

2015-2016 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. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
- 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 2015-2016

Public Charter Title I Magnet Private Independent Rural Name of Principal: Mr. Daniel Bartels

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

Official School Name: Alfonza W. Davis Middle School (As it should appear on an award) Official School Name Mailing Address: 8050 N 129th Ave, Omaha, NE 68164 (If address is P.O. Box, also include street address.) County: Douglas State School Code Number *: 28-0001-225 Telephone: 402-561-6135 Fax: 402-933-9131 Web site/URL: www.ops.org/middle/davis E-mail: Daniel.bartels@ops.org *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.

Burte

_____ Date: 1-26-16

(Principal's Signature)



Name of Superintendent: Mr. Mark Evans (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records) District Name: Omaha Public Schools

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

_____ Date: January 28, 2016

(Superintendent'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: Nebraska Department of Education

Name of Nominating Authority: Ms. Sara Cooper (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.

Sara Lloupe

_Date:02/01/2015

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary 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. Then, include concrete examples for work in every Pillar and Element. Only schools that document progress in every Pillar and Element can be considered for this award.

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 <u>ed.green.ribbon.schools@ed.gov</u> according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: March 31, 2018

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 and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

Level

		0 0	
	Private/Independent	than <u>1%</u>	
Elementary (PK – Elementary	Charter	Other measures:	
	Colored Description	Graduation rate: <u>n/a</u>	
	School Description	Attendance rate: <u>98%</u>	
Middle (6 - 8 or 9) High (9 or 10 - 12)	💟 Urban 🔄 Suburban 🗌 Rural	Does your school serve 40% or more students from disadvantaged households?	
	School Demographics	🖂 Yes 🗌	
	Total Enrolled: <u>624</u>		
	% receiving FRPL: 46%		

Public

SUMMARY NARRATIVE: Provide an 800 word maximum narrative describing your school's efforts to reduce environmental impact and costs, improve student and staff health, and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.

Alfonza W. Davis Middle School is a state-of-the art green building seated on the edge of Omaha among farm fields and open areas. The building was completed in May 2013, and was designed and built with a focus on low environmental impact. Everything from the landscaping, to the trash program, to our countertops were created with sustainability in mind. Geothermal wells heat and cool the building. Two green roofs reduce the heating and cooling load by providing extra insulation on the building's roof. Native plantings and retention ponds are used to limit water irrigation needs and address water quality and runoff to make our landscaping environmentally sound. In 2014, Davis Middle School was awarded the Silver LEED Award. Davis is the first middle school in the region that is LEED (Leadership in Energy and Environmental Design) certified and is a "green building" in its entirety. LEED Certification is the most recognized global standard for high performance buildings that are energy and water efficient, cost-effective to operate, and better for occupants and the environment. Even with our 624 students living throughout the city of Omaha, the transportation our students use is typically an environmentally conscious choice. Eighty-eight percent of them ride fuelefficient school buses, many of which are fueled by liquid propane instead of diesel. Support from our District and our new LEED building ensures that our air quality is excellent and that best practices are in place regarding school safety, asthma triggers, ventilation, and chemical use. Natural light is featured in nearly every space in the building, even in basement rooms that would traditionally have no windows. Daylight is a superior lighting mechanism and may even improve student health and academic performance.

Students and staff focus on wellness each day through the use of outdoor spaces, good nutrition, and wellness activities. One of our school improvement committees focuses specifically on wellness and has put several innovative measures in place including a staff wellness in-service day and a Fitness Fun club for students.

Our school health office, counseling office, and kitchen are committed to work together with families and the community to improve students' mental and physical health. Partnerships with area physicians, dieticians, our community counseling program, and peer-taught lessons about social issues impact our students every day. Wellness information is shared with families via school newsletter and as part of our daily announcements. Our closest high school offers a School-Based Health Center that our students and families can access at low or no cost. A variety of athletics is offered to all students, and every student participates in physical education class for the entire school year.

Davis also recycles unwanted materials with recycling stations throughout the building to separate recyclable materials from trash. Due to this program, as well as a teacher focus on decreasing paper use, our average monthly solid waste volume is low.

In our classrooms, students receive education on concepts related to sustainability education, environmental education, and green career pathways in nearly every curricular area. Technology and Living classes, as well as Career Education classes, focus specifically on the green technologies and career pathways. Students are taught that these

% limited English proficient: less

areas will be booming as they leave high school or college and enter the world of work. In math, science, social studies, and English classes, students learn using examples and applied activities based on wellness and environmental concepts. Conceptually speaking, students are taught every day about how they can affect the world around them, and how humans and the environment impact one another. Units on human geography, economics, and civic skills help students understand their role in these areas. They understand that our dependence on energy will provide them with a challenge for the future.

