



## 2014-2015 School Nominee Presentation Form

### ELIGIBILITY CERTIFICATIONS

#### 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 to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
3. 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.
4. 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.
5. 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.
6. 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.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

### U.S. Department of Education Green Ribbon Schools 2014-2015

Charter  Title I  Magnet  Private  Independent

Name of Principal: Dr. Susan P. Hargis

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: Wiesbaden Middle School

(As it should appear on an award)

Official School Name Mailing Address: Unit 24309 Box 87 APO AE 09005

Street address: 19 Texasstr Geb. 07778 65189 Wiesbaden Hainerberg DE

(If address is P.O. Box, also include street address.)

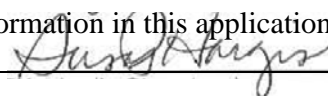
County: N/A State School Code Number \*: N/A

Telephone: 011-49-611-705-2240 Fax: 011-49-611-723496

Website/URL: <http://www.dodea.edu/europe/kaiserslautern/wiesbaden/wiesbadenMS/index.cfm/> E-mail: susan.hargis@eu.dodea.edu

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

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

  
Date: November 21, 2014

(Principal's Signature)

Name of Superintendent/Area Director: Dr. Dell McMullen / Dr. Nancy Bresell

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)



District Name: Kaiserslautern – DoDDS - Europe

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Dee McNeill NC Busell Date: November 21, 2014  
(Superintendent's/Area Director's Signature)

### Nominating Authority's Certifications

The signature by the Nominating Authority 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 to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Headquarters Department of Defense Education Activity

Name of Nominating Authority: Dr. Adrian B. Talley, Associate Director for Education, HQ DoDEA  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Adrian B. Talley Date: January 29, 2015  
(Nominating Authority's Signature)

### SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

### SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

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

### Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



## *Wiesbaden Middle School*

Headquarters Department of Defense Education Activity (HQ DoDEA) Nominee to  
U.S. Department of Education Green Ribbon Schools Program

**Part I: School Application Information.**

**1. School Contact Information:**

School Name: Wiesbaden Middle School

Installation: United States Army Garrison Wiesbaden, Hainerberg, Germany

Street Address: Unit 24309 Box 87

City: APO     State: AE     Zip: 09095

School Website:

<http://www.dodea.edu/europe/kaiserslautern/wiesbaden/wiesbadenMS/index.cfm/>

Principal Name: Susan P. Hargis, Ph.D.

Principal Email Address: susan.hargis@eu.dodea.edu

Principal Phone Number: 011-49-611-705-2240

Total school enrollment (Fall 2014): 471

DoDEA District: Kaiserslautern

DoDEA Area: Europe

School type: Middle

School enrollment: 471

Percent Disadvantaged Background Population: 15%

**2. Application Team Information.**

Lead Applicant Name (who prepared the application): Susan P. Hargis, Ph.D

Lead Applicant Title (e.g., teacher, principal): Principal

Lead Applicant Email: Susan.Hargis@eu.dodea.edu

Lead Applicant Phone Number: 011-49-611-705-2240

**Application Team Members:** (Others who helped prepare this application)

	<b>Name (First and Last)</b>	<b>Title/Department</b>
1	Patricia Trujillo	Teacher – 7 <sup>th</sup> Grade Language Arts
2	Carol Falling	Information Specialist
3	Scott Haines	Resource Manager
4	MAJ William McGlothin	DPW Energy Manager – Wiesbaden

## **Part II: Summary of Achievements.**

### **Summary Narrative:**

Wiesbaden Middle School (WMS) is Green. From our “Green Boot” award, to partnerships focusing on Science, Technology, Engineering and Math (STEM) and 21st Century learning, and our commitment to health and wellness, the entire WMS community is committed to reducing our carbon footprint, developing healthy habits and leadership skills for a better tomorrow.

STEM is the heart of our school. The principal has created a vision of a 21st Century school by securing three community partnerships: The U.S. Army Corps of Engineers (USACE), Europe, Defense Science and Technology Center (DSTC) -Europe, and Defense Commissary Agency (DeCA). WMS is fortunate to have teachers and partners fully engaged in STEM initiatives. Together, these military and civilian partners support the middle school community by integrating STEM in our classrooms, helping students understand practical applications of STEM, setting education and career goals, and promoting digital learning.

Our partners are committed to the highest student achievement and embed many environmental topics in their planned outreach activities. Each August, school administrators present standardized test scores, performance standards, and text books to our partners. Based on the data, with our school’s needs in mind, our partners design outreach activities. USACE has five formal outreach activities at WMS: SKYPE with SCIENCE, Engineers Week (where engineers present structural engineering, alternative energy and fire protection concepts), “Take Your Child To Work Day,” Earth Day activities (where USACE environmental technical experts speak about natural resources, green energy and environmental careers), and a STEM Career Student Essay Contest where winners spend a day shadowing engineers at the USACE office.

Our partners at DSTC-E have created more than 75 standards-based lessons for WMS during the 2013-2014 school year. These lessons have provided real-world connections to STEM Careers in military and civilian life. DSTC-E scientists provide professional development for our science and mathematics teachers, as well as resources at no cost to the school. They relate their military experience to students and differentiate their lessons so all may benefit. DSTC-E is also supporting the school’s eCybermission teams who are working on alternative energy sources, health and wellness, and environmental topics.

Our partnership with DeCA is the lynchpin in our nutrition literacy standards. DeCA supports our students during “Take Your Child to Work Day,” by providing a work location for nearly fifty students whose parents are deployed or otherwise cannot accommodate them. Commissary personnel serve as educators during the school’s study trips, teaching our students about proper nutrition, healthy snacking, and good shopping habits. DeCA also supports our “Fueling the Future” fun-run with the Commanding General each year by supplying water and fresh fruit for all community members and students.

Our partnerships and STEM initiatives are growing stronger each year. Our teachers have committed to incorporating STEM and 21st Century learning in their classrooms. WMS has also



dedicated a STEM classroom and a lab space for our students. Through collaboration with community partners, the teachers have established an interdisciplinary program that focuses on STEM. This interdisciplinary program meets the requirements for job-embedded graduate courses for teachers. Our commitment to continuing growth and professional development, along with our network of partners, has made these initiatives part of our school culture.

This year, USACE-Environmental Branch is collaborating with six 7th grade teachers and the principal to establish a two-year project to “green up” our school. Three environmental gardens - a horticulture, pollinator, and a fruit/vegetable garden will be developed on school grounds. The interdisciplinary team of teachers and technical experts (chemists, biologists, and engineers) will guide learning in the student created gardens. In this outdoor classroom, students will engage in hands-on environmental and sustainability concepts, explore career opportunities, and document their experiences.

Earth Week highlights our efforts in environmental awareness. Last year, students created sculptures from recyclable materials and decorated our school foyer. To reward students who recycle, the school began the, “I Got Caught Recycling” program to recognize students’ efforts. This year we plan to repeat both programs and will also have a ribbon-cutting event for our three environmental gardens.

Our commitment to a healthy environment and lifestyle requires a year-round effort. WMS has funded after-school clubs to include Bike Club, Outdoor Recreation, Cooking Club and a Cross-Country Club which all promote healthy lifestyles. Additionally, our United States Army Garrison (USAG) - Wiesbaden’s partners sponsor our Environmental Club (EC). The EC promotes WMS’s commitment to reducing waste and natural resource consumption school-wide. In the past two years, WMS has increased their recycling efforts and environmental awareness among students, faculty and staff. Teachers and students are also committed to turning off lights when not in their classrooms as well as conserving water. In recognition of our school wide efforts, USAG-Wiesbaden has awarded WMS with a “Green Boot.” With our commitment firmly in place, we are certain to maintain our Green Boot certification in the years to come.

