

**2012-2013 School Nominee Presentation Form**

**PART I - ELIGIBILITY CERTIFICATION**

**School and District's Certifications**

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct 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 one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school 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 and sustainability 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.

# Green Ribbon

ED-GRS (2012-2013)

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## U.S. Department of Education Green Ribbon Schools 2013

For Public Schools only: [ ] Charter [ ] Title I [X] Magnet [ ] Choice

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

Official School Name Heritage E-STEM Middle School  
(As it should appear in the official records)

School  
Mailing Address 121 W Butler Ave  
(If address is P.O. Box, also include street address.)

West St Paul MN 55118  
City State Zip

County Dakota County State School Code Number\* 0054

Telephone ( 651 ) 403-7400 Fax ( 651 ) 403-7410

Web site/URL heritage.isd197.org E-mail Christopher.hiti@isd197.org

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

[Signature] Date 2-4-13  
(Principal's Signature)

Name of Superintendent\* Dr. Nancy Allen-Mastro  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name\* Independent School District 197 Tel. ( 651 ) 403-7001

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

[Signature] Date 1-30-13  
(Superintendent's Signature)

## **PART II - SUMMARY OF ACHIEVEMENTS**

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### **Pillar I**

Heritage has received several energy awards; Energy Star Label every year since 2008, EPACT Certification 2010, Xcel Energy Efficiency Partner 2009. As part of ISD 197- Energy Star Leader earning 10%, 20% and 30% improvement, Energy Star Top Performer every year since 2009.

Heritage has reduced; Greenhouse Gas emissions by 21% and energy use by 47% from 2007-2012. Besides behavior changes there are several things that have contributed to these savings; indoor temperature standards, building automation system for heating, cooling and lighting allows us to schedule buildings for occupied and unoccupied.

Irrigation systems are monitored to ensure they are free of water leaks, grounds are watered based on weather conditions and necessity. We use a deduct meter to save money on sewer charges. Our school's landscaping is 100% regionally appropriate. The district performed lead in water sampling last year. During renovation all fixtures were replaced with lead free fixtures, installed motion sensors to control water usage on toilets, urinals and sinks.

More than 62% of our solid waste is diverted from landfills. This is the fifth year we have composted lunch waste. We partnered with Dakota County to enhance our recycling; we have recycle bins in every classroom, office and hallway. The Health and Safety Director has made sure that we are recycling scrap metal, used oil, oil filters and other hazardous waste. E-waste is recycled by Asset Recovery a R2 certified recycler.

Our paper comes from mills that are SFI Certified Sourcing and processed chlorine free (PCF). Cleaning products are "third party certified" green cleaners.

Our electronic purchases are EPEAT certified.

Heritage has a no idling policy that applies to all vehicles including buses, participates in "Safe Routes to School" and partnered with Project Green Fleet, an initiative to reduce diesel emissions.

### **Pillar II**

Our school has an integrated pest management plan in place, methods of application, and posting requirements are provided to parents and school employees in accordance with the Janet B. Johnson Parents' Right-to-Know Act.

We control moisture in our building through a desiccant based cooling system. All exhaust systems are functional and balanced to maintain slightly positive air pressure.

We ensure all spaces are adequately ventilated with outside air, consistent with ASHRAE standards and guidelines. Michaels Engineering performs IAQ surveys during the months of Jan and Feb 2012. Assessments included teacher checklist for concerns about workspace, lead engineer interview about HVAC maintenance and operations etc., building

walk through, measurement of carbon dioxide, carbon monoxide, temperature and humidity.

We have district standards to address thermal comfort for heating and cooling. All classrooms have energy efficient windows that are placed in classrooms for maximum natural light, which reduces the need for schools to turn on lights during the school day. Heritage has our hallway lights on a sensor so when hallways are not being used the lights turn off and only return when movement is sensed.

Our school nutrition program has won the 2012 USDA's Healthier US Gold Challenge at the Gold level. Heritage kitchen staff offers students fresh fruit and vegetables along with freshly prepared meals. Students eat with compostable sporks and trays. Students are required to participate in physical education every other day for 55 minutes. Each student is physically active for at least 120-150 minutes of gym class each week that is organized and taught by our physical education teachers.

### **Pillar III**

Heritage E-STEM Magnet School follows The Environmental Literacy standards and benchmarks, which are at the foundation of our environmental education. Teachers collaborate to ensure environmental standards and benchmarks are included in lessons taught through out the year. Heritage staff collaborates to make cross-curricular connections through an environmental lens. The environmental theme is what ties our building together and is evident as you walk around our building. At our foundation, our school strives to be known for our work as environmental educators and stewards. We understand that in order to be environmental stewards we need to provide experiences and learning to support how students interact with the environment and be active educating our community on environmental issues such as recycling, water quality, composting, gardening, prairie restoration and re-fillable water bottles. As a leader in environmental education we work with Dodge Nature Center to make real-life connections to our environment.

Students at Heritage are Involved with daily composting of breakfast and lunches, recycling and use of re-fillable water bottles at our water bottle filling station. We use our weather bug system to monitor outdoor air temperatures to prepare for outdoor learning experiences that happen throughout the year.

School wide LIVEGREEN club promotes energy conservation and recycling through behavior changes with guidance of a dedicated teacher. Heritage will continue to grow as green educators with the guidance of Dodge Nature Center and our District Sustainability Coordinator.

# Green Ribbon

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

## **PART II – SUMMARY OF ACHIEVEMENTS**

### **Instructions to School Principal**

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School.

