....☐ ☒ ☐

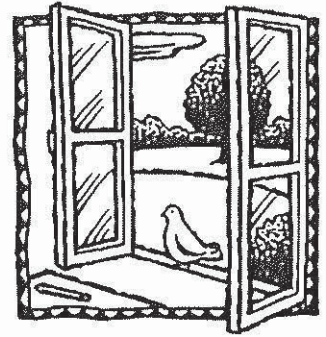
5. EXHAUST SYSTEMS

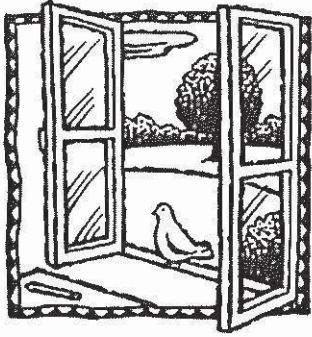
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s)☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

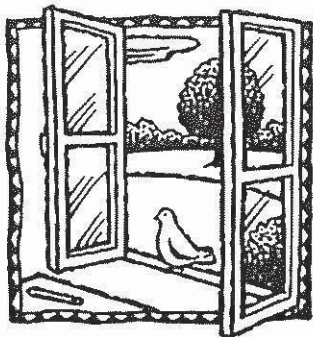
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold High School
 Unit Ventilator/AHU No: ahu10
 Room or Area: locker room Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

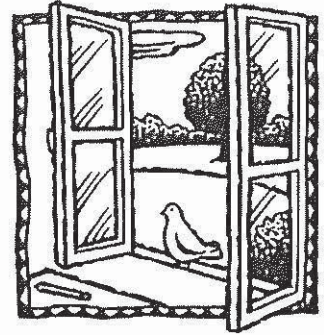
ACTIVITY 11: CONTROL COMPONENTS

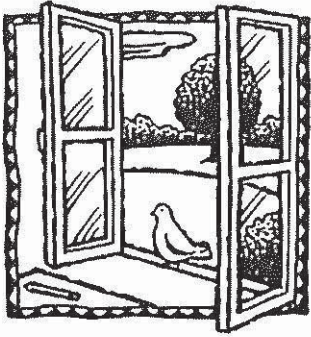
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☒ ☐ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

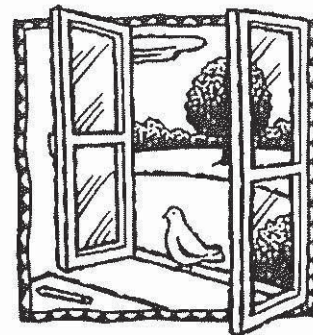
5. EXHAUST SYSTEMS

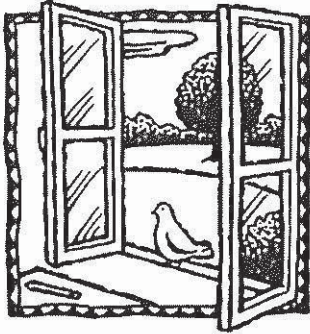
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

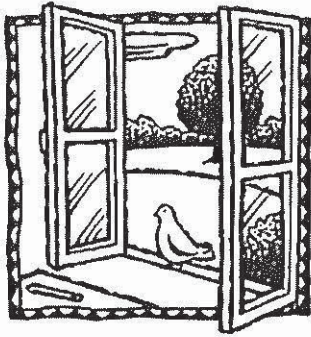
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold High School		
Unit Ventilator/AHU No:	ahu11		
Room or Area:	3114	Date Completed:	3-11-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☐ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) .. | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

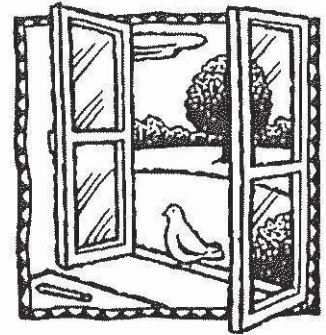
ACTIVITY 11: CONTROL COMPONENTS

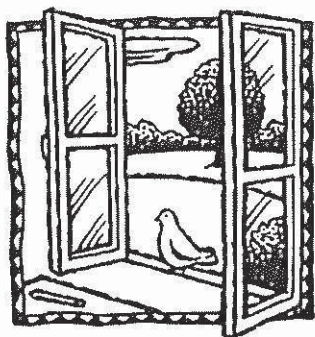
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler..... | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ Yes ☒ No ☐ N/A
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ Yes ☒ No ☐ N/A

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ Yes ☐ No ☐ N/A
- 4d. Ensured that supply and return vents are open and unblocked ☒ Yes ☐ No ☐ N/A

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ Yes ☒ No ☐ N/A
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ Yes ☒ No ☐ N/A
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ Yes ☐ No ☐ N/A
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ Yes ☐ No ☐ N/A
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ Yes ☐ No ☐ N/A

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ Yes ☒ No ☐ N/A

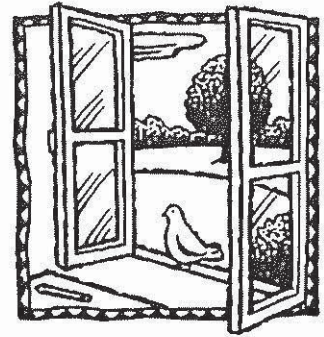
5. EXHAUST SYSTEMS

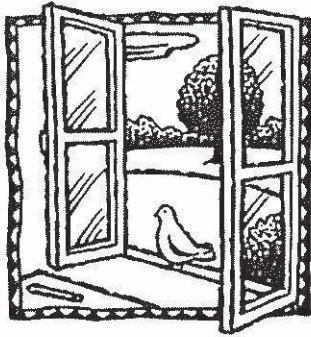
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ Yes ☒ No ☐ N/A

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

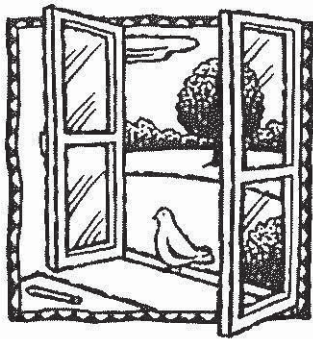
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	Griswold High School		
Unit Ventilator/AHU No:	ahu12		
Room or Area:	3118	Date Completed:	3-11-25
Signature:	<i>thomas verville</i>		

Instructions

- Read the *IAQ Backgrounder* and the Background Information for this checklist.
- Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
- Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
- Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) .. | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

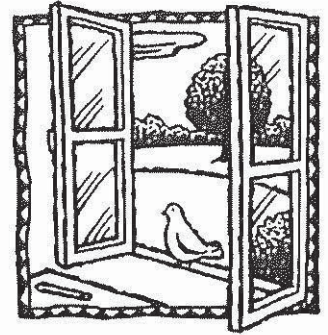
- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

ACTIVITY 11: CONTROL COMPONENTS

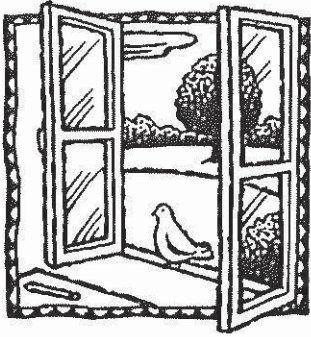
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☐ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |



NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.



3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

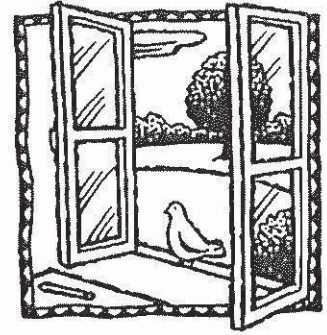
NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.



4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ Yes ☒ No ☐ N/A
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ Yes ☒ No ☐ N/A

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ Yes ☐ No ☐ N/A
- 4d. Ensured that supply and return vents are open and unblocked ☒ Yes ☐ No ☐ N/A

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ Yes ☒ No ☐ N/A
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ Yes ☒ No ☐ N/A
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ Yes ☐ No ☐ N/A
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ Yes ☐ No ☐ N/A
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ Yes ☐ No ☐ N/A

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ Yes ☒ No ☐ N/A

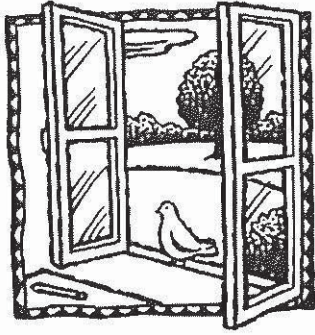
5. EXHAUST SYSTEMS

ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ Yes ☒ No ☐ N/A

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt



5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

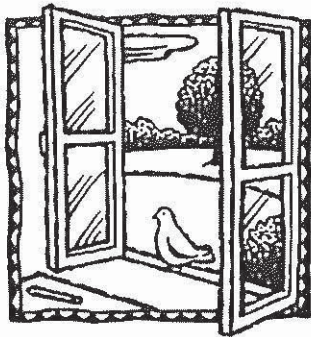
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: Thomas Verville
 School: Griswold High School
 Unit Ventilator/AHU No: ahu13
 Room or Area: manufacturing Date Completed: 3-11-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☐ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

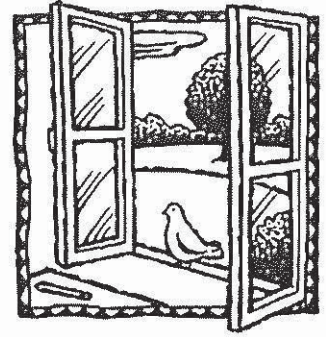
ACTIVITY 11: CONTROL COMPONENTS

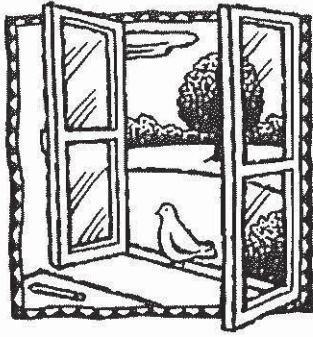
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler..... | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☒ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied).....☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required.....☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning.....☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows).....☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked.....☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply.....☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes.....☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents.....☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities.....☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals.....☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings).....☐ ☒ ☐

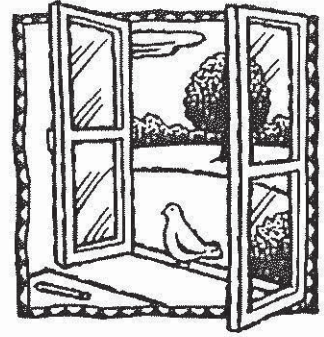
5. EXHAUST SYSTEMS

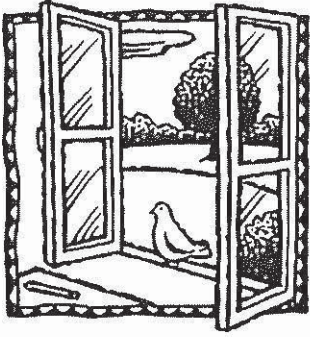
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s).....☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

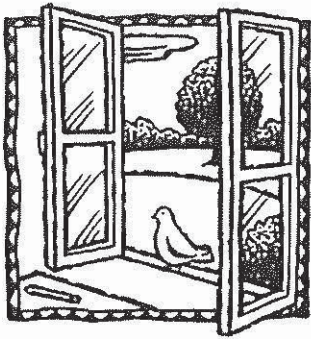
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: thomas verville

School: griswold highschool

Unit Ventilator/AHU No: ahu14

Room or Area: cadd Date Completed: 3-4-25

Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☒ Yes ☐ No ☐ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☒ Yes ☐ No ☐ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☒ Yes ☐ No ☐ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

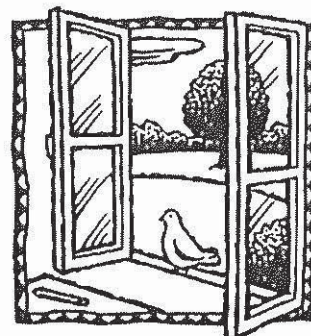
ACTIVITY 11: CONTROL COMPONENTS

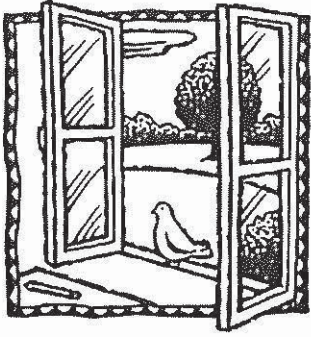
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|----------------------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☒ | ☐ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☒ | ☐ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|-----------------------|----------------------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☐ | ☒ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☐ | ☒ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☐ | ☒ |
|--|-----------------------|-----------------------|----------------------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☐ | ☒ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☐ | ☒ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

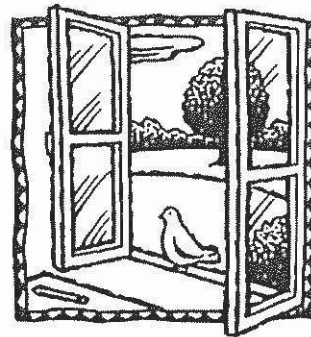
5. EXHAUST SYSTEMS

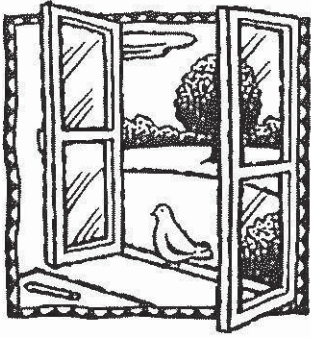
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

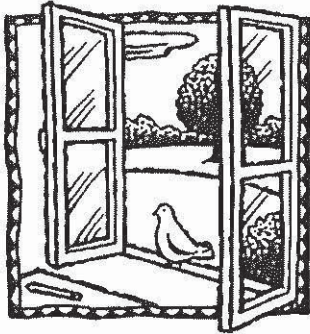
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: thomas verville
 School: griswold highschool
 Unit Ventilator/AHU No: fau-1
 Room or Area: 4000 wing Date Completed: 3-4-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☐ Yes ☐ No ☒ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☐ Yes ☐ No ☒ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☐ Yes ☐ No ☒ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

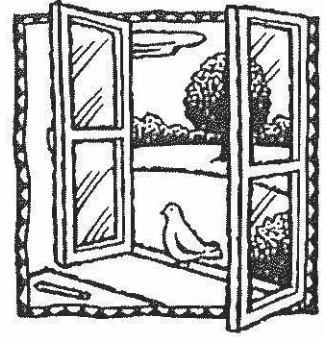
ACTIVITY 11: CONTROL COMPONENTS

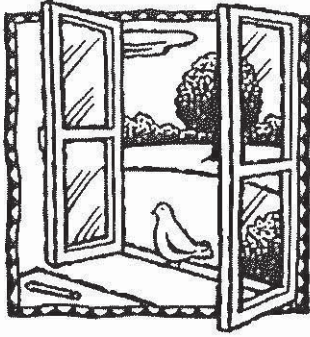
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|----------------------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☒ | ☐ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☒ | ☐ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|----------------------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☒ | ☐ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☒ | ☐ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|-----------------------|----------------------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☐ | ☒ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☐ | ☒ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☐ | ☒ |
|--|-----------------------|-----------------------|----------------------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☐ | ☒ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☐ | ☒ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☒ ☐ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☐ ☒
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☐ ☒
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☐ ☐ ☒
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

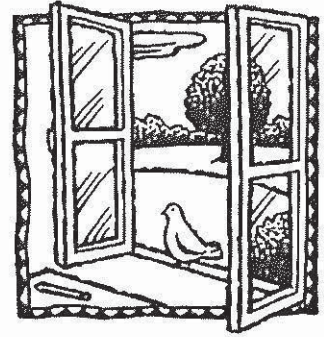
5. EXHAUST SYSTEMS

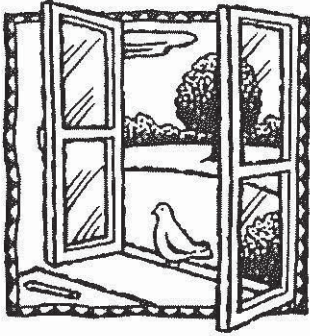
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

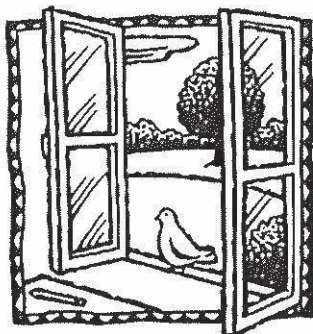
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Ventilation Checklist

Name: thomas verville
 School: griswold highschool
 Unit Ventilator/AHU No: fau-2
 Room or Area: 3000 wing Date Completed: 3-4-25
 Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) ☒ Yes ☐ No ☐ N/A
- 1b. Ensured that the ventilation system was on and operating in "occupied" mode ☒ Yes ☐ No ☐ N/A

ACTIVITY 1: OBSTRUCTIONS

- 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers ☒ Yes ☐ No ☐ N/A
- 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) ☐ Yes ☐ No ☒ N/A

ACTIVITY 2: POLLUTANT SOURCES

- 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) ☐ Yes ☐ No ☒ N/A
- 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) ☒ Yes ☐ No ☐ N/A
- 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) ☐ Yes ☐ No ☒ N/A

ACTIVITY 3: AIRFLOW

- 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) ☒ Yes ☐ No ☐ N/A
- 1i. Confirmed that outdoor air is entering the intake appropriately ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- 2a. Replaced filters per maintenance schedule ☒ Yes ☐ No ☐ N/A
- 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) ☒ Yes ☐ No ☐ N/A
- 2c. Vacuumed filter areas before installing new filters ☒ Yes ☐ No ☐ N/A
- 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter ☒ Yes ☐ No ☐ N/A
- 2e. Confirmed proper installation of filters (correct direction for airflow) ☒ Yes ☐ No ☐ N/A

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☐ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

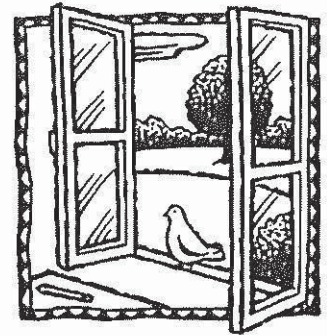
ACTIVITY 11: CONTROL COMPONENTS

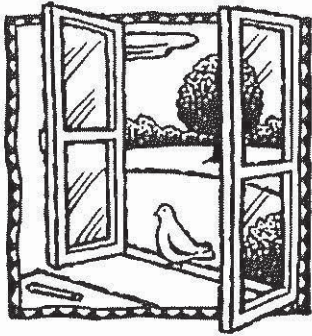
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|----------------------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☒ | ☐ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☒ | ☐ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|----------------------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☒ | ☐ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☒ | ☐ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|-----------------------|----------------------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☐ | ☒ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☐ | ☒ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☐ | ☒ |
|--|-----------------------|-----------------------|----------------------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☐ | ☒ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☐ | ☒ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied) ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required ☒ ☐ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows) ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked ☒ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply ☐ ☐ ☒
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes ☐ ☐ ☒
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents ☐ ☐ ☒
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings) ☐ ☒ ☐

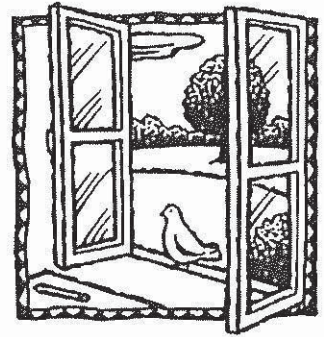
5. EXHAUST SYSTEMS

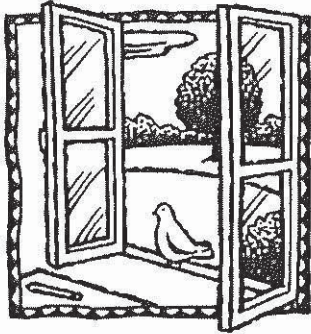
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s) ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

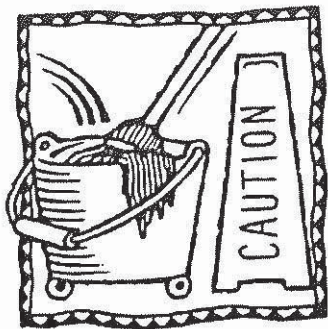
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☒ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☒ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Building and Grounds Maintenance Checklist

Name: thomas verville

School: griswold soule street acad.

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. BUILDING MAINTENANCE SUPPLIES

	Yes	No	N/A
1a. Developed appropriate procedures and stocked supplies for spill control	☒	☐	☐
1b. Reviewed supply labels	☒	☐	☐
1c. Ensured that air from chemical and trash storage areas vents to the outdoors	☒	☐	☐
1d. Stored chemical products and supplies in sealed, clearly labeled containers	☒	☐	☐
1e. Researched and selected the safest products available	☒	☐	☐
1f. Ensured that supplies are being used according to manufacturers' instructions	☒	☐	☐
1g. Ensured that chemicals, chemical-containing wastes, and containers are disposed of according to manufacturers' instructions	☒	☐	☐
1h. Substituted less- or non-hazardous materials (where possible)	☒	☐	☐
1i. Scheduled work involving odorous or hazardous chemicals for periods when the school is unoccupied	☒	☐	☐
1j. Ventilated affected areas during and after the use of odorous or hazardous chemicals	☒	☐	☐

2. GROUNDS MAINTENANCE SUPPLIES

2a. Stored grounds maintenance supplies in appropriate area(s)	☒	☐	☐
2b. Ensured that supplies are used and stored according to manufacturers' instructions	☒	☐	☐
2c. Established and followed procedures to minimize exposure to fumes from supplies	☒	☐	☐
2d. Reviewed and followed manufacturers' guidelines for maintenance	☒	☐	☐
2e. Replaced portable gas cans with low-emission cans	☒	☐	☐
2f. Stored chemical products and supplies in sealed, clearly-labeled containers	☒	☐	☐
2g. Ensured that chemicals, chemical-containing wastes, and containers are disposed of according to manufacturers' instructions	☒	☐	☐

3. DUST CONTROL

3a. Installed and maintained barrier mats for entrances	☒	☐	☐
3b. Used high efficiency vacuum bags	☒	☐	☐
3c. Used proper dusting techniques	☒	☐	☐
3d. Wrapped feather dusters with a dust cloth	☐	☐	☒
3e. Cleaned air return grilles and air supply vents	☒	☐	☐

4. FLOOR CLEANING

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4a. Established and followed schedule for vacuuming and mopping floors | ☒ | ☐ | ☐ |
| 4b. Cleaned spills on floors promptly (as necessary) | ☒ | ☐ | ☐ |
| 4c. Performed restorative maintenance (as necessary) | ☐ | ☐ | ☐ |

5. DRAIN TRAPS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 5a. Poured water down floor drains once per week (about 1 quart of water) | ☒ | ☐ | ☐ |
| 5b. Ran water in sinks at least once per week (about 2 cups of water) | ☒ | ☐ | ☐ |
| 5c. Flushed toilets once each week (if not used regularly) | ☒ | ☐ | ☐ |

6. MOISTURE, LEAKS, AND SPILLS

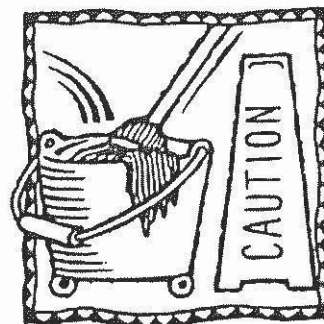
- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 6a. Checked for moldy odors | ☒ | ☐ | ☐ |
| 6b. Inspected ceiling tiles, floors, and walls for leaks or discoloration (may indicate periodic leaks) | ☒ | ☐ | ☐ |
| 6c. Checked areas where moisture is commonly generated (e.g., kitchens, locker rooms, and bathrooms) | ☒ | ☐ | ☐ |
| 6d. Checked that windows, windowsills, and window frames are free of condensate | ☒ | ☐ | ☐ |
| 6e. Checked that indoor surfaces of exterior walls and cold water pipes are free of condensate | ☒ | ☐ | ☐ |
| 6f. Ensured the following areas are free from signs of leaks and water damage: | | | |
| Indoor areas near known roof or wall leaks | ☒ | ☐ | ☐ |
| Walls around leaky or broken windows | ☒ | ☐ | ☐ |
| Floors and ceilings under plumbing | ☒ | ☐ | ☐ |
| Duct interiors near humidifiers, cooling coils, and outdoor air intakes | ☒ | ☐ | ☐ |

7. COMBUSTION APPLIANCES

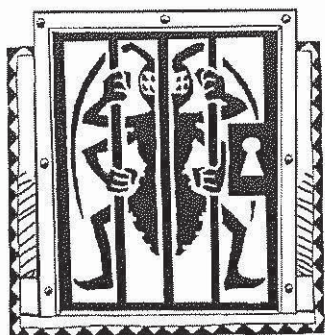
- | | | | |
|---|----------------------------------|----------------------------------|-----------------------|
| 7a. Checked for odors from combustion appliances | ☒ | ☐ | ☐ |
| 7b. Checked appliances for backdrafting (using chemical smoke) | ☐ | ☒ | ☐ |
| 7c. Inspected exhaust components for leaks, disconnections, or deterioration | ☒ | ☐ | ☐ |
| 7d. Inspected flue components for corrosion and soot | ☒ | ☐ | ☐ |

8. PEST CONTROL

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 8a. Completed the <i>Integrated Pest Management Checklist</i> | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|



NOTES



Integrated Pest Management Checklist

Name: thomas verville

School: griswold soule street acad.

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verville

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OFFICIAL POLICY STATEMENT

Yes No N/A

- 1a. Developed or located the school's official policy statement for integrated pest management (IPM) ☒ ☐ ☐

2. DESIGNATING PEST MANAGEMENT ROLES

- 2a. Assigned and trained a qualified person to be the pest manager ☒ ☐ ☐
- 2b. Involved decision makers in the IPM program ☒ ☐ ☐
- 2c. Educated students and staff (the occupants of the building) about IPM and asked them to keep their areas clean and free of clutter ☒ ☐ ☐
- 2d. Encouraged parents to learn about IPM practices and implement them at home ☒ ☐ ☐
- 2e. Developed a program to educate and train all IPM participants ☒ ☐ ☐
- 2f. Included language about IPM into contracts with pest management professionals ☒ ☐ ☐

3. SETTING PEST MANAGEMENT OBJECTIVES

- 3a. Set appropriate pest management objectives for school buildings (such as preventing pests from interfering with students' learning environment and preserving the integrity of the building structure) ☒ ☐ ☐
- 3b. Set appropriate pest management objectives for school grounds (such as providing safe playing areas and the best athletic surfaces possible) ☒ ☐ ☐

4. INSPECTING, IDENTIFYING, AND MONITORING

- 4a. Inspected all buildings and grounds for pest evidence, entry points, food, water, and harborage sites ☒ ☐ ☐
- 4b. Identified potential pest habitats in buildings and grounds ☒ ☐ ☐
- 4c. Pinpointed the source of any current pest problems ☒ ☐ ☐
- 4d. Monitored to determine the extent of pest problems and to estimate pest populations ☒ ☐ ☐
- 4e. Developed plans to modify habitat (for example, exclusion, repair, and sanitation efforts) to prevent or resolve any pest problems ☒ ☐ ☐
- 4f. Established a monitoring program that consists of routine inspections to estimate pest population levels and identify evidence of pests and potential habitat ☒ ☐ ☐

5. SETTING ACTION THRESHOLDS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 5a. Evaluated all available data obtained through inspecting, identifying, and monitoring | ☒ | ☐ | ☐ |
| 5b. Determined how many pests the school buildings, grounds, and occupants can tolerate | ☒ | ☐ | ☐ |
| 5c. Set action thresholds | ☒ | ☐ | ☐ |

6. PREVENTIVE STRATEGIES

INDOOR SITES

6a. Implemented appropriate strategies to prevent pests from inhabiting the following areas:

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| • Entryways | ☒ | ☐ | ☐ |
| • Classrooms | ☒ | ☐ | ☐ |
| • Gymnasiums | ☒ | ☐ | ☐ |
| • Locker rooms | ☒ | ☐ | ☐ |
| • Offices | ☒ | ☐ | ☐ |
| • Staff lounges | ☒ | ☐ | ☐ |
| • Bathrooms | ☒ | ☐ | ☐ |
| • Food preparation and serving areas | ☒ | ☐ | ☐ |
| • Rooms with extensive plumbing | ☒ | ☐ | ☐ |
| • Maintenance areas | ☒ | ☐ | ☐ |
| • Other | ☐ | ☐ | ☐ |

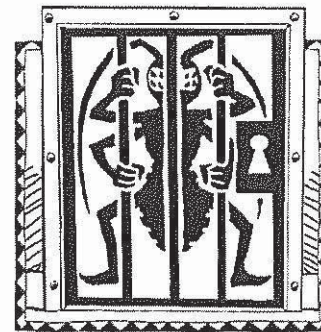
OUTDOOR SITES

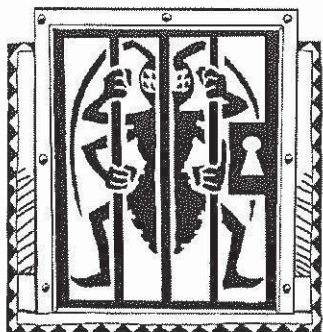
6b. Implemented appropriate strategies to prevent pests from inhabiting the following areas:

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| • Playgrounds | ☒ | ☐ | ☐ |
| • Parking lots | ☒ | ☐ | ☐ |
| • Lawns and athletic fields | ☒ | ☐ | ☐ |
| • Teaching gardens or greenhouses | ☒ | ☐ | ☐ |
| • Loading docks | ☒ | ☐ | ☐ |
| • Dumpsters | ☒ | ☐ | ☐ |
| • Areas with ornamental shrubs and trees | ☒ | ☐ | ☐ |
| • Other | ☒ | ☐ | ☐ |

7. PESTICIDE USE AND STORAGE

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 7a. Explored alternative pest management methods before concluding that pesticides were necessary | ☒ | ☐ | ☐ |
| 7b. Ensured that pest management professionals integrate IPM into their pest management methods | ☒ | ☐ | ☐ |
| 7c. Identified the least toxic, target-specific chemical (or pesticide formulation) that is the most effective to address the pest problem, preferably as baits and granules | ☒ | ☐ | ☐ |
| 7d. Reviewed and followed all label instructions on pesticides and learned how to properly apply and handle these chemicals | ☒ | ☐ | ☐ |
| 7e. Used spot-treatment (or bait, crack, and crevice applications) to apply pesticides whenever possible and only treated the obviously infested plants in the area | ☒ | ☐ | ☐ |
| 7f. Used protective clothing or equipment when applying pesticides | ☒ | ☐ | ☐ |
| 7g. Placed all pesticides in tamper-resistant bait boxes or locations that are inaccessible to children and non-target species | ☒ | ☐ | ☐ |





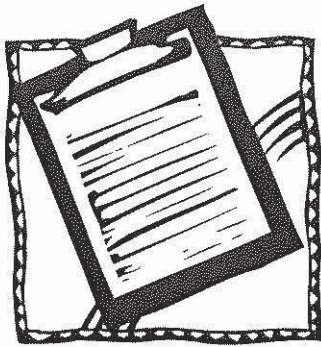
7. PESTICIDE USE AND STORAGE (cont.)