### **Part III: Green School Program and Awards.**

1. Does your school participate in a local, state, or national green schools program?

(x) Yes ( ) No            Program(s) and level(s) achieved:

**List of Green School Programs:**

	<b>Program</b>	<b>Level in Progress</b>	<b>Level Achieved</b> (include date achieved)
1	Green Boot Certification	Completed and On-Going	May 2014
2	STEM PD	Year One/On-Going	Teachers will receive graduate credit 06/2015
3	STEM Partnerships	Year Three/On-Going	
4	Nutritional Partnership	Year Three On-Going	

2. In the past five years, has your school, staff, students or student groups received any awards for environmental stewardship, student and staff health and wellness, or environmental education/civic programs?

(x) Yes ( ) No      Provide award details below.

**List of Environmental Stewardship Awards.**

	<b>Award</b>	<b>Awarded to</b>	<b>Awarded by</b>	<b>Year Received</b>
1	Green Boot Certification	WMS	US Army- Wiesbaden Garrison	2014

**Pillar 1: Reduce environmental impact and costs.**

**Element 1A: Energy conservation strategies.**

1. Which of the following programs or practices has your school implemented to conserve energy and to protect our environment from the negative effects of buildings and transportation?  
 (Check all that apply)



Our school has an energy management plan in place that describes the steps we are taking, the key participants, our goals, and a schedule for conserving energy and reducing energy costs.

Our school participated in an energy efficiency program that resulted in a comprehensive energy audit and cost effective energy efficiency improvements.

Our school has set and met an energy conservation target every year since we started our program.

Our school energy use is tracked and benchmarked using EPA ENERGY STAR Portfolio Manager or an equivalent installation program.

Our school is EPA Energy Star certified this year.

5% or more of the energy used at our school is obtained from on-site or off-site renewable energy sources.

Our new school (estimated completion date July 2018) is being built to meet Leadership in Energy and Environmental Design (LEED green building standards).

Our school has a greenhouse gas emission reduction plan in place that targets energy use. We measure our annual progress against our reduction goal.

2. Use the list above as a guide to describe how your school programs, policies, and actions have reduced the amount of energy used in your building(s). Include data. Also include information about your efforts to protect our environment from greenhouse gas emissions, how you set your goals for reduction, and how you measure your progress. Work as needed with your installation energy program management team to get information about your energy use (Maximum 250 words).

Wiesbaden Middle School's practices and policies align with German regulations, as does the Wiesbaden Army Community that we serve. We met the stringent requirements to receive the Army Green Boot award (an Army certification for organizations that meet goals for energy conservation). We have a unique relationship where the Army owns our school, which connects with an elementary school. During 2013, the two schools' heating bill was \$171,991.49. During the same period in 2014, the energy bill was \$144,979.77, a cost reduction of \$27,011.72 to the U.S. military. We are in the planning stages for a new school (estimated completion July 2018). Features of the new facility include: green roofs for rain water retention and to reduce the heat island effect; expanded use of natural daylighting throughout the school to reduce demand for electrical lighting during the school day; use of occupancy sensors; and use of high efficiency toilets and waterless urinals to reduce water usage by 20%. We have had several school-wide and community facility meetings with the architects and designers of the new facility to ensure conservation measures are integrated throughout the design and will meet our local country's national conservation goals. In accordance with Leadership in Energy and Environmental Design (LEED) for Schools, Silver certifiable (Outside the Continental United States) OCONUS will be the minimum goal of the new school facility. LEED is a green building certification program recognizing best-in-class building strategies and practices; building projects satisfy prerequisites and earn points to achieve different levels of certification.



**Element 1B: Water quality, efficiency, and conservation.**

1. Which of the following practices contribute to the protection and conservation of the school domestic (drinking) water? (Check all that apply)

- We are served by an installation/privatized utility water provider that is required to report annually on the quality of our water.
- Our school has its own well and we do water sampling in accordance with our local and state health authorities.
- Our building maintenance department cleans all water taps and drinking fountains on a regular basis to prevent bacterial contamination.
- We have a water reduction plan in place that includes:
  - low-flow water fixtures
  - native drought-tolerant plants
  - minimal or no landscape irrigation
- Our school water use is tracked and benchmarked using EPA ENERGY STAR Portfolio Manager or an equivalent installation program.
- We use only non-potable water (such as water collected from a rain barrel or rain cistern) for irrigation.
- Our school has a greenhouse gas emission reduction plan in place that targets water use. We measure our annual progress against our reduction goal.

2. Use the list above as a guide to describe how your school implemented and is maintaining your water conservation program including your baseline, your goal, and your reduction rate to date. Explain how you will continue to reduce water use to meet your goal. Include who in the school participates in the water conservation program. Describe the work done to protect water taps and drinking fountains from bacterial contamination. Work as needed with your installation energy program management team to get information about your energy use (Maximum 250 words).

Wiesbaden Middle School's preventative maintenance program, implemented by our maintenance contractor, ensures protection against bacterial agents through weekly maintenance of the domestic water system. Additionally, the maintenance contractor has installed filter units on all faucets where drinking water is delivered. WMS uses water in the school's home economics classes, rest rooms, drinking fountains, locker rooms, and faculty lounge. The maintenance contractors check faucets and toilets for leaks on a daily basis. They prohibit the hosing off of hard surfaces, vehicles, equipment, or other items except at authorized locations. To reduce water consumption, all areas have been marked and labeled with "Use Water Wisely" signs by the student Environmental Club. Students have campaigned to ensure that they are using as little water possible in all classes, and that no unnecessary water goes to waste. One-hundred percent of faculty members have been trained by students on water conservation. As part of the Green Boot Program, the United States Army Garrison-Wiesbaden Directorate of Public Works (DPW) energy team members helped the school coordinate an Energy and Water conservation audit of our school. The audit found us in compliance with being energy savvy and efficient. We are in the planning stages of a new school that will use high efficiency toilets and waterless urinals to reduce water usage by twenty percent. There is no current data available from DPW on water consumption by the school.

**Element 1C: Waste Management and Product Procurement.**

1. Which of the following programs has the school initiated and maintained to reduce solid waste, eliminate hazardous waste, and procure environmentally preferable products? (Check all that apply)

Our school has initiated and maintained a solid waste management plan that includes waste reduction practices, collection of recyclable and compostable materials, elimination of hazardous waste, and preferred-purchasing requirements.

Our recycling program collects every material that is collected on our installation.

Our school composts organic materials on site.

Our school only purchases office/classroom paper that is 50% or more post-consumer material.

Our school only purchases office/classroom paper made of fibers from forests certified as responsibly managed in accordance with Forest Stewardship Council, Sustainable Forestry Initiative, or a comparable certification standard.

Our school purchases office/classroom paper that is totally chlorine-free (TCF) or processed chlorine free (PCF).

All new furniture purchases are certified by the Business and Institutional Furniture Manufacturers Association or a comparable standard.

Hazardous and dangerous products at our school have been reduced or eliminated.

Hazardous, dangerous, and universal wastes at our school are handled and disposed of in accordance with federal and state regulations.

Our school has a greenhouse gas emission reduction plan in place that targets solid waste reduction and recycling. We measure our annual progress against our reduction goal.

2. Use the list above as a guide to describe your solid waste management plan, including goals, materials you collect to be recycled or composted, your current recycling rate, and how you calculated the recycling rate. Include who participates in the waste management program, any student learning objectives, and the educational and environmental benefits to date. Provide an overview of your environmentally preferred purchasing. Work as needed with your installation hazardous waste program manager or recycling program manager to gather information about your efforts in this area (Maximum 250 words).

Our school has a designated management-level sustainability officer. The officer is responsible for maintaining compliance at all times with the United States Army Green Boot Program requirements and sustaining a program to manage resources, conserve and secure energy, operate, and build future capacities. The goal is to achieve the Army's Triple Bottom Line of Mission, Community and Environment. As a part of professional development, the staff in its entirety has been trained on indoor and outdoor recycling requirements on-post and off-post. Professional Growth Plans of several teachers indicate that they are building technological capacity in their classrooms to reduce the use of paper. For example, through the use of digital learning and Google documents, many classrooms are, or will become, paperless. Paper supplies purchased by the school are all recycled products. Students in Art and Family & Consumer Science classes use recycled items for class projects. To highlight this effort, students create art from recyclable items, which are displayed in school common areas. Additionally, there is a recycling program within all classrooms and the lunch room that students and staff follow. Outside of the classrooms, natural debris (including grass clippings and leaves) are collected from the school grounds and composted at an off-site facility. DoDEA requires that the school has a Green procurement initiative/pollution preventative program.

### **Element 1D: Alternative transportation.**

1. Our school provides the following alternative transportation options to driving in single occupancy vehicles to and from school. (Check all that apply)

- Our school participates in a "Safe Routes to School" or similar program.
- Our school has designated carpool parking stalls.
- Our school offers yellow school bus service.
- Our school is served by public transportation service.
- All school buses that serve our students were built after 1994 when the first emission standards were adopted.
- Our school has a well-publicized no idling policy that applies to all vehicles including school buses.
- Our school has a vehicle loading/unloading area(s) at least 25 feet from building air intakes, doors, and windows.
- Our school has a greenhouse gas emission reduction plan in place that targets transportation. We measure our annual progress against our reduction goal.

2. Use the list above as a guide to describe alternative transportation options to driving in a single occupancy vehicle to and from school. Include how the alternatives are promoted, any data you have about participation in school bus service, public transportation, carpools, ride-sharing, and commuting to school by walking or biking. (Maximum 250 words)

School transportation to Department of Defense Dependents School System (DoDDS) schools in Europe is similar to the US, but with key operational and safety differences. DoDDS contracts with host-nation commercial transportation companies for transportation services. The buses and vans are not the yellow school bus service, but European-style tourist or public transit buses and vans marked with an international school bus sign in the front and the back. The transportation contractor vehicles in the European Union are required to meet stringent vehicle emission and maintenance standards. During school bus loading/unloading operations, school administrators and bus staff ensure that bus operators adhere to the no idling policy. This policy also applies to parents that drive to their children to school. The Wiesbaden Middle School bus loading/unloading area and the designated drop off/pick up areas for parents are at least 40 feet from building air intakes, doors, and windows. WMS teachers help support alternative

transportation goals by maximizing carpooling, ride-sharing, and parking in designated areas. Additionally, there are several bike racks strategically located near the WMS building doors.

WMS has 420 of 471 students currently registered for the school transportation program, which is 89.2% school bus program enrollment.

Consistent with the force protection security posture and the location of the German bus stops relative to the school complex, public transportation is not conducive for use by students. WMS organizes several walking field trips for the students each year. These field trips help raise environmental awareness while encouraging a more active lifestyle.

## **Pillar 2: Improve the health and wellness of students and staff.**

### **Element 2A: An integrated school environmental health program.**

1. Which of the following programs or practices does your school implement to ensure the environmental health of the school community? (Check all that apply)

Our school implements an up-to-date Integrated Pest Management program.

Our school implements an up-to-date Indoor Air Quality Management Plan modeled after the EPA's Indoor Air Quality (IAQ) Tools for Schools or other national recognized model.

Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.

Our school does not have any wood playground equipment or other structures that contain chromate copper arsenate or we have identified these structures and have taken steps to reduce exposure.

Our school has a comprehensive green cleaning program.

Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L or our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

Our school has an Asthma Management Program consistent with the National Asthma Education and Prevention Program.

Our school has a chemical management program in place, with elements of purchasing, inventory, storage, training, spills, and hazards communication.

2. Use the list above as a guide to describe how your school implements and measures the success of your integrated environmental health programs and practices to ensure the health and safety of the school community. Include information on how your school addresses exposure to health hazards including radon, chromate copper arsenate, carbon monoxide, chemicals, asthma triggers, and mold. (Maximum 250 words)

Wiesbaden Middle School and the Directorate of Public Works have implemented a comprehensive Health and Safety Program that encompasses a wide range of elements. The basis for our program revolves around the Environmental Protection Agency Indoor Air Quality

Program and addresses Moisture and Mold, Integrated Pest Management, Cleaning and Maintenance, Materials Selection, Source Control and Energy Efficiency. Cleaning personnel are trained to keep an eye out for mold issues. Should mold become an issue, the Preventive Medicine representative in Wiesbaden provides assistance in resolving the situation. Additionally, the cleaning contractor has been directed to purchase “green” cleaning materials that are environmentally friendly. The Garrison has instigated a “Green Boot” Program to increase environmental awareness throughout the installation. WMS has fully cooperated in this program by selecting an Environmental Officer, setting up of a comprehensive recycling program, identifying a Building Energy Monitor and applying energy conservation measures. WMS was certified in May 2014 and through these efforts WMS has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. Our school has a chemical management program in place, with elements of purchasing, inventory, storage, training, spills and hazards communication. WMS doesn’t have any wooden playground equipment or other structures that contain copper arsenate. The school has been surveyed for asbestos, and all building elements that did contain asbestos have been removed according to Host Nation regulations. All classrooms have been tested for radon. No rooms were identified having levels at or above 4 pCi/L.

**2B. High standards of nutrition, fitness, and quality outdoor time for both students and staff.**

1. Which of the following programs or practices does your school implement to promote nutrition, physical activity, and overall school community health? (Check all that apply).

- Our school participates in the “Coordinated School Health” program ([www.cdc.gov/HealthyYouth/cshp/](http://www.cdc.gov/HealthyYouth/cshp/)).
- Our school participates in the USDA's Healthier School Challenge.
- Our school participates in a Farm to School or comparable program to use local, fresh food in our cafeteria.
- Our school has a food garden either on-site or in close proximity to our building, which is utilized by the cafeteria or by teachers.
- Over the past year, our students spent an average of at least 120 minutes per week (for middle and high schools) or 90 minutes per week (for elementary schools) in school supervised physical education.
- At least 50% of our students' annual physical education and physical activity (including recess) takes place outdoors.
- At least 50% of our students have participated in the EPA's Sunwise or equivalent program (to protect students from skin cancer).
- Our school integrates health measures into student assessments.

2. Use the list above as a guide to describe how your school implements high standards of nutrition, fitness, and quality outdoor time for both students and staff. (Maximum 250 words)

The school has partnered with the Defense Commissary Agency (DeCA) to forge a partnership based on nutrition literacy as the first line of defense for student health. The “Fueling the Future” partnership supports the commissary as an extension of the classroom as students take regular tours of the commissary to learn about nutritional choices and how they affect family health. Commissary personnel serve as professional developers working with

teachers, parents, and students to ensure all are making healthy choices. Students are able to make connections between exercise and wellness. They determine good snacking habits and take a look at serving sizes. The program has an annual kick-off with European Command (EUCOM) Senior Leaders “running the track” with a grade-level, and the commissary providing healthy fruit snacks. The program enhances the school’s fitness component. Lunchtime has been extended an additional twenty minutes daily to allow additional time outdoors for physical activity. Volunteers from the military community are recruited to serve as playground monitors to ensure students are continuously moving their bodies and focusing their minds on outside play. The school schedule was modified from the DoDEA requirement of one quarter of Health class to the entire year, teaching students the importance of hand-in-glove health and physical education. Our school’s counselors present the importance of healthy sleep hygiene, and how sleep deprivation impacts learning. The administration has provided extra-duty positions to support after-school activities which promote physical health and wellness such as: Astronauts, Bike, Cooking, Outdoor Recreation, Conditioning, and Running Clubs.

**Pillar 3: Provide effective environmental and sustainability which incorporates STEM, civic skills, and green career pathways.**

**Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems.**

1. Describe how your school integrates and assesses/measures students’ environmental or sustainability literacy at each grade level including curriculum, courses, outdoor learning, and assessments. (Maximum 250 words)

WMS has incorporated programs and activities into the culture of the daily school structure to truly implement a STEM model that is on-going throughout the school year. Each grade-level is incorporating science and social studies and the use of critical reading and writing strategies relating to environmental issues and sustainability concepts. Seventh grade students examine soil quality as they prepare to plant community gardens. World Geography students study eco-system locations and ethics as part of sustainability literacy. The US Army Corps of Engineers (USACE) and Defense Science and Technology Center (DSTC-E) have partnered with our school bringing a wealth of curricular knowledge through STEM lessons, demonstrations, and outdoor learning opportunities. These partnerships have allowed us to offer not only annual STEM and Math Family Night events for our students, but many students bring younger siblings and community members to participate and learn. The DSTC-E has mentored school efforts in the US Army-sponsored eCybermission event while also extending this opportunity into classrooms and offering hands-on lesson to all teachers. These projects include alternative energy sources, health and nutrition, and the environment. E-Cybermission also allows for project-based learning settings that puts our students before an authentic audience that critique and assess final projects. There has been an increase in student participation in full campus competitions such as the USACE sponsored Essay Contest, where student winners are allowed to be “Engineers for a Day.” This contest brings students face-to-face with the engineering design process and careers outside the walls of our school.

2. Describe professional development opportunities available to your teachers in environmental and sustainability concepts and the number and percentage of teachers who participated in these opportunities during the past 12 months. (Maximum 250 words)

When no middle school STEM course was available for teachers locally, the principal created a graduate-level job-embedded professional development course for all teachers - “Teaching STEM in the Middle School” to enhance the value of curriculum, instruction, and assessment of STEM at Wiesbaden Middle School. More than one-third of the staff is enrolled in coursework, but more are committed to the school’s STEM efforts. With this course in mind, the seventh grade team has partnered with the United States Army Corps of Engineers to develop hands-on learning opportunities in the construction of three on-site community gardens to teach sustainability concepts through producing vegetables, observing pollinators, and other horticultural concepts. Other grade teachers will work with the school administrators on coursework through their content areas and co-teach with field experts. The Defense Science and Technology Center-Europe has provided military volunteers with years of expertise, who possess Ph.Ds. in science and technology. These volunteers provide mentorship and professional development to teachers, as well as students. Many staff members have included STEM practices into their Professional Growth Plans. One example is the school’s Information Specialist, who is converting the Information Center into a STEM Library with an emphasis on environmental awareness. As part of the school’s job-embedded professional development, 100% of the school staff has been trained on proper recycling techniques according to German law, sponsored by the school’s Environmental Club. Additionally, all teachers participated in the Environmental Management System Awareness training provided by the United States Army to support the Green Boot Certification.

**Element 3B: Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy.**

1. Describe how environmental and sustainability education at your school supports teaching science and engineering practices (e.g., 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) and supports robust general science education that includes a deep understanding of life, physical, and earth sciences. (Maximum 250 words)

Wiesbaden Middle School employs a comprehensive approach that integrates science and engineering practices into environmental and sustainability education. Using national education standards for science, technology, engineering and math as a foundation, WMS achieves success by taking advantage of local resources, volunteer personnel, and DoDEA STEM initiatives that focus student effort on environmental and sustainability education. Unique to DoDEA, WMS has created a first of its kind STEM classroom for students and teachers to conduct experiments, participate in complex scientific demonstrations, and host credentialed scientists from the Army Corps of Engineers and the Defense Science and Technology Center – Europe office. As an example of the synergies created in this WMS STEM environment, 6th grade students are currently conducting long range experiments to measure the effectiveness of solar energy. The students have already acquired a two-panel solar array and data collection system. This experiment is expected to run a full year. Students will use the data to understand the benefit of renewable energy, the engineering requirements of employing solar energy collection, and ways to mitigate periods of limited or no light. However, students have already decided to take the initiative and apply these lessons to real world environmental and sustainable goals by modeling

and correlating the actual cost benefit analysis for use on plans for the to be newly constructed middle school building. Thus, through efforts like these, students demonstrate combined writing, engineering, and mathematical practices for homework, scholarship, and practical real world sustainability applications.