Alfonza W. Davis Middle School is only in its third year of existence, and as it grows and changes, there will be continued opportunity for additional education. Teachers dream of an outdoor classroom, a school garden, an orienteering club, and many more community and civic projects and partnerships. We are stewards of a green school teeming with green technology and built upon sound environmental practices. There is no limit to what students and teachers can do in classrooms as we move toward the future. Our students are of the mindset that increasing energy independence and economic security will be their responsibility and their challenge in the future. They are ready to take on the challenge, with a foundation in the skills and knowledge they are learning here at Davis Middle.

SCHOOL PROFILE: GREEN SCHOOL PROGRAM AND AWARDS

- Is your school participating in a local, state, or national program, which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes No I If yes, please explain what program(s), current level of achievement, and the years you have been involved in these programs. (e.g. EPA Energy Star Portfolio Manager, Eco-Schools USA, PLT Green Schools, NPPD Green Schools). 2006-present: OPS Green Schools Initiative, benchmarking Energy, Waste & Recycling, Paper Use, Water and Green Teams
- Has your school, staff or student body received any awards for facilities, health or environment? Yes No
 Award(s) and years received: As a district, OPS received EPA's National Excellence Award for Indoor Air Quality in 2006, EPA's Model of Sustained Excellence Award for Indoor Air Quality in 2009 and the 2014 U.S. Department of Education District Sustainability Award.
- 3. Has your school created a place for teachers to share lessons on Sustainability? Yes No I If yes, where? OneDrive is a network application that teachers can use to share and collaborate ideas, lesson plans, just about any information or files. It is part of the Microsoft Outlook software.
- 4. Has your School Board adopted a Green Strategic Plan? Yes 🖂 No 📃 OPS has a Green Schools Initiative
- 5. Has your school created a Green Team? Yes No If yes, list team members and their roles. <u>Dan Bartels – principal, Cathy Scurlock - teacher, Marissa Jorgenson - teacher</u>
- 6. Has your school seen a cost savings from green initiatives? Yes 🗌 No 🔀 If yes, describe the cost savings or use the table below to fill in your cost savings data.

Fiscal Year	Electric Energy Consumption (kwh)	Natural Gas or Fuel Oil Consumption (therms)	Electric Utility Costs (\$)	Natural Gas Utility Costs (\$)	Total Utility Costs (\$)	Annual Savings (\$)	% Reduction from FY '11- '12
11-12							
12-13							
13-14							
14-15							

PILLAR I: REDUCED ENVIRONMENTAL IMPACT

Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions

Energy (Please convert energy data to Portfolio Manager format if possible)

7. Can your school demonstrate a reduction in Greenhouse Gas emissions? (*Please fill in table below first.*)

Yes No Percentage reduction: <u>6%</u> over (m/yy - m/yy): <u>09/12-08/13 to 09/14-08/15</u>

Initial GHG emissions rate (MT eCO2/person): <u>3.41</u>

Final GHG emissions rate (MT eCO2/person): 2.24

Offsets: <u>none</u> How did you calculate the reduction? Exported values from Portfolio Manager and the greenhouse gas conversion rates from this application.

What do you use to benchmark your energy use? Energy Star Portfolio Manager

Table is based on School data taken from Energy Start Portfolio Manager, district utility bills, etc.), as reported by District Personnel (Vendor or School/District Personnel). NOTE: Green Ribbon application has an error, as discussed with NE Dept of Education (Sara Cooper). Conversion to metric tons should be 2204.62

Fiscal Year	Electric Energy consumption (kwh)	Natural Gas Consumption (therms)	Fuel Oil Consumption (gallons)	Carbon Dioxide from Electric 1.52lbs/kwh	Carbon Dioxide from natural Gas 11.7 lbs/therms	Carbon Dioxide from Fuel Oil 26.033 Ibs/gal	Total Number of Staff and Students	MT eCO2/person
Example	100,000	15,000	5,000	100,000 x 1.52 = 152,000	15,000x 11.7 = 175,500	5000 x 26.033 = 130,165	250	(152000+1775 500+130165)/2 50/1000=1.83
11-12	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
12-13	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
13-14	2,2104,205	5,219	0	3,198,391.60	61,063.7	0	434	3.4
14-15	2,231,972	5,161	0	3,392,597.44	60,383.4	0	698	2.2

- 8. Has your school conducted an energy audit of its facilities? Yes 🗌 No 🔀
 - Percent reduction:

Measurement unit used kBTU/Square foot or kBTU/student? _____

Time period measured: from _____to ____

- 9. Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification? (Score of 75 or above) Yes No X Year(s) and score(s) received: _____
- 10. What percentage of your school's energy is obtained from:

On-site renewable energy generation: <u>0%, but there are onsite geothermal heat pumps</u> Type: _____

Purchased renewable energy: <u>0%</u> Type: ____

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: n/a

11. Has your school reduced its total non-transportation energy use from an initial baseline? Yes 🔀 No 📃

Current energy usage (kBTU/student/year): Enter data in table below.

Current energy usage (kBTU/sq. ft./year): Enter data in table below.

Table is based on School data taken from Portfolio Manager (Portfolio Manager, district water

bills, etc.), as reported by **District Personnel** (Vendor or School/District Personnel).

Fiscal Year	Electric Energy Consumption (kBTU)	Natural Gas Consumption (kBTU)	Fuel Oil Consumption (gallons) 1	Total Number of Staff &	kBTU/Number of Staff & Students	kBTU/sq. ft.	% Reduction from FY
	1kwh=3.412 kBTU	1therm=100kBTU	gal=139 kBTU	Students			11-12
11-12	n/a	n/a	n/a	n/a	n/a	n/a	n/a
12-13	n/a	n/a	n/a	n/a	n/a	n/a	n/a
13-14	7,179,548	512,912	0	375	20,537	38.1	baseline
14-15	7,615,489	516,097	0	617	13,179	40.2	36

12. Year your school was originally constructed: 2013 Total school building area (sq.ft): 186,802

13. Has your school constructed or renovated building(s) in the past ten years? Yes 🖂 No 🗌

For **new** building(s): Which green building standard was used? <u>LEED Silver</u> Percentage building area that meets green building standards: <u>100%</u> Certification and level: <u>LEED Silver</u> Total constructed area: <u>186,802</u>

 For renovated building(s): Which green building standard was used?

 Percentage of the building area that meets green building standards:

 Certification and level:
 Total renovated area:

Element 1B: Improved water quality, efficiency, and conservation Water and Grounds

14. Can you demonstrate a reduction in your school's total water consumption measured in gal/square foot **and/or** gallons/occupant from an initial baseline? Yes 🔀 No 🗌

If yes, please complete the tables below and provide the following information:

Average Baseline water use (gallons per **occupant**): 7,042 Current water use (gallons per **occupant**): 3,492Percent reduction in domestic use: 36.7 Percent reduction in irrigation: 55.2 Total percent reduction: 50.4Time period: from 09/12-08/13 to 09/14-08/15

Average Baseline water use (gallons per **sq ft**): <u>15</u> Current water use (gallons per **sq ft**): <u>12</u> Percent reduction in domestic use: <u>n/a</u> Percent reduction in irrigation: <u>27.9</u> Total percent reduction: <u>20.2</u> Time period: from <u>09/12-08/13</u> to <u>09/14-08/15</u>

Fiscal Year	Water Consumption (gallons)	Total Square Feet	Water Consumption (gals/sq ft)	% Reduction from FY 11-12
11-12	n/a	n/a	n/a	n/a
12-13	n/a	n/a	n/a	n/a
13-14	3,052,800	202,323	15.09	baseline
14-15	2,437,100	202,323	12.05	-20.02 (from 13-14)

Fiscal Year	Water Consumption (gallons)	Total number of Staff and Students	Water Consumption (gals/occupant)	% Reduction from FY 11-12
11-12	n/a	n/a	n/a	n/a
12-13	n/a	n/a	n/a	n/a
13-14	3,052,800	434	7,042	baseline
14-15	2,437,100	698	3,492	-50.4 (from 13-14)

Table is based on School data taken from <u>Portfolio Manager</u> (Portfolio Manager, district water bills, etc.), as reported by <u>District Personnel</u> (Vendor or School/District Personnel).

Do you include after-hour activities in your water consumption calculations? (Adult sport leagues, community events, etc.) Yes \boxtimes No \square

- 15. Describe any strategies you use to discourage single-use beverage containers on school property. Describe how you assure the recycling of those containers at athletic locations, or other outdoor events. <u>Recycling bins/stations are found throughout the building.</u>
- 16. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? 100%
- 17. What plants are native to your geographic location and how have you incorporated them? <u>Regionally appropriate</u> plants include native grasses and fescue rye that does not require lawn sprinkler irrigation once established. Various drought-resistant plants and grasses were also used in decorative landscaping near the building.