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 7h. Locked or fastened lids of all bait boxes and placed bait away from the runway of the box | ☒ | ☐ | ☐ |
| 7i. Applied pesticides when occupants were not present or in areas where they would not be exposed to the chemicals | ☒ | ☐ | ☐ |
| 7j. Ensured that school occupants (students and staff) are notified of upcoming pesticide applications through posted notices and/or letters | ☒ | ☐ | ☐ |
| 7k. Ensured that parents are notified of upcoming pesticide applications through letters | ☒ | ☐ | ☐ |
| 7l. Kept copies of current pesticide labels and information on pesticides easily accessible | ☒ | ☐ | ☐ |
| 7m. Stored pesticides off site or in areas that are locked and accessible only to designated personnel | ☒ | ☐ | ☐ |
| 7n. Ensured that storage areas are adequately ventilated and are located away from areas prone to flooding or where spills or leaks may contaminate the environment | ☒ | ☐ | ☐ |
| 7o. Ensured that flammable liquids are stored away from ignition sources | ☒ | ☐ | ☐ |
| 7p. Ensured that pesticides are stored in their original containers and all lids are securely fastened | ☒ | ☐ | ☐ |
| 7q. Ensured that air in the storage space cannot mix with the air in the central ventilation system | ☒ | ☐ | ☐ |

8. EVALUATING RESULTS AND RECORD KEEPING

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 8a. Ensured that accurate, up-to-date records of IPM practices and a pest management log for each property are kept | ☒ | ☐ | ☐ |
| 8b. Ensured that pesticide records necessary to meet all state, local, and school board requirements are maintained | ☒ | ☐ | ☐ |
| 8c. Ensured that each log book contains the following items: | | | |
| • Copy of the pest management plan | ☒ | ☐ | ☐ |
| • Service schedules for maintenance of buildings and grounds | ☒ | ☐ | ☐ |
| • Current EPA-registered labels | ☒ | ☐ | ☐ |
| • Current Material Safety Data Sheets (MSDS) for each pesticide project | ☒ | ☐ | ☐ |
| • Pest surveillance data sheets | ☒ | ☐ | ☐ |
| • Diagram noting the location of pest activity, traps, and bait stations | ☐ | ☐ | ☐ |

NOTES



Walkthrough Inspection Checklist

Name:	thomas verville		
School:	griswold soule street acad.		
Room or Area:	building wide	Date Completed:	2-24-25
Signature:	thomas verville		

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. GROUND LEVEL

	Yes	No	N/A
1a. Ensured that ventilation units operate properly	☒	☐	☐
1b. Ensured there are no obstructions blocking air intakes	☒	☐	☐
1c. Checked for nests and droppings near outdoor air intakes	☒	☐	☐
1d. Determined that dumpsters are located away from doors, windows, and outdoor air intakes	☒	☐	☐
1e. Checked potential sources of air contaminants near the building (chimneys, stacks, industrial plants, exhaust from nearby buildings)	☒	☐	☐
1f. Ensured that vehicles avoid idling near outdoor air intakes	☒	☐	☐
1g. Minimized pesticide application	☒	☐	☐
1h. Ensured that there is proper drainage away from the building (including roof downspouts)	☒	☐	☐
1i. Ensured that sprinklers spray away from the building and outdoor air intakes	☒	☐	☐
1j. Ensured that walk-off mats are used at exterior entrances and that they are cleaned regularly	☒	☐	☐

2. ROOF

While on the roof, consider inspecting the HVAC units (use the Ventilation Checklist).

2a. Ensured that the roof is in good condition	☒	☐	☐
2b. Checked for evidence of water ponding	☒	☐	☐
2c. Checked that ventilation units operate properly (air flows in)	☒	☐	☐
2d. Ensured that exhaust fans operate properly (air flows out)	☒	☐	☐
2e. Ensured that air intakes remain open, even at minimum setting	☒	☐	☐
2f. Checked for nests and droppings near outdoor air intakes	☒	☐	☐
2g. Ensured that air from plumbing stacks and exhaust outlets flows away from outdoor air intakes	☒	☐	☐

3. ATTIC

3a. Checked for evidence of roof and plumbing leaks	☒	☐	☐
3b. Checked for birds and animal nests	☒	☐	☐

4. GENERAL CONSIDERATIONS

4a. Ensured that temperature and humidity are maintained within acceptable ranges	☒	☐	☐
4b. Ensured that no obstructions exist in supply and exhaust vents	☒	☐	☐
4c. Checked for odors	☒	☐	☐
4d. Checked for signs of mold and mildew growth	☒	☐	☐

4. GENERAL CONSIDERATIONS (continued)

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4e. Checked for signs of water damage | ☒ | ☐ | ☐ |
| 4f. Checked for evidence of pests and obvious food sources | ☒ | ☐ | ☐ |
| 4g. Noted and reviewed all concerns from school occupants | ☒ | ☐ | ☐ |

5. BATHROOMS AND GENERAL PLUMBING

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 5a. Ensured that bathrooms and restrooms have operating exhaust fans | ☒ | ☐ | ☐ |
| 5b. Ensured proper drain trap maintenance: | | | |
| Water is poured down floor drains once per week (approx. 1 quart of water) | ☒ | ☐ | ☐ |
| Water is poured into sinks at least once per week (about 2 cups of water) | ☒ | ☐ | ☐ |
| Toilets are flushed at least once per week | ☒ | ☐ | ☐ |

6. MAINTENANCE SUPPLIES

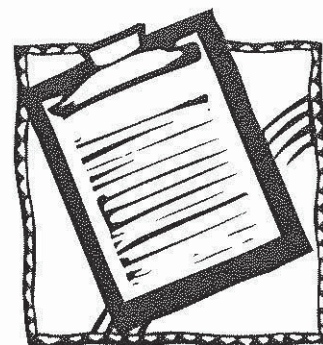
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 6a. Ensured that chemicals are used only with adequate ventilation and when building is unoccupied | ☒ | ☐ | ☐ |
| 6b. Ensured that vents in chemical and trash storage areas are operating properly | ☒ | ☐ | ☐ |
| 6c. Ensured that portable fuel containers are properly closed | ☒ | ☐ | ☐ |
| 6d. Ensured that power equipment, like snowblowers and lawn mowers, have been serviced and maintained according to manufacturers' guidelines | ☒ | ☐ | ☐ |

7. COMBUSTION APPLIANCES

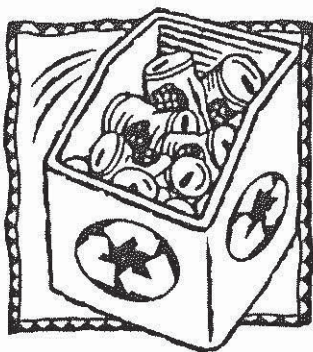
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 7a. Checked for combustion gas and fuel odors | ☒ | ☐ | ☐ |
| 7b. Ensured that combustion appliances have flues or exhaust hoods | ☒ | ☐ | ☐ |
| 7c. Checked for leaks, disconnections, and deterioration | ☒ | ☐ | ☐ |
| 7d. Ensured there is no soot on inside or outside of flue components | ☒ | ☐ | ☐ |

8. OTHER

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 8a. Checked for peeling and flaking paint (if the building was built before 1980, this could be a lead hazard) | ☒ | ☐ | ☐ |
| 8b. Determined date of last radon test | ☒ | ☐ | ☐ |



NOTES



Waste Management Checklist

Name: Thomas Verville

School: griswold soule street acad.

Room or Area: building wide Date Completed: 2-24-25

Signature: thomas verville

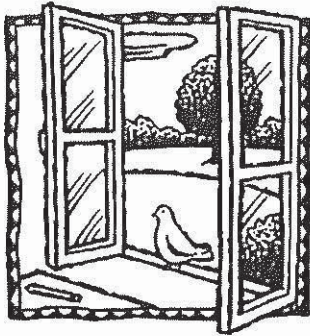
Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. WASTE MANAGEMENT

	Yes	No	N/A
1a. Ensured that waste containers are appropriate for use (for example, food waste containers should have lids)	☒	☐	☐
1b. Ensured that waste containers are lined	☒	☐	☐
1c. Ensured that waste from art, science, vocational classes, etc., are handled separately	☒	☐	☐
1d. Labeled recycling bins clearly	☒	☐	☐
1e. Ensured number of bins and dumpsters is adequate	☒	☐	☐
1f. Ensured appropriate location of dumpsters (i.e., away from air intakes, doors, and operable windows in relation to prevailing winds)	☒	☐	☐
1g. Ensured waste containers are emptied regularly	☒	☐	☐
1h. Ensured appropriate waste removal schedule	☒	☐	☐
1i. Ensured waste is stored in a well-ventilated room	☒	☐	☐
1j. Ensured any exhaust fans in the room are operating properly	☒	☐	☐
1k. Checked waste storage areas for odors, contaminants, or signs of vermin	☒	☐	☐

NOTES



Ventilation Checklist

Name:	Thomas Verville		
School:	soule street		
Unit Ventilator/AHU No:	AHU1		
Room or Area:	building	Date Completed:	3-11-25
Signature:	<i>thomas verville</i>		

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of this checklist for **each** ventilation unit in your school, as well as a copy for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. OUTDOOR AIR INTAKES

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Marked locations of all outdoor air intakes on a small floor plan (for example, a fire escape floor plan) | ☒ | ☐ | ☐ |
| 1b. Ensured that the ventilation system was on and operating in "occupied" mode | ☒ | ☐ | ☐ |

ACTIVITY 1: OBSTRUCTIONS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 1c. Ensured that outdoor air intakes are clear of obstructions, debris, clogs, or covers | ☒ | ☐ | ☐ |
| 1d. Installed corrective devices as necessary (e.g., if snowdrifts or leaves frequently block an intake) | ☒ | ☐ | ☐ |

ACTIVITY 2: POLLUTANT SOURCES

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1e. Checked ground-level intakes for pollutant sources (dumpsters, loading docks, and bus-idling areas) | ☒ | ☐ | ☐ |
| 1f. Checked rooftop intakes for pollutant sources (plumbing vents; kitchen, toilet, or laboratory exhaust fans; puddles; and mist from air-conditioning cooling towers) | ☒ | ☐ | ☐ |
| 1g. Resolved any problems with pollutant sources located near outdoor air intakes (e.g., relocated dumpster or extended exhaust pipe) | ☒ | ☐ | ☐ |

ACTIVITY 3: AIRFLOW

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 1h. Obtained chemical smoke (or a small piece of tissue paper or light plastic) | ☒ | ☐ | ☐ |
| 1i. Confirmed that outdoor air is entering the intake appropriately | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS

ACTIVITY 4: AIR FILTERS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Replaced filters per maintenance schedule | ☒ | ☐ | ☐ |
| 2b. Shut off ventilation system fans while replacing filters (prevents dirt from blowing downstream) | ☒ | ☐ | ☐ |
| 2c. Vacuumed filter areas before installing new filters | ☒ | ☐ | ☐ |
| 2d. Confirmed proper fit of filters to prevent air from bypassing (flowing around) the air filter | ☒ | ☐ | ☐ |
| 2e. Confirmed proper installation of filters (correct direction for airflow) | ☒ | ☐ | ☐ |

2. SYSTEM CLEANLINESS (continued)

ACTIVITY 5: DRAIN PANS

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 2f. Ensured that drain pans slant toward the drain (to prevent water from accumulating) | ☒ | ☐ | ☐ |
| 2g. Cleaned drain pans | ☒ | ☐ | ☐ |
| 2h. Checked drain pans for mold and mildew | ☒ | ☐ | ☐ |

ACTIVITY 6: COILS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2i. Ensured that heating and cooling coils are clean | ☒ | ☐ | ☐ |
|--|----------------------------------|-----------------------|-----------------------|

ACTIVITY 7: AIR-HANDLING UNITS, UNIT VENTILATORS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 2j. Ensured that the interior of air-handling unit(s) or unit ventilator (air-mixing chamber and fan blades) is clean | ☒ | ☐ | ☐ |
| 2k. Ensured that ducts are clean | ☒ | ☐ | ☐ |

ACTIVITY 8: MECHANICAL ROOMS

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2l. Checked mechanical room for unsanitary conditions, leaks, and spills | ☒ | ☐ | ☐ |
| 2m. Ensured that mechanical rooms and air-mixing chambers are free of trash, chemical products, and supplies | ☒ | ☐ | ☐ |

3. CONTROLS FOR OUTDOOR AIR SUPPLY

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3a. Ensured that air dampers are at least partially open (minimum position) | ☒ | ☐ | ☐ |
| 3b. Ensured that minimum position provides adequate outdoor air for occupants | ☒ | ☐ | ☐ |

ACTIVITY 9: CONTROLS INFORMATION

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3c. Obtained and reviewed all design inside/outside temperature and humidity requirements, controls specifications, as-built mechanical drawings, and controls operations manuals (often uniquely designed) | ☒ | ☐ | ☐ |
|---|----------------------------------|-----------------------|-----------------------|

ACTIVITY 10: CLOCKS, TIMERS, SWITCHES

- | | | | |
|---|----------------------------------|-----------------------|----------------------------------|
| 3d. Turned summer-winter switches to the correct position | ☐ | ☐ | ☒ |
| 3e. Set time clocks appropriately | ☒ | ☐ | ☐ |
| 3f. Ensured that settings fit the actual schedule of building use (including night/weekend use) | ☒ | ☐ | ☐ |

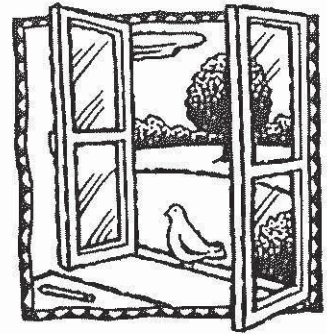
ACTIVITY 11: CONTROL COMPONENTS

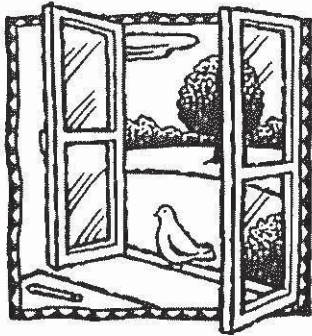
- | | | | |
|--|-----------------------|-----------------------|----------------------------------|
| 3g. Ensured appropriate system pressure by testing line pressure at both the occupied (day) setting and the unoccupied (night) setting | ☐ | ☐ | ☒ |
| 3h. Checked that the line dryer prevents moisture buildup | ☐ | ☐ | ☒ |
| 3i. Replaced control system filters at the compressor inlet based on the compressor manufacturer's recommendation (for example, when you blow down the tank) | ☐ | ☐ | ☒ |
| 3j. Set the line pressure at each thermostat and damper actuator at the proper level (no leakage or obstructions) | ☐ | ☐ | ☒ |

ACTIVITY 12: OUTDOOR AIR DAMPERS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3k. Ensured that the outdoor air damper is visible for inspection | ☒ | ☐ | ☐ |
| 3l. Ensured that the recirculating relief and/or exhaust dampers are visible for inspection | ☒ | ☐ | ☐ |
| 3m. Ensured that air temperature in the indoor area(s) served by each outdoor air damper is within the normal operating range | ☒ | ☐ | ☐ |

NOTE: It is necessary to ensure that the damper is operating properly and within the normal range to continue.





3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

- | | Yes | No | N/A |
|---|-----------------------|----------------------------------|-----------------------|
| 3n. Checked that the outdoor air damper fully closes within a few minutes of shutting off appropriate air handler | ☐ | ☒ | ☐ |
| 3o. Checked that the outdoor air damper opens (at least partially with no delay) when the air handler is turned on | ☐ | ☒ | ☐ |
| 3p. If in heating mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 85°F | ☐ | ☒ | ☐ |
| 3q. If in cooling mode, checked that the outdoor air damper goes to its minimum position (without completely closing) when the room thermostat is set to 60°F and mixed air thermostat is set to 45°F | ☐ | ☒ | ☐ |
| 3r. If the outdoor air damper does not move, confirmed the following items: | | | |
| • The damper actuator links to the damper shaft, and any linkage set screws or bolts are tight | ☐ | ☒ | ☐ |
| • Moving parts are free of impediments (e.g., rust, corrosion) | ☐ | ☒ | ☐ |
| • Electrical wire or pneumatic tubing connects to the damper actuator | ☐ | ☒ | ☐ |
| • The outside air thermostat(s) is functioning properly (e.g., in the right location, calibrated correctly) | ☐ | ☒ | ☐ |

Proceed to Activities 13–16 if the damper seems to be operating properly.

ACTIVITY 13: FREEZE STATS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3s. Disconnected power to controls (for automatic reset only) to test continuity across terminals | ☐ | ☒ | ☐ |
| OR | | | |
| 3t. Confirmed (if applicable) that depressing the manual reset button (usually red) trips the freeze stat (clicking sound indicates freeze stat was tripped) | ☐ | ☒ | ☐ |
| 3u. Assessed the feasibility of replacing all manual reset freeze-stats with automatic reset freeze-stats | ☐ | ☒ | ☐ |

NOTE: HVAC systems with water coils need protection from the cold. The freeze-stat may close the outdoor air damper and disconnect the supply air when tripped. The typical trip range is 35°F to 42°F.

ACTIVITY 14: MIXED AIR THERMOSTATS

- | | | | |
|---|----------------------------------|-----------------------|-----------------------|
| 3v. Ensured that the mixed air stat for heating mode is set no higher than 65°F | ☒ | ☐ | ☐ |
| 3w. Ensured that the mixed air stat for cooling mode is set no lower than the room thermostat setting | ☒ | ☐ | ☐ |

ACTIVITY 15: ECONOMIZERS

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3x. Confirmed proper economizer settings based on design specifications or local practices | ☐ | ☒ | ☐ |
|--|-----------------------|----------------------------------|-----------------------|

NOTE: The dry-bulb is typically set at 65°F or lower.

- | | | | |
|--|-----------------------|----------------------------------|-----------------------|
| 3y. Checked that sensor on the economizer is shielded from direct sunlight | ☐ | ☒ | ☐ |
| 3z. Ensured that dampers operate properly (for outside air, return air, exhaust/relief air, and recirculated air), per the design specifications | ☐ | ☐ | ☐ |

NOTE: Economizers use varying amounts of cool outdoor air to assist with the cooling load of the room or rooms. There are two types of economizers, dry-bulb and enthalpy. Dry-bulb economizers vary the amount of outdoor air based on outdoor temperature, and enthalpy economizers vary the amount of outdoor air based on outdoor temperature and humidity level.

3. CONTROLS FOR OUTDOOR AIR SUPPLY (continued)

ACTIVITY 16: FANS

- 3aa. Ensured that all fans (supply fans and associated return or relief fans) that move outside air indoors continuously operate during occupied hours (even when room thermostat is satisfied)..... ☒ Yes ☐ No ☐ N/A

NOTE: If fan shuts off when the thermostat is satisfied, adjust control cycle as necessary to ensure sufficient outdoor air supply.

4. AIR DISTRIBUTION

ACTIVITY 17: AIR DISTRIBUTION

- 4a. Ensured that supply and return air pathways in the existing ventilation system perform as required..... ☐ ☒ ☐
- 4b. Ensured that passive gravity relief ventilation systems and transfer grilles between rooms and corridors are functioning..... ☐ ☒ ☐

NOTE: If ventilation system is closed or blocked to meet current fire codes, consult with a professional engineer for remedies.

- 4c. Made sure every occupied space has supply of outdoor air (mechanical system or operable windows)..... ☒ ☐ ☐
- 4d. Ensured that supply and return vents are open and unblocked..... ☐ ☐ ☐

NOTE: If outlets have been blocked intentionally to correct drafts or discomfort, investigate and correct the cause of the discomfort and reopen the vents.

- 4e. Modified the HVAC system to supply outside air to areas without an outdoor air supply..... ☐ ☒ ☐
- 4f. Modified existing HVAC systems to incorporate any room or zone layout and population changes..... ☐ ☒ ☐
- 4g. Moved all barriers (for example, room dividers, large free-standing blackboards or displays, bookshelves) that could block movement of air in the room, especially those blocking air vents..... ☒ ☐ ☐
- 4h. Ensured that unit ventilators are quiet enough to accommodate classroom activities..... ☒ ☐ ☐
- 4i. Ensured that classrooms are free of uncomfortable drafts produced by air from supply terminals..... ☒ ☐ ☐

ACTIVITY 18: PRESSURIZATION IN BUILDINGS

NOTE: To prevent infiltration of outdoor pollutants, the ventilation system is designed to maintain positive pressurization in the building. Therefore, ensure that the system, including any exhaust fans, is operating on the "occupied" cycle when doing this activity.

- 4j. Ensured that air flows out of the building (using chemical smoke) through windows, doors, or other cracks and holes in exterior wall (for example, floor joints, pipe openings)..... ☐ ☒ ☐

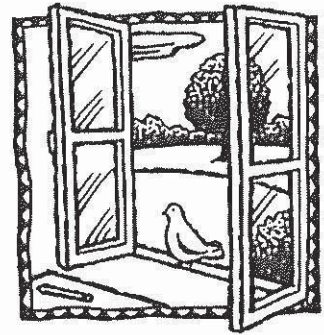
5. EXHAUST SYSTEMS

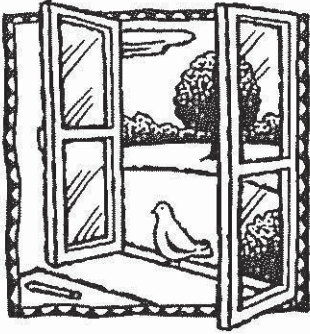
ACTIVITY 19: EXHAUST FAN OPERATION

- 5a. Checked (using chemical smoke) that air flows into exhaust fan grille(s)..... ☐ ☒ ☐

If fans are running but air is not flowing toward the exhaust intake, check for the following:

- Inoperable dampers
- Obstructed, leaky, or disconnected ductwork
- Undersized or improperly installed fan
- Broken fan belt





5. EXHAUST SYSTEMS (continued)

ACTIVITY 20: EXHAUST AIRFLOW

NOTE: Prevent migration of indoor contaminants from areas such as bathrooms, kitchens, and labs by keeping them under negative pressure (as compared to surrounding spaces).

- 5b. Checked (using chemical smoke) that air is drawn into the room from adjacent spaces **Yes** **No** **N/A**
☐ ☒ ☐

Stand outside the room with the door slightly open while checking airflow high and low in the door opening (see "How to Measure Airflow").

- 5c. Ensured that air is flowing toward the exhaust intake ☐ ☒ ☐

ACTIVITY 21: EXHAUST DUCTWORK

- 5d. Checked that the exhaust ductwork downstream of the exhaust fan (which is under positive pressure) is sealed and in good condition ☐ ☒ ☐

6. QUANTITY OF OUTDOOR AIR

ACTIVITY 22: OUTDOOR AIR MEASUREMENTS AND CALCULATIONS

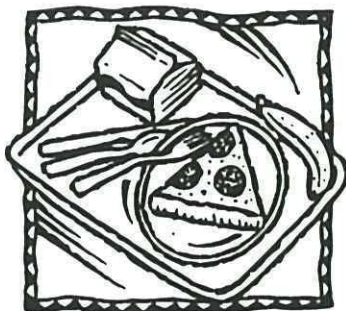
NOTE: Refer to "How to Measure Airflow" for techniques.

- 6a. Measured the quantity of outdoor air supplied (22a) to each ventilation unit ☐ ☒ ☐
 6b. Calculated the number of occupants served (22b) by the ventilation unit under consideration ☐ ☐ ☐
 6c. Divided outdoor air supply (22a) by the number of occupants (22b) to determine the existing quantity of outdoor air supply per person (22c) ☐ ☐ ☐

ACTIVITY 23: ACCEPTABLE LEVELS OF OUTDOOR AIR QUANTITIES

- 6d. Compared the existing outdoor air per person (22c) to the recommended levels in Table 1 ☐ ☒ ☐
 6e. Corrected problems with ventilation units that supplied inadequate quantities of outdoor air to ensure that outdoor air quantities (22c) meet the recommended levels in Table 1 ☐ ☒ ☐

NOTES



Food Service Checklist

Name: Griswold Public Schools

School: Griswold Elementary School

Room or Area: Kitchen Date Completed: 3/4/25

Signature: [Signature]

Instructions

1. Read the *IAQ Backgrounder* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. COOKING AREA

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Determined that local exhaust fans operate properly (note if fans are excessively noisy) | ☒ | ☐ | ☐ |
| 1b. Checked for odors near cooking, preparation, and eating areas | ☒ | ☐ | ☐ |
| 1c. Ensured that exhaust fans are used whenever cooking, washing dishes, and cleaning | ☒ | ☐ | ☐ |
| 1d. Determined that gas appliances function properly | ☒ | ☐ | ☐ |
| 1e. Verified that gas appliances are vented outdoors | ☒ | ☐ | ☐ |
| 1f. Ensured there are no combustion gas or natural gas odors, leaks, back-drafting, or headaches when gas appliances are used | ☒ | ☐ | ☐ |
| 1g. Ensured that kitchen is clean after use | ☒ | ☐ | ☐ |
| 1h. Checked for signs of microbiological growth in the kitchen, including the upper walls and ceiling (for example, mold, slime, and algae) | ☒ | ☐ | ☐ |
| 1i. Selected biocides registered by EPA (if required), followed the manufacturer's directions for use, and carefully reviewed the method of application | ☒ | ☐ | ☐ |
| 1j. Verified the kitchen is free of plumbing and ceiling leaks (signs include stains, discoloration, and damp areas) | ☒ | ☐ | ☐ |

2. FOOD HANDLING AND STORAGE

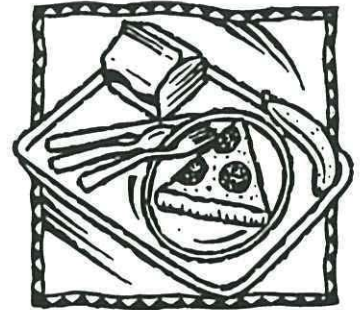
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Checked food preparation, cooking, and storage areas for signs of insects and vermin (for example, feces or remains) | ☒ | ☐ | ☐ |
| 2b. Stored leftovers in well-sealed containers with no traces of food on outside surfaces | ☒ | ☐ | ☐ |
| 2c. Ensured that food preparation, cooking, and storage practices are sanitary | ☒ | ☐ | ☐ |
| 2d. Disposed of food scraps properly and removed crumbs | ☒ | ☐ | ☐ |
| 2e. Cleaned counters with soap and water or a disinfectant (according to school policy) | ☒ | ☐ | ☐ |
| 2f. Swept and wet mopped floors | ☒ | ☐ | ☐ |

3. WASTE MANAGEMENT

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3a. Selected and placed waste in appropriate containers | ☒ | ☐ | ☐ |
| 3b. Ensured that containers' lids are securely closed | ☒ | ☐ | ☐ |
| 3c. Separated food waste and food-contaminated items from other wastes, if possible | ☒ | ☐ | ☐ |
| 3d. Stored waste containers in a well-ventilated area | ☒ | ☐ | ☐ |
| 3e. Ensured that dumpsters are properly located (away from air intake vents, operable windows, and food service doors in relation to prevailing winds) | ☒ | ☐ | ☐ |

4. DELIVERIES

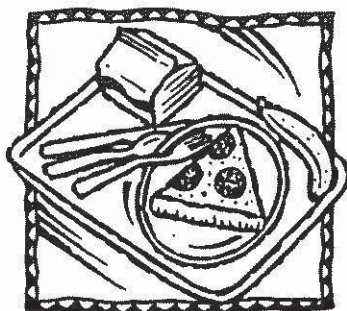
- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4a. Instructed vendors to avoid idling their engines during deliveries | ☒ | ☐ | ☐ |
| 4b. Posted a sign prohibiting vehicles from idling their engines in receiving areas | ☒ | ☐ | ☐ |
| 4c. Ensured that doors or air barriers are closed between receiving area and kitchen | ☒ | ☐ | ☐ |



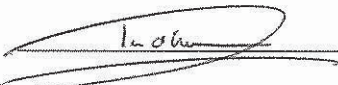
NOTES

NO FINDINGS. NO CORRECTIVE ACTION NEEDED.

[Handwritten signature]



Food Service Checklist

Name:	Griswold Public Schools		
School:	Griswold Middle School		
Room or Area:	Kitchen	Date Completed:	3/6/25
Signature:			

Instructions

- Read the *IAQ Backgrounder* and the Background Information for this checklist.
- Keep the Background Information and make a copy of the checklist for future reference.
- Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
- Return the checklist portion of this document to the IAQ Coordinator.

1. COOKING AREA

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Determined that local exhaust fans operate properly (note if fans are excessively noisy) | ☒ | ☐ | ☐ |
| 1b. Checked for odors near cooking, preparation, and eating areas | ☒ | ☐ | ☐ |
| 1c. Ensured that exhaust fans are used whenever cooking, washing dishes, and cleaning | ☒ | ☐ | ☐ |
| 1d. Determined that gas appliances function properly | ☒ | ☐ | ☐ |
| 1e. Verified that gas appliances are vented outdoors | ☒ | ☐ | ☐ |
| 1f. Ensured there are no combustion gas or natural gas odors, leaks, back-drafting, or headaches when gas appliances are used | ☒ | ☐ | ☐ |
| 1g. Ensured that kitchen is clean after use | ☒ | ☐ | ☐ |
| 1h. Checked for signs of microbiological growth in the kitchen, including the upper walls and ceiling (for example, mold, slime, and algae) | ☒ | ☐ | ☐ |
| 1i. Selected biocides registered by EPA (if required), followed the manufacturer's directions for use, and carefully reviewed the method of application | ☒ | ☐ | ☐ |
| 1j. Verified the kitchen is free of plumbing and ceiling leaks (signs include stains, discoloration, and damp areas) | ☒ | ☐ | ☐ |

2. FOOD HANDLING AND STORAGE

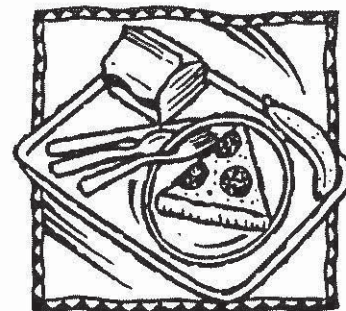
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Checked food preparation, cooking, and storage areas for signs of insects and vermin (for example, feces or remains) | ☒ | ☐ | ☐ |
| 2b. Stored leftovers in well-sealed containers with no traces of food on outside surfaces | ☒ | ☐ | ☐ |
| 2c. Ensured that food preparation, cooking, and storage practices are sanitary .. | ☒ | ☐ | ☐ |
| 2d. Disposed of food scraps properly and removed crumbs | ☒ | ☐ | ☐ |
| 2e. Cleaned counters with soap and water or a disinfectant (according to school policy) | ☒ | ☐ | ☐ |
| 2f. Swept and wet mopped floors | ☒ | ☐ | ☐ |

3. WASTE MANAGEMENT

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3a. Selected and placed waste in appropriate containers | ☒ | ☐ | ☐ |
| 3b. Ensured that containers' lids are securely closed | ☒ | ☐ | ☐ |
| 3c. Separated food waste and food-contaminated items from other wastes, if possible | ☒ | ☐ | ☐ |
| 3d. Stored waste containers in a well-ventilated area | ☒ | ☐ | ☐ |
| 3e. Ensured that dumpsters are properly located (away from air intake vents, operable windows, and food service doors in relation to prevailing winds) | ☒ | ☐ | ☐ |

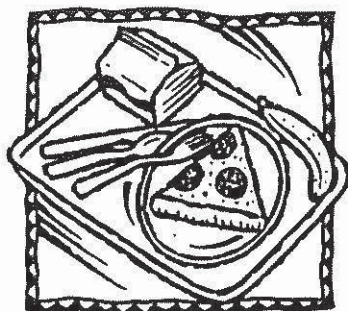
4. DELIVERIES

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4a. Instructed vendors to avoid idling their engines during deliveries | ☒ | ☐ | ☐ |
| 4b. Posted a sign prohibiting vehicles from idling their engines in receiving areas | ☒ | ☐ | ☐ |
| 4c. Ensured that doors or air barriers are closed between receiving area and kitchen | ☒ | ☐ | ☐ |

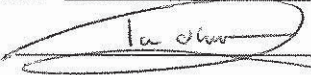


NOTES NO FINDINGS THAT REQUIRE CORRECTIVE ACTION.

1.0.



Food Service Checklist

Name:	Griswold Public Schools		
School:	Griswold High School		
Room or Area:	Kitchen	Date Completed:	3/7/25
Signature:			

Instructions

1. Read the *IAQ Background* and the Background Information for this checklist.
2. Keep the Background Information and make a copy of the checklist for future reference.
3. Complete the Checklist.
 - Check the "yes," "no," or "not applicable" box beside each item. (A "no" response requires further attention.)
 - Make comments in the "Notes" section as necessary.
4. Return the checklist portion of this document to the IAQ Coordinator.

1. COOKING AREA

- | | Yes | No | N/A |
|---|----------------------------------|-----------------------|-----------------------|
| 1a. Determined that local exhaust fans operate properly (note if fans are excessively noisy) | ☒ | ☐ | ☐ |
| 1b. Checked for odors near cooking, preparation, and eating areas | ☒ | ☐ | ☐ |
| 1c. Ensured that exhaust fans are used whenever cooking, washing dishes, and cleaning | ☒ | ☐ | ☐ |
| 1d. Determined that gas appliances function properly | ☒ | ☐ | ☐ |
| 1e. Verified that gas appliances are vented outdoors | ☒ | ☐ | ☐ |
| 1f. Ensured there are no combustion gas or natural gas odors, leaks, back-drafting, or headaches when gas appliances are used | ☒ | ☐ | ☐ |
| 1g. Ensured that kitchen is clean after use | ☒ | ☐ | ☐ |
| 1h. Checked for signs of microbiological growth in the kitchen, including the upper walls and ceiling (for example, mold, slime, and algae) | ☒ | ☐ | ☐ |
| 1i. Selected biocides registered by EPA (if required), followed the manufacturer's directions for use, and carefully reviewed the method of application | ☒ | ☐ | ☐ |
| 1j. Verified the kitchen is free of plumbing and ceiling leaks (signs include stains, discoloration, and damp areas) | ☒ | ☐ | ☐ |

2. FOOD HANDLING AND STORAGE

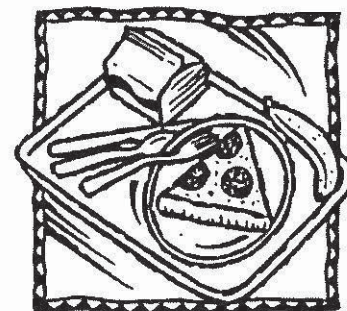
- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 2a. Checked food preparation, cooking, and storage areas for signs of insects and vermin (for example, feces or remains) | ☒ | ☐ | ☐ |
| 2b. Stored leftovers in well-sealed containers with no traces of food on outside surfaces | ☒ | ☐ | ☐ |
| 2c. Ensured that food preparation, cooking, and storage practices are sanitary | ☒ | ☐ | ☐ |
| 2d. Disposed of food scraps properly and removed crumbs | ☒ | ☐ | ☐ |
| 2e. Cleaned counters with soap and water or a disinfectant (according to school policy) | ☒ | ☐ | ☐ |
| 2f. Swept and wet mopped floors | ☒ | ☐ | ☐ |

3. WASTE MANAGEMENT

- | | | | |
|--|----------------------------------|-----------------------|-----------------------|
| 3a. Selected and placed waste in appropriate containers | ☒ | ☐ | ☐ |
| 3b. Ensured that containers' lids are securely closed | ☒ | ☐ | ☐ |
| 3c. Separated food waste and food-contaminated items from other wastes, if possible | ☒ | ☐ | ☐ |
| 3d. Stored waste containers in a well-ventilated area | ☒ | ☐ | ☐ |
| 3e. Ensured that dumpsters are properly located (away from air intake vents, operable windows, and food service doors in relation to prevailing winds) | ☒ | ☐ | ☐ |

4. DELIVERIES

- | | Yes | No | N/A |
|--|----------------------------------|-----------------------|-----------------------|
| 4a. Instructed vendors to avoid idling their engines during deliveries | ☒ | ☐ | ☐ |
| 4b. Posted a sign prohibiting vehicles from idling their engines in receiving areas | ☒ | ☐ | ☐ |
| 4c. Ensured that doors or air barriers are closed between receiving area and kitchen | ☒ | ☐ | ☐ |



NOTES

ALL AREAS meet compliance standards. *[Signature]*

Authorized Signatures Change Form

Connecticut State Department of Education • Revised March 2025

Instructions for Completing the Authorized Signatures Change Form

The **ED-099 Agreement for Child Nutrition Programs** (Agreement) is the formal agreement between a sponsoring organization and the Connecticut State Department of Education (CSDE) to operate one or more of the U.S. Department of Agriculture's (USDA) Child Nutrition Programs. The Agreement designates representatives authorized to enter into an agreement with the CSDE and certifies the claims for reimbursement. The Agreement is permanent and amended as changes occur. The CSDE recognizes that one or both authorized signers will change periodically. The sponsoring organization **must** execute the CSDE's *Authorized Signatures Change Form* whenever there is a change to either of the two authorized signers.

Claims for reimbursement are valid only when certified by authorized signers on file with the CSDE. Action by the board of education must occur to make changes to authorized signers so that claims can be signed and submitted, and reimbursement delays are avoided.

Required Information

The *Authorized Signatures Change Form* must include the information below.

- **Date** of the board meeting is when the governing body of the sponsoring organization took action to change one or both authorized signers.
- **Signature 1** is the designated representative authorized to sign the Agreement for Child Nutrition Programs and to sign claims for reimbursement. The person is head of the governing body, e.g., the chief officer elected or appointed to assume legal responsibility for the organization (superintendent of schools, mayor, selectman, corporate president, chairperson of the board, pastor, or commissioner).
- **Signature 2** is authorized only to sign the claims for reimbursement in the absence or incapacity of the first designated individual (assistant superintendent, business official, principal, headmaster, city or town manager, executive director, or deputy commissioner).
- **Signature 3** certifies the board action and is not authorized to sign the claim. This must be a different person from signatures 1 and 2 (secretary of the board, town clerk, or secretary of the corporation).

Submitting to the CSDE

Scan and email the signed and dated *Authorized Signatures Change Form* to CNPermanentAgreement@ct.gov. Include "Authorized Signatures Change Form" in the subject line of the email.

Questions

Contact the CSDE's Child Nutrition Programs staff. Refer to the CSDE's document, *Child Nutrition Staff and Responsibilities*.

Instructions for Completing the Authorized Signatures Change Form

For information about the Child Nutrition Programs, visit the CSDE's Child Nutrition Programs webpage, or contact the child nutrition programs staff at the Connecticut State Department of Education, Bureau of Child Nutrition Programs, 450 Columbus Boulevard, Suite 504, Hartford, CT 06103-1841. This document is available at https://portal.ct.gov/-/media/sde/nutrition/nsip/forms/authorized_signatures_change_form_instructions.pdf.

In accordance with federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, this institution is prohibited from discriminating on the basis of race, color, national origin, sex (including gender identity and sexual orientation), disability, age, or reprisal or retaliation for prior civil rights activity.

Program information may be made available in languages other than English. Persons with disabilities who require alternative means of communication to obtain program information (e.g., Braille, large print, audiotope, American Sign Language), should contact the responsible state or local agency that administers the program or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339.

To file a program discrimination complaint, a Complainant should complete a Form AD-3027, USDA Program Discrimination Complaint Form which can be obtained online at: <https://www.usda.gov/sites/default/files/documents/ad-3027.pdf>, from any USDA office, by calling (866) 632-9992, or by writing a letter addressed to USDA. The letter must contain the complainant's name, address, telephone number, and a written description of the alleged discriminatory action in sufficient detail to inform the Assistant Secretary for Civil Rights (ASCR) about the nature and date of an alleged civil rights violation. The completed AD-3027 form or letter must be submitted to USDA by:

1. mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410; or
2. fax: (833) 256-1665 or (202) 690-7442; or
3. email: program.intake@usda.gov

This institution is an equal opportunity provider.

The Connecticut State Department of Education is committed to a policy of equal opportunity/affirmative action for all qualified persons. The Connecticut Department of Education does not discriminate in any employment practice, education program, or educational activity on the basis of race; color; religious creed; age; sex; pregnancy; sexual orientation; workplace hazards to reproductive systems, gender identity or expression; marital status; national origin; ancestry; retaliation for previously opposed discrimination or coercion, intellectual disability; genetic information; learning disability; physical disability (including, but not limited to, blindness); mental disability (past/present history thereof); military or veteran status; status as a victim of domestic violence; or criminal record in state employment, unless there is a bona fide occupational qualification excluding persons in any of the aforementioned protected classes. Inquiries regarding the Connecticut State Department of Education's nondiscrimination policies should be directed to: Attorney Louis Todisco, Connecticut State Department of Education, by mail 450 Columbus Boulevard, Hartford, CT 06103-1841; or by telephone 860-713-6594; or by email louis.todisco@ct.gov.



CHANGES ARE IN RED

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment In The Workplace

The Griswold Board of Education (the "Board") prohibits any form of sex discrimination or sexual harassment in the Board's education programs and activities, whether by students, Board employees or third parties subject to substantial control by the Board. It is the policy of the Board to maintain a working environment free from harassment, insults or intimidation on the basis of an employee's sex and free from discrimination based on sex.

The Board does not discriminate on the basis of sex in the education programs or activities that it operates and the Board is required by Title IX of the Education Amendments of 1972 and its implementing regulations ("Title IX"), Title VII of the Civil Rights Act of 1964 ("Title VII"), and Connecticut law not to discriminate in such a manner. Discrimination or harassment on the basis of sex includes discrimination or harassment on the basis of gender identity or sexual orientation. Any employee or student who engages in conduct prohibited by this Policy shall be subject to disciplinary action, up to and including termination or expulsion, respectively. Third parties who engage in conduct prohibited by this Policy shall be subject to other sanctions, which may include exclusion from Board property and/or activities. Individuals who engage in acts of sex discrimination or sexual harassment may also be subject to civil and criminal penalties.

For conduct to violate Title IX, the conduct must have occurred in an education program or activity of the Board; the conduct must have occurred within the United States of America; and the complainant must be participating in or attempting to participate in the education program or activity of the Board. Conduct that does not meet these requirements still may constitute a violation of Title VII, Connecticut law, and/or another Board policy.

The Superintendent of Schools shall develop Administrative Regulations, which will include Grievance Procedures implementing this Policy and in accordance with Title IX, Title VII, and Connecticut law (the "Administrative Regulations").

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment In The Workplace (continued)

Sex discrimination occurs when an employer refuses to hire, disciplines or discharges any individual, or otherwise discriminates against an individual with respect to his or her compensation, terms, conditions, or privileges of employment on the basis of the individual's sex. Sex discrimination also occurs when a person, because of the person's sex, is denied participation in or the benefits of any education program or activity receiving federal financial assistance.

Sexual harassment under Title IX means conduct on the basis of sex that satisfies one or more of the following:

- (1) An employee of the Board conditioning the provision of an aid, benefit, or service of the Board on an individual's participation in unwelcome sexual conduct (*i.e.*, *quid pro quo*);
- (2) Unwelcome conduct determined by a reasonable person to be so severe, pervasive, and objectively offensive that it effectively denies a person equal access to the Board's education programs or activities; or
- (3) "Sexual assault" as defined in 20 U.S.C. 1092(f)(6)(A)(v), "dating violence" as defined in 34 U.S.C. 12291(a)(10), "domestic violence" as defined in 34 U.S.C. 12291(a)(8), or "stalking" as defined in 34 U.S.C. 12291(a)(30).

Sexual harassment under Title VII and Connecticut law means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- (1) Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment;
- (2) Submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual; or
- (3) Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

Reporting Sex Discrimination or Sexual Harassment

It is the policy of the Board to encourage victims of sex discrimination and/or sexual harassment to report such claims. Employees are encouraged to report complaints of sex discrimination and/or sexual harassment promptly in accordance with the appropriate process established in the Administrative Regulations. All complaints are to be responded to in a prompt and equitable manner.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Reporting Sex Discrimination or Sexual Harassment (continued)

Individuals who engage in acts of sex discrimination or sexual harassment may also be subject to civil and criminal penalties. Retaliation against any employee with a complaint about sex discrimination or sexual harassment is prohibited under this Policy and illegal under state and federal law.

Any Board employee with notice of sex discrimination and/or sexual harassment allegations shall immediately report such information to the building principal and/or the Title IX Coordinator, or if the employee does not work in a school building, to the Title IX Coordinator.

The Griswold Public Schools administration (the "Administration") shall provide training to Title IX Coordinator(s), investigators, decision-makers, and any person who facilitates an informal resolution process (as set forth in the Administrative Regulations), which training shall include, but need not be limited to, the definition of sex discrimination and sexual harassment, the scope of the Board's education program and activity, how to conduct an investigation and implement the grievance process, and how to serve impartially, including by avoiding prejudgment of the facts at issue, conflicts of interest, and bias.

The Administration shall make the training materials used to provide these trainings publicly available on the Board's website. The Administration shall also periodically provide training to all Board employees on the topic of sex discrimination and sexual harassment under Title IX, Title VII, and Connecticut law, which shall include when reports of sex discrimination and/or sexual harassment must be made. The Administration shall distribute this Policy and the Administrative Regulations to employees, union representatives, students, parents and legal guardians and make the Policy and the Administrative Regulations available on the Board's website to promote an environment free of sex discrimination and sexual harassment.

The Board's Title IX Coordinator is Christopher Champlin, Director of Student Services. Any individual may make a report of sex discrimination and/or sexual harassment to any Board employee or directly to the Title IX Coordinator using any one, or multiple, of the following points of contact:

Christopher Champlin, Title IX Coordinator

Griswold Public Schools

211 Slater Avenue

Griswold, CT 06351

860-376-7600 & Email: Champlin@griswoldpublicschools.org

Any Board employee in receipt of allegations of sex discrimination or sexual harassment, or in receipt of a formal complaint, shall immediately forward such information to the Title IX Coordinator. Board employees may also make a report of sexual harassment and/or sex discrimination to the U.S. Department of Education: Office for Civil Rights, Boston Office, U.S. Department of Education, 8th Floor, 5 Post Office Square, Boston, MA 02109-3921 (Telephone: 617-289-0111).

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Reporting Sex Discrimination or Sexual Harassment (continued)

Employees may also make a report of sexual harassment and/or sex discrimination to the Connecticut Commission on Human Rights and Opportunities, 450 Columbus Boulevard, Hartford, CT 06103-1835 (Telephone: 860-541-3400 or Connecticut Toll Free Number: 1-800-477-5737).

Legal References:

- Civil Rights Act of 1964, Title VII, 42 U.S.C. § 2000e-2(a).
- Equal Employment Opportunity Commission Policy Guidance on Current Issues of Sexual Harassment (N-915.050), March 19, 1990.
- Title IX of the Education Amendments of 1972, 20 U.S.C. §1681, et seq.
- Title IX of the Education Amendments of 1972, 34 CFR §106, et seq.
- Meritor Savings Bank, FSB v. Vinson*, 477 U.S. 57 (1986)
- Conn. Gen. Stat. §46a-54 Commission powers Connecticut
- Conn. Gen. Stat. §46a-60 Discriminatory employment practices prohibited.
- Conn. Gen. Stat. §46a-81c Sexual orientation discrimination: Employment
- Conn. Gen. Stat. §10-153 Discrimination on the basis of sex, gender identity or expression or marital status prohibited
- Conn. Agencies Regs. §§ 46a-54-200 through §46a-54-207

The grievance procedures in these regulations are legally required.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment In The Workplace

The Griswold Board of Education (the "Board") prohibits any form of sex discrimination or sexual harassment in the Board's education programs and activities, whether by students, Board employees or third parties subject to substantial control by the Board. Discrimination or harassment on the basis of sex includes discrimination or harassment on the basis of gender identity or sexual orientation.

Students, District employees and third parties are expected to adhere to a standard of conduct that is respectful of the rights of students, District employees, and third parties. It is the policy of the Board to maintain a working environment free from harassment, insults or intimidation on the basis of an employee's sex and free from discrimination based on sex. Verbal or physical conduct by a supervisor or co-worker relating to an employee's sex that has the effect of creating an intimidating, hostile or offensive work environment, unreasonably interfering with the employee's work performance, or adversely affecting the employee's employment opportunities is prohibited.

Any employee or student who engages in conduct prohibited by the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel) shall be subject to disciplinary action. Any third party who engages in conduct prohibited by the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel) shall be subject to remedial measures, which may include exclusion from school property.

Sex discrimination occurs when a person, because of the person's sex, is denied participation in or the benefits of any education program or activity receiving federal financial assistance.

Sexual harassment under Title IX means conduct on the basis of sex that satisfies one or more of the following:

- (1) An employee of the Board conditioning the provision of an aid, benefit, or service of the Board on an individual's participation in unwelcome sexual conduct (i.e., *quid pro quo*);
- (2) Unwelcome conduct determined by a reasonable person to be so severe, pervasive, and objectively offensive that it effectively denies a person equal access to the District's education programs or activities; or
- (3) "Sexual assault" as defined in 20 U.S.C. 1092(f)(6)(A)(v), "dating violence" as defined in 34 U.S.C. 12291(a)(10), "domestic violence" as defined in 34 U.S.C. 12291(a)(8), or "stalking" as defined in 34 U.S.C. 12291(a)(30). These definitions can be found in Appendix A of these Administrative Regulations.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment In The Workplace

Sexual harassment under Title VII and Connecticut law means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- (1) Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment;
- (2) Submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual; or
- (3) Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

Although not an exhaustive list, the following are other examples of conduct prohibited by the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel):

1. Unwelcome sexual advances from a co-worker or supervisor, such as unwanted hugs, touches, or kisses;
2. Unwelcome attention of a sexual nature, such as degrading, suggestive or lewd remarks or noises;
3. Dirty jokes, derogatory or pornographic posters, cartoons or drawings;
4. The threat or suggestion that continued employment advancement, assignment or earnings depend on whether or not the employee will submit to or tolerate harassment;
5. Circulating, showing, or exchanging emails, text messages, digital images or websites of a sexual nature;
6. Using computer systems, including email, instant messaging, text messaging, blogging or the use of social networking websites, or other forms of electronic communications, to engage in any conduct prohibited by the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel).

Notice of The Title IX Coordinator

The Board's Title IX Coordinator is **Christopher Champlin, Director of Student Services**. Any individual may make a report of sex discrimination and/or sexual harassment to any Board employee or directly to the Title IX Coordinator using any one, or multiple, of the following points of contact:

Christopher Champlin, Title IX Coordinator
Griswold Public Schools
211 Slater Avenue
Griswold, CT 06351
860-376-7600 & Email: Champlin@griswoldpublicschools.org

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Notice of the Title IX Coordinator (continued)

Any District employee in receipt of allegations of sex discrimination or sexual harassment, or in receipt of a formal complaint, shall immediately forward such information to the Title IX Coordinator. The Title IX Coordinator manages the District's compliance with Title IX, Title VII and Connecticut law with respect to sexual harassment and/or sex discrimination and is an available resource to anyone seeking information or wishing to file a formal complaint of same. When a student, District employee, or other participant in the District's programs and activities feels that such person has been subjected to discrimination on the basis of sex in any District program or activity, including without limitation being subjected to sexual harassment, such person may contact the Title IX Coordinator or utilize the Title IX, Title VII and Connecticut law grievance systems set forth herein to bring concerns forward for the purpose of obtaining a prompt and equitable resolution.

[Note: Additional Persons May Be Added. The federal regulations provide that each recipient of federal financial assistance must designate and authorize "at least one Employee" to coordinate its efforts to comply with its responsibilities under the federal regulations.]

Explanation of Complaint Process and Procedure

The federal regulations implementing Title IX require the adoption and publication of two separate grievance systems:

- a grievance process for complaints of sex discrimination involving allegations of sexual harassment; and
- grievance procedures for complaints of sex discrimination that are not sexual harassment.

Accordingly, the Administration will process any complaints of sex discrimination involving allegations of sexual harassment, as defined above, pursuant to the **grievance process** set forth in Section I of these regulations. The Administration will process any complaints of sex discrimination that are not sexual harassment pursuant to the **grievance procedures** set forth in Section II of these regulations.

The District will keep confidential the identity of any individual who has made a report or complaint of sex discrimination, including any individual who has made a report or filed a formal complaint of sexual harassment, any complainant, any individual who has been reported to be the perpetrator of sex discrimination, any respondent, and any witness, except as may be permitted by the Family Educational Rights and Privacy Act (FERPA), or as required by law, or to carry out the purposes of these Administrative Regulations, including the conduct of any investigation, hearing, or judicial proceeding arising from these Administrative Regulations.

The obligation to comply with Title IX is not obviated or alleviated by the FERPA.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment In The Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

A. Definitions

- **Bias** occurs when it is proven that the Title IX Coordinator, investigator(s), and/or decision-maker(s) demonstrate actual bias, rather than the appearance of bias. Actual bias includes, but is not limited to, demonstrated personal animus against the respondent or the complainant and/or prejudgment of the facts at issue in the investigation.
- **Complainant** means an individual who is alleged to be the victim of conduct that could constitute sexual harassment.
- A **conflict of interest** occurs when it is proven that the Title IX Coordinator, investigator(s), and/or decision-maker(s) have personal, financial and/or familial interests that affected the outcome of the investigation.
- **Consent** means an active, clear and voluntary agreement by a person to engage in sexual activity with another person (also referred to hereafter as "affirmative consent").

For the purposes of an investigation conducted pursuant to these Administrative Regulations, the following principles shall be applied in determining whether consent for sexual activity was given and/or sustained:

- A. Affirmative consent is the standard used in determining whether consent to engage in sexual activity was given by all persons who engaged in the sexual activity.
- B. Affirmative consent may be revoked at any time during the sexual activity by any person engaged in the sexual activity.
- C. It is the responsibility of each person engaging in sexual activity to ensure that the person has the affirmative consent of all persons engaged in the sexual activity to engage in the sexual activity and that the affirmative consent is sustained throughout the sexual activity.
- D. It shall not be a valid excuse to an alleged lack of affirmative consent that the respondent to the alleged violation believed that the complainant consented to the sexual activity:
 - (i) because the respondent was intoxicated or reckless or failed to take reasonable steps to ascertain whether the complainant affirmatively consented, or

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment In The Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

A. Definitions (continued)

- (ii) if the respondent knew or should have known that the complainant was unable to consent because such individual was unconscious, asleep, unable to communicate due to a mental or physical condition, unable to consent due to the age of the individual or the age difference between the individual and the respondent, or incapacitated due to the influence of drugs, alcohol or medication.
- E. The existence of a past or current dating or sexual relationship between the complainant and the respondent, in and of itself, shall not be determinative of a finding of consent.
 - For purposes of investigations and complaints of sexual harassment, **education program or activity** includes locations, events, or circumstances over which the Board exercises substantial control over both the respondent and the context in which the sexual harassment occurs.
 - **Employee** means (A) a teacher, substitute teacher, school administrator, school superintendent, guidance counselor, school counselor, psychologist, social worker, nurse, physician, school paraprofessional or coach employed by the Board or working in a public elementary, middle or high school; or (B) any other individual who, in the performance of the individual's duties, has regular contact with students and who provides services to or on behalf of students enrolled in a public elementary, middle or high school, pursuant to a contract with the Board.
 - **Formal complaint** means a document filed by a complainant or signed by the Title IX Coordinator alleging sexual harassment (as defined under Title IX) against a respondent and requesting that the Administration investigate the allegation of sexual harassment. A "document filed by a complainant" means a document or electronic submission that contains the complainant's physical or digital signature, or otherwise indicates that the complainant is the person filing the formal complaint.
 - **Respondent** means an individual who has been alleged to be the perpetrator of conduct that could constitute sexual harassment.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment In The Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

A. Definitions (continued)

- **School days** means the days that school is in session as designated on the calendar posted on the Board's website. In its discretion, and when equitably applied and with proper notice to the parties, the District may consider business days during the summer recess as "school days" if such designation facilitates the prompt resolution of the grievance process.
- **Supportive measures** mean non-disciplinary, non-punitive individualized services offered as appropriate, as reasonably available, and without fee or charge to the complainant or the respondent before or after the filing of a formal complaint or where no formal complaint has been filed. Such measures are designed to restore or preserve equal access to the District's education program or activity without unreasonably burdening the other party, including measures designed to protect the safety of all parties or the District's educational environment, or deter sexual harassment. Supportive measures may include counseling, extensions of deadlines or other course-related adjustments, modifications of work or class schedules, mutual restrictions on contact between the parties, increased security and monitoring, and other similar measures.

B. Reporting Sexual Harassment

1. It is the express policy of the Board to encourage victims of sexual harassment to report such claims. Any person may report sexual harassment (whether or not the person reporting is the person alleged to be the victim of conduct that could constitute sexual harassment), in person, by mail, by telephone, or by electronic mail, using the contact information listed for the Title IX Coordinator. If the District receives notice of sexual harassment or alleged sexual harassment against a person in the District's education program or activity, the Title IX Coordinator will promptly contact the complainant to discuss the availability of supportive measures, whether or not the complainant files a formal complaint, and will consider the complainant's wishes with respect to such measures. If the complainant has yet to file a formal complaint, the Title IX Coordinator will explain to the complainant the process for doing so.

**Personnel -- Certified/Non-Certified/Students
Sexual Harassment/Title IX**

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

B. Reporting Sexual Harassment (continued)

2. The District will treat complainants and respondents equitably. A respondent is presumed not responsible for the alleged conduct and a determination regarding responsibility will be made at the conclusion of the grievance process if a formal complaint is filed. Nothing in these Administrative Regulations shall preclude the District from placing an employee respondent on administrative leave during the pendency of the grievance process. Further, nothing in these Administrative Regulations shall limit or preclude the District from removing a respondent from the District's education program or activity on an emergency basis, provided that the District undertakes an individualized safety and risk analysis, and determines that an immediate threat to the physical health or safety of any student or other individual arising from the allegations of sexual harassment justifies removal. If a respondent is removed on an emergency basis, the District shall provide the respondent with notice and an opportunity to challenge the decision immediately following the removal.

C. Formal Complaint and Grievance Process

1. A formal complaint may be filed with the Title IX Coordinator in person, by mail, or by electronic mail, by using the contact information listed for the Title IX Coordinator. At the time of filing a formal complaint, a complainant must be participating in or attempting to participate in the District's education programs or activity. A formal complaint may be signed by the Title IX Coordinator. If the formal complaint being filed is against the Title IX Coordinator, the formal complaint should be filed with the Superintendent. If the formal complaint being filed is against the Superintendent, the formal complaint should be filed with the Board Chair, who will then retain an independent investigator to investigate the matter.
2. The District may consolidate formal complaints as to allegations of sexual harassment against more than one respondent, or by more than one complainant against one or more respondents, or by one party against the other party, where the allegations of sexual harassment arise out of the same facts or circumstances. If possible, formal complaints should be filed within ten (10) school days of the alleged occurrence in order to facilitate the prompt and equitable resolution of such claims.

Personnel -- Certified/Non-Certified/Students
Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

C. Formal Complaint and Grievance Process (continued)

2. (continued) The District will attempt to complete the formal grievance process within ninety (90) school days of receiving a formal complaint. This timeframe may be temporarily delayed or extended in accordance with Subsection G of this Section.
3. Upon receipt of a formal complaint, if the Title IX Coordinator has not already discussed the availability of supportive measures with the complainant, the Title IX Coordinator will promptly contact the complainant to discuss the availability of such measures and consider the complainant's wishes with respect to them. The Title IX Coordinator or designee may also contact the respondent, separately from the complainant, to discuss the availability of supportive measures for the respondent. The District will maintain as confidential any supportive measures provided to the complainant or respondent, to the extent that maintaining such confidentiality would not impair the ability of the District to provide such supportive measures.
4. Within ten (10) school days of receiving a formal complaint, the District will provide the known parties with written notice of the allegations potentially constituting sexual harassment under Title IX and a copy of this grievance process. The written notice must also include the following:
 - i. The identities of the parties involved in the incident, if known;
 - ii. The conduct allegedly constituting sexual harassment as defined above;
 - iii. The date and the location of the alleged incident, if known;
 - iv. statement that the respondent is presumed not responsible for the alleged conduct and that a determination regarding responsibility is made at the conclusion of the grievance process;
 - v. A statement that the parties may have an advisor of their choice, who may be, but is not required to be, an attorney, and may inspect and review evidence; and
 - vi. A statement of any provision in the District's policies that prohibits knowingly making false statements or knowingly submitting false information during the grievance process.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

C. Formal Complaint and Grievance Process (continued)

4. (continued) If, in the course of an investigation, the District decides to investigate allegations about the complainant or respondent that are not included in the written notice, the District must provide notice of the additional allegations to the parties whose identities are known.
5. The parties may have an advisor of their choice accompany them during any grievance proceeding at which the party's attendance is required. The District may, in its discretion, establish certain restrictions regarding the extent to which an advisor may participate in the proceedings. If any such restrictions are established, they will be applied equally to all parties.
6. The Title IX Coordinator will, as applicable, promptly commence an investigation of the formal complaint, designate a school administrator to promptly investigate the formal complaint, or dismiss the formal complaint in accordance with Subsection F of this Section. The standard of evidence to be used to determine responsibility is the preponderance of the evidence standard (i.e., more likely than not). The burden of proof and the burden of gathering evidence sufficient to reach a determination regarding responsibility rest on the District and not on the parties.
7. The parties will be given an equal opportunity to discuss the allegations under investigation with the investigator(s) and are permitted to gather and present relevant evidence. This opportunity includes presenting witnesses, including fact and expert witnesses, and other inculpatory and exculpatory evidence. Credibility determinations will not be based on a person's status as a complainant, respondent, or witness. The District will provide to a party whose participation is invited or expected (including a witness) written notice of the date, time, location, participants, and purpose of all hearings (if applicable), investigative interviews, or other meetings, with sufficient time for the party to prepare to participate.
8. Both parties will be given an equal opportunity to inspect and review any evidence obtained as part of the investigation that is directly related to the allegations raised in the formal complaint, including the evidence upon which the District does not intend to rely in reaching a determination regarding responsibility and inculpatory or exculpatory evidence whether obtained from a party or other source, so that each party can meaningfully respond to the evidence prior to the conclusion of the investigation.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

C. Formal Complaint and Grievance Process (continued)

- 8.(cont) Prior to completion of the investigative report, the District will send to each party and the party's advisor, if any, the evidence subject to inspection and review in an electronic format or a hard copy, and the parties will have ten (10) school days to submit a written response, which the investigator(s) will consider prior to completion of the investigative report, as described in Paragraph 9 of this Subsection.
9. The investigator(s) will create an investigative report that fairly summarizes relevant evidence. The investigator(s) will send the investigative report, in an electronic format or hard copy, to each party and to each party's advisor for their review and written response at least ten (10) school days prior to the time a determination regarding responsibility is made.
10. The Superintendent will appoint a decision-maker(s), who shall be a District employee or third-party contractor and who shall be someone other than the Title IX Coordinator or investigator(s). If the formal complaint filed is against the Superintendent, the Board Chair shall appoint the decision-maker, who shall be someone other than the Title IX Coordinator or investigator(s). The investigator(s) and the decision-maker(s) shall not discuss the investigation's facts and/or determination while the formal complaint is pending. The decision-maker(s) will afford each party the opportunity to submit written, relevant questions that a party wants asked of any party or witness, provide each party with the answers, and allow for additional, limited follow-up questions from each party. Questions and evidence about the complainant's sexual predisposition or prior sexual behavior are not relevant, unless such questions and evidence about the complainant's prior sexual behavior are offered to prove that someone other than the respondent committed the conduct alleged by the complainant, or if the questions and evidence concern specific incidents of the complainant's prior sexual behavior with respect to the respondent and are offered to prove consent. The decision-maker(s) will explain to the party proposing the questions any decisions to exclude a question as not relevant.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

C. Formal Complaint and Grievance Process (continued)

11. The decision-maker(s) will issue a written determination regarding responsibility. To reach this determination, the decision-maker must apply the preponderance of the evidence standard. The written determination will include: (1) identification of the allegations potentially constituting sexual harassment; (2) a description of the procedural steps taken from the receipt of the formal complaint through the determination, including any notifications to the parties, interviews with parties and witnesses, site visits, methods used to gather other evidence, and hearings held; (3) findings of fact supporting the determination; (4) conclusions regarding the application of the District's code of conduct to the facts; (5) a statement of, and rationale for, the result as to each allegation, including a determination regarding responsibility, any disciplinary sanctions the District will impose on the respondent, and whether remedies designed to restore or preserve equal access to the District's education program or activity will be provided by the District to the complainant; and (6) the District's procedures and permissible bases for the complainant and respondent to appeal. If the respondent is found responsible for violating the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel), the written determination shall indicate whether the respondent engaged in sexual harassment as defined by the Board's Policy and these Administrative Regulations. The written determination will be provided to both parties simultaneously.
12. Student respondents found responsible for violating the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel) may be subject to discipline up to and including expulsion. Employee respondents found responsible for violating the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel) may be subject to discipline up to and including termination of employment. Other respondents may be subject to exclusion from the District's programs, activities and/or property. In appropriate circumstances, the District may make a criminal referral. Remedies will be designed to restore or preserve equal access to the District's education programs or activities.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

C. Formal Complaint and Grievance Process (continued)

13. After receiving notification of the decision-maker(s)' decision, or after receiving notification that the District dismissed a formal complaint or any allegation therein, both complainant and respondent may avail themselves of the appeal process set forth in Section E of this Section.

D. Informal Resolution

At any time prior to reaching a determination regarding responsibility, but only after the filing of a formal complaint, the District may suggest to the parties the possibility of facilitating an informal resolution process, such as mediation, to resolve the formal complaint without the need for a full investigation and adjudication. If it is determined that an informal resolution may be appropriate, the Title IX Coordinator or designee will consult with the parties.

Prior to facilitating an informal resolution to a formal complaint, the Title IX Coordinator or designee will provide the parties with written notice disclosing the sexual harassment allegations, the requirements of an informal resolution process, and any consequences from participating in the informal resolution process. Upon receipt of this document, complainants and respondents have five (5) school days to determine whether they consent to participation in the informal resolution. The District must obtain voluntary, written consent to the informal resolution process from both parties.

Prior to agreeing to any resolution, any party has the right to withdraw from the informal resolution process and resume the grievance process with respect to the formal complaint. If a satisfactory resolution is reached through this informal process, the matter will be considered resolved. If these efforts are unsuccessful, the formal grievance process will continue.

Nothing in this section precludes an employee from filing a complaint of retaliation for matters related to an informal resolution, nor does it preclude either party from filing complaints based on conduct that is alleged to occur following the District's facilitation of the informal resolution.

An informal resolution is not permitted to resolve allegations that an employee sexually harassed a student.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

E. Appeal Process

After receiving notification of the decision-maker(s)' decision, or after receiving notification that the District dismissed a formal complaint or any allegation therein, both complainant and respondent have five (5) school days to submit a formal letter of appeal to the Title IX Coordinator specifying the grounds upon which the appeal is based. Upon receipt of an appeal, the Superintendent shall appoint a decision-maker(s) for the appeal, who shall be someone other than the Title IX Coordinator, investigator(s) or initial decision-maker(s).

Appeals will be appropriate only in the following circumstances:

- new evidence that was not reasonably available at the time the determination regarding responsibility or dismissal was made, that could affect the outcome of the matter;
- procedural irregularity that affected the outcome of the matter;
- the Title IX Coordinator, investigator(s), and/or decision-maker(s) had a conflict of interest or bias for or against complainants or respondents generally or the individual complainant or respondent that affected the outcome of the matter. A conflict of interest or bias does not exist solely because the Title IX Coordinator, investigators(s), and/or decision-maker(s) previously worked with or disciplined the complainant or respondent.

The District will provide the other party with written notice of such appeal. The appealing party will then have ten (10) school days to submit to the decision-maker(s) for the appeal a written statement in support of, or challenging, the outcome of the grievance process. The decision-maker(s) for the appeal will provide the appealing party's written statement to the other party. The other party will then have ten (10) school days to submit to the decision-maker for the appeal a written statement in support of, or challenging, the outcome of the grievance process. The decision-maker(s) for the appeal, in their discretion, will determine any additional necessary and appropriate procedures for the appeal.

Personnel -- Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

E. Appeal Process (continued)

After considering the parties' written statements, the decision-maker(s) for the appeal will provide a written decision. The decision-maker(s) for the appeal will attempt to issue the written decision within thirty (30) school days of receipt of all written statements from the parties. If it is found that one of the bases for appeal exists, the decision-maker(s) for the appeal will issue an appropriate remedy.

Supportive measures for either or both parties may be continued throughout the appeal process.

F. Dismissal of a Formal Complaint

The Title IX Coordinator shall dismiss any formal complaint that, under Title IX, 1) would not constitute sexual harassment as defined under Title IX even if proved, 2) did not occur in the District's education program or activity, or 3) did not occur against a person in the United States. Such dismissal does not preclude action under another Board policy.

The District may dismiss a formal complaint or any allegations therein, if at any time during the investigation or hearing a complainant notifies the Title IX Coordinator in writing that 1) the complainant would like to withdraw the formal complaint or any allegations therein; 2) the respondent is no longer enrolled or employed in the District; or 3) specific circumstances prevent the District from gathering evidence sufficient to reach a determination as to the formal complaint or allegations therein.

Upon a dismissal, the District will promptly and simultaneously send written notice of the dismissal and reason(s) therefor to each party. Either party can appeal from the District's dismissal of a formal complaint or any allegations therein using the appeals procedure.

In the event a formal complaint is dismissed prior to the issuance of a decision under Title IX, the Title IX Coordinator shall determine if the allegations of sexual harassment shall proceed through the grievance procedures identified in Section II of these Administrative Regulations for claims of sex discrimination for consideration as to whether the allegations constitute sexual harassment under Title VII or Connecticut law.

A dismissal pursuant to this section does not preclude action by the District under the Student Discipline policy, Code of Conduct for students/or and employees, or any other applicable rule, policy, and/or collective bargaining agreement.

Personnel – Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX (continued)

G. Miscellaneous

1. Any timeframe set forth in these Administrative Regulations may be temporarily delayed or extended for good cause. Good cause may include, but is not limited to, considerations such as the absence or illness of a party, a party's advisor, or a witness; concurrent law enforcement activity; concurrent activity by the Department of Children and Families; or the need for language assistance or accommodation of disabilities. If any timeframe is altered on a showing of good cause, written notice will be provided to each party with the reasons for the action.
2. If a sexual harassment complaint raises a concern about discrimination or harassment on the basis of any other legally protected classification (such as race, religion, color, national origin, age, or disability), the Title IX Coordinator or designee shall make a referral to other appropriate personnel within the District (e.g. Section 504 Coordinator, etc.), so as to ensure that any such investigation complies with the requirements of policies regarding non-discrimination.
3. If the sexual harassment complaint results in reasonable cause to suspect or believe that a child has been abused or neglected, has had a non-accidental physical injury, or injury which is at variance with the history given of such injury, is placed at imminent risk of serious harm, or that a student has been sexually assaulted by a school employee, then, the person to whom the complaint is given or who receives such information shall report such matters in accordance with the Board's policy on the Reports of Suspected Child Abuse or Neglect of Children.
4. Retaliation against any individual who complains pursuant to the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel) and these Administrative Regulations is strictly prohibited. Neither the District nor any other person may intimidate, threaten, coerce, or discriminate against any individual for the purpose of interfering with any right or privilege secured by Title IX or these Administrative Regulations, or because the individual has made a report or complaint, testified, assisted, or participated or refused to participate in any manner in an investigation, proceeding, or hearing under these Administrative Regulations. The District will take actions designed to prevent retaliation. Complaints alleging retaliation may be filed according to the grievance procedures for sex discrimination described herein.

Personnel – Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section I. Grievance Process for Complaints of Sexual Harassment Under Title IX

G. Miscellaneous (continued)

5. The District will maintain for a period of seven (7) years records of:
 - i. Each sexual harassment investigation including any determination regarding responsibility, any disciplinary sanctions imposed on the respondent, and any remedies provided to the complainant designed to restore or preserve equal access to the Board's education program or activity;
 - ii. Any appeal and the result therefrom;
 - iii. Any informal resolution and the result therefrom; and
 - iv. All material used to train Title IX Coordinators, investigators, decision-makers, and any person who facilitates an informal resolution process. The Board will make these training materials publicly available on its website.

If the District has actual knowledge of sexual harassment in an education program or activity of the Board, and for any report or formal complaint of sexual harassment, the District will create and maintain for a period of seven (7) years, records of any actions, including any supportive measures, taken in response to a report or formal complaint of sexual harassment. The District will document the basis for its conclusion that its response was not deliberately indifferent, and document that it has taken measures designed to restore or preserve equal access to the Board's education program or activity. If the District does not provide a complainant with supportive measures, then the District will document the reasons why such a response was not clearly unreasonable in light of the known circumstances.

Section II. Grievance Procedures for Claims of Sex Discrimination (Other Than Sexual Harassment Under Title IX)

A. Definitions

- **Complainant** means an individual who is alleged to be the victim of conduct that could constitute sex discrimination.
- **Respondent** means an individual who has been reported to be the perpetrator of conduct that could constitute sex discrimination.

Personnel – Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace

Section II. Grievance Procedures for Claims of Sex Discrimination (Other Than Sexual Harassment Under Title IX) (continued)

B. Reporting Sex Discrimination Other than Sexual Harassment under Title IX

It is the express policy of the Board to encourage victims of sex discrimination to report such claims. Any person may report sex discrimination (whether or not the person reporting is the person alleged to be the victim of conduct that could constitute sex discrimination), in person, by mail, by telephone, or by electronic mail, using the contact information listed for the Title IX Coordinator. If the District receives notice of sex discrimination or alleged sex discrimination against a person in the District's education program or activity, the Title IX Coordinator or designee will promptly notify the complainant of the grievance process. The District will treat complainants and respondents equitably during the grievance process. Sexual harassment is a form of sex discrimination, and any incident of sexual harassment under Title IX, as defined above, shall be handled pursuant to Section I of these Administrative Regulations. Any allegations of sexual harassment under Title VII or Connecticut law, as defined above, shall be handled pursuant to this Section II of these Administrative Regulations.

C. Grievance Procedures

1. As soon as an employee feels that the employee has been subjected to sex discrimination other than sexual harassment as defined under Title IX (including, without limitation, sexual harassment under Title VII or Connecticut law), the employee should make a written complaint to the Title IX Coordinator or to the building principal, or designee. The employee will be provided a copy of the Board's Policy and Administrative Regulations and made aware of the employee's rights under this Policy and Administrative Regulations. Preferably, complaints should be filed within ten (10) school days of the alleged occurrence. Timely reporting of complaints facilitates the investigation and resolution of such complaints.

Personnel – Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section II. Grievance Procedures for Claims of Sex Discrimination (Other Than Sexual Harassment Under Title IX)

C. Grievance Procedures (continued)

2. The complaint should state the:
 - i. Name of the complainant;
 - ii. Date of the complaint;
 - iii. Date(s) of the alleged discrimination;
 - iv. Name(s) of the discriminator(s);
 - v. Location where such discrimination occurred;
 - vi. Names of any witness(es) to the discrimination;
 - vii. Detailed statement of the circumstances constituting the alleged discrimination; and
 - viii. Remedy requested.
3. Any employee who makes an oral complaint of sex discrimination to any of the above-mentioned personnel will be provided a copy of these Administrative Regulations and will be requested to make a written complaint pursuant to the above procedure.
4. All complaints are to be forwarded immediately to the building principal or designee unless that individual is the subject of the complaint, in which case the complaint should be forwarded directly to the Superintendent of Schools or designee. In addition, a copy of any complaint filed under this Policy shall be forwarded to the Title IX Coordinator. If the complaint being filed is against the Title IX Coordinator, the complaint should be filed with the Superintendent. If the complaint being filed is against the Superintendent, the complaint should be filed with the Board Chair, who will then retain an independent investigator to investigate the matter.
5. The Title IX Coordinator or designee shall investigate all complaints of sex discrimination against an employee, regardless of whether the conduct occurred on or off-school grounds. Complaints will be investigated promptly within the timeframes identified below. Timeframes may be extended as needed given the complexity of the investigation, availability of individuals with relevant information, and other extenuating circumstances. The investigation shall be conducted discreetly, maintaining confidentiality insofar as possible while still conducting an effective and thorough investigation.

Personnel – Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section II. Grievance Procedures for Claims of Sex Discrimination (Other Than Sexual Harassment Under Title IX)

C. Grievance Procedures (continued)

6. Any employee who makes a complaint shall be notified of the District's intent to investigate the complaint. In the event the employee requests confidentiality or that an investigation not be conducted, the District will take reasonable steps to investigate and respond to the complaint to the extent possible, given the request for confidentiality or that the District not investigate the complaint. If the employee insists that this information not be shared with the alleged discriminator(s), the employee will be informed that the District's ability to investigate and/or take corrective action may be limited.
7. Upon receipt of a sex discrimination complaint, the Title IX Coordinator shall either promptly commence an investigation of the complaint, or shall designate a school administrator to promptly investigate the complaint. The Title IX Coordinator or designee shall:
 - i. offer to meet with the complainant and respondent (if applicable) separately within ten (10) school days to discuss the nature of the complaint, identify individuals the complainant and respondent (if applicable) believe have relevant information, and obtain any relevant documents the complainant and respondent may have;
 - ii. provide the complainant and respondent (if applicable) with a copy of the Board's sex discrimination policy and accompanying regulations;
 - iii. consider whether any interim measures may be appropriate to protect the complainant or respondent (if applicable), pending the outcome of the investigation;
 - iv. conduct an investigation that is adequate, reliable, and impartial. Investigate the factual basis of the complaint, including, as applicable, conducting interviews with individuals deemed relevant to the complaint;

Personnel – Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section II. Grievance Procedures for Claims of Sex Discrimination (Other Than Sexual Harassment Under Title IX)

C. Grievance Procedures (continued)

- v. consider whether alleged sex discrimination has created a hostile work environment, including consideration of the effects of off-campus conduct on the school;
 - vi. communicate the outcome of the investigation in writing to the complainant, to the respondent, and to any individual properly identified as a party to the complaint (to the extent permitted by state and federal confidentiality requirements), within ninety (90) school days from the date the complaint was received by the Superintendent's office. The investigator may extend this deadline for no more than fifteen (15) additional school days if needed to complete the investigation. The complainant and respondent (if applicable) shall be notified of such extension. The written notice shall include a finding whether the complaint was substantiated and if so, shall identify, to the extent possible, how the District will remedy the discrimination, adhering to the requirements of state and federal law; and
 - vii. when sex discrimination has been found, take steps that are reasonably calculated to end the discrimination, take corrective and/or disciplinary action aimed at preventing the recurrence of the discrimination, as deemed appropriate by the Superintendent or designee, and take steps to remedy the effects of the sex discrimination.
- 8. If a complaint is made during summer recess, the complaint will be reviewed and addressed as quickly as possible given the availability of staff and/or other individuals who may have information relevant to the complaint. If fixed timeframes cannot be met, the complainant and respondent will receive notice and interim measures may be implemented as necessary.

Personnel – Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section II. Grievance Procedures for Claims of Sex Discrimination (Other Than Sexual Harassment Under Title IX)

C. Grievance Procedures (continued)

9. If the complainant or respondent (if applicable) is dissatisfied with the findings of the investigation, the complainant or respondent may file a written appeal within five (5) school days to the Title IX Coordinator, or, if the Title IX Coordinator conducted the investigation, to the Superintendent of Schools. The Title IX Coordinator or Superintendent shall review the Title IX Coordinator or designee's written report, the information collected by the Title IX Coordinator or designee together with the recommended disposition of the complaint to determine whether the alleged conduct constitutes sex discrimination. The Title IX Coordinator or Superintendent of Schools may determine if further action and/or investigation is warranted. After completing this review, the Title IX Coordinator or Superintendent of Schools shall respond to the complainant and respondent (if applicable), in writing, within fifteen (15) school days following the receipt of the written request for review.

D. Miscellaneous

1. If a sex discrimination complaint raises a concern about discrimination or harassment on the basis of any other legally protected classification (such as race, religion, color, national origin, age, or disability), the Title IX Coordinator or designee shall make a referral to other appropriate personnel within the District (e.g. Section 504 Coordinator, etc.), so as to ensure that any such investigation complies with the requirements of policies regarding nondiscrimination.
2. If the sex discrimination complaint results in reasonable cause to suspect or believe that a child has been abused or neglected, has had a nonaccidental physical injury, or injury which is at variance with the history given of such injury, is placed at imminent risk of serious harm, or that a student has been sexually assaulted by a school employee, then, the person to whom the complaint is given or who receives such information shall report such matters in accordance with the Board's policy on the Reports of Suspected Child Abuse or Neglect of Children.

Personnel – Certified/Non-Certified/Students

Sexual Harassment/Title IX

Prohibition of Sex Discrimination and Sexual Harassment in the Workplace (continued)

Section II. Grievance Procedures for Claims of Sex Discrimination (Other Than Sexual Harassment Under Title IX)

D. Miscellaneous (continued)

3. Retaliation against any individual who complains pursuant to the Board's Policy regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel) and these Administrative Regulations is strictly prohibited. Neither the District nor any other person may intimidate, threaten, coerce, or discriminate against any individual for the purpose of interfering with any right or privilege secured by Title IX or these Administrative Regulations, or because the individual has made a report or complaint, testified, assisted, or participated or refused to participate in any manner in an investigation, proceeding, or hearing under these Administrative Regulations. The District will take actions designed to prevent retaliation as a result of filing a complaint. Complaints alleging retaliation may be filed according to the grievance procedures for sex discrimination described herein.

Section III. Further Reporting

At any time, a complainant alleging sex discrimination or sexual harassment may also file a complaint with the Office for Civil Rights, Boston Office, U.S. Department of Education, 8th Floor, 5 Post Office Square, Boston, MA 02109-3921 (Telephone (617) 289-0111).

Employees may also make a report of sexual harassment and/or sex discrimination to the Connecticut Commission on Human Rights and Opportunities, 450 Columbus Boulevard, Hartford, CT 06103-1835 (Telephone: 860-541-3400 or Connecticut Toll Free Number: 1-800-477-5737).

Copies of these Administrative Regulations will be distributed to all employees.

Sexual Assault: An offense classified as forcible or nonforcible sex offense under the uniform crime reporting system of the Federal Bureau of Investigation.

Rape— (Except Statutory Rape) The carnal knowledge of a person, without the consent of the victim, including instances where the victim is incapable of giving consent because of the person's age or because of the person's temporary or permanent mental or physical incapacity.

Sodomy—Oral or anal sexual intercourse with another person, without the consent of the victim, including instances where the victim is incapable of giving consent because of the person's age or because of the person's temporary or permanent mental or physical incapacity.

Sexual Assault with an Object—To use an object or instrument to unlawfully penetrate, however slightly, the genital or anal opening of the body of another person, without the consent of the victim, including instances where the victim is incapable of giving consent because of the person's age or because of the person's temporary or permanent mental or physical incapacity.

Fondling—The touching of the private body parts of another person for the purpose of sexual gratification without the consent of the victim, including instances where the victim is incapable of giving consent because of the person's age or because of the person's temporary or permanent mental or physical incapacity.

Incest—Non-forcible sexual intercourse between persons who are related to each other within the degrees wherein marriage is prohibited by law.

Statutory Rape—Non-forcible sexual intercourse with a person who is under the statutory age of consent.

Dating Violence: Violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim; and where the existence of such a relationship shall be determined based on a consideration of the length of the relationship, the type of relationship, and the frequency of interaction between the persons involved in the relationship.

Domestic Violence: Includes felony or misdemeanor crimes of violence committed by a current or former spouse or intimate partner of the victim, by a person with whom the victim shares a child in common, by a person who is cohabitating with or has cohabitated with the victim as a spouse or intimate partner, by a person similarly situated to a spouse of the victim under the domestic or family violence laws of the jurisdiction receiving grant monies, or by any other person against an adult or youth victim who is protected from that person's acts under the domestic or family violence laws of the jurisdiction.

Stalking: Engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for the person's safety or the safety of others; or suffer substantial emotional distress.

**COMPLAINT FORM REGARDING SEXUAL HARASSMENT UNDER TITLE IX
(PERSONNEL)**

This complaint form should be used for complaints of sexual harassment as defined on page 1 of the Board's Administrative Regulations regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel)

Name of the complainant _____

Date of the complaint _____

Date of the alleged sexual harassment _____

Name or names of the sexual harasser(s) _____

Location where such sexual harassment occurred _____

Name(s) of any witness(es) to the sexual harassment _____

Detailed statement of the circumstances constituting the alleged sexual harassment

Remedy requested _____

Signature of Complainant or Title IX Coordinator: _____

COMPLAINT FORM REGARDING SEX DISCRIMINATION (OTHER THAN SEXUAL HARASSMENT UNDER TITLE IX) (PERSONNEL)

This complaint form should be used for complaints of sex discrimination as defined on page 1 of the Board's Administrative Regulations regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel)

Name of the complainant _____

Date of the complaint _____

Date of the alleged sex discrimination _____

Name or names of the sex discriminator(s) _____

Location where such sex discrimination occurred _____

Name(s) of any witness(es) to the sex discrimination _____

Detailed statement of the circumstances constituting the alleged sex discrimination

Remedy requested _____

Signature: _____

NOTICE OF SEXUAL HARASSMENT ALLEGATIONS UNDER TITLE IX

In accordance with the Board's Policy and Administrative Regulations regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel), a formal complaint of sexual harassment has been filed with the Title IX Coordinator.

Identities of the parties involved, if known:

_____ (Complainant(s))
_____ (Respondent(s))

The conduct allegedly constituting sexual harassment: _____

The date and the location of the alleged incident, if known: _____

The Title IX Coordinator or designee will contact the parties regarding the next step in the grievance process. Questions can be directed to the Title IX Coordinator: **[INSERT CONTACT INFORMATION FOR TITLE IX COORDINATOR]**

The respondent is presumed not responsible for the alleged conduct. A determination regarding responsibility is made at the conclusion of the grievance process.

All parties involved may have an advisor of their choice who may be, but it not required to be, an attorney. This advisor may inspect and review evidence as permitted by the Board's Administrative Regulations regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel).

Any employee who knowingly makes false statements or knowing submits false information during this grievance process is subject to discipline, up to and including termination. Additionally, it is a violation of the Board's Student Discipline Policy to lie to school officials or otherwise engage in dishonest behavior, which includes knowingly making false statements or knowingly submitting false information during the grievance process. Any student who knowingly makes false statements or knowingly submits false information during this grievance process will be subject to sanctions pursuant to the Board's Student Discipline Policy.

A copy of the Board's Policy and Administrative Regulations regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel) is included with this notice.

**NOTICE OF INFORMAL RESOLUTION PROCESS FOR SEXUAL HARASSMENT
COMPLAINTS UNDER TITLE IX**

In accordance with the Board's Policy and Administrative Regulations regarding the Prohibition of Sex Discrimination and Sexual Harassment (Personnel), a formal complaint of sexual harassment has been filed with the Title IX Coordinator. The Board has an informal resolution process to promptly and equitably resolve such complaints using mediation *[alternatively, could be restorative justice]*. This informal resolution process will only be utilized if both the Complainant and Respondent agree to do so.

The conduct allegedly constituting sexual harassment: _____

If both parties agree to the informal resolution process, it shall preclude the parties from resuming a formal complaint arising out of the same allegations. However, either party may withdraw from the informal resolution process at any time before agreeing to a resolution and resume the grievance process for formal complaints of sexual harassment.

If both parties agree to a resolution, that resolution is binding upon both parties and cannot be changed or appealed.

The District will maintain for a period of seven (7) years records of the informal resolution process and results therefrom.

I voluntarily consent to the informal resolution process:

Complainant Date

Respondent Date

[To be posted in a conspicuous place readily available
for viewing by employees and emailed to employees within three months of hire with the
subject line "Sexual Harassment Policy" or words of similar import]

SEXUAL HARASSMENT IS ILLEGAL

AND IS PROHIBITED

BY

THE CONNECTICUT DISCRIMINATION EMPLOYMENT PRACTICES ACT

(Section 46a-60(a)(8) of the Connecticut General Statutes)

AND

TITLE VII OF THE CIVIL RIGHTS ACT OF 1964

(42 United States Code Section 2000e et seq.)

SEXUAL HARASSMENT MEANS ANY UNWELCOME SEXUAL ADVANCES OR REQUESTS FOR SEXUAL FAVORS OR ANY CONDUCT OF A SEXUAL NATURE WHEN:

1. SUBMISSION TO SUCH CONDUCT IS MADE EITHER EXPLICITLY OR IMPLICITLY A TERM OR CONDITION OF AN INDIVIDUAL'S EMPLOYMENT;
2. SUBMISSION TO OR REJECTION OF SUCH CONDUCT BY AN INDIVIDUAL IS USED AS THE BASIS FOR EMPLOYMENT DECISIONS AFFECTING SUCH INDIVIDUAL; OR
3. such conduct has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

EXAMPLES OF SEXUAL HARASSMENT INCLUDE:

UNWELCOME SEXUAL ADVANCES

SUGGESTIVE OR LEWD REMARKS

UNWANTED HUGS, TOUCHES, KISSES

REQUESTS FOR SEXUAL FAVORS

RETALIATION FOR COMPLAINING ABOUT SEXUAL HARASSMENT

DEROGATORY OR PORNOGRAPHIC POSTERS, CARTOONS, OR DRAWINGS.

REMEDIES FOR SEXUAL HARASSMENT MAY INCLUDE:

CEASE AND DESIST ORDERS

BACK PAY

COMPENSATORY DAMAGES

PUNITIVE DAMAGES

HIRING, PROMOTION, OR REINSTATEMENT

Retaliation against any employee for complaining about sexual harassment is prohibited under this policy and illegal.

4000.1

4200.1

Notice

(continued)

VIOLATION OF THIS POLICY IS GROUNDS FOR DISCIPLINE, INCLUDING DISCHARGE.

INDIVIDUALS WHO ENGAGE IN ACTS OF SEXUAL HARASSMENT MAY ALSO BE SUBJECT TO CIVIL AND CRIMINAL PENALTIES.

AN INFRACTION OF THIS POLICY BY SUPERVISORS OR CO-WORKERS SHOULD BE REPORTED IMMEDIATELY TO THE TITLE IX COORDINATOR **OR THE SUPERINTENDENT IF THE TITLE IX COORDINATOR IS THE SUBJECT OF THE COMPLAINT**. CONFIDENTIALITY WILL BE MAINTAINED TO THE EXTENT POSSIBLE.

ANY EMPLOYEE WHO BELIEVES THAT HE OR SHE HAS BEEN HARASSED OR DISCRIMINATED AGAINST IN THE WORKPLACE IN VIOLATION OF THIS POLICY MAY ALSO CONTACT:

THE CONNECTICUT COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES

[] REGION OFFICE [REGIONAL OFFICES AND THEIR ADDRESSES CAN BE FOUND ON THE CHRO WEBSITE, [HTTP://WWW.STATE.CT.US/CHRO/](http://www.state.ct.us/chro/)]

[ADDRESS]

[PHONE NUMBER]

AND/ OR:

THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

BOSTON AREA OFFICE

JOHN F. KENNEDY FEDERAL BUILDING

475 GOVERNMENT CENTER

BOSTON, MA 02203

PHONE (800) 669-4000

CONNECTICUT LAW REQUIRES THAT A FORMAL WRITTEN COMPLAINT BE FILED WITH THE COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES WITHIN THREE HUNDRED (300) DAYS OF THE DATE WHEN THE ALLEGED HARASSMENT/ DISCRIMINATION OCCURRED.

9/24/20

Instruction

Graduation Requirements

Definition and Broad Guidelines

Graduation from Griswold Public Schools implies (1) that students have satisfactorily completed the prescribed courses of study for the several grade levels in accordance with their respective abilities to achieve, (2) that they have satisfactorily passed any examinations and satisfactorily demonstrated the district's performance standards, ~~assessed in part by the statewide mastery examinations~~, established by the faculty and approved by the Griswold Board of Education, and (3) that they have fulfilled the legally mandated number and distribution of credits. ~~Graduation shall not be held until 180 days and 900 hours of actual school work are completed. The adopted school calendar shall indicate a graduation date which is no earlier than the 185th day. This may be modified after April 1 in any school year in conformity with applicable statute.~~

The Principal shall submit to the Board of Education through the Superintendent his/her detailed requirements and standards to agree with the goals of our district as adopted by the Griswold Board of Education. It is expected that faculty will apply measures of achievement to provide evidence that each student has progressed far enough toward program goals and requirements to warrant graduation according to the terms of paragraph #1 above.

~~The Griswold Board of Education, in recognition of its responsibility for the education of all students in the district, including those who do not successfully complete the assessment criteria listed above, and those who drop out of school, shall make available to all the school district's students a course of study or alternative programming for meeting standards that will enable them to acquire a high school or vocational school diploma.~~

~~The Griswold Board of Education shall award a high school diploma to any World War II veteran or veteran of the Korean Hostilities or Vietnam Era veteran requesting such diploma who left high school for military service as defined in the statutes and did not receive a diploma as a consequence of such service.~~

~~The Griswold Board of Education may grant students high school credit for successful completion of coursework earned from an accredited institution of higher learning taken either during the school year or summer months.~~

Graduation Criteria

The Griswold Board of Education adheres to the State requirement permitting any high school student to be granted a diploma upon satisfactorily completing a minimum of twenty-five credits, including no fewer than:

9.0 Humanities Credits	4.0 credits of English
	3.0 credits of History including 0.5 credit of Civics
	2.0 credits of Humanities courses of choice
9.0 Science, Technology, Engineering, & Mathematics (STEM) Credits	3.0 credits of Science
	3.0 credits of Mathematics
	0.5 credit of Capstone - Personal Finance
	0.5 credit of Capstone - Vision of the Graduate
	2.0 credits of STEM courses of choice
1.0 World Language Credit	1.0 credit of World Language
1.0 Physical Education and Wellness Credit	0.5 credit of Physical Education 9
	0.5 credit of Physical Education 10
1.0 Health and Safety Education Credit	0.5 credit of Health
	0.5 credit of Safety & Wellness
1.0 Community Service	40 hours (10 hours/year)
3.0 Electives	Courses of choice
Total Credits	25.0 Credits

A student shall be excused from the physical education requirement upon presentation of a certificate from a physician or advanced practice registered nurse indicating that participation in physical education is medically contraindicated because of the student's physical condition. An elective may fulfill the credit for physical education.

All students must take a minimum of 7 credits per year with the exception of senior year whereby a student in good academic standing may opt to take 6 credits.

Grade Assignment and Promotion

Students are promoted to the next higher grade according to the following accumulation of credits:

Grade 9 to Grade 10 6 credits
 Grade 10 to Grade 11 11 credits
 Grade 11 to Grade 12 17 credits

A student's grade classification is determined by credits earned and years in high school.

Student Support and Remedial Services

Beginning with the graduating class of 2023, the Board of Education will provide adequate student support and remedial services for students beginning in grade seven. Such student support and remedial services shall provide alternate means for a student to complete any of the high school graduation requirements previously listed if such student is unable to satisfactorily complete any of the required courses or exams. Such student support and remedial services shall include, but not be limited to, (1) allowing students to retake courses in summer school or through an approved online credit recovery course; or (2) allowing students to enroll in a class offered at a constituent unit of the state system of higher education, and (3) allowing those students whose individualized education plans state that such students are eligible for an alternate assessment to demonstrate competency on any of the five core courses through success on such alternate assessment.

The Griswold Public School's graduation requirements apply to all students, including students requiring Special Education Services except when the Planning and Placement Team exercises the right to adjust the standards of performance on an individual basis.

~~Performance standards for students participating in a functional, life skills curriculum will be based on the student's IEP goals and objectives.~~

~~The fulfillment of the mandated one-credit foreign language requirement can include the successful completion of a world language course in grades six, seven, or eight, an online course successfully completed, or the successful completion of a course offered privately through a nonprofit provider, provided such student achieves a passing grade on an examination prescribed by the Commissioner and such credits do not exceed four.~~

~~All credits earned toward meeting any of the graduation requirements through the successful completion of online courses must fulfill the requirements established in policy #6172.6, "Virtual/On-line Courses."~~

Student Success Plans

~~The Griswold Public Schools Administration shall create a student success plan for each enrolled student, beginning in grade six. Such plan shall include a student's career and academic choices in grades six through twelve. Beginning in grade six, such student success plan shall provide evidence of career exploration in each grade. The Griswold Board of Education shall utilize the Department of Education's issued and revised guidance regarding changes to such student success plans.~~

~~Student success plans shall be created, if possible, in collaboration with each student and the student's parent/guardian and shall, to the extent it does not conflict with the career choices of the student or his/her parent/guardian, include an academic plan that is in compliance with the Board's Challenging Curriculum Policy.~~

Eligible Credits

~~Per statute (C.G.S. 221a(f)) the determination of eligible credits is at the discretion of the Board of Education, provided the primary focus of the curriculum of eligible credits corresponds~~

directly to the subject matter of the specified course requirements. The Board may permit a

6146(d)

student to graduate during a period of expulsion if the Board determines the student has satisfactorily completed the necessary credits. The graduation requirements shall apply to any student requiring special education except when the Planning and Placement Team (PPT) determines the requirement not to be appropriate.

At Griswold High School, a credit is defined as a class of block time, per year, equivalent to 200 minutes per week. One-half credit is given for courses that complete work in one semester. In addition, credit toward high school graduation can be earned (1) at an institution accredited by the Board of Regents for Higher Education or State Board of Education or regionally accredited, (2) through on-line course work or (3) through a demonstration of mastery based on competency and performance standards, in accordance with guidelines adopted by the State Board of Education.

Only courses taken in grades nine through twelve, inclusive, and that are in accordance with the state-wide subject matter content standards, adopted by the State Board of Education shall satisfy this graduation requirement except that a student may be granted credit toward meeting the high school graduation requirements upon (1) the successful demonstration of mastery of the subject matter content described in this and the Mastery-Based Learning sections, achieved through education experiences and opportunities that provide flexible and multiple pathways to learning, including cross-curricular graduation requirements, career and technical education, virtual learning, work-based learning, high school courses taken during middle school (taught at the high school campus only), service learning, dual enrollment and early college courses, internships and student designed independent studies or (2) for the successful completion of coursework at an institution accredited by the Department of Higher Education or regionally accredited. One three-credit semester course, or its equivalent shall equal one-half high school credit.

Connecticut Seal of Biliteracy

Commencing with the graduating class of 2019, and for each graduating class thereafter, the Board of Education, utilizing criteria established by the State Board of Education, may affix the "Connecticut State Seal of Biliteracy" to a diploma awarded to a student who has achieved a high level of proficiency in English and one or more foreign languages. "Foreign language" means a world language other than English and includes American Sign Language and any other language spoken by a federally recognized Native American tribe. The Board of Education shall include on such student's transcript a designation that the student received the "Connecticut Seal of Biliteracy."

Awards of High School Diplomas

Students who complete all graduation requirements shall receive a diploma at the June commencement. Individuals also may satisfy graduation requirements by the satisfactory completion of the following:

1. Successful completion of a summer course or summer courses comparable (as determined by the Principal) to the subject(s) in which the student was deficient.

2. Honorable discharge from the United States Armed Forces after a minimum of ninety days of active service during World War II for individuals who withdrew from school to join the Armed Forces and for veterans of the Korean Hostilities and for veterans of the Vietnam Era.
3. Honorable discharge from the United States Armed Forces for individuals who left high school prior to graduation and did not receive a diploma as a consequence of such service.
4. Withdrawal from high school prior to graduation to work on a job that assisted the war effort during World War II, December 7, 1941 through December 31, 1946, not receiving a diploma as a consequence of such work and has been a resident of Connecticut for at least fifty (50) consecutive years.

LEGAL REFERENCE

Connecticut General Statutes

10-5c Board examination series pilot program. Issuance of certificate (as amended by P.A. 13-247)

Legal Reference: Connecticut General Statutes (continued)

10-14n State-wide mastery examination. Conditions for reexamination. Limitation on use of test results. (as amended by Section 115 of PA 14-217)

10-16(l) Graduation exercises. (as amended by P.A. 96-26 An Act Concerning Graduation Requirements and Readmission and Placement of Older Students)

10-221a High school graduation requirements. (as amended by P.A. 00-124, An Act Concerning High School Diplomas and Veterans of World War II, P.A. 00-156, An Act Requiring A Civics Course for High School Graduation and P.A. 08-138, An Act Concerning High School Credit for Private World Language Courses Other Subject Areas), P.A. 10-111, An Act Concerning Education Reform in Connecticut, P.A. 135, An Act Concerning Implementation Dates for Secondary School Reform, P.A. 13-57, An Act Concerning Honorary Diplomas for Vietnam Veterans, P.A. 13-122, An Act Concerning Minor Revisions to the Education Statutes, P.A. 13-247, Budget Implementer Bill, P.A.

15-237 An Act Concerning High School Graduation.) and PA 17-42

10-233(a) Promotion and graduation policies.

P.A. 13-108 An Act Unleashing Innovation in Connecticut Schools

P.A. 13-247 An Act Implementing Provisions of the State Budget

P.A. 15-237 An Act Concerning High School Graduation.

6146(f)

P.A. 16-44(SS) (Section 310)

Policy Revised: June 24, 2019

GRISWOLD PUBLIC SCHOOLS

Griswold, Connecticut

CURRENT POLICY

Students

Student Safety

The Board of Education (Board) shall strive to build safe, supportive, and academically challenging school learning environments in partnership with students, staff members and families. The Board shall develop and adopt a mission statement that promotes a safe and secure environment for learning. Such mission statement shall emphasize respect, caring, and high academic achievement.

The Board shall ensure that all facilities, grounds, equipment, and vehicles meet acceptable injury and violence prevention standards for design, installation, use and maintenance.

Student safety shall be a priority of all school district personnel through close supervision of students in all school buildings and grounds and through special attention to:

1. Maintenance of safe school environments through conducting regular safety, vulnerability, and hazard assessments of all school facilities, school grounds, sports-related equipment and vehicles used to transport students. Security and vulnerability assessments shall be conducted every two years, resulting in a school safety plan for each school, based upon the assessment results.
2. Safe practices by school personnel and students – particularly in instructional areas or in extracurricular activities presenting special hazards.
3. Development of school programs and activities consistent with appropriate abilities and limitations of students at each age level.
4. Offering safety education to students germane to particular subjects, such as laboratory courses in science, industrial arts, and health and physical education.
5. Appropriate first aid care for students in case of accident or sudden illness.
6. Adequacy of emergency response procedures at each school in the District (first aid, cardiopulmonary resuscitation, infection control security).
7. Development, adoption and implementation of a code of conduct and other appropriate rules that are designed to promote health and safety and prevent unintended injury, harassment, bullying and other forms of violence. Such code shall prohibit the use and possession of alcohol, tobacco and other drugs and weapons and dangerous instruments at school.
8. Training exercises for all school staff designed to help them maintain a positive climate for learning and to effectively enforce safety and discipline rules.
9. Requiring the District and its individual schools to have safety and security plans which serve as a guide to address the various safety needs in the school, such as lockdown procedures, evacuations, drills and safety protocols, and personnel assignments.
10. Conducting regular audits (at least annually) to evaluate and analyze the effectiveness of each school's safety and security plans. First responders, local law enforcement and the entire school community shall be involved in this process. Law enforcement and local public safety officials shall be invited to evaluate all fire and crisis response drills.

Students

Student Safety (continued)

11. Communicating with parents/guardians and community members about school-level emergency preparedness protocols to the greatest extent possible.
12. Providing regular training for all school employees on the Districts' school emergency management systems and protocols, as well as violence prevention training.
13. Creating a partnership between schools, local law enforcement and appropriate community agencies, including mental health, to prevent and reduce school violence.
14. Establishing a school security and safety committee at each school. Such committee shall be responsible for assisting in the development of the school's security and safety plan and administering such plan.
15. Assistance of the safe school climate committee at each school, originally established to address issues related to bullying in the school, to also collect, evaluate, and report information relating to instances of disturbing or threatening behavior that may not meet the statutory definition of bullying.

(cf. 0100 - Mission Statement)

(cf. 5131/5144/5114 - Conduct/Discipline/Suspension/Expulsion)

(cf. 5131.21 - Terroristic Threats/Acts of Violent Behavior)

(cf. 5131.6 - Drugs/Alcohol and Tobacco)

(cf. 5131.7 - Weapons and Dangerous Instruments)

(cf. 5131.911 - Bullying/Safe School Climate Plan)

(cf. 5141.21 - Administering Medications)

(cf. 5141.22 - Communicable and Infectious Diseases)

(cf. 5141.3 - Student Health Assessments and Immunizations)

(cf. 5141.4 - Child Abuse and Neglect)

(cf. 5141.5 - Suicide Prevention)

(cf. 5141.6 - Crisis Management Plan)

(cf. 6142.1 - Family Life and Sex Education)

(cf. 6114 - Emergencies and Disaster Preparedness)

(cf. 6114.7 - Safe Schools)

(cf. 6114.8 - Pandemic/Epidemic Emergencies)

Legal Reference: Connecticut General Statutes
10-220f Safety committee.
P.A. 13-3 An Act Concerning Gun Violence Prevention and Children's
Safety (Sections 86, 87, 88)

Policy adopted: October 26, 2015

GRISWOLD PUBLIC SCHOOLS
Griswold, Connecticut

RECOMMENDED, NEWLY EXPANDED POLICY AND REGULATION

Students

School Safety: Preparation, Response, and After Action

It is the policy of the Griswold Board of Education to maintain a safe, orderly, civil, and positive learning environment and to be prepared, as far as possible, to prevent and respond quickly and appropriately to unexpected crises, such as emergencies, disasters, and threats.

The Board of Education shall strive to build safe, supportive, and academically challenging school learning environments in partnership with students, staff members, families and community leaders and officials. Supporting these efforts, along with ensuring all facilities, grounds, equipment, and vehicles meet acceptable injury and violence prevention standards for design, installation, use, and maintenance, the Board recognizes that sound emergency preparedness planning and response are essential for the health, welfare, and safety of all students, staff and visitors. All school community members are responsible for doing everything in their power to promote everyone's safety at all times. District staff and students shall be prepared to respond immediately and responsibly to any combination of events that threaten the school community.

The Board directs the Superintendent to develop, maintain, and implement an *Emergency Disaster Preparedness and Response Plan (District Security and Safety Plan)* and, for each school, a **School Security and Safety Plan** and administrative procedures that detail provisions for responding to emergencies and disasters. This Plan will articulate the local emergency service providers' role in crisis preparedness and incident management, which shall be included in the District's Security and Safety Plan.

The School Security and Safety Plan

The Superintendent shall use state-approved School Security and Safety Plan Standards and a School Security and Safety Plan Template to comply with the National Incident Management System (NIMS) and incorporate the National Incident Command System when updating District- and site-level emergency and disaster preparedness plans. Each school in the District, each school year, will develop and implement a **School Security and Safety Plan**. Such plan shall be based upon the standards issued by the *Department of Emergency Services and Public Protection/Division of Emergency Management and Homeland Security (DESPP/DEMHS)* and the *School Security and Safety Plan Template*. In addition to preparedness and response, the plan shall provide guidance on recovery from any emergency incident.

In developing the District and School Security and Safety Plans, which include plans for various crisis scenarios, such as fire, bus accidents, criminal acts, civil disturbances, presence of intruders, hazardous material spill, weather-related emergencies, and bomb threats, the Superintendent shall collaborate with local and state emergency responders and local health officials in compliance with the provisions of PA 13-3.

Students

School Safety: Preparation, Response, and After Action

The School Security and Safety Plan (continued)

The Board through the Superintendent, shall annually, by November 1 of each year, submit the School Security and Safety Plans for each school to the Department of Emergency Services and Public Protection via submission to the District's DEMHS Regional Coordinator in the manner prescribed by said agency.

The Superintendent or designee shall use the School Security and Safety Plan standards and plan templates developed by the Department of Emergency Services, state-approved Standardized Emergency Management System guidelines, be compliant with the National Incident Management System (NIMS) and incorporate the National Incident Command System when updating district and site-level emergency and disaster preparedness plans.

The School Security and Safety Plan shall be developed within the context of the four recognized phases of crisis management: Mitigation/Prevention, Preparedness, Response, and Recovery.

Protocols for Interacting with Federal Immigration Authorities (*New and recommended*)

Through this policy, the Board of Education commits to ensuring the Griswold Public Schools follow all guidelines and protocols established by the Connecticut State Department of Education regarding immigration authorities interacting with the District. These plans cover each school.

These plans specifically require each district to do the following:

1. Designate at least one administrator at each school to serve as the individual responsible for interacting with federal immigration authorities;
2. Specify that this administrator, or any other school employee, may request specific information from the immigration authorities to take specific other actions (see below); and
3. Permit other school personnel to direct immigration authorities to the designated administrator if they request access to records, information, the interior of the school building, or other school personnel to communicate with.

Actions that the designated administrator or any other school employee may take:

1. Request and record a federal immigration authority's identification, including the name, badge or identification number, telephone number, and business card;
2. Ask the immigration authority if he or she has a judicial warrant to support the authority's request and, if so, show the warrant;
3. Review warrants or other materials that the authority provides to determine who issued the warrant and what it or the other material authorizes the authority to do; and

Students

School Safety: Preparation, Response, and After Action

Protocols for Interacting with Federal Immigration Authorities (continued)

4. Consult with the school district's legal counsel (or legal counsel's guidance) on how to interact with the immigration authority regarding the request's nature, whether a warrant is produced, the warrant's details (including whether it is a judicial warrant or an administrative warrant), whether the immigration authority is claiming exigent circumstances, and any other consideration the legal counsel has identified.

No staff member shall be disciplined, suspended, terminated, or otherwise punished for implementing the updated school security and safety plan relating to staff interacting with an immigration authority. This protection specifically applies to staff taking any of the permitted actions listed above and directing the immigration authority to communicate with the designated administrator.

District Security and Safety Committee

The **District Security and Safety Committee** includes the Superintendent, Town Emergency Officials, representative of school leadership, teachers and staff, mental health and special education staff representatives, **the administrator(s) designated to interact with immigration authorities**, and others deemed necessary. This Committee shall meet each month and fulfill the following tasks:

- Oversee and facilitate the process for the development and submission of **School Security and Safety Plans**;
- Ensure that District and school site security and safety plans address an all-hazards approach to emergencies;
- Assist individual school-based crisis response teams (the School Security and Safety Committee) to include community partners and school-based personnel as specified;
- Develop training activities and conduct emergency exercises, such as tabletop exercises, to support and improve the plan;
- Initiate, build and maintain relationships with community partners;
- Conduct regular safety, security and hazard assessments;
- Establish and update the district emergency management plan.
- Interview vendors that provide products related to school safety and security;
- Meet with the Board of Education committee that oversees district security and safety quarterly to report on the following:
 - Input related to policy changes and updates;
 - Resources supporting security and safety initiatives;
 - Security and Safety concerns facing the District;
 - Updates on communication procedures and protocols;
 - *(Discussions relating to emergency plans may require an Executive Session.)*

Students

School Safety: Preparation, Response, and After Action

District Security and Safety Committee (continued)

Each school shall establish a **School Security and Safety Committee**, which will assist in developing and implementing the school's **Security and Safety Plan**. Such plans shall be based upon the Department of Emergency Services and Public Protection standards.

The members of the Committee shall include a *local police officer*, *local first responder*, *teacher* and *administrator* from the school, a *mental health professional*, a *parent or legal guardian* of a student at the school, a *special education teacher*, and any other person deemed necessary, such as a *school nurse*, *custodian*, *local health director*, *transportation coordinator*, etc. Schools shall collaborate closely with law enforcement, fire and emergency services personnel, and community partners, including public health professionals who can assist with the development of a plan that addresses a wide range of crises. A security vulnerability assessment of each school shall be conducted every two years; the results of which shall be incorporated into the school's Security and Safety Plan and reported to the DEMHS Regional Coordinator.

School Security and Safety Plans are to be updated and submitted annually and conform to standards and templates developed by the Department of Emergency Services and the Division of Emergency Management and Homeland Security (DEMHS) pursuant to Section 86 of Public Act 13-3. In addition, the Superintendent or designee shall ensure that the District's procedures include strategies and actions that comply with the National Incident Management System (NIMS) used by all first responders at all levels of prevention/mitigation, preparedness, response and recovery.

(cf. 5114 – Suspension/Expulsion; Student Due Process)

(cf. 6114.7 - Safe Schools)

Legal Reference: Connecticut General Statutes

10-154a Professional communications between teacher or nurse and student.

10-207 Duties of medical advisors.

10-209 Records not to be public.

10-210 Notice of disease to be given parent or guardian.

10-220f Safety committee

10-221 Boards of education to prescribe rules

10-222m School security and safety plans. School security and safety committees

10-231 Fire drills

19a-221 Quarantine of certain persons.

Students

School Safety: Preparation, Response, and After Action

Legal Reference: Connecticut General Statutes (continued)

52-557b Immunity from liability for emergency medical assistance, first aid or medication by injection. School personnel not required to administer or render.

The Family Educational Rights and Privacy Act of 1974, (FERPA), 20 U.S.C. 1232g, 45 C.F.R. 99.

P.A. 13-3 An Act Concerning Gun Violence Prevention and Children's Safety (Section 86, 87, 88)

P.A. 19-5 An Act Concerning the Safe Storage of Firearms in the Home and Firearm Safety Programs in Public Schools

PA 25-1 An Act Concerning Interactions Between School Personnel and Immigration Authorities, The Purchase and Operation of Certain Drones, Grants to Certain Nonprofit Organizations, and Student Athlete Compensation Through Endorsement Contracts and Revenue Sharing Agreements

A sample excerpted regulation to accompany the policy.

Students

School Safety: Preparation, Response, and After Action

The Superintendent or designee, on behalf of the Board of Education, shall ensure that District and School Security and Safety Plans address an all-hazards approach to emergencies and shall include, but not limited to:

1. Fire on or off school grounds which endangers students and staff;
2. Natural disasters;
3. Environmental hazards;
4. Attack or disturbance, or threat of attack or disturbance, by an individual or group;
5. Bomb threat or actual detonation;
6. Biological, radiological, chemical, and other activities, or heightened warning of such activities;
7. Medical emergencies and quarantines, such as pandemic influenza outbreaks.

Protocols for Interacting with Federal Immigration Authorities

Through this policy, the Board of Education commits to ensuring the Griswold Public Schools follow all guidelines and protocols established by the Connecticut State Department of Education regarding immigration authorities interacting with the District. These plans cover each school.

These plans specifically require each district to do the following:

1. Designate at least one administrator at each school to serve as the individual responsible for interacting with federal immigration authorities;
2. Specify that this administrator, or any other school employee, may request specific information from the immigration authorities to take specific other actions (see below); and
3. Permit other school personnel to direct immigration authorities to the designated administrator if they request access to records, information, the interior of the school building, or other school personnel to communicate with.

Actions that the designated administrator or any other school employee may take:

1. Request and record a federal immigration authority's identification, including the name, badge or identification number, telephone number, and business card;
2. Ask the immigration authority if he or she has a judicial warrant to support the authority's request and, if so, show the warrant;
3. Review warrants or other materials that the authority provides to determine who issued the warrant and what it or the other material authorizes the authority to do; and

Students

School Safety: Preparation, Response, and After Action

Protocols for Interacting with Federal Immigration Authorities (continued)

4. Consult with the school district's legal counsel (or legal counsel's guidance) on how to interact with the immigration authority regarding the request's nature, whether a warrant is produced, the warrant's details (including whether it is a judicial warrant or an administrative warrant), whether the immigration authority is claiming exigent circumstances, and any other consideration the legal counsel has identified.

No staff member shall be disciplined, suspended, terminated, or otherwise punished for implementing the updated school security and safety plan relating to staff interacting with an immigration authority. This protection specifically applies to staff taking any of the permitted actions listed above and directing the immigration authority to communicate with the designated administrator. (*PA 25-1 An Act Concerning Interactions Between School Personnel and Immigration Authorities, The Purchase and Operation of Certain Drones, Grants to Certain Nonprofit Organizations, and Student Athlete Compensation Through Endorsement Contracts and Revenue Sharing Agreements*)

Each school and district building shall establish a **School Security and Safety Committee**. The Committee is responsible for developing the school's Security and Safety Plan and shall include a *local police officer, local first responder, teacher and administrator* from the school, a *mental health professional, a special education department representative, a parent or guardian of a student at the school, the administrator(s) designated to interact with immigration authorities*, and may include any other person deemed necessary, such as a *nurse, custodian or property manager, local emergency management director, local public health director, information technology manager, and transportation coordinator*. The School Security and Safety Committee shall also invite subject matter experts to participate as needed, including, for example, the local public works director, high school student council president, and/or food service director.

The Superintendent shall annually review, update as necessary, and submit a School Security and Safety Plan for each school under its jurisdiction to the DESPP/DEMHS Regional Coordinator based on the standards and required template as updated. These annual submissions shall also include results of security and vulnerability assessments for each school conducted every two years.

The Superintendent shall identify a lead administrator, such as the school principal, who shall conduct a security and vulnerability assessment for each school under the jurisdiction of such board every two years and develop a plan as described in **Personal safety and security** (Number 4 under Security and Safety Plans) and **Steps to be taken after the disaster or emergency** (Number 8 under the same section). By November 1st of each school year, the board of education, through the superintendent, shall submit to its DEMHS Regional Coordinator an electronic copy of the plan for that year.

CABE's newest version of this policy. Revised definition of "bullying" to align with Connecticut School Climate policy. Policy narrative, appendices and regulation available upon request

Students

RECOMMENDED, NEWLY EXPANDED POLICY

Suspension and Expulsion/Due Process

The Griswold Board of Education is committed to creating a safe, orderly, and supportive learning environment for all students, staff, and visitors. This policy aims to balance the necessity of maintaining safety and order within our schools while adhering to progressive discipline and restorative practices, which seeks to address and correct inappropriate behavior while promoting accountability, personal growth, and the repair of harm.

Students are expected to comply with school rules and Board policies and may be disciplined for conduct on school grounds or at any school-sponsored activity that endangers persons or property, is seriously disruptive of the educational process, or that violates a publicized policy of the Board. Students may be disciplined for conduct off school grounds if such conduct is seriously disruptive to the educational process and violates Board policy.

Policy Objectives

1. **Ensure Safety and Order:** Maintain a secure and disciplined school environment conducive to learning and free from violence, threats, and disruptive behaviors.
2. **Promote Equity and Fairness:** Apply disciplinary measures in an equitable, consistent, and unbiased manner, ensuring that all students are treated with dignity and respect.
3. **Support Progressive Discipline:** Implement a progressive discipline model that focuses on intervention and prevention strategies to address and correct student behavior before it escalates.
4. **Implement Restorative Practices:** Incorporate restorative practices that emphasize accountability, reparation of harm, and the restoration of relationships within the school community.
5. **Encourage Personal Responsibility:** Foster a sense of personal responsibility and self-discipline in students, helping them to understand the consequences of their actions and to make better choices in the future.
6. **Engage Families and Communities:** Involve parents, guardians, and community members in the disciplinary process to support students in their behavioral and academic growth.

Policy Guidelines

1. **Clear Expectations and Communication:**
 - Establish and communicate clear behavioral expectations and the consequences of violating them.
 - Ensure that all students, staff, and parents/guardians are aware of the discipline policy and procedures.

Students

Suspension and Expulsion/Due Process

Policy Guidelines (continued)

2. Progressive Discipline Framework:

- Utilize a tiered approach to discipline that escalates in response to the severity and frequency of the behavior.
- Implement early intervention strategies such as counseling, mentoring, and behavior modification plans to address minor infractions.

3. Restorative Practices:

- Employ restorative practices such as mediation, peer counseling, and restorative circles to address conflicts and repair harm.
- Encourage students to take responsibility for their actions and to actively participate in the resolution process.

4. Consistent and Fair Application:

- Ensure that disciplinary measures are applied consistently and fairly across all student populations.
- Monitor and address any disparities in the application of disciplinary actions to prevent discrimination or bias.

5. Supportive Interventions:

- Provide support services such as counseling, social work, and mental health resources to help students address underlying issues contributing to behavioral problems.
- Develop individualized behavior plans for students with recurring or severe behavioral issues.

6. Engagement and Collaboration:

- Engage families in the disciplinary process through regular communication and involvement in restorative practices.
- Collaborate with community organizations and resources to support students and families in addressing behavioral and social-emotional needs.

7. Training and Professional Development:

- Provide ongoing training for staff on progressive discipline, restorative practices, and culturally responsive approaches to student behavior.
- Encourage staff to develop skills in conflict resolution, de-escalation techniques, and positive behavior support.

Students

Suspension and Expulsion/Due Process

Policy Guidelines (continued)

Review and Accountability

The Griswold Board of Education will regularly review the effectiveness of its discipline policy, incorporating feedback from students, staff, parents, and the community. Data on disciplinary actions and their outcomes will be collected and analyzed to ensure continuous improvement and the achievement of policy objectives.

By adopting this balanced approach to discipline, the Griswold Public School District aims to create a school environment where all students can learn, grow, and succeed while feeling safe and supported.

A. Definitions

1. **“Exclusion”** shall be defined as any denial of public school privileges to a student for disciplinary purposes.
2. **“Removal”** shall be defined as an exclusion from a classroom for all or a part of single class period, provided such exclusion shall not extend beyond ninety (90) minutes.
3. **“In-School Suspension”** means an exclusion from regular classroom activity for no more than five consecutive days, but not exclusion from school, provided such exclusion shall not extend beyond the end of the school year in which such in-school suspension was imposed. Such suspensions shall be served in any school building under the jurisdiction of the Board of Education.
4. **“Suspension”** means an exclusion from school privileges or from transportation services, provided such exclusion shall not extend beyond the end of the school year in which suspension was imposed. An out-of-school suspension for students in grades 3-12 shall not exceed ten days. An out-of-school suspension imposed for children in preschool to second grade shall not exceed five days.

All suspensions shall be in-school unless the administration determines for any student in grades three through twelve that (1) the student being suspended poses such a danger to persons or property or such a disruption of the educational process that the student (grades three to twelve) shall be excluded from school during the period of the suspension, or (2) that an out-of-school suspension is appropriate based on evidence of previous disciplinary issues that have led to suspensions or expulsion of the student and efforts by the administration to address such disciplinary issues through means other than out-of-school suspension or expulsion, including positive support strategies.

Students

Suspension and Expulsion/Due Process

A. Definitions (continued)

4. Suspension (continued)

A student in grades preschool to two, inclusive, may be given an out-of-school suspension if it is determined by the administration that such suspension is appropriate based on evidence that the student's conduct on school grounds is of a violent or sexual nature that endangers persons. In addition, a person's duty as a mandated reporter to report suspected child abuse or neglect is not limited by this provision.

5. **"Expulsion"** shall be defined as an exclusion from school privileges for any student in grades three to twelve, inclusive, for more than ten (10) consecutive school days and shall be deemed to include but not be limited to, exclusion from the school to which such student was assigned at the time such disciplinary action was taken, provided that assignment to a regular classroom program in a different school in the district shall not constitute a suspension or an expulsion. Such period of exclusion may extend to the school year following the school year in which the exclusion was imposed, up to one calendar year. To be expelled, the student's conduct must be found to be both violative of a Board policy and either seriously disruptive of the educational process or endangering persons or property.

Unless an emergency exists, no student shall be expelled without a formal hearing provided whenever such student is a minor, the notice shall also be given to the parents or guardians of the student at least five business days before such hearing, not including the day of such hearing. If an emergency exists, such hearing shall be held as soon after the expulsion as possible. The notice shall include information concerning the parent's or guardian's and the student's legal rights and concerning legal services provided free of charge or at a reduced rate that are available locally and how to access such services. An attorney or other advocate may represent any student subject to expulsion proceedings. The parent or guardian of the student shall have the right to have the expulsion hearing postponed for up to one week to allow time to obtain representation, except that if an emergency exists, such hearing shall be held as soon after the expulsion as possible.

6. **"Emergency"** shall be defined as a situation under which the continued presence of the student in the school imposes such a danger to persons or property or such a disruption of the educational process that a hearing may be delayed until a time as soon after the exclusion of such student as possible.
7. **"Days"** is defined as days when school is in session.
8. **"School-sponsored activity"** is defined as any activity sponsored, recognized or authorized by the Board of Education and includes activities conducted on or off school property.
9. **"Possess"** means to have physical possession or otherwise to exercise dominion or control over tangible property.

Students

Suspension and Expulsion/Due Process

A. Definitions (continued)

10. **“Deadly weapon”** means any weapon, whether loaded or unloaded, from which a shot may be discharged, or a switchblade knife, gravity knife, billy, blackjack, bludgeon, or metal knuckles. A weapon such as a pellet gun and/or airsoft pistol may constitute a deadly weapon if such weapon is designed for violence and is capable of inflicting death or serious bodily harm.
11. **“Firearm”** as defined in 18 U.S.C. §921, means 1) any weapon (including a starter gun) which will or is designed to or readily be converted to expel a projectile by the action of an explosive; 2) the frame or receiver of any such weapon; 3) any firearm muffler or firearm silencer; or 4) any destructive device. Firearm does not include any antique firearm. For purposes of this definition “destructive device” means any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than 4 ounces, missile having an explosive or incendiary charge of more than ¼ ounce, mine, or device similar to any of the weapons described herein. A “destructive device” does not include an antique firearm; a rifle intended to be used by the owner solely for sporting, recreational, or cultural purposes; or any device which is neither designed nor redesigned for use as a weapon.
12. **“Vehicle”** means a **“motor vehicle”** as defined in Section 14-1 of the Connecticut General Statutes, snow mobile, any aircraft, or any vessel equipped for propulsion by mechanical means or sail.
13. **“Martial arts weapon”** means a nunchaku kama, Kesari-fundo, octagon sai, tonfa, or Chinese star.
14. **“Dangerous Drugs and Narcotics”** is defined as any controlled drug in accordance with Connecticut General Statutes §219-240.
15. **“Alternate education”** means a school or program maintained and operated by the Board of Education that is offered to students in a nontraditional setting and addresses their social, emotional, behavioral and academic needs. Such program must conform to SBE guidelines and conform to C.G.S. 10-15 and 16 (180 days/900 hours).
16. **“Dangerous Instrument”** means any instrument, article, or substance which, under the circumstances in which it is used or attempted or threatened to be used, is capable of causing death or serious physical injury, and includes a “vehicle” or a dog that has been commanded to attack.
17. **“Seriously disruptive of the educational process”** means, as applied to off-campus conduct, any conduct that markedly interrupts or severely impedes the day-to-day operation of a school.

Students

Suspension and Expulsion/Due Process (continued)

B. Removal from Class

1. All teachers are hereby authorized to remove a student from class when such student causes a serious disruption of the educational process within the classroom.
2. Such teacher shall send the student to a designated area and shall immediately inform the building Principal or his/her designee as to the name of the student and the reason for removal.
3. No student shall be removed from class more than six (6) times in any year nor more than twice in one week, unless such student is referred to the Building Principal or his/her designee and granted an informal hearing in accordance with the provisions of this policy, as stated in G(3).
4. A school principal or other school administrator shall notify a parent or guardian of a student whose behavior has caused a serious disruption to the instruction of other students, caused self-harm or caused physical harm to a teacher, another student or other school employee not later than twenty-four hours after such behavior occurs. Such notice shall include, but not be limited to, informing such parent or guardian that the teacher of record in the classroom in which such behavior occurred may request a behavior intervention meeting.

Any teacher of record in a classroom may request a behavior intervention meeting with the crisis intervention team for the school, for any student whose behavior has caused a serious disruption to the instruction of other students, or caused self-harm or physical harm to such teacher or another student or staff member in such teacher's classroom. The crisis intervention team shall, upon the request of such teacher and notifying such student's parent or guardian, convene a behavior intervention meeting regarding such student. The participants of such behavior intervention meeting shall identify resources and support to address such student's social, emotional and instructional needs. Not later than seven days after the behavior intervention meeting, the crisis intervention team shall submit to the parent or guardian of such student, in the dominant language of such parent or guardian, a written summary of such meeting, including, but not limited to, the resources and supports identified.

C. Exclusion from Co-Curricular and Extra-Curricular Activities

Participation in co-curricular and extra-curricular activities is a privilege and not an entitlement. Students involved in such programs are expected to follow all school rules and demonstrate good citizenship. Failure to do so may result in partial or complete exclusion from said activities and programs. Activities include, but are not limited to, athletic programs, musical or drama productions, clubs, field trips, and school trips out-of-state and abroad.

Students

Suspension and Expulsion/Due Process

D. Actions Leading to Disciplinary Action, including Removal from Class, Suspension and/or Expulsion

Conduct which may lead to disciplinary action (including, but not limited to, removal from class, suspension and/or expulsion in accordance with this policy) includes conduct on school grounds or at a school-sponsored activity (including on a school bus), and conduct off school grounds, as set forth above. Such conduct includes, but is not limited to, the following:

1. Striking or assaulting a student, members of the school staff or other persons.
2. Theft.
3. The use of obscene or profane language or gestures, the possession and/or display of obscenity or pornographic images or the unauthorized or inappropriate possession and/or display of images, pictures or photographs depicting nudity.
4. Violation of smoking, dress, transportation regulations, or other regulations and/or policies governing student conduct.
5. Refusal to obey a member of the school staff, law enforcement authorities, or school volunteers, or disruptive classroom behavior.
6. Any act of harassment based on an individual's sex, sexual orientation, race, color, religion, disability, national origin or ancestry.
7. Refusal by a student to identify himself/herself to a staff member when asked, misidentification of oneself to such person(s), lying to school officials or otherwise engaging in dishonest behavior.
8. Inappropriate displays of public affection of a sexual nature and/or sexual activity on school grounds or at a school-sponsored activity.
9. A walk-out from or sit-in within a classroom or school building or school grounds.
10. Blackmailing, threatening or intimidating school staff or students (or acting in a manner that could be construed to constitute blackmail, a threat, or intimidation, regardless of whether intended as a joke).
11. Possession of any weapon, weapon facsimile, deadly weapon, martial arts weapon, electronic defense weapon, pistol, knife, blackjack, bludgeon, box cutter, metal knuckles, pellet gun, air pistol, explosive device, firearm, whether loaded or unloaded, whether functional or not, or any other dangerous object or instrument. The possession and/or use of any object or device that has been converted or modified for use as a weapon.
12. Possession of any ammunition for any weapon described above in paragraph 11.
13. Unauthorized entrance into any school facility or portion of a school facility or aiding or abetting an unauthorized entrance.
14. Possession or ignition of any fireworks, combustible or other explosive materials, or ignition of any material causing a fire. Possession of any materials designed to be used in the ignition of combustible materials, including matches and lighters.

Students

Suspension and Expulsion/Due Process

D. Actions Leading to Disciplinary Action, including Removal from Class, Suspension and/or Expulsion (continued)

15. Unlawful possession, sale, distribution, use, or consumption of tobacco, electronic nicotine delivery systems (e.g. e-cigarettes), vapor products, drugs, narcotics or alcoholic beverages (or any facsimile of tobacco, drugs, narcotics or alcoholic beverages, or any item represented to be tobacco, drugs or alcoholic beverages), including being under the influence of any such substances or aiding in the procurement of any such substances. For the purposes of this Paragraph 15, the term “electronic nicotine delivery system” shall mean an electronic device that may be used to simulate smoking in the delivery of nicotine or other substance to a person inhaling from the device and includes, but is not limited to, an electronic cigarette, electronic cigar, electronic cigarillo, electronic pipe or electronic hookah and any related device and any cartridge or other component of such device. For the purposes of Paragraph 15, the term “vapor product” shall mean any product that employs a heating element, power source, electronic circuit or other electronic, chemical or mechanical means, regardless of shape or size, to produce a vapor that may or may not include nicotine that is inhaled by the user of such product. For the purposes of this Paragraph 15, the term “drugs” shall include, but shall not be limited to, any medicinal preparation (prescription and non-prescription) and any controlled substance whose possession, sale, distribution, use or consumption is illegal under state and/or federal law.
16. Sale, distribution, or consumption of substances contained in household items; including, but not limited to glue, paint, accelerants/propellants for aerosol canisters, and/or items such as the aerators for whipped cream; if sold, distributed or consumed for the purpose of inducing a stimulant, depressant, hallucinogenic or mind-altering effect.
17. Unlawful possession of paraphernalia used or designed to be used in the consumption, sale or distribution of drugs, alcohol or tobacco, as described in subparagraph (15) above. For purposes of this policy, drug paraphernalia includes any equipment, products and materials of any kind which are used, intended for use or designed for use in growing, harvesting, manufacturing, producing, preparing, packaging, storing, containing or concealing, or injecting, ingesting, inhaling or otherwise introducing controlled drugs or controlled substances into the human body, including but not limited to items such as “bongs,” pipes, “roach clips,” vials, tobacco rolling papers, and any object or container used, intended or designed for use in storing, concealing, possessing, distributing or selling controlled drugs or controlled substances.
18. The destruction of real, personal or school property, such as, cutting, defacing or otherwise damaging property in any way.
19. Accumulation of offenses such as school and class tardiness, class or study hall cutting, or failure to attend detention.

Students

Suspension and Expulsion/Due Process

D. Actions Leading to Disciplinary Action, including Removal from Class, Suspension and/or Expulsion (continued)

20. Trespassing on school grounds while on out-of-school suspension or expulsion.
21. Making false bomb threats or other threats to the safety of students, staff members, and/or other persons.
22. Defiance of school rules and the valid authority of teachers, supervisors, administrators, other staff members and/or law enforcement authorities.
23. Throwing snowballs, rocks, sticks and/or similar objects, except as specifically authorized by school staff.
24. Unauthorized and/or reckless and/or improper operation of a motor vehicle on school grounds or at any school-sponsored activity.
25. Leaving school grounds, school transportation or a school-sponsored activity without authorization.
26. Use of or copying of the academic work of another individual and presenting it as the student's own work, without proper attribution; or any other form of academic dishonesty, cheating or plagiarism.
27. Possession and/or use of a cellular telephone, radio, walkman, CD player, blackberry, personal data assistant, walkie talkie, Smartphone, mobile or handheld device, or similar electronic device, on school grounds or at a school-sponsored activity in violation of Board policy and/or administrative regulations regulating the use of such devices.
28. Possession and/or use of a beeper or paging device on school grounds or at a school-sponsored activity without the written permission of the principal or his/her designee.
29. Unauthorized use of any school computer, computer system, computer software, Internet connection or similar school property or system, or the use of such property or system for inappropriate purposes.
30. Possession and/or use of a laser pointer, unless the student possesses the laser pointer temporarily for an educational purpose while under the direct supervision of a responsible adult.
31. Hazing.

Students

Suspension and Expulsion/Due Process

D. Actions Leading to Disciplinary Action, including Removal from Class, Suspension and/or Expulsion (continued)

32. **“Bullying”** means unwanted and aggressive behavior among children in grades kindergarten to twelve, inclusive, that involves a real or perceived power imbalance.
33. Cyberbullying, defined as any act of bullying through the use of the Internet, interactive and digital technologies, cellular mobile telephone or other mobile electronic devices or any electronic communications.
34. Acting in any manner that creates a health and/or safety hazard for staff members, students, or the public, regardless of whether the conduct is intended as a joke.
35. Engaging in a plan to stage or create a violent situation for the purposes of recording it by electronic means; or recording by electronic means acts of violence for purposes of later publication.
36. Engaging in a plan to stage sexual activity for the purposes of recording it by electronic means; or recording by electronic means sexual acts for purposes of later publication.
37. Using computer systems, including email, instant messaging, text messaging, blogging or the use of social networking websites, or other forms of electronic communications, to engage in any conduct prohibited by this policy.
38. Use of a privately owned electronic or technological device in violation of school rules, including the unauthorized recording (photographic or audio) of another individual without permission of the individual or a school staff member.

Students

Suspension and Expulsion/Due Process (continued)

E. Scope of the Student Discipline Policy

a. Conduct on School Grounds or at a School-Sponsored Activity

Students may be disciplined for conduct on school grounds or at any school-sponsored activity that endangers persons or property, is seriously disruptive of the educational process, or violates a publicized policy of the Board.

b. Conduct off School Grounds

1. Students may be disciplined for conduct off school grounds if such conduct is seriously disruptive of the educational process and violative of a publicized policy of the Board. In determining whether such conduct is seriously disruptive of the educational process, the Administration and the Board of Education may consider, but such consideration shall not be limited to, the following factors: (1) whether the incident occurred within close proximity of a school; (2) whether other students from the school were involved or whether there was any gang involvement; (3) whether the conduct involved violence, threats of violence, or the unlawful use of a weapon, as defined in section Conn. Gen. Stat. § 29-38, and whether any injuries occurred; and (4) whether the conduct involved the use of alcohol.

In making a determination as to whether such conduct is seriously disruptive of the educational process, the Administration and/or the Board of Education may also consider whether such off-campus conduct involved the illegal use of drugs.

F. Mandatory Expulsion

It shall be the policy of the Board to expel a student, grades preschool, and kindergarten to twelve, inclusive, for one full calendar year if:

1. The student, on grounds or at a school-sponsored activity, was in possession of a firearm, as defined in 18 U.S.C. 921*, as amended from time to time, or deadly weapon, dangerous instrument or martial arts weapon, as defined in C.G.S. 53A-3; or the student, off school grounds, did possess such firearm in violation of C.G.S. 29-35 or did possess and use such a firearm, instrument or weapon in the commission of a crime; or the student, on or off school grounds offered for sale or distribution a controlled substance, as defined in subdivision (9) of C.G.S. 21a-240, whose manufacture, distribution, sale, prescription, dispensing, transporting or possessing with intent to sell or dispense, offering or administering is subject to criminal penalties under C.G.S. 21-277 and 21a-278.
2. Such a student shall be expelled for one calendar year if the Board of Education or impartial hearing officer finds that the student did so possess or so possess and use, as appropriate, such a weapon or firearm, instrument or weapon or did so offer for sale or distribution such a controlled substance.
3. The Board may modify the period of a mandatory expulsion on a case-by-case basis.

Students

Suspension and Expulsion/Due Process

F. Mandatory Expulsion (continued)

4. A firearm, as defined by C.G.S. 53a-3 includes any sawed-off shotgun, machine gun, rifle, shotgun, pistol, revolver, or other weapon, whether loaded or unloaded from which a shot may be discharged, or a switchblade knife, a gravity knife, billy, black jack, bludgeon or metal knuckles.
5. A student enrolled in a preschool program provided by the Board of Education, state or local charter school or interdistrict magnet school shall not be expelled from such school except that a student shall be expelled for one calendar year from such preschool program pursuant to the mandatory expulsion requirement in compliance with the Gun-Free School Act, as described in this section.

G. Suspension Procedure (as modified in Public Act 24-45, Sections 13 and 14)

All suspensions shall be in-school suspensions, except the Board of Education may authorize the administration of schools under its direction to impose an out-of-school suspension on any student in:

1. Grades three to twelve, inclusive, if, resulting from a due process hearing:
 - a. The administration determines that the student being suspended poses such a danger to persons or property or such a disruption of the educational process that the student shall be excluded from school during the period of suspension;
 - b. The administration determines that an out-of-school suspension is appropriate for such student based on evidence of:
 - i. Previous disciplinary problems that have led to suspensions or expulsion of such student, and
 - ii. Efforts by the administration to address such disciplinary problems through means other than out-of-school suspension or expulsion, including positive behavioral support strategies; **or for grades preschool to two if during the due process hearing:**
2. The administration determines that an out-of-school suspension is appropriate for such student based on evidence that such student's conduct on school grounds is behavior that causes physical harm;
3. Requires that such student receives services that are trauma-informed and developmentally appropriate and align with any behavioral intervention plan, individualized education program, or plan pursuant to Section 504 of the Rehabilitation Act of 1973, as amended from time to time, for such student upon such student's return to school immediately following the out-of-school suspension; and

**A firearm; currently defined by 18 U.S.C. 921, is any weapon that can expel a projectile by an explosive action and includes explosive devices, incendiaries, poison gases, and firearm frames, receivers, mufflers or silencers.*

Students

Suspension and Expulsion/Due Process

G. Suspension Procedure (as modified in Public Act 24-45, Sections 13 and 14 (continued))

4. Considers whether to convene a planning and placement team meeting for the purposes of conducting an evaluation to determine whether such student may require special education or related services.

An out-of-school suspension shall not exceed ten school days for students in grades 3-12.

An out-of-school suspension shall not exceed five school days for children in preschool through 2 grade.

An in-school suspension may be served in the student's school or any school building under the jurisdiction of the local or regional board of education, as determined by such board.

The administration shall also have the authority to suspend a student from transportation services whose conduct while awaiting or receiving transportation violates the standards set forth in paragraph D, above. The administration shall have the authority to immediately suspend from school any student when an emergency exists as that term is defined in paragraph A, above.

If an emergency situation exists, the hearing outlined in paragraph G (3) shall be held as soon as possible after the exclusion of the student.

5. In the case of suspension, the administration shall notify the student's parents and the Superintendent of Schools not later than twenty-four (24) hours of the suspension as to the name of the student who has been suspended and the reason therefore. Any student who is suspended shall be given an opportunity to complete any class work including, but not limited to, examinations which such student missed during the period of his/her suspension.
6. Except in the case of an emergency, as defined in paragraph A, above, a student shall be afforded the opportunity to meet with the administration and to respond to the stated charges prior to the effectuation of any period of suspension or in-school suspension. If, at such a meeting the student denies the stated charges, he/she may at that time present his/her version of the incident(s) upon which the proposed suspension is based. The administration shall then determine whether or not suspension or in-school suspension is warranted. In determining the length of a suspension period, the administration may receive and consider evidence of past disciplinary problems which have led to removal from a classroom, in-school suspension, or expulsion.
7. For any student who is suspended for the first time and who has never been expelled, the school administration may shorten the length of or waive the suspension period if the student successfully completes an administration-specified program and meets any other administration-required conditions. Such program shall be at no expense to the student or his/her parents/guardians.

Students

Suspension and Expulsion/Due Process (continued)

G. Suspension Procedure (as modified in Public Act 24-45, Sections 13 and 14 (continued))

8. No student shall be suspended more than ten times or a total of fifty (50) days in one school year, whichever results in fewer days of exclusion, unless a hearing as provided in paragraph H(5) is first granted.
9. No student shall be placed on in-school suspension more than fifteen times or a total of fifty (50) days in one school year, whichever results in fewer days of exclusion, unless a hearing as provided in paragraph H(5) is first granted.

H. Expulsion Procedures

1. The Board of Education may, upon recommendation of the Superintendent of Schools, expel any student for one or more of the reasons stated in this policy if in the judgment of the Board of Education, such disciplinary action is in the best interest of the school system.
2. Upon receipt of a recommendation for expulsion from the Superintendent of Schools the Board shall, after giving written notice, at least five (5) business days before such hearing, to the student and his parents or guardian, if said student is less than 18 years of age, conduct a hearing prior to taking any action on the expulsion of said student, provided however, that in the event of an emergency as defined in this policy, the student may be expelled prior to the hearing but in such case even a hearing shall be held as soon after the expulsion as possible. The notice shall include information concerning the student's and his/her parent's/guardian's legal rights and concerning legal services that are provided free of charge or at a reduced rate that are available locally (CT Legal Service a source of such services) and how to access such services. An attorney or other advocate may represent any student subject to expulsion proceedings. The parent/guardian of the student has the right to have the expulsion hearing postponed for up to one week to allow time to obtain representation, except that if an emergency exists, such hearing shall be held as soon after the expulsion as possible.
3. Expulsion hearings conducted by the Board will be heard by any three or more Board members. A decision to expel a student must be supported by a majority of the Board members present, provided that no less than three (3) affirmative votes to expel are cast.

Alternatively, the Board may appoint an impartial hearing officer composed of one (1) or more persons to hear and decide the expulsion matter, provided that no member of the Board may serve on such panel.

4. A special education student's handicapping conditions shall be considered before making a decision to expel. A Planning and Placement Team (PPT) meeting must be held to determine whether the behavior or student actions violative of Board of Education standards set forth in policy governing suspension and expulsion are the result of the student's handicapping condition.

Students

Suspension and Expulsion/Due Process

H. Expulsion Procedures (continued)

5. The procedure for any hearing conducted under this paragraph shall at least include the right to:
 - a. Notice prior to the date of the proposed hearing which shall include a statement of the time, place and nature of the hearing and a statement of the legal jurisdiction under which the hearing is to be held and a statement that students under sixteen years old who are expelled and students between sixteen and eighteen who have been expelled for the first time and who comply with conditions set by the Board of Education, must be offered an alternative educational opportunity;
 - b. A short and plain statement of the matters asserted, if such matters have not already been provided in a statement of reasons requested by the student;
 - c. The opportunity to be heard in the student's own defense;
 - d. The opportunity to present witnesses and evidence in the student's defense;
 - e. The opportunity to cross-examine adverse witnesses;
 - f. The opportunity to be represented by counsel at the parents'/student's own expense; and
 - g. Information concerning legal services provided free of charge or at a reduced rate that are available locally and how to access such services;
 - h. The opportunity to have the services of a translator, to be provided by the Board of Education whenever the student or his/her parent or legal guardian do not speak the English language;
 - i. The prompt notification of the decision of the Board of Education, which decision shall be in writing if adverse to the student concerned.
6. The record of the hearing held in any expulsion case shall include the following:
 - a. All evidence received and considered by the Board of Education;
 - b. Questions and offers of proof, objections and ruling on such objections;
 - c. The decision of the Board of Education rendered after such hearing; and
 - d. A copy of the initial letter of notice of proposed expulsion, a copy of any statement of reasons provided upon request, a statement of the notice of hearing and the official transcript, if any or if not transcribed, any recording or stenographic record of the hearing.

Students

Suspension and Expulsion/Due Process

H. Expulsion Procedures (continued)

7. Rules of evidence at expulsion hearings shall assure fairness, but shall not be controlled by the formal rules of evidence, and shall include the following:
 - a. Any oral or documentary evidence may be received by the Board of Education but, as a matter of policy, irrelevant, immaterial or unduly repetitious evidence may be excluded. In addition, other evidence of past disciplinary problems which have led to removal from a classroom, in-school suspension, suspension, or expulsion may be received for considering the length of an expulsion and the nature of the alternative educational opportunity, if any, to be offered;
 - b. The Board of Education shall give effect to the rules of privilege by law;
 - c. In order to expedite a hearing, evidence may be received in written form, provided the interest of any party is not substantially prejudiced thereby;
 - d. Documentary evidence may be received in the form of copies or excerpts;
 - e. A party to an expulsion hearing may conduct cross-examination of witnesses where examination is required for a full and accurate disclosure of the facts;
 - f. The Board of Education may take notice of judicially cognizable facts in addition to facts within the Board's specialized knowledge provided, however, the parties shall be notified either before or during the hearing of the material noticed, including any staff memoranda or data, and an opportunity shall be afforded to any party to contest the material so noticed;
 - g. A stenographic record or tape-recording of any oral proceedings before the Board of Education at an expulsion hearing shall be made provided, however, that a transcript of such proceedings shall be furnished upon request of a party with the cost of such transcript to be paid by the requesting party. Findings of fact made by the Board after an expulsion hearing shall be based exclusively upon the evidence adduced at the hearing.
 - h. Decisions shall be in writing if adverse to the student, and shall include findings of fact and conclusions necessary for the decision. Findings of fact made by the Board after an expulsion hearing shall be based exclusively upon the evidence adduced at the hearing.
8. For any student expelled for the first time and who has never been suspended, except for a student who has been expelled based on possession of a firearm or deadly weapon, the Board of Education may shorten the length of or waive the expulsion period if the student successfully completes a Board specified program and meets any other conditions required by the Board. Such a Board specified program shall not require the student or the parent/guardian of such student to pay for participation in the program.

Students

Suspension and Expulsion/Due Process (continued)

I. Notification

1. All students and parents within the jurisdiction of the Board of Education shall be informed, annually, of Board Policy governing student conduct by the delivery to each said student of a written copy of said Board Policy.
2. The parents or guardian of any minor student either expelled or suspended shall be given notice of such disciplinary action no later than 24 hours of the time of the institution of the period of expulsion or suspension.
3. The notice of an expulsion hearing shall be given at least five (5) business days before such hearing to the student and his/her parents or guardians, if said student is less than 18 years of age shall include information concerning the parent's/guardian's and the student's legal rights and concerning legal services that are provided free of charge or at a reduced rate that are available and how to access such services. The notification shall reference the maximum number of suspension days before the expulsion days proceed. 5 consecutive days for students in pre-school to second grade, 10 consecutive days for students in grades 3-12, a statement that an attorney or other advocate may represent any student subject to expulsion proceedings. The parent/guardian of the student shall be notified of the right to have the expulsion hearing postponed for up to one week to allow time to obtain representation, except that if an emergency exists, such hearing shall be held as soon after the expulsion as possible.

J. Stipulated Agreements

In lieu of the procedures used in this section, the Administration and the parents (or legal guardians) of a student facing expulsion may choose to enter into a Joint Stipulation of the Facts and a Joint Recommendation to the Board concerning the length and conditions of expulsion. Such Joint Stipulation and Recommendation shall include language indicating that the parents (or legal guardians) understand their right to have an expulsion hearing held pursuant to these procedures, and language indicating that the Board, in its discretion, has the right to accept or reject the Joint Stipulation of Facts and Recommendation.

If the Board rejects either the Joint Stipulation of Facts or the Recommendation, an expulsion hearing shall be held pursuant to the procedures outlined herein. If the Student is eighteen years of age or older, the student shall have the authority to enter into a Joint Stipulation and Recommendation on his or her own behalf.

If the parties agree on the facts, but not on the disciplinary recommendation, the Administration and the parents (or legal guardians) of a student facing expulsion may also choose to enter into a Joint Stipulation of the Facts and submit only the Stipulation of the Facts to the Board in lieu of holding the first part of the hearing, as described above. Such Joint Stipulation shall include language indicating that the parents understand their right to have a hearing to determine whether the student engaged in the alleged misconduct and that the Board, in its discretion, has the right to accept or reject the Joint Stipulation of Facts. If the Board rejects the Joint Stipulation of Facts, a full expulsion hearing shall be held pursuant to the procedures outlined herein.

Students

Suspension and Expulsion/Due Process (continued)

K. Students identified as eligible for services under the Individuals with Disabilities Education Act (“IDEA”)

If the Board of Education expels a student who has been identified as eligible for services under the Individuals with Disabilities Education Act (“IDEA”), it shall off an alternative educational opportunity to such student in accordance with the requirements of IDEA, as it may be amended from time to time.

L. Procedures Governing Suspension and Expulsion of Students Identified as Eligible for Services under the Individuals with Disabilities Education Act (“IDEA”)

A. Suspension of IDEA students

Notwithstanding the foregoing, if the Administration suspends a student identified as eligible for services under the IDEA (an “IDEA student”) who has violated any rule or code of conduct of the school district that applies to all students, the following procedures shall apply:

1. The administration shall make reasonable attempts to immediately notify the parents of the student of the decision to suspend on the date on which the decision to suspend was made, and a copy of the special education procedural safeguards must either be hand-delivered or sent by mail to the parents on the date that the decision to suspend was made.
2. During the period of suspension, the school district is not required to provide any educational services to the IDEA student beyond that which is provided to all students suspended by the school district.

B. Expulsion and Suspensions that Constitute Changes in Placement for IDEA Students

Notwithstanding any provision to the contrary, if the administration recommends for expulsion an IDEA student who has violated any rule or code of conduct of the school district that applies to all students, the procedures described in this section shall apply. The procedures described in this section shall also apply for students whom the administration has suspended in a manner that is considered under the IDEA, as it may be amended from time to time, to be a change in placement:

1. The parents of the student must be notified of the decision to recommend for expulsion (or to suspend if a change in placement) on the date on which the decision to suspend was made, and a copy of the special education procedural safeguards must either be hand-delivered or sent by mail to the parents on the date that the decision to recommend for expulsion (or to suspend if a change in placement) was made.
2. The school district shall immediately convene the student’s planning and placement team (“PPT”), but in no case later than ten (10) school days after the recommendation for expulsion or the suspension that constitutes a change in placement was made.

Students

Suspension and Expulsion/Due Process

L. Procedures Governing Suspension and Expulsion of Students Identified as Eligible for Services under the Individuals with Disabilities Education Act ("IDEA")
(continued)

B. Expulsion and Suspensions that Constitute Changes in Placement for IDEA Students (continued)

2. (continued) The student's PPT shall consider the relationship between the student's disability and the behavior that led to the recommendation for expulsion or the suspension which constitutes a change in placement, in order to determine whether the student's behavior was a manifestation of his/her disability.
3. If the student's PPT finds that the behavior was a manifestation of the student's disability, the Administration shall not proceed with the recommendation for expulsion or the suspension that constitutes a change in placement.
4. If the student's PPT finds that the behavior was not a manifestation of the student's disability, the Administration may proceed with the recommended expulsion or suspension that constitutes a change in placement.
5. During any period of expulsion, or suspension of greater than ten (10) days per school year, the Administration shall provide the student with an alternative education program in accordance with the provisions of the IDEA.
6. When determining whether to recommend an expulsion or a suspension that constitutes a change in placement, the building administrator (or his or her designee) should consider the nature of the misconduct and any relevant educational records of the student.

C. Transfer of IDEA Students for Certain Offenses:

School personnel may transfer an IDEA student to an appropriate interim alternative educational setting for not more than forty-five (45) school days if the student:

1. Was in possession of a dangerous weapon, as defined in 18 U.S.C. 930(g)(2), as amended from time to time, on school grounds or at a school-sponsored activity, or
2. Knowingly possessed or used illegal drugs or sold or solicited the sale of a controlled substance while at school or at a school-sponsored activity; or
3. Has inflicted serious bodily injury upon another person while at school, on school premises, or at a school function.

Students

Suspension and Expulsion/Due Process

L. **Procedures Governing Suspension and Expulsion of Students Identified as Eligible for Services under the Individuals with Disabilities Education Act (“IDEA”)** (continued)

The following definitions shall be used for this subsection XII. C.

1. **Dangerous weapon** means a weapon, device, instrument, material, or substance, animate or inanimate, that is used for, or is readily capable of, causing death or serious bodily injury, except that such term does not include a pocket knife with a blade of less than 2.5 inches in length.
2. **Controlled substance** means a drug or other substance identified under schedules I, II, III, IV, or V in section 202(c) of the Controlled Substances Act, 21 U.S.C. 812(c).
3. **Illegal drug** means a controlled substance but does not include a substance that is legally possessed or used under the supervision of a licensed health-care professional or that is legally possessed or used under any other authority under the Controlled Substances Act or under any other provision of federal law.
4. **Serious bodily injury** means a bodily injury which involves: (A) a substantial risk of death; (B) extreme physical pain; (C) protracted and obvious disfigurement; or (D) protracted loss or impairment of the function of a bodily member, organ, or mental faculty.

M. **Procedures Governing Expulsions for Students Identified as Eligible under Section 504 of the Rehabilitation Act of 1973 (“Section 504”)**

- A. Except as provided in subsection B below, notwithstanding any provision to the contrary, if the Administration recommends for expulsion a student identified as eligible for educational accommodations under Section 504 who has violated any rule or code of conduct of the school district that applies to all students, the following procedures shall apply:
 1. The parents of the student must be notified of the decision to recommend the student for expulsion.
 2. The district shall immediately convene the student’s Section 504 team (“504 team”) for the purpose of reviewing the relationship between the student’s disability and the behavior that led to the recommendation for expulsion. The 504 team will determine whether the student’s behavior was a manifestation of his/her disability.
 3. If the 504 team finds that the behavior was a manifestation of the student’s disability, the Administration shall not proceed with the recommended expulsion.
 4. If the 504 team finds that the behavior was not a manifestation of the student’s disability, the Administration may proceed with the recommended expulsion.

Students

Suspension and Expulsion/Due Process

M. Procedures Governing Expulsions for Students Identified as Eligible under Section 504 of the Rehabilitation Act of 1973 (“Section 504”) (continued)

- B. The Board may take disciplinary action for violations pertaining to the use or possession of illegal drugs or alcohol against any student with a disability who currently is engaging in the illegal use of drugs or alcohol to the same extent that such disciplinary action is taken against nondisabled students. Thus, when a student with a disability is recommended for expulsion based solely on the illegal use or possession of drugs or alcohol, the 504 team shall not be required to meet to review the relationship between the student’s disability and the behavior that led to the recommendation for expulsion.

N. Procedures Governing Expulsions for Students Committed to a Juvenile Detention Center

- A. Any student who commits an expellable offense and is subsequently committed to a juvenile detention center, the Connecticut Juvenile Training School or any other residential placement for such offense may be expelled by the Board in accordance with the provisions of this section. The period of expulsion shall run concurrently with the period of commitment to a juvenile detention center, the Connecticut Juvenile Training School or any other residential placement.
- B. If a student who committed an expellable offense seeks to return to a school district after participating in a diversionary program or having been detained in a juvenile detention center, the Connecticut Juvenile Training School or any other residential placement and such student has not been expelled by the board of education for such offense under subdivision (A) of this subsection, the Board shall allow such student to return and may not expel the student for additional time for such offense.

O. Alternative Educational Opportunity

The Board of Education recognizes its obligation to offer any student under the age of sixteen (16) who is expelled, an alternative educational opportunity which shall be equivalent to alternative education, as defined, by C.G.S. 10-74j with an individualized learning plan, (1) if the Board provides such alternative education, or (2) in accordance with the standards adopted by the State Board of Education (by 8/15/17), which includes the kind of instruction to be provided and the number of hours to be provided, during the period of expulsion.

Any parent or guardian of such student who does not choose to have his or her child enrolled in an alternative educational opportunity shall not be subject to the provision of Section 10-184 of the Connecticut General Statutes. Any expelled student who is between the ages of sixteen (16) and eighteen (18) not previously expelled and who wishes to continue his or her education shall be offered such an alternative educational opportunity if he or she complies with conditions established by the Board of Education. other than the one from which the student has been excluded.

Students

Suspension and Expulsion/Due Process

O. Alternative Educational Opportunity (continued)

Such alternative educational opportunity may include, but shall not be limited to, the assignment of a student (who is seventeen (17) years of age or older) to any such adult education program or placement of such student in a regular classroom program of a school

Any student participating in an adult education program during a period of expulsion shall not be required to withdraw from school under C.G.S. 10-184. In determining the nature of the alternative education opportunity to be offered under this Section, the Board of Education may receive and consider evidence of past disciplinary issues which have led to removal from a classroom, suspension, or expulsion.

The Board of Education is not obligated to provide such alternative educational opportunity to any student eighteen years of age or older. The Board of Education is also required to offer such alternative educational opportunity, as defined, to any student between the ages of sixteen and eighteen who is expelled because of conduct which endangers persons, and involved the following, on school grounds or at a school-sponsored event:

1. Possession of a firearm, deadly weapon, dangerous instrument or martial arts weapon, or
2. Offering an illegal drug for sale or distribution.

If the Board expels a student for the sale or distribution of a controlled substance, the Board shall refer the student to an appropriate state or local agency for rehabilitation, intervention or job training, or any combination thereof, and inform the agency of its action. If a student is expelled for possession of a firearm, deadly weapon, dangerous instruments (those that can be used to cause death or serious injury) or martial arts weapons the Board shall report the violation to the local police department.

This provision shall not apply to students requiring special education who are described in subdivision (1) of sub-section (e) of C.G.S. 10-76a. The alternative educational opportunity for any such student shall be established by the IEP team (PPT) in accordance with the procedures described above.

P. Other Considerations

1. If a student is expelled, notice of the expulsion and the conduct for which the student was expelled shall be included on the student's cumulative educational record. Such notice, except for the notice of an expulsion of a student in grades nine through twelve, inclusive, based on possession of a firearm or deadly weapon, shall be expunged from the cumulative educational record by the Board if the Board determines that the student's conduct and behavior in the years following such expulsion warrants an expungement or if the student graduates from high school.

Students

Suspension and Expulsion/Due Process

P. Other Considerations (continued)

2. If a student's expulsion is shortened or the expulsion period waived based upon the fact that the student was expelled for the first time, had never been suspended, and successfully completed a Board specified program and/or met other conditions required by the Board, the notice of expulsion shall be expunged from the cumulative educational record if the student graduates from high school or, if the Board so chooses, at the time the student completes the Board specified program and meets any other conditions required by the Board.
3. If a student in grades preschool to eight, is expelled based on possession of a firearm or deadly weapon, the Board may expunge from the students' cumulative education record the notice of the expulsion and the conduct for which the student was expelled if the Board determines that the conduct and behavior of the student in the years following such expulsion warrants an expungement.
4. The Board may adopt the decision of a student expulsion hearing conducted by another school district provided such Board of Education held a hearing pursuant to C.G.S.10-233d(a). Adoption of such a decision shall be limited to a determination of whether the conduct which was the basis for the expulsion would also warrant expulsion under the policies of this Board. The student shall be excluded from school pending such hearing. The excluded student shall be offered an alternative education opportunity in accordance with item K above.
5. Whenever a student against whom an expulsion hearing is pending withdraws from school and after notification of such hearing but before the hearing is completed and a decision rendered, (1) notice of the pending expulsion hearing shall be included on the student's cumulative educational record and (2) the Board shall complete the expulsion hearing and render a decision.
6. A student expelled for possession of a firearm, deadly weapon, dangerous instrument or martial arts weapon shall have the violation reported to the local police department.
7. The period of expulsion shall not extend beyond a period of one calendar year. A period of exclusion may extend into the next school year.
8. An expelled student may apply for early readmission to school. Such readmission shall be at the discretion of the Board of Education/Superintendent of Schools (choose which). Readmission decisions shall not be subject to appeal to Superior Court. The Board or Superintendent, as appropriate, may condition such readmission on specified criteria.
9. Any student who commits an expellable offense and is subsequently committed to a juvenile detention center, The Connecticut Juvenile Training School or any other residential placement for such offense may be expelled by the local Board of Education. The period of expulsion shall run concurrently with the period of commitment to a juvenile detention center, the Connecticut Juvenile Training School or any other residential placement.

Students

Suspension and Expulsion/Due Process (continued)

Q. Change of Residence During Expulsion Proceedings (continued)

A. Student moving into the school district

1. If a student enrolls in the district while an expulsion hearing is pending in another district, such student shall not be excluded from school pending completion of the expulsion hearing unless an emergency exists, as defined above. The Board shall retain the authority to suspend the student or to conduct its own expulsion hearing.
2. Where a student enrolls in the district during the period of expulsion from another public school district, the Board may adopt the decision of the student expulsion hearing conducted by such other school district. The student shall be excluded from school pending such hearing. The excluded student shall be offered an alternative educational opportunity in accordance with statutory requirements. The Board shall make its determination based upon a hearing held by the Board, which hearing shall be limited to a determination of whether the conduct which was the basis of the previous public school district's expulsion would also warrant expulsion by the Board.

B. Student moving out of the school district:

Where a student withdraws from school after having been notified that an expulsion hearing is pending, but before a decision has been rendered by the Board, the notice of the pending expulsion hearing shall be included on the student's cumulative record and the Board shall complete the expulsion hearing and render a decision. If the Board subsequently renders a decision to expel the student, a notice of the expulsion shall be included on the student's cumulative record.

R. Compliance with Documentation and Reporting Requirements

- A. The Board of Education shall include on all disciplinary reports the individual student's state-assigned student identifier (SASID).
- B. The Board of Education shall report all suspensions and expulsions to the State Department of Education.
- C. If the Board of Education expels a student for sale or distribution of a controlled substance, the Board shall refer such student to an appropriate state or local agency for rehabilitation, intervention or job training and inform the agency of its action.
- D. If the Board of Education expels a student for possession of a deadly weapon or firearm, as defined in Conn. Gen. Stat. §53a-3, the violation shall be reported to the local police.

Students

Suspension and Expulsion/Due Process (continued)

Readmission of Student from a Residential Placement

A District student who has committed an expellable offense who seeks to return to a District school, after participating in a diversionary program or having been detained in a juvenile detention center, the Connecticut Juvenile Training School or any other residential placement, for one year or more, in lieu of expulsion from the District, shall be permitted to return to the appropriate school setting within the District. Further, the District shall not expel the student for any additional time for the offense(s).

Students and parents shall be notified of this policy annually.

Legal Reference: Connecticut General Statutes

4-176e through 4-180a. Contested Cases. Notice. Record, as amended

10-74j Alternative education (PA 15-133)

10-222d Safe school climate plans. Definitions. Safe school climate assessments.

10-233a through 10-233f Suspension, removal and expulsion of students, as amended by PA 95-304, PA 96-244, PA 98-139, PA 07-66, PA 07-122, PA 08-160, PA 09-82, PA 09-6 (September Special Session), PA 10-111, PA 11-126, PA 14-229, PA 15-96, PA 16-147 and PA 17-220, and PA 19-91.

10-233l Expulsion and suspension of children in preschool programs

19a-342a Use of electronic nicotine delivery system or vapor product prohibited.

29-38 Weapons in vehicles

53a-3 Definitions.

53a-217b Possession of Firearms and Deadly Weapons on School Grounds.

53-344b Sale and delivery of electronic nicotine delivery system or vapor products to minors.

53-206 Carrying of dangerous weapons prohibited.

PA 15-96 An Act Prohibiting Out-of-School Suspensions and Expulsions for Students in Preschool and Grades Kindergarten to Two.

GOALS 2000: Educate America Act, Pub. L. 103-227.

Title III - Amendments to the Individuals with Disabilities Education Act. Sec. 314 (Local Control Over Violence)

Students

Suspension and Expulsion/Due Process (continued)

Legal Reference: (continued)

Elementary and Secondary Act of 1965 as amended by the Gun Free Schools Act of 1994

P.L. 105-17 The Individuals with Disabilities Act, Amendments of 1997.

Kyle P. Packer PPA Jane Packer v. Thomaston Board of Education.

P.L. 108-446 The Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. 1400 et seq.

18 U.S.C. §921 – Definitions of “firearms”

18 U.S.C. §930(g)(2) – Definition of “dangerous weapon”

18 U.S.C. §1365(h)(3) – Identifying “serious bodily injury”

21 U.S.C. §812(c) – Identifying “controlled substances”

Public Act 24-45 An Act Concerning Education Mandate Relief, School Discipline and Disconnected Youth, Sections 13-14

Public Act 24-93 An Act Concerning Various and Assorted Revisions to the Education Statutes, Section 11 and Section 12

Current Existing Policy

Students

Suspension and Expulsion/Due Process

It is the goal of the Board of Education to ensure the safety and welfare of all students in attendance, and to maintain an atmosphere conducive to learning. In keeping with this goal, students are expected to comply with school rules and regulations, as well as Board policies. Students may be disciplined for conduct on school grounds or at any school-sponsored activity that endangers persons or property, is seriously disruptive of the educational process, or that violates a publicized policy of the Board. Students may be disciplined for conduct off school grounds if such conduct is seriously disruptive of the educational process and violates a publicized policy of the Board.

In working with students, emphasis shall be placed upon developing effective self-discipline as the most effective disciplinary approach.

A. Definitions

1. **“Exclusion”** shall be defined as any denial of public school privileges to a student for disciplinary purposes.
2. **“Removal”** shall be defined as an exclusion from a classroom for all or a part of single class period, provided such exclusion shall not extend beyond ninety (90) minutes.
3. **“In-School Suspension”** shall be defined as an exclusion from regular classroom activity for no more than ten consecutive school days, but not exclusion from school, provided such exclusion shall not extend beyond the end of the school year in which such in-school suspension was imposed. Such suspensions shall be served in the school attended by the student.
4. **“Suspension”** shall be defined as an exclusion from school privileges or from transportation services for no more than ten (10) consecutive school days, provided such exclusion shall not extend beyond the end of the school year in which such suspension was imposed. All suspensions shall be in-school suspensions unless the administration determines for any student in grades three through twelve, inclusive, that (1) the student being suspended poses such a danger to persons or property or such a disruption of the educational process that the student (grades three to twelve, inclusive) shall be excluded from school during the period of suspension, or (2) that an out-of-school suspension is appropriate based on evidence of previous disciplinary problems that have led to suspensions or expulsion of the student and efforts by the administration to address such disciplinary problems through means other than out-of-school suspension or expulsion, including positive support strategies.

Students

Suspension and Expulsion/Due Process

A. Definitions (continued)

A student in grades preschool to two, inclusive, may be given an out-of-school suspension if it is determined by the administration that such suspension is appropriate based on evidence that the student's conduct on school grounds is of a violent or sexual nature that endangers persons. In addition a person's duty as a mandated reporter to report suspected child abuse or neglect is not limited by this provision.

5. **"Expulsion"** shall be defined as an exclusion from school privileges for any student in grades three to twelve, inclusive, for more than ten (10) consecutive school days and shall be deemed to include but not be limited to, exclusion from the school to which such student was assigned at the time such disciplinary action was taken, provided that assignment to a regular classroom program in a different school in the district shall not constitute a suspension or an expulsion. Such period of exclusion may extend to the school year following the school year in which the exclusion was imposed, up to one calendar year.
6. **"Emergency"** shall be defined as a situation under which the continued presence of the student in the school imposes such a danger to persons or property or such a disruption of the educational process that a hearing may be delayed until a time as soon after the exclusion of such student as possible.
7. **"Days"** is defined as days when school is in session.
8. **"School-sponsored activity"** is defined as any activity sponsored, recognized or authorized by the Board of Education and includes activities conducted on or off school property.
9. **"Possess"** means to have physical possession or otherwise to exercise dominion or control over tangible property.
10. **"Deadly weapon"** means any weapon, whether loaded or unloaded, from which a shot may be discharged, or a switchblade knife, gravity knife, billy, blackjack, bludgeon, or metal knuckles.
11. **"Firearm"** means 1) any weapon (including a starter gun) which will or is designed to or readily be converted to expel a projectile by the action of an explosive; 2) the frame or receiver of any such weapon; 3) any firearm muffler or firearm silencer; or 4) any destructive device. Firearm does not include any antique firearm. For purposes of this definition "destructive device" means any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than 4 ounces, missile having an explosive or incendiary charge of more than ¼ ounce, mine, or device similar to any of the weapons described herein.

Students

Suspension and Expulsion/Due Process

A. Definitions (continued)

12. **“Vehicle”** means a **“motor vehicle”** as defined in Section 14-1 of the Connecticut General Statutes, snow mobile, any aircraft, or any vessel equipped for propulsion by mechanical means or sail.
13. **“Martial arts weapon”** means a nunchakum kama, kasari-fundo, octagon sai, tonfa or chinese star.
14. **“Dangerous Drugs and Narcotics”** is defined as any controlled drug in accordance with Connecticut General Statutes §219-240.

B. Removal from Class

1. All teachers are hereby authorized to remove a student from class when such student causes a serious disruption of the educational process within the classroom.
2. Such teacher shall send the student to a designated area and shall immediately inform the building Principal or his/her designee as to the name of the student and the reason for removal.
3. No student shall be removed from class more than six (6) times in any year nor more than twice in one week, unless such student is referred to the Building Principal or his/her designee and granted an informal hearing in accordance with the provisions of this policy, as stated in G(3).

C. Exclusion from Co-Curricular and Extra-Curricular Activities

Participation in co-curricular and extra-curricular activities is a privilege and not an entitlement. Students involved in such programs are expected to follow all school rules and demonstrate good citizenship. Failure to do so may result in partial or complete exclusion from said activities and programs. Activities include, but are not limited to, athletic programs, musical or drama productions, clubs, field trips, and school trips out-of-state and abroad.

Students

Suspension and Expulsion/Due Process (continued)

D. Suspension and Expulsion

1. A student may be suspended (in-school) or suspended (out-of-school) or expelled (grade three to twelve, inclusive) for conduct on school property or at a school-sponsored activity that endangers persons or property, is violative of a publicized policy of the Board, or is seriously disruptive of the educational process, including but not limited to one or more of the following reasons:
 - a. Conduct causing danger to the physical well-being of himself/herself or other people that is not reasonably necessary for self-defense;
 - b. Intentionally causing or attempting to cause physical injury to another person that is not reasonably necessary for self-defense;
 - c. Intentionally causing or attempting to cause damage or school property or material belonging to staff (private property);
 - d. Stealing or attempting to steal private or school property or taking or attempting to take personal property or money from any other person;
 - e. The use, either spoken or written on clothing, of obscene or profane language or gestures on school property or at a school-sponsored activity;
 - f. Deliberate refusal to obey the directions or orders of a member of the school staff;
 - g. Harassment and/or hazing/bullying on the basis of that person's race, religion, ethnic background, gender or sexual orientation;
 - h. Open defiance of the authority of any teacher or person having authority over the student, including verbal abuse;
 - i. Threatening in any manner, including orally, in writing, or via electronic communication, a member of the school including any teacher, a member of the school administration or any other employee, or a fellow student;
 - j. Blackmailing a member of the school community, including any teacher, member of the school administration or any other employee or fellow student;
 - k. Possession of a firearm, deadly weapon, dangerous instrument, or martial arts weapon, as defined in Section 53a-3, such as a pistol, knife, blackjack, etc.;
 - l. Possession of any weapon or weapon facsimile, including but not limited to knife, pistol, pellet guns and/or air soft pistols.

Students

Suspension and Expulsion/Due Process

D. Suspension and Expulsion (continued)

- m. Possession, transmission, distribution, selling, use or consumption of alcoholic beverages, dangerous drugs or narcotics or intoxicant of any kind or any facsimile of a dangerous drug, narcotic or intoxicant of any kind;
- n. Knowingly being in the presence of those who are in possession of using, transmitting, or being under the influence of any dangerous drug, narcotic, hallucinogenic drug, amphetamine, barbiturate, marijuana, alcoholic beverage, or intoxicant of any kind;
- o. Participation in any unauthorized occupancy by any group of students or others of any part of any school, school premises or other building owned by any school district after having been ordered to leave said school premises or other facility by the Principal or other person then in charge of said school building or facility;
- p. Participation in any walkout from a classroom or school building by any group of students and refusing to immediately return to said classroom or school building after having been directed to do so by the Principal or other person then in charge of said classroom or school building;
- q. Intentional incitement which results in an unauthorized occupation of, or walkout from, any school building, school premises, facility or classroom by any group of students or other persons;
- r. Repeated unauthorized absence from or tardiness to school;
- s. Intentional and successful incitement of truancy by other students;
- t. The use or copying of the academic work of another and the presenting of it as one's own without proper attribution;
- u. Violation of school rules and practices or Board policy, regulation or agreement, including that dealing with conduct on school buses and the use of school district equipment;
- v. Violation of any federal or state law which would indicate that the violator presents a danger to any person in the school community or to school property;
- w. Lying, misleading or being deceitful to a school employee or person having authority over the student;
- x. Unauthorized leaving of school or school-sponsored activities;
- y. Unauthorized smoking.

Students

Suspension and Expulsion/Due Process (continued)

E. Suspension for Conduct Off School Grounds

1. Students are subject to suspension for conduct off school property and outside of school-sponsored activities in accordance with law, for conduct that violates a publicized policy of the Board and is seriously disruptive of the educational process, including but not limited to the following:
 - a. Conduct leading to a violation of any federal or state law if that conduct is determined to pose a danger to the student himself/herself, other students, school employees or school property.
 - b. Adjudication as a delinquent or a youthful offender as the result of a felony if the conduct leading to the adjudication is determined to pose a danger to the student himself/herself, other students, school employees or school property.
2. In making a determination as to whether conduct is “seriously disruptive of the educational process,” the administration, Board of Education or impartial hearing board may consider, but such consideration shall not be limited to; (1) whether the incident occurred within close proximity of a school; (2) whether other students from the school were involved or whether there was any gang involvement; (3) whether the conduct involved violence, threats of violence or the unlawful use of a weapon as defined in Section 29-38 and whether any injuries occurred, and (4) whether the conduct involved the use of alcohol, narcotic drug, hallucinogenic drug, amphetamine, barbiturate or marijuana.

F. Mandatory Expulsion

It shall be the policy of the Board to expel a student, grades preschool, and kindergarten to twelve, inclusive, for one full calendar year if:

1. The student, on grounds or at a school-sponsored activity, was in possession of a firearm, as defined in 18 U.S.C. 921*, as amended from time to time, or deadly weapon, dangerous instrument or martial arts weapon, as defined in C.G.S. 53A-3; or the student, off school grounds, did possess such firearm in violation of C.G.S. 29-35 or did possess and use such a firearm, instrument or weapon in the commission of a crime; or the student, on or off school grounds offered for sale or distribution a controlled substance, as defined in subdivision (9) of C.G.S. 21a-240, whose manufacture, distribution, sale, prescription, dispensing, transporting or possessing with intent to sell or dispense, offering or administering is subject to criminal penalties under C.G.S. 21-277 and 21a-278.

*A firearm; currently defined by 18 U.S.C. 921, is any weapon that can expel a projectile by an explosive action and includes explosive devices, incendiaries, poison gases, and firearm frames, receivers, mufflers or silencers.

Students

Suspension and Expulsion/Due Process

F. Mandatory Expulsion (continued)

2. Such a student shall be expelled for one calendar year if the Board of Education or impartial hearing board finds that the student did so possess or so possess and use, as appropriate, such a weapon or firearm, instrument or weapon or did so offer for sale or distribution such a controlled substance.
3. The Board may modify the period of a mandatory expulsion on a case-by-case basis.
4. A firearm, as defined by C.G.S. 53a-3 includes any sawed-off shotgun, machine gun, rifle, shotgun, pistol, revolver, or other weapon, whether loaded or unloaded from which a shot may be discharged, or a switchblade knife, a gravity knife, billy, black jack, bludgeon or metal knuckles.
5. A student enrolled in a preschool program provided by the Board of Education, state or local charter school or interdistrict magnet school shall not be expelled from such school except that a student shall be expelled for one calendar year from such preschool program pursuant to the mandatory expulsion requirement in compliance with the Gun-Free School Act, as described in this section.

G. Suspension Procedure

1. The administration of each school shall have the authority to invoke suspension for a period of up to ten days or to invoke in-school suspension for a period of up to ten school days of any student for one or more of the reasons stated in paragraph C, above, in accordance with the procedure outlined in this paragraph. Suspensions shall be in-school suspensions unless the administration determines that the student being suspended poses such a danger to persons or property or such a disruption of the educational process that the student shall be excluded from school during the period of suspension. The administration may also consider a student's previous disciplinary problems when deciding whether an out-of-school suspension is warranted, as long as the school previously attempted to address the problems by means other than an out-of-school suspension or an expulsion.

The administration is expected to use the guidelines developed and promulgated by the Commissioner of Education to help determine whether a student should receive an in-school or out-of-school suspension.

Students

Suspension and Expulsion/Due Process

G. Suspension Procedure (continued)

The administration shall also have the authority to suspend a student from transportation services whose conduct while awaiting or receiving transportation violates the standards set forth in paragraph C, above. The administration shall have the authority to immediately suspend from school any student when an emergency exists as that term is defined in paragraph A, above.

If an emergency situation exists, the hearing outlined in paragraph G (3) shall be held as soon as possible after the exclusion of the student.

2. In the case of suspension, the administration shall notify the student's parents and the Superintendent of Schools not later than twenty-four (24) hours of the suspension as to the name of the student who has been suspended and the reason therefore. Any student who is suspended shall be given an opportunity to complete any class work including, but not limited to, examinations which such student missed during the period of his/her suspension.
3. Except in the case of an emergency, as defined in paragraph A, above, a student shall be afforded the opportunity to meet with the administration and to respond to the stated charges prior to the effectuation of any period of suspension or in-school suspension. If, at such a meeting the student denies the stated charges, he/she may at that time present his/her version of the incident(s) upon which the proposed suspension is based. The administration shall then determine whether or not suspension or in-school suspension is warranted. In determining the length of a suspension period, the administration may receive and consider evidence of past disciplinary problems which have led to removal from a classroom, in-school suspension, or expulsion.
4. For any student who is suspended for the first time and who has never been expelled, the school administration may shorten the length of or waive the suspension period if the student successfully completes an administration-specified program and meets any other administration-required conditions. Such program shall be at no expense to the student or his/her parents/guardians.
5. No student shall be suspended more than ten times or a total of fifty (50) days in one school year, whichever results in fewer days of exclusion, unless a hearing as provided in paragraph H(5) is first granted.
6. No student shall be placed on in-school suspension more than fifteen times or a total of fifty (50) days in one school year, whichever results in fewer days of exclusion, unless a hearing as provided in paragraph H(5) is first granted.

Students

Suspension and Expulsion/Due Process (continued)

H. Expulsion Procedures

1. The Board of Education may, upon recommendation of the Superintendent of Schools, expel any student for one or more of the reasons stated in this policy if in the judgment of the Board of Education, such disciplinary action is in the best interest of the school system.
2. Upon receipt of a recommendation for expulsion from the Superintendent of Schools the Board shall, after giving written notice to the student and his parents or guardian, if said student is less than 18 years of age, conduct a hearing prior to taking any action on the expulsion of said student, provided however, that in the event of an emergency as defined in this policy, the student may be expelled prior to the hearing but in such case even a hearing shall be held as soon after the expulsion as possible. The notice shall include information concerning legal services that are provided free of charge or at a reduced rate that are available locally (CT Legal Service a source of such services) and how to access such services.
3. Three members of the Board of Education shall constitute a quorum for an expulsion hearing. A student may be expelled if a majority of the Board members sitting in the expulsion hearing vote to expel and provided at least three affirmative votes for expulsion are cast.
4. A special education student's handicapping conditions shall be considered before making a decision to expel. A Planning and Placement Team (PPT) meeting must be held to determine whether the behavior or student actions violative of Board of Education standards set forth in policy governing suspension and expulsion are the result of the student's handicapping condition.
5. The procedure for any hearing conducted under this paragraph shall at least include the right to:
 - a. Notice prior to the date of the proposed hearing which shall include a statement of the time, place and nature of the hearing; a statement of the legal jurisdiction under which the hearing is to be held; and a statement that the board is not required to offer an alternative educational opportunity to any student between 16 and 18 who was previously expelled or who is found to have engaged in conduct endangering persons which involved (1) possession of a firearm, deadly weapon, dangerous instrument or martial arts weapon on school property or school transportation or at a school sponsored activity or (2) offering for sale or distribution on school property or at a school sponsored activity a controlled substance, as defined in Section 21a-240(a) of the Connecticut General Statutes.

Students

Suspension and Expulsion/Due Process

H. Expulsion Procedures (continued)

- b. A short and plain statement of the matters asserted, if such matters have not already been provided in a statement of reasons requested by the student;
 - c. The opportunity to be heard in the student's own defense;
 - d. The opportunity to present witnesses and evidence in the student's defense;
 - e. The opportunity to cross-examine adverse witnesses;
 - f. The opportunity to be represented by counsel at the parents'/student's own expense; and
 - g. Information concerning legal services provided free of charge or at a reduced rate that are available locally and how to access such services;
 - h. The opportunity to have the services of a translator, to be provided by the Board of Education whenever the student or his/her parent or legal guardian do not speak the English language;
 - i. The prompt notification of the decision of the Board of Education, which decision shall be in writing if adverse to the student concerned.
- 6. The record of the hearing held in any expulsion case shall include the following:
 - a. All evidence received and considered by the Board of Education;
 - b. Questions and offers of proof, objections and ruling on such objections;
 - c. The decision of the Board of Education rendered after such hearing; and
 - d. A copy of the initial letter of notice of proposed expulsion, a copy of any statement of reasons provided upon request, a statement of the notice of hearing and the official transcript, if any or if not transcribed, any recording or stenographic record of the hearing.
- 7. Rules of evidence at expulsion hearings shall assure fairness, but shall not be controlled by the formal rules of evidence, and shall include the following:
 - a. Any oral or documentary evidence may be received by the Board of Education but, as a matter of policy, irrelevant, immaterial or unduly repetitious evidence may be excluded. In addition, other evidence of past disciplinary problems which have led to removal from a classroom, in-school suspension, suspension, or expulsion may be received for considering the length of an expulsion and the nature of the alternative educational opportunity, if any, to be offered;

Students

Suspension and Expulsion/Due Process

H. Expulsion Procedures (continued)

- b. The Board of Education shall give effect to the rules of privilege by law;
 - c. In order to expedite a hearing, evidence may be received in written form, provided the interest of any party is not substantially prejudiced thereby;
 - d. Documentary evidence may be received in the form of copies or excerpts;
 - e. A party to an expulsion hearing may conduct cross-examination of witnesses where examination is required for a full and accurate disclosure of the facts;
 - f. The Board of Education may take notice of judicially cognizable facts in addition to facts within the Board's specialized knowledge provided, however, the parties shall be notified either before or during the hearing of the material noticed, including any staff memoranda or data, and an opportunity shall be afforded to any party to contest the material so noticed;
 - g. A stenographic record or tape-recording of any oral proceedings before the Board of Education at an expulsion hearing shall be made provided, however, that a transcript of such proceedings shall be furnished upon request of a party with the cost of such transcript to be paid by the requesting party. Findings of fact made by the Board after an expulsion hearing shall be based exclusively upon the evidence adduced at the hearing.
 - h. Decisions shall be in writing if adverse to the student and shall include findings of fact and conclusions necessary for the decision. Findings of fact made by the Board after an expulsion hearing shall be based exclusively upon the evidence adduced at the hearing.
8. For any student expelled for the first time and who has never been suspended, except for a student who has been expelled based on possession of a firearm or deadly weapon, the Board of Education may shorten the length of or waive the expulsion period if the student successfully completes a Board specified program and meets any other conditions required by the Board. Such a Board specified program shall not require the student or the parent/guardian of such student to pay for participation in the program.

Students

Suspension and Expulsion/Due Process (continued)

I. Notification

1. All students and parents within the jurisdiction of the Board of Education shall be informed, annually, of Board Policy governing student conduct by the delivery to each said student of a written copy of said Board Policy.
2. The parents or guardian of any minor student either expelled or suspended shall be given notice of such disciplinary action no later than 24 hours of the time of the institution of the period of expulsion or suspension.
3. The notice of an expulsion hearing to the student and his/her parents or guardians, if said student is less than 18 years of age shall include information concerning legal services that are provided free of charge or at a reduced rate that are available and how to access such services.

J. Students with Disabilities

A special education student's IEP and/or 504 disability shall be considered before making a decision to suspend. A student with disabilities may be suspended for up to ten school days in a school year without the need for the district to provide any educational services. A disabled student may be additionally removed (suspended) for up to ten school days at a time for separate acts of misconduct as long as the removals do not constitute a pattern. During any subsequent suspension of ten days or less of a student with disabilities, the district shall provide services to the disabled student to the extent determined necessary to enable the student to appropriately advance in the general education curriculum and toward achieving his/her IEP goals. In cases involving removals for ten days or less, school personnel (school administration) in consultation with the child's special education teacher, shall make the service determination.

If the disabled student's suspensions beyond ten school days in a school year constitute a pattern because of factors such as the length of each removal, the total amount of time the child is removed and the proximity of the removals to one another, the IEP team (PPT) shall conduct a manifestation determination. Meetings of a student's IEP team (PPT) are required to develop a behavioral assessment plan or to review and modify as necessary one previously developed when the disabled student has been removed (suspended) from his/her current placement for more than ten school days in a school year and when commencing a removal (suspension) that constitutes a change in placement.

Students

Suspension and Expulsion/Due Process

J. Students with Disabilities (continued)

Whenever a student is suspended, notice of the suspension and the conduct for which the student was suspended shall be included on the student's cumulative educational record. Such notice shall be expunged from the record by the Board if the student graduates from high school.

Notwithstanding the foregoing, the following procedures shall apply to students who have been identified as having one or more disabilities under the IDEA (Individual with Disabilities Education Act) and/or Section 504 of the Rehabilitation Act (a "student with disabilities"):

1. If a student with disabilities engages in conduct that would lead to a recommendation for expulsion, the district shall promptly convene an IEP team (PPT) meeting to determine whether the misconduct was caused by or had a direct and substantial relationship to the student's disability or if the conduct in question was the direct result of the District's failure to implement the IEP. A student may be suspended for up to ten days pending the IEP team (PPT) determination.
2. If the District, parent and relevant members of the IEP team (PPT) determine that the misconduct was not caused by the disability, the Superintendent may proceed with a recommendation for expulsion. During any period of expulsion, a student with disabilities under the IDEA shall receive an alternative educational plan consistent with the student's educational needs as determined by the IEP team (PPT) in light of such expulsion and the student's IEP. The services must continue to the extent determined necessary to enable the disabled student to appropriately advance in the general education curriculum and to advance toward achieving the goals of his/her IEP, and be provided a free appropriate public education.
3. If the District, parent and relevant members of the IEP team (PPT) determine that the misconduct was caused by or had a direct and substantial relationship to the disability, or the conduct in question was the direct result of the District's failure to implement the student's IEP, the Superintendent shall not proceed with the recommendation for expulsion. The IEP team (PPT) shall consider the student's misconduct and revise the IEP to prevent a recurrence of such misconduct and to provide for the safety of the other students and staff. A functional behavioral assessment shall be conducted, if not previously done, and a behavioral intervention plan implemented or revised, if in existence. The student shall be returned to the placement from which he/she was removed unless agreed otherwise by the District and parent.

Students

Suspension and Expulsion/Due Process

J. Students with Disabilities (continued)

4. Should a parent of a student with disabilities who is eligible for services under the IDEA (or the student himself/herself if eighteen years of age or older) file a request for a due process hearing to contest an expulsion under subparagraph (2) above or a proposed change in placement under subparagraph (3), unless the parents (or student if eighteen years of age or older) and the Board otherwise agree, the child shall stay in the interim alternate educational setting, if so placed by student authorities, pending decision in said due process hearing and any subsequent judicial review proceedings.
5. Notwithstanding the provisions of the preceding subparagraph (4), a student with disabilities may be assigned to an interim alternative educational setting for not more than forty-five (45) school days if the student brings a weapon to school or to a school function or knowingly possesses or uses illegal drugs or sells or solicits the sale of a controlled substance while at school or a school function, or has inflicted serious bodily injury upon another person while at school, on school premises, or at a school function. For purposes of this paragraph, "weapon" means a device instrument, material, or substance, animate or inanimate, that is used for, or is readily capable of, causing death or serious bodily injury, but excludes a pocket knife with a blade of less than 2 ½ inches in length. "Serious bodily injury" is defined as bodily injury which involves a substantial risk of death, extreme physical pain, protracted and obvious disfigurement or protracted loss or impairment of the function of a bodily member, organ or mental faculty. The interim alternative placement shall be determined by the IEP team (PPT). If a due process hearing is requested, the student shall remain in said interim alternative placement pending a decision in the due process hearing, unless the Board and the parents otherwise agree, or the Board obtains a court order.
6. In order for the district to unilaterally obtain a 45 day change in placement from a federal judge of Connecticut hearing officer, it must prove by substantial evidence that maintaining the current placement of the student is substantially likely to result in injury to the child or others. The school must also prove that it has made reasonable efforts to minimize the risk of harm the student presents in the current placement.

Students

Suspension and Expulsion/Due Process

K. Alternative Educational Opportunity

The Board of Education recognizes its obligation to offer any student under the age of sixteen (16) who is expelled an alternative educational opportunity during the period of expulsion. Any parent or guardian of such student who does not choose to have his or her child enrolled in an alternative educational program shall not be subject to the provision of Section 10-184 of the Connecticut General Statutes. Any expelled student who is between the ages of sixteen (16) and eighteen (18) not previously expelled and who wishes to continue his or her education shall be offered an alternative educational opportunity if he or she complies with conditions established by the Board of Education. Such alternative educational opportunity may include, but shall not be limited to, the assignment of a student (who is sixteen years of age or older) to an adult education program or placement of such student in a regular classroom program of a school other than the one from which the student has been excluded. Any student participating in an adult education program during a period of expulsion shall not be required to withdraw from school under C.G.S. 10-184. In determining the nature of the alternative education opportunity to be offered under this Section, the Board of Education may receive and consider evidence of past disciplinary problems which have led to removal from a classroom, suspension, or expulsion.

The Board of Education is not obligated to provide such alternative educational opportunity to any student eighteen years of age or older. The Board of Education is not required to offer such alternative educational opportunity to any student between the ages of sixteen and eighteen who is expelled because of conduct which endangers person, if it was determined at the expulsion hearing that the conduct for which the student was expelled involved (a) carrying on or introducing onto school property a firearm, deadly weapon or dangerous instrument as defined in C.G.S. 53a-3 or (b) offering for sale or distribution on school property or at a school sponsored activity a controlled substance, as defined in subdivision (8) of C.G.S. 21a-240, whose manufacture, distribution, sale, prescription, dispensing, transporting, or possessing with the intent to sell or dispense, offering, or administration is subject to criminal penalties under C.G.S. 21a-277 and 21a-278. If the Board expels a student for the sale or distribution of such a controlled substance, the Board shall refer the student to an appropriate state or local agency for rehabilitation, intervention or job training, or any combination thereof, and inform the agency of its action. If a student is expelled for possession of a firearm or deadly weapon, the Board shall report the violation to the local police department.

This provision shall not apply to students requiring special education who are described in subdivision (1) of sub-section (e) of C.G.S. 10-76a. The alternative educational opportunity for any such student shall be established by the IEP team (PPT) in accordance with the procedures described above.

Students

Suspension and Expulsion/Due Process

K. Alternative Educational Opportunity (continued)

Whenever the Board notifies a student between the ages of sixteen and eighteen or the parents/guardians of such student, that an expulsion hearing will be held, the notification shall include a statement that the Board is not required to offer an alternative educational opportunity to any student who is found to have engaged in conduct including possession of a martial arts weapon, firearms, deadly weapons or dangerous instruments on school property or at a school function.

L. Other Considerations

1. If a student is expelled, notice of the expulsion and the conduct for which the student was expelled shall be included on the student's cumulative educational record. Such notice, except for the notice of an expulsion of a student in grades nine through twelve, inclusive, based on possession of a firearm or deadly weapon, shall be expunged from the cumulative educational record by the Board if the Board determines that the student's conduct and behavior in the years following such expulsion warrants an expungement or if the student graduates from high school.
2. If a student's expulsion is shortened or the expulsion period waived based upon the fact that the student was expelled for the first time, had never been suspended, and successfully completed a Board specified program and/or met other conditions required by the Board, the notice of expulsion shall be expunged from the cumulative educational record if the student graduates from high school or, if the Board so chooses, at the time the student completes the Board specified program and meets any other conditions required by the Board.
3. If a student in grades kindergarten to eight, is expelled based on possession of a firearm or deadly weapon, the Board may expunge from the students' cumulative education record the notice of the expulsion and the conduct for which the student was expelled if the Board determines that the conduct and behavior of the student in the years following such expulsion warrants an expungement.
4. The Board may adopt the decision of a student expulsion hearing conducted by another school district provided such Board of Education held a hearing pursuant to C.G.S.10-233d(a). Adoption of such a decision shall be limited to a determination of whether the conduct which was the basis for the expulsion would also warrant expulsion under the policies of this Board. The student shall be excluded from school pending such hearing. The excluded student shall be offered an alternative education opportunity in accordance with item K above.

Students

Suspension and Expulsion/Due Process

L. Other Considerations (continued)

5. Whenever a student against whom an expulsion hearing is pending withdraws from school and after notification of such hearing but before the hearing is completed and a decision rendered, (1) notice of the pending expulsion hearing shall be included on the student's cumulative educational record and (2) the Board shall completed the expulsion hearing and render a decision.
6. A student expelled for possession of a firearm or deadly weapon shall have the violation reported to the local police department.
7. The period of expulsion shall not extend beyond a period of one calendar year. A period of exclusion may extend into the next school year.
8. An expelled student may apply for early readmission to school. Such readmission shall be at the discretion of the Board of Education/Superintendent of Schools (choose which). Readmission decisions shall not be subject to appeal to Superior Court. The Board or Superintendent, as appropriate, may condition such readmission on specified criteria.
9. Any student who commits an expellable offense and is subsequently committed to a juvenile detention center, The Connecticut Juvenile Training School or any other residential placement for such offense may be expelled by the local board of education. The period of expulsion shall run concurrently with the period of commitment to a juvenile detention center, the Connecticut Juvenile Training School or any other residential placement.

Readmission of Student from a Residential Placement

A District student who has committed an expellable offense who seeks to return to a District school, after having been in a juvenile detention center, the Connecticut Juvenile Training School or any other residential placement, for one year or more, in lieu of expulsion from the District, shall be permitted to return to the appropriate school setting within the District. Further, the District shall not expel the student for any additional time for the offense(s).

Students and parents shall be notified of this policy annually.

Legal Reference: Connecticut General Statutes

4-176e through 4-180a. Contested Cases. Notice. Record, as amended

10-233a through 10-233f Suspension, removal and expulsion of students, as amended by PA 95-304, PA 96-244, PA 98-139, PA 07-66, PA 07-122, PA 08-160, PA 09-82, PA 09-6 (September Special Session), PA 10-111, PA 11-126, PA 14-229 and PA 15-96.

Students

Suspension and Expulsion/Due Process

Legal Reference: Connecticut General Statutes (continued)

53a-3 Definitions.

53a-217b Possession of Firearms and Deadly Weapons on School Grounds.

PA 94-221 An Act Concerning School Discipline and Safety.

PA 15-96 An Act Prohibiting Out-of-School Suspensions and Expulsions for Students in Preschool and Grades Kindergarten to Two.

GOALS 2000: Educate America Act, Pub. L. 103-227.

18 U.S.C. 921 Definitions.

Title III - Amendments to the Individuals with Disabilities Education Act. Sec. 314 (Local Control Over Violence)

Elementary and Secondary Act of 1965 as amended by the Gun Free Schools Act of 1994

P.L. 105-17 The Individuals with Disabilities Act, Amendments of 1997.

Kyle P. Packer PPA Jane Packer v. Thomaston Board of Education.

20 U.S.C. Section 7114, No Child Left Behind Act

P.L. 108-446 The Individuals with Disabilities Education Improvement Act of 2004

Policy adopted: October 26, 2015

GRISWOLD PUBLIC SCHOOLS
Griswold, Connecticut



GRISWOLD PUBLIC SCHOOLS

211 Slater Avenue, Griswold, CT 06351

Tel: (860) 376-7600 Fax: (860) 376-7607

griswoldpublicschools.org

Sean P. McKenna, Superintendent of Schools
Erik Christensen, Director of Fiscal & Personnel Services

Glenn LaBossiere, Assistant Superintendent of Schools
Christopher Champlin, Director of Student Services

MEMO

To: Griswold Board of Education

From: Sean P. McKenna/Superintendent

Subject: The Home Depot Foundation Award--\$1,922.23

Date: June 5th, 2025

+++++

Ali Nassimos, a GHS Special Education Teacher applied for and was awarded a small grant from the The Home Depot Foundation in the amount of **\$1,922.23**.

The grant award provided funds that will be used to purchase mulch, plants, and garden tools to beautify near one of the patios at Griswold High School. A special thanks to Ali Nassimos and The Home Depot of Lisbon for this generous donation.

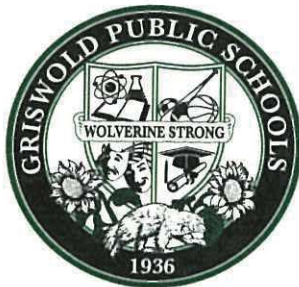
Mrs. Elaine Taylor
School Counseling Director

Mr. Lorenzo Chavez
School Counselor

Mrs. Kiley Flynn
School Counselor

Mrs. Darlene Melgey
Administrative Assistant

Mrs. Jennifer Lowell
Administrative Assistant



Griswold High School School Counseling Office

267 Slater Ave

Griswold, CT 06351

Phone (860) 376-7680

Fax (860) 376-7684

www.griswold.k12.ct.us

May 28, 2025

To: The Griswold Public Schools Board of Education

From: The Gerard and Wanda Brunet Foundation Scholarship Committee

Re: The Gerard and Wanda Brunet Foundation 2025 Scholarships

The following members served on the 2025 Gerard and Wanda Brunet Scholarship Committee:

- Board of Education Member: Cathy Waselik (Absent)
- Principal: Erin Palonen
- English Teacher: Kelsey Tobler
- Science & Technology Teacher: Andrew Meislitzer
- School Counselor: Kiley Flynn
- Director of School Counseling: Elaine Taylor

The 2025 disbursement of the scholarship is \$112,734. Tier I and Tier II recipients were selected by the Gerard and Wanda Brunet Foundation Scholarship Committee. Tier III recipients were nominated by each of the twelve academic departments and selected by the Gerard and Wanda Brunet Foundation Scholarship Committee. We are pleased to announce the following recipients have been selected for the Class of 2025:

Tier I (\$56,366.00)

- \$28,183.00 awarded to Kierra Neilson
- \$28,183.00 awarded to Gabriella Rosado

Tier II (\$33,820.00)

- \$16,910.00 awarded to Arianna Pedraza
- \$16,910.00 awarded to Brooke Valentine

Tier III (\$22,548.00)

Art / Media Technology & Communication	1,879.00	Kalla Homme
Business	1,879.00	Sam Gilgenbach
Construction & Manufacturing Technology / Information Technology	1,879.00	Natalie Obuchowski
English	1,879.00	Ava Mehrens
Family and Consumer Sciences / Health Sciences	1,879.00	Abygail Richardson
History & Social Studies	1,879.00	Ava Mehrens
Math	1,879.00	Addyson Ryan
Music	1,879.00	Marco Prando
Physical Education / Health	1,879.00	Aiden Plante
Science	1,879.00	Kaylin Stockwell
Supplemental	1,879.00	Christopher Turner
World Language	1,879.00	Tyler Silva



GPS Spotlight

Math Curriculum

Purpose

This presentation will review

- Steps the district took to develop curricula that engages students in deep mathematical thinking.
- Highlights of the Mathematics Curriculum under consideration.



The Team's Process

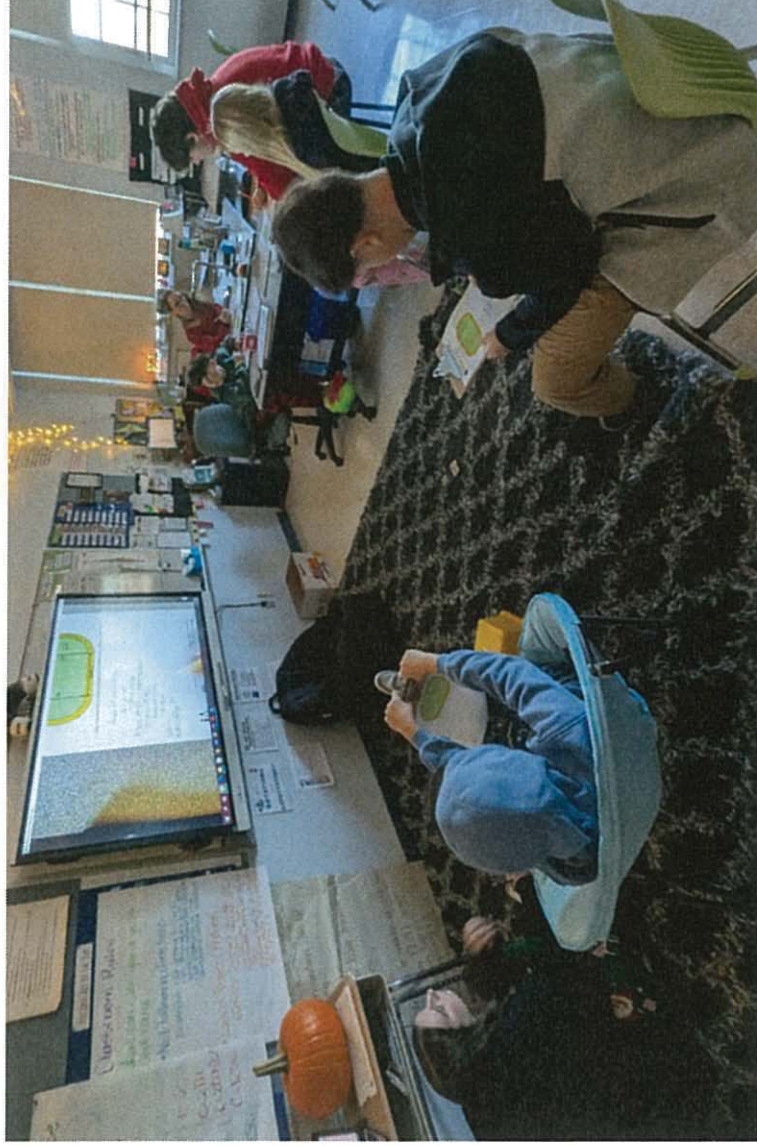
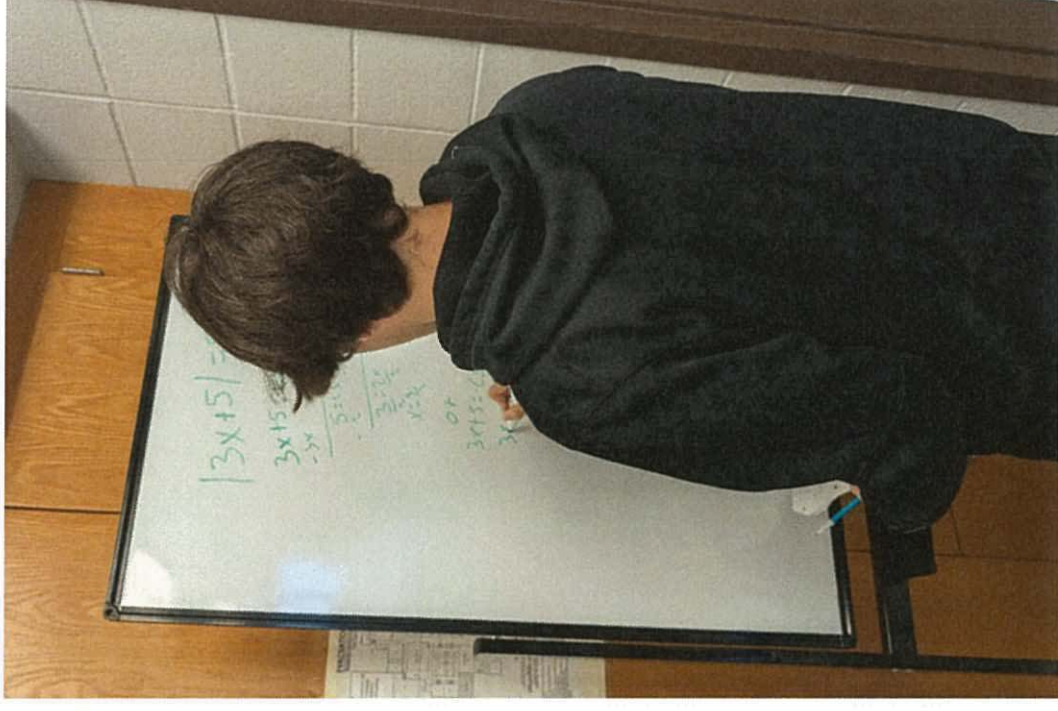
The Mathematics Curriculum Team includes teachers from each grade level and each course.

They have worked as a whole and in grade level teams meeting on PD days as well as during targeted work sessions to:

- Align the skills and concepts of the CCSS Standards to each unit, ensuring emphasis is on the progression of skills and understandings.
- Design aligned summative assessments and common learning experiences, including performance tasks.
- Determine key resources aligned with district goals and mathematical practices.



Key Practice: Students discuss their mathematical reasoning.



Key Practice: Students address
real world problems.



Next Steps

Implementation

- Continue developing engaging common learning experiences and gather supporting resources for each grade level
- Refine performance tasks based on new applications and new technologies.

Monitoring

- Identifying areas of growth, watching for areas of need as data illuminates.
- Clarifying grade level practices of promise and essential resources.



Links to Units

[Grade K](#)

[Grade 1](#)

[Grade 2](#)

[Grade 3](#)

[Grade 4](#)

[Grade 5](#)

[Grade 6](#)

[Grade 7](#)

[Grade 8](#)

[Algebra 1](#)

[Geometry](#)

[Algebra 2](#)

[Statistics & Probability](#)



VACANCIES

<u>Certified Positions</u>	<u>Location</u>	<u>Closing Date</u>
Director of Fiscal & Personnel Services	GPS	Until Filled
Teacher, Science	GHS	Until Filled

<u>Non-Certified Positions</u>	<u>Location</u>	<u>Closing Date</u>
School Nurse, Full-Time	GMS	Until Filled
School Nurse Coordinator, Part-Time	GPS	Until Filled
Café Food Service Manager, Full-Time	GHS	Until Filled
Café Service Provider, Full-Time	GES	Until Filled
Custodian, Full-Time	GHS	Until Filled
Wolverine Forward Assistant Instructors	GES	Until Filled

<u>Extra-Curricular Positions</u>	<u>Location</u>	<u>Closing Date</u>
-----------------------------------	-----------------	---------------------

RESIGNATIONS

<u>Name</u>	<u>Location</u>	<u>Position</u>	<u>Effective Last Day</u>
Kaminski, Tiffany	GHS	Teacher – Science, 1.0 FTE	June 13 th , 2025
Horstmann, Christian	GMS	Paraeducator, Full-Time	May 28, 2025
Drury, Melissa	GES	Wolverine B/A School Pgm. Instructor	May 15 th , 2025
Miles, Ashlynn	GES	Wolverine B/A School Pgm. Asst. Instructor	May 23 rd , 2025

APPOINTMENTS

<u>Name</u>	<u>Location</u>	<u>Position</u>	<u>Effective Date</u>	<u>Salary/Rate</u>
Anderson, Jamie	GES	School Psychologist, 1.0 FTE	August 25, 2025	Salary
Harris, Constance	GES	Music Teacher, 1.0 FTE	August 25, 2025	Salary

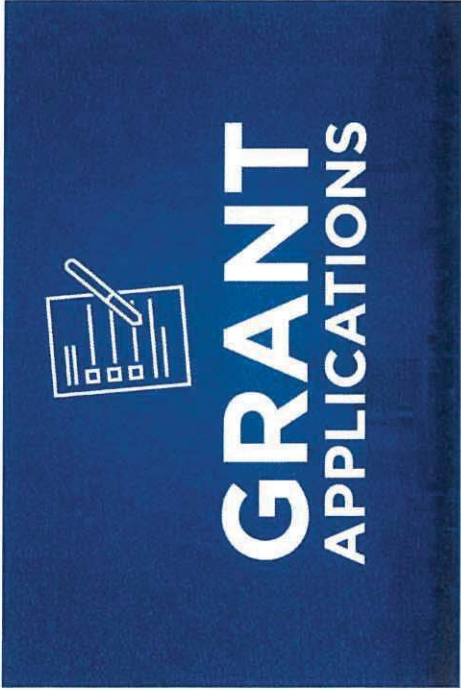
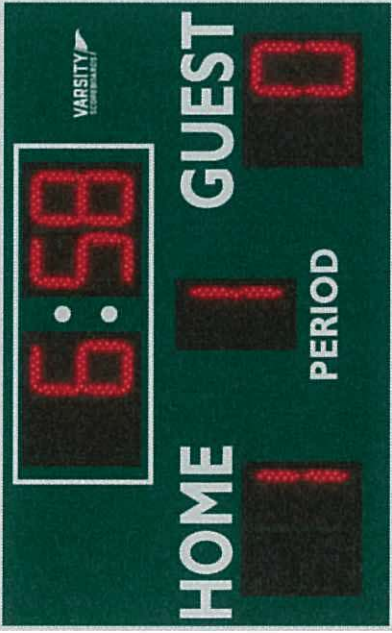
Notes:

June 10th, 2025

SUPERINTENDENT'S UPDATES

Special Meeting--June 10th, 2025

Update Drafted on June 6th, 2025

PROJECT/AREA	UPDATE
<p>GRANT APPLICATION</p>  A blue rectangular graphic with a white icon of a clipboard and pencil at the top left. Below the icon, the words "GRANT APPLICATIONS" are written in large, white, bold, sans-serif capital letters.	<ul style="list-style-type: none">● Griswold Public Schools is submitting an application to the Connecticut State Department of Education After-School Grant Program for Grades K-12 to enhance the Wolverines Forward Before & After School Program at Griswold Elementary School. If awarded, this funding—totaling over \$140,000—would support expanded enrichment partnerships, reduce family costs for professional development day programming, and increase opportunities for family engagement.
<p>COMMUNITY MULTIPURPOSE FIELD SCOREBOARD</p>  A green rectangular graphic representing a scoreboard. At the top left is the "VARSITY" logo. In the center, a large red digital display shows "6:58". To the left of the display is the word "HOME" and to the right is "GUEST". Below the display, the word "PERIOD" is centered. On either side of "PERIOD" are red digital displays showing the number "1".	<ul style="list-style-type: none">● As many people know, the Community Multipurpose Field Scoreboard has been a discussion topic in the community because of the “peeling paint.” We thank everyone for their patience.● Our Field Turf representative has assured us that the “face” of the scoreboard will be fully replaced due to a misapplication of paint/primer when the scoreboard was first installed.● At the time of the drafting of this update, the installation of the face is near completion.● This is very important to note: This will be at no cost to the district.