2. Describe how your curriculum connects classroom content to career and college readiness, particularly post-secondary options that focus on environmental and sustainability field studies and/or careers. (Maximum 250 words)

Wiesbaden Middle School prides itself on the STEM atmosphere we have fostered and encouraged in our teachers and students. What is most exciting about our STEM program is the integration and real-world application connecting each lesson, program, or project to the STEM subjects. Our partnerships with the United States Army Corps of Engineers-Europe and the Defense Science and Technology Center - Europe have brought mentors into our school with first-hand experience as to why STEM is important and necessary in 21<sup>st</sup> Century career fields. These community and military mentors bring their expertise into the classroom providing classroom activities related to STEM core content areas. Frequently, these activities include realistic hands-on field experiments. These mentors also share their experience and discuss the wide array of STEM careers available to students. The fact that our military community is literally next door has also allowed for such STEM events to come alive inside our building during full school career days. Students are not simply listening to the details of a STEM career, but they are able to put their hands on the robotics, weather stations, and operational controls many of our Soldiers use in day-to-day life in their military careers. We have also incorporated a school-wide nutrition program and partnership with our local base commissary so students can begin to understand the science and mathematics behind daily nutrition as well as the careers and related 21<sup>st</sup> Century skills imbedded in nutrition planning and implementation of health plans across the entire school campus.

**Element 3C: Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community.**

Describe your students' civic and/or community engagement experiences integrating environmental and sustainability topics/concepts, field studies, community service, etc. Address if and how students conduct an age-appropriate community engagement projects around a self-selected environmental or sustainability topic at every grade level; and partnering with local academic, business, informal science institutions and/or other schools to help advance the school toward the 3 Pillars and/or assist the progress of (an) other school(s), particularly a school with lesser capacity in these areas. (Maximum 250 words)

Wiesbaden Middle School students have embraced the Green concept with both hands. Students are currently scanning school grounds for the location of environmental gardens, collaborating with the United States Army Corps of Engineers. Students in the Environmental Club manage WMS's paper and plastic recycling program weekly. All recycled items are collected by the city of Wiesbaden. Through this, the students learn how to reduce their carbon footprint. Environmental Engineers at the Clay Kaserne Army Air Base mentor these students in their environmental endeavors. The Environmental Club members, in turn, inform the faculty and students about German recycling law through presentations and student-made videos. Because of the outreach of the Environmental Club, students at WMS regularly participate in



recycling in their lunchroom and classrooms. To further highlight sustainability practices, students create art from recycled material and display it throughout the school building. At the after-school Army-sponsored Youth Service Program, middle school students have a robotics, photography, and astronomy club. The Principal has encouraged engagement of the Girl Scouts in environmental issues, resulting in Gold and Silver Awards. Troops #199 and #464 help with the school's recycling. Recently, Troop #464 placed more than 40 plants in WMS classrooms to improve air quality. Boy Scout Troop #65 provides community service by recycling throughout the community. WMS's popular after-school Cooking Club addresses health, wellness, and proper eating habits. Students learn about plants, plant growth, and using less packaging. Students also prepare and cook nutritious meals in an eco-friendly setting.



Student winners from the U.S.  
Army Corps of Engineers – Europe  
District Career Day Essay Contest.



Wiesbaden Middle School students learn  
the Engineering Design Process during  
STEM Night by attending more than 30  
different stations manned by teachers,  
parents, and military and community  
partners.



A structural engineer from the U.S. Army Corps of Engineers – Europe District presents bridge building concepts to eighth grade science and math students during Engineering Week.



U.S. Army Garrison Wiesbaden leaders Col. Mary Martin and Command Sgt. Maj. Roy Rocco join Wiesbaden Middle School Principal Dr. Susan Hargis and members of the school's Environmental Club for a group photo during the Green Boot ceremony. 11/12/2014