- 18. Describe alternate non-potable water sources used for irrigation (e.g. roof run-off, parking lot runoff). (50-words max) <u>Storm water runoff is an alternate source of irrigation for the bio-retention garden area. The mulch layer and subsoil is designed to hold storm water over a longer period of time. Only 4.4 of 30 acres of land are irrigated, the rest is watered with rain and/or storm water.</u>
- 19. Describe any efforts to reduce storm water runoff and/or reduce impervious pavement (e.g. rain gardens, bioswales, ponds). (50-words max) <u>Storm water runoff is detained in the three water quality basins and the bio-retention</u> garden for a longer period of time (1-2 days). It is then slowly released over that time to the storm sewer system. Some water will also infiltrate into the subsoil in these areas.
- 20. Our school's drinking water comes from: 🔀 Municipal water source 🗌 Well on school property 🗌 Other: _____
- 21. Describe how the water source is protected from potential contaminants. (50-words max) <u>The municipal water source, Omaha's Metropolitan Utilities District (MUD), provides water that meets or exceeds</u> <u>every federal and state requirement for safe drinking water. MUD uses chloramines in the water treatment process</u> <u>to kill bacteria.</u>
- 22. Describe the program you have in place to control lead in drinking water. (50-words max) <u>Water was tested by the District in all schools in 1989 when the EPA mandated testing water coolers for lead. Testing</u> was done to the first draw of water after a weekend when lead concentrations would be highest. Two water coolers were removed from services in OPS after testing.
- 23. Does your school have its own well? Yes No No If yes, did your school comply with all monitoring requirements and did the drinking water meet all applicable standards? Yes No
- 24. Describe how your school's site grading and irrigation system and schedule is appropriate for your climate, soil conditions, plant materials, with an emphasis on water conservation: (50-word max) <u>The landscaping was designed</u> to reduce water consumption by installing low flow irrigation fixtures and drought tolerant landscaping. Davis' plant species require little irrigation, the design of the water-efficient irrigation systems, reduces water use, and zoning, grouping and grading of the landscape was done to conserve water as well.
- 25. What percentage of school grounds are devoted to ecologically beneficial uses? (50 word max) 21.08 out of 28 acres are (75.3%) are devoted to ecologically beneficial uses. The 24.7% that are not devoted to ecologically beneficial uses are the building itself, the parking lots, and the football field. All other portions of the school grounds are devoted to ecologically beneficial uses.

Element 1C: Reduce waste production – Waste/Hazardous Waste

26. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 90

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): $\underline{32}$

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): $\underline{0}$

Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: <u>26%</u>

Monthly waste generated per person = (A/number of students and staff): 0.13 cubic yards

27. Do you include after-hour activities in your garbage reduction calculations (adult sport leagues, community events, etc.)? Yes 🔀 No 📃

- 28. What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed, and/or chlorine-free? <u>35%</u>
- 29. Describe how you have reduced your paper consumption, and how you measured that reduction (e.g. working and reviewing online, white boards). (50-word max) Davis staff uses scratch paper for in class, as well as copying / printing options. Whiteboards are utilized by teachers and students. OneDrive, email, and staff / school websites are used to share information and work with staff, students, families and the community.
- 30. List the types and amounts of hazardous waste generated at your school:

Flammable Liquids	Corrosive Liquids	Toxics	Mercury	Other
None	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>

How is this calculated? Using OPS Safety Protocols

How is hazardous waste disposal tracked? Using OPS Safety Protocols

31. Describe other measures taken to reduce solid waste and eliminate hazardous waste (on-site composting etc.). (100-word max)

OPS recycles waste as much as possible, employing methods such as mercury reclamation (for industrial use) and energy recovery from spent paint. Existing processes facilitate the reuse of chemicals and chemical products by offering the products for reuse by another school, rather than disposal. Unwanted or unusable chemical products become hazardous waste when there is no other option but disposal.

<u>Hazardous waste disposal is tracked by use of waste manifests, which are written documentation containing the</u> <u>identification of the contents, quantity, and final disposal location as well as the signature of all who took possession</u> <u>of that material.</u>

- 32. Which green cleaning custodial standard is used? ISSA Cleaning Industry Management Standards
- 33. What percentage of all products is certified? 25%

What specific third party certified green cleaning product standard does your school use? ISSA

Describe the measures your school has taken to use only green cleaning products. <u>Cleaning programs that protect</u> <u>health without harming the environment are used whenever possible</u>.

34. If your school has a nurse's office, how does the nurse track regulated medical waste? Describe the tools or mechanisms used to track this waste.

Sharps containers, biohazardous materials and surplus or outdated medications are collected by district personnel and are processed by a company specializing in the disposal of biohazardous waste.

- 35. Is a Hazardous Waste Policy for storage, management, and disposal of chemicals in laboratories and other areas with hazardous waste in place and actively enforced? Yes No Environmental picks up all laboratory waste that is not approved for disposal in the sanitary waste or through the sewer system.
- 36. Are there any Underground Storage Tanks located at your School? Yes 🗌 No 🔀 If yes, do you have the proper permits for using an underground tank? Yes 📃 No 📃

Element 1D: Use of Alternative Transportation

37. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses) <u>91%</u>

How is this data calculated? (50-word max) <u>88% of our students ride the school bus each day (546 students). Staff</u> observes approximately 74 students carpooling to school (multiple non-related students in one car). So, 546 out of <u>620 students bus or carpool to and from school</u>.

38. Has your school implemented?

- Designated carpool parking spaces
- A well-publicized no idling policy that applies to all vehicles (including school buses)
- A policy that encourages walking and/or bicycling to school
- Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows
- A Safe Routes to School program or a School Travel Plan
- 📃 Walk and Bike to School Days -
- A Walking School Bus program
- Walking and bicycling safety curriculum
- Electric vehicle charging stations have been installed to encourage the use of these vehicles
- Secure bicycle storage (such as bicycle lockers, racks, or rooms) is provided to encourage bicycling to school

Describe activities in your safe routes program if applicable: (50-word max)

OPS Transportation Division has well-documented School Bus Idling Procedures located within the Handbook for Transportation Employees. OPS Transportation works to identify hazardous streets, number of students assigned to routes, and implementing a safe walk to school zone that is less than two blocks away from the school site.

39. If your school has only bus transportation, describe how your school transportation use is efficient and has reduced its environmental impact (e.g. more efficient bus routes, diesel retrofits for buses, use of biodiesel fuel, electric vehicles). (50-word max)

OPS bus idling procedures state buses should be turned off for loading, unloading or waiting for students, except in extreme weather. Buses don't start until all students have boarded. The bus fleet is fueled by liquid propane and is estimated to reduce 2.3 million pounds of CO₂ per year.

Summary Question for Pillar 1

40. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100-word max)

Approximately 430 of the OPS buses used are fueled by liquid propane instead of diesel. OPS has the largest school fleet of liquid propane buses in North America which has a tremendous impact on the OPS Green Schools Initiative. This change is estimated to reduce 2.3 million pounds of CO₂ per year.

PILLAR 2: IMPROVE THE HEALTH AND WELLNESS OF STUDENTS AND STAFF Element 2A: Integrated School Environmental Health program Environmental Health

- 1. Has your school conducted any "Occupant Survey" with teachers and students? Yes 🗌 No 🔀 If so, please state the date(s) and results of the survey.(e.g. CHPS) _____
- 2. Do you have an Operations & Maintenance Policy for your building? <u>Yes, all Operation employees receive the</u> <u>Custodial Handbook.</u>
- 3. Describe your school's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspection, pest identification, monitoring, record-keeping, etc.:

OPS personnel are among the founding members of the Nebraska IPM Coalition and have been actively implementing IPM practices in the District for more than ten years. All pest management professionals employed by OPS are instructed to use IPM methods and must secure permission from the IPM program manager and the IPM program committee before any pesticide application is permitted. The OPS IPM program does not include antibacterial or antifungal cleansers.

All OPS schools are practicing IPM methodologies. No routine application of pesticides is allowed in OPS schools. Pests must be captured and identified. Only then is a specific pest management strategy developed for the control of that pest population.

Insect pest populations are monitored by use of sticky traps some of which may have been impregnated with pheromones which are regularly monitored and the findings recorded by the PMP vendor.

OPS personnel are not allowed to purchase or bring from home over-the-counter pesticides for use in OPS buildings.

What is the volume of your annual pesticide use (gal/student/year)? <u>0 gal/student/year -no pesticides are used.</u>

Describe efforts to reduce use: <u>All OPS schools are practicing IPM methodologies</u>. No routine application of pesticides is allowed in OPS schools. Pests must be captured and identified. Only then is a specific pest management strategy developed for the control of that pest population.

- 4. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.
 - Our school conducts both indoor (structural) and outdoor (turf and ornamental) IPM to reduce student exposure to chemical pesticides.
 - Our school prohibits smoking on campus and in public school buses. <u>Smoking is prohibited on OPS property</u> (including all buildings and grounds) and on any OPS student transportation vehicle.
 - Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. <u>OPS has implemented a program of voluntary elimination of mercury policy since 1997.</u> <u>Elemental mercury is sent for distillation and industrial reuse.</u>
 - Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO₂) Carbon monoxide monitors have been placed in all school boiler rooms, kitchens or rooms where gas fired appliances are in use since 2010. Prior to that time, the district used portable carbon monoxide and multi gas monitors to test for potential CO exposure.
 - Our school does not have any fuel burning combustion appliances (e.g. boilers, emergency generators, hot water heaters, etc.)

School Radon Testing: Our school has tested all frequently occupied rooms in contact with the ground, and first floor rooms above basement spaces that are not frequently occupied for radon gas and has fixed and retested rooms with levels that tested at or above 4 pCi/L. Yes \bigcirc No \bigcirc <u>All frequently occupied rooms are tested for radon following EPA guidelines, and retested after significant remodeling projects or ventilation system changes.</u>

Our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L. Our schools were not built with radon resistant construction as most were completed long before the presence or effects of radon were known. All occupied spaces have been tested and those with readings above 4pCi/L were inspected for penetrations, sealed and the ventilation systems were brought to proper working order. The area was retested to confirm 4pCi/L was attained.

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. The use of wood structures containing preservatives is not an OPS

standard practice. Any landscaping lumber suspected to contain chromate copper arsenate is protected by polyurethane.

5. Describe how your school controls and manages chemicals routinely used in the school, as well as construction or cleaning activity that produces odors or dust, to minimize student and staff exposure. (100-word max) OPS provides information, procedures and support to control/manage chemicals used. This includes locked storage areas, safety manuals/presentations, laboratory waste stream directions, inventory spreadsheets, disposal information, established spill procedures, educational videos and pick up services to recycle science lab chemicals, cleaning chemicals, art/other paints, and other chemicals. The goal is to substitute chemical products with the least toxic product available and to reuse chemicals to avoid disposal.

Construction or remodeling activities occur in unoccupied facilities. If not, contractors must provide an airtight dust barrier with a lockable hard surface to prevent the infiltration of dust into occupied portions of the facility.

- 6. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100-word max) Our schools work to minimize or eliminate major asthma triggers such as second hand smoke, pollen/mold spores, dust mites, cockroaches and animal dander. For example, smoking is prohibited; one-inch pleated filters are used in HVAC systems to reduce pollen/mold spore concentrations; mold remediation and prevention is a priority; indoor humidity is expected to be below 60% to minimize dust mites; an Integrated Pest Management Plan with an emphasis on cockroach control is fully implemented, and classroom pets are allowed only in rooms without sensitive individuals and must be kept in cages and food is stored in air tight containers.
- 7. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found. (100-word max)
 Building engineers and custodians are trained to look for water leaks and condensation and to work with the OPS Environmental Department to prevent mold growth in all schools. Any leak or condensation is reported immediately and repairs are completed promptly to prevent mold growth if possible. If the presence of mold is suspected but cannot be found, mold spore sampling may be performed. The OPS Environmental Department has specialized training to assess mold issues. It is standard practice to dispose of any porous material that has supported mold growth and properly remediate any mold growth on hard surfaces.
- 8. Our school has installed local exhaust systems for major airborne contaminant sources. Yes 🖂 No 🗌
- 9. Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100-word max)
 Custodial staff is responsible for changing filters on air handling units on a quarterly basis or more frequently if needed. The District heating, ventilation and air-conditioning (HVAC) technicians provide crucial technical support to determine the proper operation of all ventilation systems as needed. The HVAC technicians have also upgraded filters with a 6% efficiency rating to pleated filters with a 30% efficiency rating. Any response to an indoor air quality complaint includes an inspection of the HVAC system to verify the equipment has been properly maintained.
- 10. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (100-word max). As a new school is designed or old school remodeled, architects and mechanical engineers work with District staff to ensure close adherence to the ASHRAE Ventilation Standard. Pre-construction design considers the placement of outdoor air intakes (preferably away from loading docks); refuse containers, student drop off lanes, dedicated exhaust systems, interior relative humidity control and temperature control. The OPS HVAC technicians also recommend upgrades or retrofit systems to achieve ventilation rates and air quality as recommended by the current ASHRAE Ventilation Standard.
- 11. Describe other steps your school takes to protect indoor environmental quality such as: (200-word max)

- Implementing EPA IAQ Tools for Schools and/or
- Conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action.

The District uses the EPA's IAQ Tools for Schools program to monitoring indoor air quality (IAQ), and has been recognized for its program by EPA – National Excellence Award for IAQ (2006) and Model of Sustained Excellence Award for IAQ (2009). Annual IAQ baselines are collected at each school to monitor IAQ and are used to detect early issues in the building. This data is also used to determine ENERGY STAR eligibility. The District works regularly with building personnel to educate them in the recognition of environmental health and safety issues and where they can receive assistance with any corrective actions needed.

The District provides support for potential mold problems, asbestos management, lead testing of paint, toys, soil and water, mercury spills clean-up by use of a special vacuum and two direct read mercury vapor analyzers, chemical management for spills and proper storage, and proper disposal of potentially hazardous materials.

Other safety issues are managed by the Risk/Safety Management Office by providing training and corrective actions related to safety; including fire safety, occupational safety, traffic safety, extreme weather, playground and other safety issues to all schools.

12. Which of the following green procurement practices does your school engage in?

Building & Construction Low or no VOC emitting products

Carpets Used for noise attenuation. Hard surface materials specified for use in areas that are anticipated to become wet such as sinks and drinking fountains.

Cleaning The least toxic and least hazardous products have been chosen for use as cleaning products as long as the product performs as expected....sufficiently cleans and/or disinfects where needed.

- Electronics
- Fleets
- Food Services
- Landscaping OPS does not routinely use pesticides or herbicides in it's lawn care program.
- Meetings & Conferences
- Office Supplies
- Paper

13. What system do you use to determine if the above products and services are considered sustainable?

- DOE Purchasing for Energy Efficient Products
- CHPS High Performance Database
- Electronic Product Environmental Assessment Tool (EPEAT)
- Other

Element 2B: Nutrition and Fitness

Food and Nutrition, Fitness and Outdoor time

- 14. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100-word max each)
 - Our school participates in the USDA's Healthier US School Challenge. Level and year:
 - 🛛 Our school participates in a Farm to School program to use local, fresh food.
 - Our school has an on-site food garden that teaches nutrition and environmental education, describe.
 - Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community.
 - Our students spent 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.

Our school participates in International Walk to School Day in October and/or National Bike to School Day in May. Year(s):

- Our school has a School Wellness Policy that addresses both nutrition AND physical activity
- Our school has a School Wellness Committee that meets at least once a year.
- Health measures are integrated into assessments
- At least 50% of our students have participated in the EPA's Sunwise (or equivalent program.)

A certain percentage of the food purchased by our school food service is locally sourced from regional farms.

- Percentage: 2.9 Type: produce, dairy and proteins
- 15. Does your school compost lunch waste on-site? Yes No 🛛 If so, what percent? _____ How much is used in your outdoor classroom? _____
- 16. What environmental technology is used at your school? (e.g. weather station, composting, rain garden) n/a
- 17. Describe the type of outdoor education, exercise and recreation available. (100-word max) <u>Students are eligible to participate in intermural athletics (soccer, football) which take place outside. 7th graders are eligible to try out for cross country, football, track, and soccer which take place outdoors. PE Staff also has a "Fitness Fun" club for students who are reluctant to try sports.</u>

Coordinated School Health, Mental Health, School Climate, and Safety

18. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? Yes No I If yes, describe the health-related initiatives or approaches used by the school: Wellness information is posted throughout the school. Wellness tips are presented to students during PE classes.

All students are eligible to receive free breakfast every day. Some students also receive a free reduced nutritionally balanced lunch. Meal nutrition information is available on line and families are encouraged to review the menu each week. Our cafeteria has numerous visual aids to help students make good food choices.

The school nurse, social worker, counsels and school psychologist work closely with our families to provide services. We also have a close partnership with numerous community based health organizations.

Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health, school garden education and/or safety? Yes No I If yes, describe these partnerships: <u>Our School Resource Officer is provided by Douglas County Sheriff's Office. Our dedicated SRO is an integral part of the workings of the school on a day-to-day basis and is called in on all crisis situations as well as any Threat Assessments.</u>

We also have community partnerships with the following businesses: The Players Club of Omaha, Pepsi Beverage Company, Hauff's Sporting Goods, Tuskegee Airmen Inc. (NE), Cutchall Management Company, Hy-Vee (Fort St location), and University of Nebraska Omaha (UNO) Aviation Institute. These groups have provided support and services for students and will continue to do so on a yearly and as-needed basis.

Through a partnership with Methodist Hospital, we have a Licensed Mental Health Practitioner and Licensed Alcohol and Drug counselor available to work with students in the school 3 days a week at no charge to families. We refer to this partnership as our Community Counseling Program (CCP).

We also partner with Charles Drew Community Health Center and their School-Based Health Center (SBHC) program. While this program is not housed in our building, it is housed in our neighborhood high school, Northwest High, and our students and families have access to their low- and no-cost programs.

- 19. Does your school have a school nurse and/or a school-based health center? Yes 🖂 No 🗌
- 20. Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.): Omaha Public Schools has a strict anti-bullying policy and procedure in place. Documents are available for students to report bullying behavior, and administration can assign consequences to students who participate in bullying behavior according to the Code of Conduct. Students who bully and students who are bullied are also able to receive followup counseling through the school counselor and the Community Counseling Program.

School counseling curriculum includes a personal/social component which is taught in classrooms to all students. The Physical Education department also teaches the concepts of families, peer relationships, puberty, and personal health care during their Human Growth and Development coursework.

Summary Question for Pillar 2

21. Describe any other efforts to improve coordinated health and safety, nutrition and fitness, highlighting innovative or unique practices and partnerships. (100-word max)

OPS is a member of the School Food Focus (Food Options for Children in Urban Schools), to make school meals more healthful, regionally sourced and sustainably produced. OPS is an active participant in the Midwest Regional Learning Lab.

The Gretchen Swanson Center for Human Nutrition is a partner in actively promoting Farm to School Activities. The newsletter, *Nutrition Connection*, is sent to all parents; *Daily Nutrition Tips for Schools* on our website; monthly *Taste It! Try It! Fruit & Veggie Day!* - introduces new and different items, and "*Cheese Nugget*" of the month, which features a locally produced cheese nugget.

PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION

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

 Which practices does your school employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.

Our school has an environmental or sustainability literacy requirement. (200-word max) <u>The Nebraska State Standards for science include focuses on Life Science (including flow of energy and matter, impact on ecosystems, and biodiversity) and Earth and Space Science (including use of earth materials, fuel, building materials, sustaining plant life, and effects of energy changes on Earth). These standards, which are connected to sustainability and the environment, are core elements of what students are taught every day.</u>

Environmental and sustainability concepts are integrated throughout the curriculum. (200-word max)
Within the climate and culture standards for Social Studies, students learn agricultural practices of various regions and how people in other cultures interact with their environment. They study the long lasting effects of pollution within their science courses and use math and graphing skills to document trends over time. Some of the non-fiction selections used by reading classes include literature relating to the environment and renewable energy.

Environmental and sustainability concepts are integrated into assessments. (200-word max) Included on the OPS Acuity Diagnostic tests and on the Nebraska State assessments, questions pertaining to recycling, renewable energy and cultural practices are included.

Students evidence high levels of proficiency in these assessments. (100-word max)

Davis students perform consistently higher than same-age peers on state Math, Reading, Science and Writing tests. In 2014-2015 Davis NeSA meets/exceeds combined results for all grades tested were: Reading 80%, Math 67%, Science 57%, and Writing 72%. Professional development in environmental and sustainability education are provided to all teachers. (200-words max) All staff have been trained on proper recycling techniques with professional development presentations and signage. Each light switch in the building includes a "please turn off" sticker. A tour of the LEED building was provided to the staff.

Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills

- For schools serving grades 9-12, provide: Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: n/a Percentage scoring a 3 or higher: n/a
- 3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200-word max) <u>The Nebraska State Standards for mathematics include a "Comprehensive Data Analysis/Probability Standard" in which "students will communicate data analysis/probability concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines. It is within this standard that students are asked to look at sustainability and the environment and use applied mathematics to assess impact. Students are asked to formulate questions, organize data, evaluate predictions, and make inferences in this standard. Math teachers use sustainability and wellness concepts as examples in math lessons, classes, and story problems.</u>

In Tech & Living class, students apply the information and research on sustainability and environmental topics to complete many experiments, analyze data and produce scaled replicas of green energy machines and vehicles. Students are challenged in the curriculum delivery to apply information and research to their daily lives and incorporate changes in behavior to lessen their carbon footprint.

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200-word max) Every student at Davis participates in Career Education through Introduction to Careers and Technology coursework as well as counseling department lessons and Personal Learning Plans. Students are taught that green technologies and career pathways (many as part of STEM education) are among the fastest-growing career fields that will be available to students when they graduate from high school. Math and science teachers focus on the concepts of "clean energy and environments" as careers that will be in demand when our students are entering the workforce.

Career Education uses the Nebraska Department of Labor career cluster model. Career pathways linked with sustainability and the environment includes: Health Science, Communication and Information Systems, Agriculture, Food and Natural Resources, Skilled and Technical Sciences, and Human Sciences and Education.

Our after-school Computer Club uses old computers that were saved from the trash and can now be improved and restored as the students learn about their interest.

Element 3C: Development and application of civic knowledge and skills

- 5. Describe students' civic/community engagement projects integrating environment, environmental justice (as defined by EPA) and sustainability topics. (200-word max) _____
- 6. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200-word max) <u>All teachers are able to spend time outdoors with their classes on our campus.</u> For example, a reading class might take their books outside to read. Math teachers find ways to do labs and lessons outside so that students can participate in applied knowledge rather than abstract.
- 7. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max) <u>Our green roofs</u> are utilized by math teachers to teach an array of concepts including perimeter, volume, and rate. They are used by science teachers to teach biology concepts. Our stage is built so that performances can be done inside the building

in the gym, or from the outside using seating attached to our football stadium. Our spring play will be performed in an outdoor setting.

8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (200 words max) <u>Partnerships with area high schools enable our students to see environmental and STEM education in action at a higher level. They become aware of the importance of their middle school studies in mathematics, technology, and science and how build to enable students to participate in environmental and STEM education more intensively in the future. The scope of these partnerships ranges from understanding prerequisites for high school courses, to being mentored by a high school robotics team.</u>

Summary Questions for Pillar 3

- 9. Describe any other ways that your school integrates core environment, sustainability, STEM, equity and environmental justice issues (as defined by EPA), green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200-words) Effective environmental and sustainability education is embedded into learning for all content areas in our building. Whether it is using an article about environmentalism as a catalyst for a debate in Social Studies, learning about technical writing in English using a piece on sustainability, or learning about actual sustainability theory in Tech & Living, our students are focused on environmental education throughout their days. They are aware that it is their responsibility (and will someday be their job) to take care of their environment. They are up to the challenge.
- 10. How are your descriptions in number 8 supported or enhanced by your efforts in Pillar 1 to reduce environmental impact and costs for your school. (100 words max) <u>Students are led through the positive impact an effective recycling program can have on our school, community, country and world. They are invited to analyze our current practices and offer suggestions for improvement.</u>
- 11. Submit up to 20 photos or up to 10 minutes of video content.



Native plants and grasses in the landscaping near the main entrance. Student drop off takes place more than 25 feet from the building.



Retention pond between the parking lot and the building.



One of two green roofs used to redirect sunlight.



Native plants surround the flagpole.



Native plants and grasses near the building with farm land in the distance.



Parking for high-efficiency vehicles.



One of nine recycle stations throughout the building.



Healthy eating in the cafeteria.



Nutrition information displayed in the lunch line.

Two-story wall of windows in the cafeteria, windows in classrooms and library provide lots of natural light.







Students recycle milk containers at all meals.



Students get some exercise in the gym after lunch.



Stage opens either to the gym or the outdoor space.



Food and Nutrition curriculum in Technology and Living Class.



Wellness concepts used as a story problem in math class.



A student learns about green energy via a computer module.



Students use computer modules as well as creating magnetic model planes to learn about alternative energies.