

## VIRGINIA DEQ ENVIRONMENTAL EXCELLENCE PROGRAM

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

Reports are due by April 1 for the **previous calendar year**.  
See [instructions](#) for more information

#### GENERAL INFORMATION

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

Hazardous Waste:  
Solid Waste:  
Water: VAG751004, VA0076244  
Air:

Ground Water Withdrawal: PWSID 2003810, PWSID 2003170,  
PWSID 2003885, PWSID 2003660,  
PWSID 2003880, PWSID 2003162,  
PWSID 2003680

Wetlands (VWP):

Toxics Release Inventory:

Facility Registration System (FRS):

Other (local environmental, etc.):

FIFRA:

#### ENVIRONMENTAL IMPACT REPORTING

CATEGORY: Waste  
INDICATOR: Non-hazardous Waste Recycled  
Additional Information on Environmental Results (e.g., how did you achieve the reductions? if there were increases, what was the reason?): The major increase in non-hazardous waste recycled is a result of a construction waste recycling program, carpet recycling, and a continued commingled recycling program in each school. Albemarle County Public Schools (ACPS) have the capability of combining mixed paper, cardboard, aluminum, steel, tin, glass and plastics #1 and #2 in the same container. ACPS has a volunteer recycling coordinator in each school who promotes the recycling program, relays problems and successes to Building Services, and serves as the recycling expert for the school staff and students. ACPS is renting a 20-cubic yard compactor for commingled recycling, and this serves as a great tracking tool because we receive a true recycling weight for each load.  
Normalizing Basis: Square footage of facility  
Normalizing Basis Notes: The square footage is for each facility managed by the Building Services

Department for Albemarle County Public Schools. These facilities include Albemarle High School, Monticello High School, Western Albemarle High School, Murray High School, Burley Middle School, Henley Middle School, Jouett Middle School, Sutherland Middle School, Walton Middle School, Agnor Hurt Elementary School, Baker-Butler Elementary School, Broadus Wood Elementary School, Brownsville Elementary School, Cale Elementary School, Crozet Elementary School, Greer Elementary School, Hollymead Elementary School, Meriwether Lewis Elementary, Murray Elementary School, Red Hill Elementary School, Scottsville Elementary School, Stone Robinson Elementary School, Stony Point Elementary School, Woodbrook Elementary School, Yancey Elementary School, CATEC/Ivy Creek School, Vehicle Maintenance Facility, and the Building Services area.

|                     | Baseline | Year 1  | Year 2 | Year 3 |
|---------------------|----------|---------|--------|--------|
| Year                | 2008     | 2009    |        |        |
| Actual Quantity     | 340.4    | 519.0   |        |        |
| Normalizing Ratio   | 1        | 1.0269  |        |        |
| Normalized Quantity | 340.4    | 505.405 |        |        |

Units: tons

Cost Savings Last Year (do not include savings that resulted from reduced utility rates, etc. Only use those that resulted from pollution prevention efforts): \$ 714

Additional Cost Savings Information: Scrap metal brought to a local recycling operation generated revenue and avoided landfill costs for disposal. Cost savings resulted from not landfilling the electronic waste. The electronic waste is recycled at no cost, and therefore the cost of landfill disposal is eliminated.

CATEGORY: Energy Use

INDICATOR: Total Energy Use

Additional Information on Environmental Results (e.g., how did you achieve the reductions? if there were increases, what was the reason?): Albemarle County Public Schools completed lighting upgrades at 5 schools to contribute to the energy usage reduction. Additionally, schools began to receive monthly updates on energy and water usage. Each school has an ENERGY STAR rating, and 4 schools have earned the ENERGY STAR label. Fifteen additional schools are eligible for the ENERGY STAR label, and site verifications are being scheduled weekly.

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       |        |        |
| Actual Quantity     | 114023   | 114217     |        |        |
| Normalizing Ratio   | 1        | 1.0269     |        |        |
| Normalized Quantity | 114023   | 111225.046 |        |        |

Units:

MMBtu

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

\$ 33,000

Additional Cost Savings Information:

Lighting upgrades were completed at Scottsville Elementary, Red Hill Elementary, Crozet Elementary, and Western Albemarle High School. Lighting upgrades consisted of ballast and bulb replacement (T-12 to T-8 bulbs) and motion sensor installation. Estimated savings are due to retrofit of fixtures only, and the cost of the projects has not been included. A payback of less than 5 years is expected.

#### 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 first annual audit of the Safer Chemical Management SOP by June 2009. Progress for this objective includes: -Safer Chemical Management SOP Audit was conducted in July 2009 - Audit report submitted to School Board (B) Energy Management Objective: Reduce natural resource depletion through energy conservation practices Target: Implement Energy Management and Conservation Policy and Utility Tracking Software Progress for this objective includes: -Purchased utility tracking software -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 4 schools (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: -Information on recycled paper procurement sent to schools -Trash collection frequency reduced at 10 schools (D) Water Conservation Objective: Minimize stormwater runoff from school sites Target: Complete a cistern and natural grass project to minimize the stormwater runoff and irrigate with

rainwater when possible A summary of progress for this objective is as follows: - Irrigation amounts were analyzed at high schools -Irrigation schedule put into place for this year; monthly updates will update schedule with rainfall amounts (E) 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 is in LEED for Schools construction review -Albemarle High School is in LEED for Schools Design Phase Appeal Review -Green Renovations SOP and Green Building Policy sent to County Executive for review (F) 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 -Retrocommissioning proposal obtained for a candidate school Energy management has been 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 75, which is up 4 points from our baseline. An Energy Team gathers quarterly to discuss conservation projects and outreach.

Comments Related to Compliance Issues: Not applicable during calendar year 2009.

#### **ADDITIONAL INFORMATION**

Awards and Recognition: -ACPS was awarded third prize in the Virginia School Board Association's Go Green Virginia - Green Schools Challenge. -ACPS received the ENERGY STAR label for 4 schools.

Outreach to the Public: -A press release was issued as part of ENERGY STAR's 10th anniversary public outreach effort (see attached). - University of Virginia student groups have collaborated with elementary and middle schools to teach them about conservation and recycling.

Best Practices: We added TechnoTrash recycling containers to each school to capture a small, but important, waste stream of CDs, VHS tapes, diskettes, and other electronic accessories. This recycling program is in addition to our electronics recycling program that is for larger items like laptops, desktops, projectors,

etc. Additionally, we recycle our rechargeable and household batteries in a single stream instead of separate streams. Metal Conversion Technologies charges for the household batteries and issues a credit for the rechargeable batteries. This system eliminates the separation step and is much simpler for users. We conducted waste audits at 2 high schools to determine how much recyclable material was ending up in the trash stream. The experience was fun for students, and the information is valuable for improving our commingled recycling program.

Others:

Attachments:

[News Release Four ACPS Buildings Earn ENERGY STAR.pdf](#)

[2009 Recycling Totals.pdf](#)

[UVA Students Partner with Greer 2nd Graders for Global Sustainability.pdf](#)

#### **SUBMITTAL**

Initials:

Date:

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For assistance, please contact Keith Boisvert at (804)698-4225 or at [kaboisvert@deq.virginia.gov](mailto:kaboisvert@deq.virginia.gov)