

VIRGINIA DEQ ENVIRONMENTAL EXCELLENCE PROGRAM

VEEP ANNUAL REPORT: EMS/POLLUTION PREVENTION PLAN RESULTS & UPDATE

Reports are due by May 20th for the **previous calendar year**.

See instructions for more information.

GENERAL INFORMATION 2010

FACILITY NAME: Albemarle County Public Schools

PRIOR FACILITY NAME:

MEMBERSHIP LEVEL: E3

FACILITY CONTACT

Name: Lindsay Check Snoddy

Phone: (434) 975-9340

Email: lcsnoddy@k12albemarle.org

FACILITY PERMIT NUMBERS

Water Discharge: VA0076244

Air: 40175

Water Discharge: VAG750045

Water Discharge: VAG0076244

Petroleum: 6022358

Petroleum: 6039404

Air: 40583

Petroleum: 6005047

Air: 40185

Petroleum: 6022357

Air: 40176

Petroleum: 6020477

Air: 81404

Petroleum: 6005048

Petroleum: 6005039

Air: 40178

Petroleum: 6005051

Air: 81405

Air: 40330

Petroleum: 6026642

Air: 40134

Petroleum: 6005045

Air: 40179

Petroleum: 6020278

Petroleum:	6005044
Air:	40177
Air:	81406
Petroleum:	6005042
Air:	40136
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Petroleum:	6005041
Air:	40137
Petroleum:	6005040
Air:	40171
Petroleum:	6005043
Petroleum:	6024231
Petroleum:	6005050
Hazardous Waste:	VAD988173373
Hazardous Waste:	VAD988203352

ENVIRONMENTAL IMPACT REPORTING

CATEGORY: Energy Use
 INDICATOR: Total Energy Use

Additional Information on Environmental Results (e.g., how did you achieve the reduction? if there were increases, what was the reason?):

Albemarle County Public Schools completed lighting upgrades at 80% of schools to contribute to the energy usage reduction. Additionally, schools receive monthly updates on energy and water usage. Each school has an ENERGY STAR rating, and 19 schools have earned the ENERGY STAR label. Retro-commissioning term contracts have just been awarded, and work has started on our first renewable energy installation at Henley Middle School. The Renewable Energy Resource Center will include a 30 kW solar PV system, a wind turbine and a solar thermal system for 60% of the hot water needs.

Normalizing Basis: Square footage of facility

Normalizing Basis Notes: Normalizing based on square footage allows us to easily compare years despite building additions. It is interesting to note that load has been added to many schools (air conditioning in gyms), and energy usage per square foot has decreased.

	Baseline	Year 1	Year 2	Year 3
Year	2008	2009	2010	
Actual Quantity	114023	114217	112534	
Normalizing Quantity	2257301	2432686.0509	2368961	
Units	MMBtu	MMBtu	MMBtu	
Normalizing Ratio	1.00	1.08	1.05	
Normalized Quantity	114023.00	105982.50	107229.76	

Cost Savings Last Year (do not include savings that resulted from reduced utility rates, etc. Only use those that resulted from pollution prevention efforts): \$215,792.00

Additional Cost Savings Information: The cost savings is cost avoidance compared to calendar year 2007 baseline usage.

ENVIRONMENTAL IMPACT REPORTING

CATEGORY: Waste

INDICATOR: Non-hazardous Waste Recycled

Additional Information on Environmental Results (e.g., how did you achieve the reduction? if there were increases, what was the reason?):

Non-hazardous waste recycling includes commingled recycling (paper, cardboard, aluminum, glass, plastic), used oil, construction waste, scrap metal, batteries, cell phones, electronic waste, bulbs, auction waste, waste fuel, ballasts, and used antifreeze.

Less material was recycled in 2010 compared to 2009 due to the decrease in construction projects. Three major construction projects were occurring in 2009, and the projects recycled over 100 tons of construction material.

Normalizing Basis: Square footage of facility

Normalizing Basis Notes: Square footage of all facilities used to normalize data

	Baseline	Year 1	Year 2	Year 3
Year	2008	2009	2010	
Actual Quantity	340.4	519	388.9	
Normalizing Quantity	2257301	2432686.0509	2368961	
Units	tons	tons	tons	
Normalizing Ratio	1.00	1.08	1.05	
Normalized Quantity	340.40	481.58	370.57	

Cost Savings Last Year (do not include savings that resulted from reduced utility rates, etc. Only use those that resulted from pollution prevention efforts): \$0.00

Additional Cost Savings Information: We earn funds from recycling scrap metal and used oil. Costs are offset through our commingled recycling program because we were able to decrease the number of trash hauls. Schools recycle ink cartridges and cell phones as fundraisers.

EMS & ENVIRONMENTAL PERFORMANCE UPDATE

EMS Development Progress:

Following are progress reports for the objectives and targets during the most recent EMS cycle.

(A) Safer Chemical Management

Objective: Audit Safer Chemical Management SOP

Target: Conduct the second annual audit of the Safer Chemical Management SOP by June 2011.

Progress for this objective includes:

- First Safer Chemical Management SOP Audit was conducted in July 2009
- Second Safer Chemical Management SOP Audit scheduled for June 2011

(B) Energy Management

Objective: Reduce natural resource depletion through energy conservation practices

Target: Implement Energy Management and Conservation Policy

Progress for this objective includes:

- Conducted trainings for custodial and maintenance crews on Energy Management and Conservation Policy
- Conducted after-hours energy inspections at the majority of schools
- Earned ENERGY STAR label for 19 schools
- Earned Top Performer Recognition by EPA due to an average Portfolio Manager rating above 75

(C) Reduce, Reuse and Recycle

Objective: Improve tracking of current recycling program and Improve Source Reduction

Target: Track commingled recycling for school awareness and Decrease trash through source reduction

A summary of progress for this objective is as follows:

- Formation of draft waste management policy to meet LEED for Existing Buildings: Operations & Maintenance requirements
- Trash collection reduction maintained at 10 schools
- Summer trash schedule reduced at all schools

(D) Green Building

Objective: All new school construction and major renovations should be LEED for Schools certified and smaller projects must follow the Green Project SOP

Target: Obtain LEED for Schools Certification for Brownsville, AHS and Greer Phase II additions

Progress for this objective includes:

- Brownsville Elementary School earned LEED for Schools Gold and plaque installed in front lobby
- Albemarle High School is in LEED for Schools Construction Phase Review
- Green Renovations SOP and Green Building Policy sent to County Executive for review

(E) LEED for Existing Buildings

Objective: Promote energy and resource conservation in existing buildings

Target: Obtain LEED for Existing Buildings Certification for a top-performing existing school

A summary progress for this objective are as follows:

- Monthly energy performance has been tracked to identify an efficient school candidate
- Henley Middle School registered under LEED for Existing Buildings: Operations & Maintenance 2009
- Credit documentation started for Energy & Atmosphere, Materials & Resources and Water Efficiency credits
- 2 part-time environmental interns are assisting with documentation and data collection

Energy management has remained a major focus for the Division this year. Many schools have become engaged with the conservation effort by conducting student energy audits and increasing awareness in the schools. Our rating average in ENERGY STAR's Portfolio Manager program is 82, which is up 11 points from our baseline of 71. An Energy Team gathers quarterly to discuss conservation projects and outreach.

Comments Related to Compliance Issue:

Not applicable during calendar year 2010.

ADDITIONAL INFORMATION

Facility Objectives:

1) Safer Chemical Management

-Objective: Audit Safer Chemical Management SOP

-Target: Conduct the second annual audit of the Safer Chemical Management SOP by June 2011

2) Energy Management

-Objective: Reduce natural resource depletion through energy conservation practices

-Target: Reduce energy usage at 5 schools through retro-commissioning projects

3) Water Conservation

-Objective: Maximize efficiency of water fixtures in schools

-Target: Improve water efficiency by 10% from FY2010-2011

4) Green Building

-Objective: All new construction and major renovations should be LEED for Schools certified and smaller projects must follow the Green Project SOP

-Target: Obtain LEED for Schools for AHS and implement Green Renovation SOP

5) LEED for Existing Buildings

-Objective: Promote energy and resource conservation in existing buildings

-Target: Obtain LEED for Existing Buildings Certification for Henley Middle School

6) After-Hours Event Scheduling

-Objective: Formalize procedures for after-hours event scheduling in schools

-Target: Develop SOP for managing after-hours events by September 1, 2011

7) Renewable Energy Resource Center at Henley Middle School

-Objective: Promote renewable energy education

-Target: Complete Renewable Energy Resource Center Installation and Outreach by December 31, 2011

Awards and Recognition:

-ACPS was again awarded third prize in the Virginia School Board Association's Go Green Virginia - Green Schools Challenge.

-ACPS received the ENERGY STAR label for 19 schools.

-ACPS received recognition by EPA as an ENERGY STAR Top Performer for 2010 (portfolio average ENERGY STAR rating must be 75 or higher)

Outreach to the Public:

-A press release was issued when ACPS received ENERGY STAR Top Performer recognition

-University of Virginia's Commercial Building Energy Systems course focused on energy conservation upgrades on 5 buildings during the semester. ACPS was able to provide data and access to Henley Middle School as part of the course.

Best Practices:

We added battery recycling receptacles to the high schools to increase collection rates for rechargable and household batteries. Metal Conversion Technologies charges for the household batteries and issues a credit for the rechargable batteries. This system eliminates the separation step and is much simpler for users.

Others:

ATTACHMENTS

A1-EMS-02-Objectives-Targets-ActionPlans 2011-2012.pdf

Cville Newsplex Story.pdf

Press Release - Brownsville LEED Gold 20101221-Revised.doc

SUBMITTAL

Name:

Initials:

Date: