

**VIRGINIA DEQ ENVIRONMENTAL EXCELLENCE PROGRAM**

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

Reports are due by April 1st for the **previous calendar year**.

See instructions for more information.

**GENERAL INFORMATION 2012**

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](mailto: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
:	
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?):

Schools receive monthly updates on energy and water usage. Each school has an ENERGY STAR rating, and 22 schools have earned the ENERGY STAR label. A retro-commissioning contract for Western Albemarle High School has been completed, and our first renewable energy installation at Henley Middle School has been operating for almost a year. The Renewable Energy Resource Center includes a 42 kW solar PV system, a wind turbine and a solar thermal system for 60% of the hot water needs. Live data monitoring is available at: [http://live.deckmonitoring.com/?id=henley\\_middle\\_school](http://live.deckmonitoring.com/?id=henley_middle_school)

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.

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Year	2011	2012		
Actual Quantity	103,395.8	96,741		
Normalizing Quantity	2,368,961	2,382,344		
Units	MMBtu	MMBtu		
Normalizing Ratio	1	1.0056		
Normalized Quantity	103,395.8	96,197.55		

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

\$200,004.00

Additional Cost Savings Information:

Cost avoidance based on electricity, natural gas and fuel oil usage in 2012 compared to 2010.

**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, used antifreeze and food waste.

Recycled material increases are primarily due to increased auction materials, composted food waste, and recycled construction and demolition debris.

Normalizing Basis:

Square footage of facility

Normalizing Basis Notes:

Square footage of all facilities used to normalize data

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Year	2011	2012		
Actual Quantity	345.6	421		
Normalizing Quantity	2,368,961	2,382,344		
Units	tons	tons		
Normalizing Ratio	1	1.0056		
Normalized Quantity	345.6	418.635		

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

\$1,272.00

Additional Cost Savings Information:

Cost savings are listed for price paid for scrap metal.

## **EMS & ENVIRONMENTAL PERFORMANCE UPDATE**

### EMS Development Progress:

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

#### (a) Energy Management

Objective: Reduce natural resource depletion through energy conservation practices

Target: Reduce energy usage at 2 schools through retro-commissioning projects

Progress: Retro-commissioning at Western Albemarle High School completed by Facility Dynamics. Exploring program with Department of Energy to have additional audits performed at no cost.

#### (b) Water Conservation

Objective: Maximize efficiency of water fixtures in schools

Target: Improve water efficiency by 5% from FY2010-2011

Progress: The division continues to install 0.5 gallon/minute aerators on sinks throughout schools. Fixture upgrades are planned for the summer months.

#### (c) LEED for Existing Buildings

Objective: Promote energy and resource conservation in existing buildings

Target: Obtain LEED for Existing Buildings Certification for Henley Middle School and Crozet Elementary School

Progress: Schools are registered with LEED EBOM. Site credits are being developed by Environmental interns. Sustainable Purchasing policy in development.

#### (d) Renewable Energy Resource Center at Henley Middle School

Objective: Promote renewable energy education

Target: Complete Renewable Energy Resource Center

Progress: Exterior and interior signage being developed by Henley students in Graphic Design class. Draft signage completed and ready for production. Book and science kit resources housed in media center and available to all students and teachers. Interns helped run KidVenture in February 2012 at Virginia Discovery Museum.

### Comments Related to Compliance Issue:

No compliance issues.

## **ADDITIONAL INFORMATION**

### Facility Objectives:

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

#### (a) Energy Management

Objective: Reduce natural resource depletion through energy conservation practices

Target: Reduce energy usage at 2 schools through retro-commissioning projects

#### (b) Water Conservation

Objective: Maximize efficiency of water fixtures in schools

Target: Improve water efficiency by 5% from FY2010-2011

#### (c) LEED for Existing Buildings

Objective: Promote energy and resource conservation in existing buildings

Target: Obtain LEED for Existing Buildings Certification for Henley Middle School and Crozet Elementary School

#### (d) Renewable Energy Resource Center at Henley Middle School

Objective: Promote renewable energy education

Target: Complete Renewable Energy Resource Center

### Awards and Recognition:

Virginia Green Ribbon School for Sutherland Middle School - Nominee for USED National Green Ribbon School  
Virginia Green Ribbon School for Stony Point Elementary School - Nominee for USED National Green Ribbon School  
Virginia School Boards Association - 2nd Place in 2012 VSBA Green Schools Challenge

**Outreach to the Public:**

Intern participation in KidVention at Virginia Discovery Museum on February 23, 2012

(<http://www.vadm.org/eventsKidvention.html>)

News story on composting at Sutherland Middle School

Host environmental program interns through University of Virginia's University Internship Program

**Best Practices:**

Commercial composting has been implemented in Sutherland Middle School, Meriwether Lewis Elementary and Jouett Middle School. The composting program has resulted in diversion of over 6.5 tons of food waste. We plan to add at least 3 schools at the beginning of the next school year. Black Bear Composting began offering commercial composting to our area in 2011.

**Others:**

**ATTACHMENTS**

[Newsplex SUT Composting.pdf](#)

[ACPS Q4 Report.pdf](#)

[KidVention.pdf](#)

**SUBMITTAL**

Name:

Initials:

Date: