U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

U.S. Department of Education Green Ribbon Schools

2011-2012 Presentation of Nominee to the U.S. Department of Education

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OMB Control Number: 1860-0509
Expiration Date: February 28, 2015

PART I - ELIGIBILITY CERTIFICATION

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)

2. The school achieves or comes close to achieving the goals of all three green Ribbon Pillars: 1) environmental impact and energy efficiency; 2) healthy school environments; and 3) environmental and sustainability education.

3. The school has been evaluated and selected from among schools within the state or Nominating Authority's jurisdiction (BIE, DoDEA), based on *documented achievement* toward the three Green School Pillars and Elements.

4. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.

5. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.

6. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.

7. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.

8. The school meets all applicable federal, state, tribal and local health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

For Public Schools only: (Check all that apply) [ ] Charter [ ] Title I [ ] Magnet [ ] Choice
Name of Principal: Susan Bachmann
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: Folger McKinsey Elementary School
(As it should appear in the official records)
School Mailing Address: 175 Arundel Beach Road
(If address is P.O. Box, also include street address.)
Severna Park, Maryland 21146
City State Zip

County: Anne Arundel State School Code Number* 022102

Telephone (410) 222-6560 Fax (410) 255-3060

Website:http://www.aacps.org/html/schol/Elementary/Folgmces.asp
E-mail: sbachmann@aacps.org

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4, and certify that to the best of my knowledge all information is accurate.

Susan Bachmann Date 3/20/12
(Principal's Signature)

Name of Superintendent* Kevin M. Maxwell, Ph.D.

District Name*Anne Arundel County Public Schools Tel.(410) 222-5303

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4, and certify that to the best of my knowledge all information is accurate. I concur that this is one of the highest performing green school applicants in our state.

Kevin M. Maxwell Date 3/28/12
(Superintendent's Signature)

**Private Schools: If the information requested is not applicable, write N/A in the space.*

PART II – SUMMARY OF ACHIEVEMENTS

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Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school is representative of your state's highest achieving green school efforts in approximately 600-800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School. Be sure to note if students were actively involved in preparing the application.

This summary should be written as a stand-alone document. It will provide the ED review panel with an overview of the school's green activities that were detailed in the application to the state, DoDEA or BIE evaluators. If the school is awarded a Green Ribbon, this information may be shared with other schools, candidates for next year, the press, and the public.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

For the pilot year, the Nominating Authority must review nominated schools for high achievement based on the schools' q*uantified achievement*[1] toward reaching the goals of each of the three Green School Pillars and elements.[2]

For each school being nominated by the Authority to ED, please attach state (or equivalent) evaluation materials (application) based on the Nominating Authority Evaluation Support Framework provided by ED to facilitate your evaluation of schools.

The Nominating Authority must review and sign the following certification for each school being nominated to ED.

Nominating Authority's Certifications

The signature by the Nominating Authority (the CSSO, DoDEA or BIE) on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)

1 The quantified assessment should be based on the common metrics provided in state level evaluator guidance.
2 In future years, evaluators will be required to review the school community's comprehensive *green school plan* that incorporates, at a minimum, the plan elements listed under "The Three Pillars and Elements," and a *baseline assessment* for each of the elements of the plan; however, this documentation is not a requirement in the pilot year.

2. The school achieves or is one of those overseen by the Nominating Authority which comes the closest to achieving the goals of all three green Ribbon Pillars: 1) environmental impact and energy efficiency; 2) healthy school environments; and 3) environmental and sustainability education.

3. The Nominating Authority has evaluated the school and selected it for submission to the U.S. Department of Education from among those schools overseen by the Nominating Authority which have applied for a Green Ribbon, based on *quantified achievement* toward the three Green School Pillars and Elements.

4. The school and the district meet applicable federal civil rights and federal, state, tribal and local health, environmental and safety requirements in law, regulations and policy and are willing to undergo EPA on-site verification.

Name of Nominating Agency: Maryland State Department of Education

Name of Nominating Authority: Bernard J. Sadusky, Ed.D.

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application, including the award and eligibility requirements on pages 2-4, and certify, to the best of my knowledge through a documentary verification assessment, that the school meets the provisions in this Part of the Nominee Presentation Form.

(Nominating Authority's Signature)

Date March 21, 2012

Note to Nominating Authority: The application, including the signed certifications should be converted to a PDF file and emailed to Director, ED-Green Ribbon Schools at green.ribbon.schools@ed.gov, or mailed by expedited mail or a courier mail service (such as Express Mail, FedEx or UPS) to Andrea Suarez Falken, Director, Green Ribbon Schools, Office of Communications and Outreach, 5E227, U.S. Department of Education, 400 Maryland Ave. SW, Washington, DC 20202-8173.

Folger McKinsey Elementary School (FMES) has always been a county wide and state wide leader in the implementation of environmental awareness and stewardship curricula. However, in light of the renovations and new construction, Folger McKinsey now has a green facility, as well. As you will see from our application, FMES meets standards for all three pillars outlined in the application, while making great strides to address every element identified.

Environmental Impact and Energy Efficiency - Renovations to the building have drastically improved the water and energy efficiency of the site. Additionally, best practices for the environment were utilized from the beginning of construction. During the demolition phase dumpsters were furnished by the contractors allowing 100% of the electrical equipment, asphalt, concrete, and cleared debris to be recycled.

Special attention was also given to the outdoor plan. In addition to providing a landscape scheme that utilizes drought resistant, indigenous plantings, rainwater collection barrels were installed through a student-led project. These barrels reduce the amount of potable water that might be used to water landscape areas, but more importantly, will become instructional tools for the staff to educate the students in responsible water use for irrigation purposes.

Healthy School Environments – All aspects of a healthy school environment are part of the FMES plan. One, of many, initiatives to ensure students have regular access to the outdoors, is that more that 50% of PE classes are conducted outside, recognizing that regular and positive experiences outside nurture student appreciation and respect for the environment in which they live. In addition to encouraging an active lifestyle, nutrition is a primary focus. FMES participates in a Tasting of the Rainbow event each month, providing students with the opportunity to try new fresh fruits and vegetables. Additionally, we participate in Farm to School Week, providing students with local fruits and vegetables.

Environmental and Sustainability Education - Folger McKinsey Elementary's environmental goals are in direct alignment with the school system's goals. Anne Arundel County Public Schools strives to ensure every student will graduate from high school able to read critically, write coherently, think creatively, solve complex mathematical problems and understand their connection to the natural world. At FMES, students develop the skills, attitudes and motivation to act as environmental stewards.

The newly created courtyard provides numerous venues for increased environmental appreciation and hands-on, outdoor learning. The "OC" (outdoor classroom) is a place in which Folger can make the County's "No Child-Left Inside" initiative a reality. Through staff, student and volunteer efforts, in partnership with local businesses including Peregrine Construction, Turf Equipment, and Arlington Echo Center for Outdoor Education, the OC will provide instructional opportunities for all students. Featuring a butterfly garden, raised flower beds, a science lab, reading area, stage, "explora-torium" to dig and witness nature, and a water-feature emulating the sea-level fen uniquely characteristic of this region, the OC curriculum plan encompasses science, language arts, music, art, and math. This emphasizes the critical nature and ease of accomplishing environmental

literacy: it's in all we do already, but we must seize the opportunity to make the connection between traditional curriculum requirements and the natural world, using the environment as a valuable instructional tool to attain educational objectives, in part by simply getting outside.

Through annual environmental field trips and use of the schoolyard at all grade levels, along with a strong partnership with Arlington Echo Outdoor Education Center, Folger students engage in active lessons to make practical applications to the environment. In addition to each grade level focusing on a specific issue, projects such as growing bay grasses, and raising terrapins and eels make environmental literacy a reality at Folger.

Community and business partnerships help to strengthen the educational experience at Folger, by extending the learning environment beyond the boundaries of the school. The Greater Severna Park Watershed Action Group hosts an annual Earth Day Festival, drawing thousands to participate in environmental education. Folger students and staff participate annually with a demonstration and activity booth at the event, as well as in the planning and implementation of the program.

Northrup Grumman and the Naval Academy are partners in STEM initiatives, including the school-wide environmental science fair held annually for all Folger students. Additionally, these partners provide grants to support a variety of science programs and experiences, such as the Sea Perch program, where students have the opportunity to build under-water robots. These partnerships support problem-based learning in STEM, as defined by the Buck Institute, providing environmental issues investigation opportunities that emphasize local issues, enabling students to make connections to the world in which they live.

With all of the accomplishments mentioned, and plans for continued improvement, Folger McKinsey Elementary School is representative of Maryland’s highest achieving green school and is worthy of the title U.S. Department of Education Green Ribbon School.

Green Ribbon Schools Maryland Application 2012

Response ID: 387 Data

3. Page Three

School Contact Information

School Name

Folger McKinsey Elementary School

Street Address

175 Arundel Beach Road

City

Severna Park

State

MD

Zip

21146

School Website URL

folgermckinsey.org

Principal First Name

Susan

Principal Last Name

Bachmann

Principal Email Address

sbachmann@aacps.org

Principal Phone Number

410-222-6560

Lead Applicant First Name (if different from principal)

Chris

Lead Applicant Last Name (if different from principal)

Myers

Lead Applicant Email (if different from principal)

myerschris@yahoo.com

Lead Applicant Phone Number (if different from principal)

410-421-9009

Level

Elementary (PK - 5 or 6)

School Type

Public

How would you describe your school?

Suburban

Does your school have at least 40 percent of your students from a disadvantaged background?

No

Public School LEA and School Code (6 digits)
Example: 300406 [Prince George's (30), Forest Park HS (0406)]

22102

5. Page Five

QCC1: Is your school participating in a local, state, or nationally recognized green school program which asks you to benchmark progress in some fashion, e.g., MAEOE Green School Program, National Wildlife Federation Eco-Schools USA, Green Schools Alliance, Collaborative for High Performance Schools, or Project Learning Tree's Green Schools?

Yes

Which program(s) are you participating in and what level(s) have you achieved?

MAEOE Green School (2006, 2009)

QCC2: Has your school, staff or student body received any awards for environmental or sustainability stewardship/action?

Yes

Please list the awards you have received and the years you received them.

MD Green School (2006, 2009); 2008 Anne Arundel County Earth Week Committee - Volunteer for the Earth Award for Folger's Recyclign Program Volunteer of the Year (Edwin Takemori); Chesapeake Connections Teacher Certification (Sue Rodger and Debbie Bangert)

7. Page Seven

Q1A1: Can your school demonstrate a reduction in its Greenhouse Gas emissions?

Yes

Please provide the following information:

How did you document this reduction (e.g., the inventory module from Clean Air Cool Planet's Campus Carbon Calculator)? : Not yet a state requirement. Calculations not yet completed. However, the existing mechanical equipment was over 20 years old and all heat generating and domestic water heating equipment was replaced with new, energy conscience equipment, which will result in a reduction of the school's greenhouse gas emissions.

Q1A2: Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification?

No

If your school received the certification, please note the year it was achieved and the score received:

Q1A3: Has your school reduced its total non-transportation energy use from an initial baseline?

Yes

Please provide the following information:

How did you document this reduction (i.e., ENERGY STAR portfolio, district report)? : Not a state requirement. Calculations not yet completed. However, the existing mechanical equipment was over 20 years old and all heat generating and domestic water heating equipment and lighting was replaced with new, energy conscience equipment, which will result in a reduction of the school's energy use.

Q1A4: What percentage of your school's energy is obtained from:

On-site renewable energy generation : 0
Purchased renewable energy : 7.2%

In what year was your school constructed?

1958 single story school with 29,043 GSF. 1970 renovation added classroom space and media center making school 52,849GSF. 2010 modernization

What is the total building area of your school?

83,175 square feet

Q1A5: Has your school constructed a new building or renovated an existing building in the past ten years?

Yes

Please provide the appropriate information requested below.

If your school has been constructed and/or renovated in the past three years, have you participated in any of the following programs: Leadership in Energy and Environmental Design (LEED), Collaborative for High Performing Schools (CHPS), Green Globes or other standards? : Yes
What is the total constructed area? : 83,175 square feet
What is the total renovated area? : 19,627 square feet
What certification (if any) have you already received and at what level, e.g., Silver, Gold, Platinum, or what certification or point total are you currently tracking as a goal toward what certification level? : LEED certification was not a requirement for the design or construction teams; yet several sustainable design concepts were implemented. (see Q1A7)

Q1A6: Does your school reduce and/or offset the greenhouse gas emissions from building energy use?

Yes

Please provide the following information:

Time period measured (mm/yyyy - mm/yyyy) : Calculations not yet completed

Q1A7: Please indicate which green building practices your school is using to ensure your building is energy efficient.

Other (please describe): Sustainable design concepts include: Water Efficiency; Building Thermal Envelope; Site Pollution Prevention; Building Re-Use; Glazing Materials; Exterior Lighting Controls; Interior Lighting Fixtures; Building System Commissioning; and Daylighting.

8. Page Eight

Q1B1: Can you demonstrate a reduction in your school's total water consumption (measured in gallons/occupant) from an initial baseline?

Yes

Please provide the following information:

How did you document this reduction (i.e., ENERGY STAR Portfolio Manager, school district reports)? : Calculations not yet

completed. Reduction is known due to replacement of all plumbing fixtures with water-saving fixtures that meet or exceed current baseline requirements.

Q 1B2: Which of the following practices does your school employ to increase water efficiency and ensure quality? (Please check all that apply.)

Our school uses alternative water sources (i.e., grey water, rainwater) for irrigation before potable water.
Our school's landscaping is water-efficient and/or regionally appropriate.
Our school has a program to control lead in drinking water (including voluntary testing and implementation of measures to reduce lead exposure)
Taps, faucets, and fountains at our school are cleaned at least twice annually to reduce contamination and screens and aerators are cleaned at least annually to remove particulate lead deposits.

Please provide the following information about your school's landscaping

What percentage or your total landscaping is considered water-efficient or regionally appropriate? : 100%
What types of plants are used and where are they located? : All of the plantings (shade and ornamental trees, shrubs, and ground cover) are indigenous to the coastal plan region. All plantings are adaptive to sandy soil conditions and the overall landscape characteristics present throughout the Lower Chesapeake Bay Region. The school is located in the Magothy River sandlands. Additional plantings include a native seed mixture planted in stormwater management areas. The seed mixture, in addition to the shade and ornamental trees and shrubs, are arranged to aesthetically enhance on-site stormwater management facilities. Water conservation has been obtained by selecting native plant species that require less water once established, eliminating the need for on-site irrigation.

Please describe the alternate water sources used for irrigation. (Maximum 100 words)

In addition to providing a landscape scheme that utilizes drought resistant, indigenous plantings, rainwater collection barrels were installed through a student-led project. Use of these barrels reduce the amount of potable water that might be used to water landscape areas, but more importantly, will become instructional tools for the staff to educate the students in responsible water use for irrigation purposes. Also, rainscaping gardens are part of the school grounds, following BPM to slow down water and allow for infiltration. The meadow was installed by students, staff and community volunteers in 1987; a hands-on lesson to address environmental issues.

Please describe the program you have in place to control lead in drinking water. (Maximum 100 words)

All fixtures and supply piping have been replaced as a result of the renovation process; all are lead-free. The project specifications did not allow solder containing lead or antimony. Additionally, all sink and lavatory faucets and drinking fountains were required to be lead-free, as defined by ANSI/NSF-61, Section 9. Since on public water supply, the county tests water samples, per public water supplier guidelines. School maintenance staff conduct monthly cleaning and maintenance of all taps; more aggressively cleaning during summer months. The Drinking Water Fountain Flushing Program, requiring weekly flushing of all water fountains, is adhered to.

Q 1B3: Our school's drinking water comes from:

Municipal water source

Please describe how the water source is protected from potential contaminants. (Maximum 100 words)

Q 1B4: Please describe any additional progress your school has made towards improving water quality, efficiency, and conservation. (Maximum 200 words)

Back-flow prevention devices have been installed on all critical locations (incoming municipal domestic water supply, incoming sprinkler system supply, and make-up water supply to the boiler closed loop). Additionally, storm water quality has been designed to direct run-off through both above-ground and below-ground filtration facilities. Approximately 80% of total suspended solids, which would otherwise enter the municipal storm drain system and eventually enter the Chesapeake Bay, are removed by on-site pretreatment facilities. Rainwater runoff is further filtered through stone and native soils in on-site underground filtration facilities. There is no site runoff from the infiltration facilities, reducing the flows to the municipal storm drain system and the Chesapeake Bay. All new fixtures are water-saving, meeting or exceeding current baseline requirements. Technologies implemented include 0.5gpm aerators on all faucets and lavatories and low-flow water closets. The fields and grounds are not irrigated; they're maintained naturally through water-efficient, regionally appropriate landscaping. Recognizing the direct connection to the Chesapeake Bay, students have stenciled area storm water drains, further educating the community in improving water quality. Plans are in place for students to label additional drains in and around the school, strengthening

Folger's commitment as stewards of the Bay.

9. Page Nine

Q 1C1: What percentage of solid waste is diverted from landfilling or incinerating due to recycling and/or composting (i.e., Recycling Rate)?

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected). : (1) 6 yd x 4 collections x 100% = 24 cu yd
B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected). : (1) 6yd x 8 collections x 100% = 48 cu yd
Recycling Rate = ((B + C) ÷ (A + B + C) x 100) : (48 + 0) divided by (24 + 48 + 0) = 48/72 = 66.66%
C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected). : 0

Q 1C2: What percentage of your school's total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed by the Forest Stewardship Council, Sustainable Forestry Initiative, American Tree Farm System or other certification standard. (If a product is only 30% recycled, only 30% of the cost should be counted.)

100% is SFI sourced

Q 1C3: What percentage of the total office/classroom paper content by cost is totally chlorine-free (TCF) or processed chlorine free (PCF)

0%

Q 1C4: Please provide the following information about your school's hazardous waste

How much hazardous waste does you school produce (lbs/person/year)? : none generated
How is the amount generated calculated? : n/a
List the types of hazardous waste generated : n/a
How is hazardous waste monitored? : n/a

Q 1C5: Which of the following benchmarks has your school achieved to minimize and safely manage hazardous waste? (Please check all that apply.)

Our school disposes of unwanted computer and electronic products through an approved recycling facility or program.
Our school has a hazardous waste policy for storage, management, and disposal that is actively enforced.
Our custodial program has been certified to the Green Seal Standard for Commercial and Institutional Cleaning Services (GS-42), the ISSA Cleaning Industry Management Standard - Green Building or an equivalent standard.
All our computer purchases are Electronic Product Environmental Assessment Tool (EPEAT) certified products

Which green cleaning standard is used?

Folger uses biodegradable, reduced or low VOC content, low toxicity, reduced packaging, and/or low life energy use products.

Q 1C6: Does your school use "third party certified" green cleaning products?

Yes

Please provide the following information about the green cleaning products used in your school:

What percentage by volume of all cleaning products in use are "third party certified" green cleaning products? : 80%
What specific green cleaning product standard (Green Seal, Ecologo, etc.) does the school use? : Green Seal

Q 1C7: What other indicators do you have of your school's reduction of solid waste and elimination of hazardous waste? (Maximum 200 words)

Our active Green School team (staff, students and volunteers) implemented waste reduction and pro-recycling efforts at school and the surrounding community: Waste Free Wednesdays - encourages packing lunches without waste, measure and promote change; America Recycles Day - all classes participated in hands-on learning to differentiate between trash and recyclables; how to pack no-waste lunches; Abitibi Paper Recycling - student recycling team collects and manages Magazine Recycling Contests

- results in households recycling extensively Aluminum and Ink Jet Recycling collections. While the school renovation was not a LEED project requiring that waste be diverted from landfills, this was often implemented as a best practice for the environment. The electrical contractor furnished dumpsters during their demolition phase and 100% of the removed equipment was recycled. The Site Contractor hauled 100% of the clearing debris to a local recycling plant to generate mulch. They hauled 100% of the site asphalt and concrete demolished to a local recycling plant. The masonry aspect of the project, both new work and demolition, generated tremendous waste. 510 cubic yards of concrete, asphalt, brick and block waste were removed to a local rubble recycling facility for use in other local construction projects.

Q 1D1: What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school?

99%

How was this data collected and calculated? (Maximum 100 words)

Transportation Department personnel from AACPS, including a Transportation Specialist and an Operations Technician, working with school administrators, determine the transportation plan for the school community. Every student is classified within the school's SMS and SASI database programs as bus riders (79%), walkers/bike riders (20%) and "other" which is 1%. 12 buses transport more than 450 students. Over 100 students are within 1 mile from the school, walking or biking via safe, suggested routes. During school construction, Folger was temporarily relocated about 10 miles away. 14 buses transported almost 100% of all students during this time.

Q 1D2: Which of the following policies or programs has your school implemented? (Please check all that apply.)

Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.
Our school has designated carpool parking stalls.
Our school has a well-publicized no idling policy that applies to all vehicles (including school buses).
Our school has established Safe Pedestrian Routes to school which are distributed to parents and posted in our office.

Q 1D3: Describe how your school transportation use is efficient and has reduced environmental impacts (e.g., the percentage of school-owned electric/hybrid/alternative fuel vehicles in your fleet, or other indicators of significant reductions in emissions).

Buses are replaced every 12 years, meeting the highest safety and air quality standards. Buses purchased within the last three years meet the highest federal EPA air pollution standards. Our newest buses utilize Selective Catalytic Reduction technology, an emissions reduction system requiring Diesel Exhaust Fluid (DEF), reducing NOx emissions to near zero levels, while delivering improved fuel economy. DEF is a non-toxic solution of 65.7% water and 32.5% automotive grade urea, helping convert NOx into nitrogen gas and water vapor, meeting national purity and composition standards. As non-bus vehicles are replaced, additional hybrids will be purchased.

Q 1D4: What percentage of the school grounds are devoted to ecologically beneficial uses (school vegetable garden, wildlife or native plant habitats, outdoor classroom, environmental restoration projects, rain garden, etc.) or socially/culturally beneficial uses (e.g., playgrounds, outdoor spaces designed and used regularly for social interaction, athletic or recreational areas, walking or running trails, etc.)?

89.6%

Q 1D5: This is the end of Pillar 1. Please describe any other accomplishments or progress your school has made towards reducing/eliminating environmental impacts or improving your energy efficiency. (Maximum 200 words)

Sustainable design concepts implemented at FMES: Water Efficiency: low-flow water closets and lavatory faucets reduce water required for operation; reduces amount of sewer effluent that must then be treated by local municipality. Building Thermal Envelope: Exterior and roof replacement reduce energy use for HVAC. Site Pollution Prevention: LEED SSp2-Construction Activity Pollution Prevention were met for improved sediment and erosion control. Building Re-Use: Renovation of 19,267 square feet but floor, crawl space, structural elements, corridor walls remained, reducing landfill waste. Glazing Materials: Windows with thermally broken, double-pane low-emissivity reduce interior heating and cooling loads, reducing energy needed for HVAC. Reduction in ultra-violet light passing into building reduces sun damage. Exterior Lighting: Time and daylight sensors added; horizontal light traps - all reduce "light pollution". Interior Lighting Fixtures: All energy efficient using T-8 fluorescent bulbs; maintained required foot-candle levels in critical learning environments. Building System Commissioning: Third party agent to review proper HVAC operation. Daylighting: All instructional areas now have direct exterior, natural light. The education that's imparted to the students teaches practical applications of environmental stewardship. Through problem based learning in grades K-5, students learn to take action to solve environmental issues.

11. Page Eleven

Q2A1: Which of the following practices does your school employ with regards to pest management? (Please check all that apply.)

Pest control policies, methods of application, and posting requirements are provided to parents and school employees.
Our school has an integrated pest management plan in place to reduce and/or eliminate pesticides.
Copies of pesticide labels, copies of notices, MSDS, and annual summaries of pesticide applications are all available and in an accessible location.
Our school prohibits children from entering a treated area for at least 8 hours after the treatment or longer if required by the pesticide label.

Q2A2: Which of the following practices does your school employ to improve contaminant control and ventilation? (Please check all that apply.)

Our school has a comprehensive indoor air quality management program that is consistent with EPA's Indoor Air Quality (IAQ) Tools for Schools.
Our school meets ASHRAE Standard 62.1-2010 (Ventilation for acceptable indoor air quality).
Our school has installed one or more energy recovery ventilation systems to bring in fresh air while recovering the heating or cooling from the conditioned air.
Our school has eliminated mercury-containing thermometers, chemical compounds, art chemicals, etc. and elemental mercury.
Our school disposes of any unwanted mercury laboratory chemicals, thermometers and other devices in accordance with federal, state, and local environmental regulations.
There are no wood structures on school grounds that contain chromate copper arsenate.
Our school has an asthma management program that is consistent with the National Asthma Education and Prevention Program's (NAEPP) Asthma Friendly Schools guidelines.
Our school visually inspects all structures on a monthly basis to ensure they are free of mold, moisture, and water leakage.
Our school's indoor relative humidity is maintained below 60%.
Our school has moisture resistant materials/protective systems installed (i.e., flooring, tub/shower, backing, and piping).
Our school has a chemical management program that includes: chemical purchasing policy (low or no-VOC products), storage and labeling, training and handling, hazard communication, spills (clean up and disposal), and selecting third-party certified green cleaning products.
Our school prohibits smoking on campus and in public school buses.

12. Page Twelve

Q2B1: Which practices does your school employ to promote nutrition, physical activity, and overall school health? (Please check all that apply.)

Our students spent an average of at least 120 minutes per week over the past year in school-supervised physical education.
At least 50% of our students' annual physical education takes place outdoors.
At least 50% of our students have participated in the EPA's Sunwise program (or other equivalent UV protection and skin health education program).
Our school participates in the USDA's HealthierUS School Challenge or another nutrition program.
Our school participates in a Farm to School program or other program to utilize local food in our cafeteria.

Please list your school's USDA HealthierUS School Challenge award level or describe other nutrition program. (Maximum 100 words)

FMES participates in the USDA's National School Breakfast and Lunch Program. Dietitians develop meals ensuring 1/3 of the RDA's for protein, Vitamins A and C, Iron and Calcium are met. Meals provide less than 30% of total fat and less than 10% saturated fat. Whole grains are encouraged, always available by request, when not featured. Unlimited fresh fruits and vegetables are offered at lunch. Current practices meet Silver Certification, which is pending, as we anticipate certification later this year. FMES participates in a Tasting of the Rainbow monthly, providing students the opportunity to try new fresh fruits and vegetables; and Farm to School Week, providing students with local fruits and vegetables. Students are motivated to monitor

and improve their nutrition, exercise and overall health through monthly challenges focused on the following: Breakfast (importance of healthy breakfast) Calcium (learn sources of; track intake) Eating the Rainbow Family Fitness Whole grains & protein Portion Control & food labels President's Fitness Sleep education Lessons on sun and water safety, as well as anti-smoking campaigns are implemented annually.

Please describe the type of outdoor exercise opportunities and nature-based recreation available to students. (Maximum 200 words)

More than 50% of all PE classes are conducted outside. Students attend twice weekly, hour long PE classes. School-wide, annual field day occurs outdoors. Daily recess is outside, weather permitting, allowing children to play on traditional playground structures, as well as engage in open, free play using various equipment like hula hoops, balls, jump ropes and chalk. The PTO has established programs with community partners, including My Coke Rewards and Wal-Mart education foundation, to raise funds and procure equipment specifically dedicated to enhanced outdoor recreation, ensuring ample equipment in good condition is always available for students. Girls on the Run, Jump Rope for Heart, and "Folger 5K", are sponsored annually to promote exercise for good health for a life time. "Extra outside time" is frequently used for class incentives, such as rewarding the class annual recycling champion. This consists of outdoor team-building and fun group games. Fostering an environment in which students have regular access to the outdoors is a priority, recognizing that regular and positive experiences outside nurture student appreciation and respect for the environment in which they live, raising them to be stewards of the Chesapeake Bay.

Q2B2: What percentage (by cost) of food purchased by your school is certified as "environmentally preferable" (e.g., Organic, FairTrade, Food Alliance, Rainforest Alliance, etc.)?

Less than 10%

Q2B3: This is the end of Pillar 2. Please describe any additional progress your school has made in terms of the school's built and natural environment (including unique community and/or business partnerships) to promote overall student and staff health and safety. (Maximum 200 words)

The recent building modernization allowed us to "green" our facility, bringing it in line with the high environmental commitment that has always been fostered through curriculum and programs. The newly created courtyard provides numerous venues for increased environmental appreciation and hands-on, outdoor learning. The "OC" (outdoor classroom) is a place in which Folger can make the County's "No Child-Left Inside" initiative a reality. Through staff, student and volunteer efforts, in partnership with local businesses including Peregrine Construction, Beaver Ponds, and Arlington Echo Center for Outdoor Education, the OC will provide instructional opportunities for all students. Featuring a butterfly garden, raised flower beds, a science lab, reading area, stage, "explora-torium" to dig and witness nature, and a water-feature emulating the sea-level fen uniquely characteristic of this region, the OC curriculum plan encompasses science, language arts, music, art, and math. This emphasizes the critical nature and ease of accomplishing environmental literacy: it's in all we do already, but we must seize the opportunity to make the connection between traditional curriculum requirements with the natural world, using the environment as a valuable instructional tool to attain educational objectives, in part by simply getting outside.

14. Page Fourteen

Q3A1: Which practices does your school employ to help insure the environmental and sustainability literacy of your graduates? (Please check all that apply.)

Our school has an environmental or sustainability literacy graduation requirement.
Environmental and sustainability concepts are integrated throughout the curriculum.
Environmental and sustainability concepts are integrated into classroom based and schoolwide assessments.
Professional development opportunities in environmental and sustainability education are provided for all teachers.

Please describe your school's environmental or sustainability literacy graduation requirement. (Maximum 200 words)

"Every AACPS student will graduate from high school able to read critically, write coherently, think creatively, solve complex mathematical problems and understand their connection to the natural world." At FMES, students develop skills, attitude and motivation to act as environmental stewards. Focused grade level plans exceed state requirements: * systemic and systematic approach to learning in and about the natural environment, including relevant hands-on and outdoor experiences; * connection of curriculum based standards and engagement in local environmental issues investigation; * developing responsible students

with the ability to make decisions and take actions that sustain our natural environment. Annual environmental field trips and use of the schoolyard at all grade levels, along with a strong partnership with Arlington Echo Outdoor Education Center, Folger students engage in active lessons to make practical applications to the environment. Specific environmental grade requirements include recycling, trees, monarch butterflies, bluebird habitats, composting, watershed and the affects of humans to the Chesapeake, water safety, greening our schools and communities. Growing bay grasses, raising terrapins and eels are some of the activities that make environmental literacy a reality at Folger.

Please describe your classroom based or schoolwide assessments in environmental and sustainability concepts and include what percentage of students scored "proficient" or better. (Maximum 200 words)

The state of Maryland does not currently require schoolwide environmental assessments at the elementary school level. This is only a high school requirement. Of the six science standards for which elementary students are assessed in Maryland, only one tests environmental proficiency. As part of the science MSA, Folger 5th graders have achieved a score of 92-95% proficient or advanced for the last five years. Additionally, Folger teachers and administrators understand that students will be held to environmental literacy expectations at the high school level and that attaining success then is greatly enhanced by establishing a strong foundation and interest for the subject at the elementary level. As such, Folger uses environmental issues investigation to prepare students for their future educational careers, as well as to motivate and engage them for current benchmark assessments. Hands-on environmental exploration continues to produce enthusiastic responses and accomplished students in all educational pursuits and assessments at FMES, as evidenced by Folger's strong showing on MSAs in grades 3-5 in both math and language arts, as well as 5th grade science.

Please describe professional development opportunities available in environmental and sustainability standards. Include the percentage of teachers who participated in these opportunities over the past 2 years. (Maximum 200 words)

Arlington Echo, the Environmental and Outdoor Education program of AACPS, offers many opportunities for teachers to participate in Environmental Literacy professional development. Arlington Echo currently plans and implements grade specific PD for newly developed environmental literacy units for teachers of grades K, 1, and 4. Additionally, Chesapeake Connections provides specific PD for teachers participating in one of the classroom experiences, which might include raising American Eels, Diamondback Terrapins, or Bay Grasses. AACPS also has partnerships with outside providers, such as the Chesapeake Bay Foundation, to design and implement a variety of environmental PD opportunities. A very popular summer PD programs is a five day experience where teachers explore the watershed and examine the connection between land use and water quality through hands-on investigations, standards-based activities and assessments, and action projects. Three current Folger staff members in kindergarten, 1st and 4th grades have participated in two of the above named PD programs; another 1st grade teacher has completed all. These staff members then "train the trainer", sharing the knowledge, allowing for implementation in all classes. All PD opportunities are designed to show teachers how to integrate the environment into the classroom to ensure students achieve success as environmentally literate leaders.

Q 3A2: If your school serves grades 9-12, please provide the following information:

Q 3B1: Do your school's science courses frequently use sustainability and the environment as a context for learning science, such as asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations, and engaging in argument from evidence when exploring environmental and sustainability issues?

Yes

Please describe. (Maximum 200 words)

The environment and the students' connection to it are frequently used as the basis for instruction; not just in science class. Folger students are keenly aware of their proximity to the Chesapeake and thus, their responsibility to it. Growing bay grasses, raising eels and terrapins; field trips to outdoor learning centers occur at many grade levels including Camp Woodlands (K) to learn about trees, bees and the local waterways; Arlington Echo (4) to better understand the watershed and the role we play in protecting it; SERC - Smithsonian Environmental Research Center (2); all foster environmental literacy. Lessons on ecology, animals, plants, pollution, and environmental issues occur in every grade. Soil, rocks, water are part of the "Our Earth, Our Home" unit in Kindergarten. First grade units include Living Things as Resources, Pollution, Caring for the Earth's Resources. 2nd grade includes units on ecology and habitats. 3rd and 4th grades features Flow of Matter and Energy, Recycling of Matter, Earth's & Ocean's features. 5th grade includes Environmental Issues, Cycling Matter, Erosion and Conservation. The first school-wide science fair this year will be an Environmental fair, challenging students to address issues facing our planet.

Q 3B2: If your school is a high school, does your school curriculum make connections between classroom and college

and career readiness, in particular post-secondary options in environmental and sustainability fields (for example, CTE Green Sustainable Design and Technology course)?

Please describe these college and career connections. (Maximum 200 words)

Q 3C1: Do students conduct an age-appropriate, self-selected, civic/community engagement project at every grade level?

Yes

If not in all grades, please specify which grades.

What percentage of last year's graduates scored proficient or better on a community or civic engagement skills assessment?

N/A - elementary school

Please provide the following information:

What percentage of these projects focus on environmental or sustainability topics? : Projects at all grade levels involved all students in a variety of projects from plantings, to helping with the town Earth Day Festival to releasing terrapins and planting bay grasses, to the entire 5th grade participating in a community restoration project to implement rainscaping for improved storm water management in the community.
What percentage of students completed such a project last year? : 100% - through classroom instruction, environmental field trips; terrapin, eel and bay grasses programs; environmental science fair

Q 3C2: Do students have meaningful outdoor learning experiences that engage students in critical thinking, problem solving, and decision making at every grade level?

Yes

If not in all grades, please specify which grades.

Please share how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (Maximum 200 words)

Outdoor learning occurs at all grade levels, incorporating writing, reading, math, problem solving, communication skills, social studies/civics, as well as science. Field trips are often a culmination of the in-class instruction and an opportunity to apply lessons learned, witnessing and participating in practical application. Students regularly use school grounds to benefit from hands-on lessons, as well. In the fall of 2011, 5th graders were tasked with solving erosion and storm water management in the neighborhood around the school. Classroom instruction, via a presentation from an Arlington Echo Outdoor Education Specialist, introduced the students to the challenges of development in the area and the impact to the water quality and habitat of the Bay. Provided with information about native plants, the students applied their math skills to create a budget and plotted the map using native plants to help with storm water management. Students took a field trip up the road to actually plant trees and shrubs to address the real-world problem. Just one example of many about our students actively learning about the environment. Folger students are inspired to be life-long learners taking action to serve the environment in which they live.

Q 3C3: Please describe your partnerships with the local community (e.g., academic, business, government, nonprofit and informal science institutions) to help advance your school, other schools (especially schools with fewer resources), and the greater community toward the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 300 words)

Partnerships help to strengthen the educational experience at Folger, by extending the learning environment beyond the boundaries of the school and/or by bringing resources into the classroom that would not otherwise be available. Arlington Echo Outdoor Education Center is a primary source for field trips with extensive hands-on learning opportunities. It's also key to professional development and provides many tools to bring into the classroom, such as terrapins and bay grasses; allowing students to be not only witnesses to the natural world around them, but active participants. The Greater Severna Park Watershed Action Group hosts an annual Earth Day Festival, drawing thousands to participate in environmental education. Folger students and staff participate annually, both the day of with a demonstration and activity booth, as well as in the planning and implementation of the event. Northrup Grumman and the Naval Academy are partners in STEM initiatives, including the science fair, providing grants for added science programs and materials, and student participation in the Sea Perch program, building under-water robots to study and improve the waterways. With Junior Achievement, JA Day has students learning from business leaders who teach for the day in every classroom, delivering lessons that include being responsible for our natural

resources to better serve the community and business opportunities. The entire community participated in the Kleenex FaceBook contest which resulted in Folger winning a full day for the entire student body at the Maryland Science Center. Every grade takes a minimum of one outdoor, environmental field trip, thanks to partnerships with the locations that best serve enhancing the environmental education and commitment of FMES students. These partnerships support problem-based learning in STEM, as defined by the Buck Institute, providing environmental issues investigation opportunities that emphasize local issues, enabling students to make connections to the world in which they live.

Q 3C4: This is the end of Pillar 3. Please describe other methods and measurements your school uses to ensure matriculating students are environmentally and sustainability literate. (Maximum 200 words)

Benchmark assessment tests are implemented for every science unit in grades 2-5. 5th graders take the science MSA and for the last 5 years, 92-95% have scored proficient or advanced. 1/6th of the testing is environmentally oriented. Folger staff recognizes the importance of matriculating students who have a connection to the world around them, which is based upon a keen understanding and a sense of responsibility as life-long learners who must study and then solve problems that affect their world. Folger assessments are directly tied to the curriculum, which emphasizes multi-disciplinary issues investigation, outdoor experiences and subsequent student action. This methodology enables all students to actively participate in the school-wide environmental science fair, through class-wide projects (grades k-3) and individual experiments (required for grades 4-5; optional for all other students). Participation in this program marks an additional metric opportunity to assess student environmental literacy, and perhaps more importantly, their environmental stewardship and commitment.

17. Thank You!

Email Confirmation

Feb 27, 2012 16:36:17 Success: Email Sent to: sbachmann@aacps.org

Response ID: 387

Survey Submitted:	Feb 27, 2012 (4:36 PM)
IP Address:	173.69.201.118
Language:	English (en-us,en;q=0.5)
User Agent:	Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.27) Gecko/20120216 Firefox/3.6.27
Http Referrer:	http://36ohk6dgmcd1n-c.c.yom.mail.yahoo.net/om/api/1.0/openmail.app.invoke/36ohk6dgmcd1n/9/1.0.35/us/en-US/view.html/0
URL Variable: crc	(no value)
URL Variable: id	(no value)
URL Variable: snc	(no value)
URL Variable: _iseditlink	(no value)
Page Path:	1 : Page One (SKU: 1) 2 : Page Two (SKU: 15) 3 : Page Three (SKU: 3) 4 : Page Four (SKU: 17)

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Maryland Green Ribbon Schools Scoring Tool

		Folger McKi	Chris Myers	Public
Directions: Award up to the amount possible on each Element. Numbers in brackets, if present, are for high schools only. Some questions are not scored (N/S). Calculate a subscore for the Cross-cutting Question, each Element, and a total score for the Pillar.		86.34		**Not Title 1**
			Points Award	**Points Possible**
Cross-Cutting Question				**5**
QCC1	Participating in other "green school" program, e.g., MAEOE Green Schools			1
	Program and level			2
QCC2	Received awards			N/S
	Award name			2
	Subscore Cross-cutting		4.33	**/5**
Pillar 1: Environmental Impact and Energy Efficiency				**30**
Element 1A: Reduced greenhouse gas (GHG) emissions (15)				
	Subscore 1A		5	**/15***
Element 1B: Improved water quality, efficiency, and conservation (5)				
	Subscore 1B		7	**/5***
Element 1C: Reduced waste production (5)				
	Subscore 1C		8	**/5***
Element 1D: Use of alternative transportation to, during, and from school (5)				
	Subscore 1D		5.67	**/5***
	Total Pillar 1		25.67	**/30***

Note 1: This is a concensus score file. Each application was scored by two or more reviewers.
Note 2: Individual questions under each Element have been deleted to shorten the document

*Total of individual scores could be greater than the maximum amount for the Element

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Directions: Award up to the points possible amount for each Element. Numbers in brackets, if present, are for high schools only. Some questions, i.e., yes/no, are not scored (N/S). Calculate a subscore for each Element and a total score for the	**Points Awarded**		**Not Title 1 Points Possible**
Pillar 2: Healthy School Environments			**30**
Element 2A: An integrated school environmental health program (15)			
Subscore 2A	15.67		**/15***
Element 2B: High Standards of nutrition, fitness, and quantity and quality of outdoor time (15)			
Subscore 2B	11.67		**/15**
Total Pillar 2	27.34		**/30**

Note 1: This is a concensus score file. Each application was scored by two or more reviewers.
Note 2: Individual questions under each Element have been deleted to shorten the document

*Total of individual scores could be greater than the maximum amount for the Element

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Maryland Green Ribbon Schools Scoring Tool

	Folger McK	Chris Myers	Public
Directions: Award up to the points possible amount for each Element. Numbers in brackets, if present, are for high schools only. Some questions, i.e., yes/no, are not scored (N/S). Calculate a subscore for each Element and a total score for the Pillar		**Points Awarded**	**Not Title 1 Points Possible**
Pillar 3: Environmental and Sustainability Education			**35**
Element 3A: Interdisciplinary Learning (20)			
Subscore 3A		15.83	**/20**
Element 3B: Use of the environment to develop STEM knowledge (5)			
Subscore 3B		4.17	**/5**
Element 3C: Development and application of civic engagement skills (10)			
Subscore 3C		9	**/10**
Total Pillar 3		29	**/35**

Note 1: This is a concensus score file. Each application was scored by two or more reviewers.
Note 2: Individual questions under each Element have been deleted to shorten the document