## **PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE**

### **Instructions to Nominating Authority**

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

### **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 one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school 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

Minnesota Department of Education

Name of Nominating Authority

Dr. Brenda Cassellius

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

# GreenRibbon

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

Brenda Canell Date 2.12.13  
(Nominating Authority's Signature)

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.

**Heritage Middle School, West St. Paul, Minnesota**

**Summary of Evaluations**

Each of Minnesota's fourteen 2012-13 GRS applications were reviewed by three MDE GRS Advisory Group Members based on the USED scoring rubric template.

While not nominated in 2012, Heritage Middle School was a Minnesota finalist in the first year of GRS. They again ranked very high this year in our evaluation and were the second highest scoring application. The school has a highly "disadvantaged" student body with 51% of students qualifying for free and reduced lunch and 15% with limited English proficiency. They scored solidly across all three pillars, with exceptional work in Pillar 1, despite having a building constructed in 1951. They also have one of the strongest E-STEM middle school programs in Minnesota. Here is what the evaluators said about the application:

- The application states, "The environment is our big overarching goal that guides our school." This feeling permeates the program descriptions throughout the proposal. It is obvious that the E-STEM philosophy is powerful, meaningful, and fully adopted in the school. The application is well written, especially in the later, narrative sections. The school's demographics are more diverse than many incorporating environmental programs, which is also commendable. There were no substantial weaknesses.
- Very solid proposal. Significant efforts and progress made in nearly every area.
- School has received recognition/awards multiple years; Xcel Energy Efficiency Partner 2009, Energy Star 2008, Energy Star Leader 2005, 2009, 2010, Energy Star Top Performer 2009, 2010, EPACT Certification 2010.
- Water usage reduction significant. 69% reduction in domestic waster use, 3% reduction in irrigation use; site is 75% various types of green space; use 100% water-efficient or regionally appropriate landscaping; school follows "model of beneficial landscaping."
- 62% recycling and diversion rate; 90% paper is from SFI certified sourcing mills and 90% is TCF or PCF; 95% of all products Ecologo certified; school's LIVEGREEN team held fundraisers to purchase a filtration station to promote reusable water bottles; on-going education provided to all students/staff about composting w/ visuals mounted on all receptacles to help all understand where to discard items (compost, waste, garbage).
- School implemented all listed alternative transportation options; 20-25% of students walk, carpool, bike depending upon weather; ISD 197 participates in PGF and the school has done improved and innovative bus routing to eliminate 6 routes.

- School has done nearly everything in the environmental health section; aggressive and regular reviews done; have indoor temperature standards and a Make-up Air Handling unit in kitchen to capture all exhaust.
- School participates in USDA Healthier US Gold Challenge at Gold level; meets physical requirements and have Fitness Gram program to monitor personal health information; partners with Dodge Nature Center for many outdoor opportunities; participates in Sun Wise Program; school-wide vegetable gardens were grown and used by students to make fresh salads; purchases “environmentally preferable” food.
- School follows environmental literacy standards and elements are designed into multiple elements of all teaching; multiple partnerships utilized for classroom lesson designs and E/S professional development for entire staff; assessment is part of design “to ensure environmental literacy is measured and supported”; E/S benchmarks are “part of curriculum in all classes”; school stresses “real-life connections to our environment and how our systems influence on another”; “Students have been awarded as being proficient environmental stewards from Eagle Bluff and Wolf Ridge Environmental Centers for the past two years along with leading the district in recycling and composting.”
- School is an E-STEM Magnet School in its “third year of integrating our theme into our core curriculum. Teachers work every year to write curriculum with the main purpose of integrating E-STEM into their daily instruction.”; teachers integrate “our green school efforts into our math and science curriculums”; conversations/lessons about “environmental careers have been built into our science curriculums in grades 5-8.”; even the Language Arts teachers “include green careers as part of their career exploration unit.”; the “5th and 7th grade students have weekly instruction from a trained naturalist who shares many green career pathways throughout the year.”
- All grades have specific programs/plans for civic/community involvement around E/S issues; major partners include Dodge Nature Center, Dakota County, and various cities; unique programs include water testing done for/in conjunction with local units of government and their courtyard area designed to showcase elements of prairie restoration, butterfly garden and regional plants; students learn about composting impact on community; school Livegreen program incorporates E/S elements into all school actions; school’s Community Education Dept. “offers E-STEM classes throughout the school year to promote our magnet theme.”

## School/District Contact Information

Independent School District Number (if applicable): **197**

School/District Name: **West St Paul, Mendota Heights, Eagan Area**

Street Address: **121 Butler Ave**

City/State/Zip: **West St Paul MN 55118**

Website: **heritage.isd197.org**

Superintendent Name: **Dr. Nancy Allen-Mastro**

Superintendent Email Address: **nancy.allenmastro@isd197.org**

Phone Number: **651-403-7001**

Principal Name (not required for district-wide applications): **Chris Hiti**

Principal Email Address: **Christopher.hiti@isd197.org**

Phone Number: **651-403-7401**

Lead Applicant Name (if different): **Sarah Shanley and Lisa Johnson**

Lead Applicant Email: [sarah.shanley@isd197.org](mailto:sarah.shanley@isd197.org) , [lisa.johnson@isd197.org](mailto:lisa.johnson@isd197.org)

Phone Number: **651-403-7571, 651-403-7324**

Type of Award applying for (choose only one):

Individual School

District-Wide, Multi-School

Level <input type="checkbox"/> Elementary (PK - 5 or 6) <input type="checkbox"/> K - 8 <input checked="" type="checkbox"/> Middle (6 - 8 or 9) <input type="checkbox"/> High (9 or 10 - 12)	School Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private/Independent <input type="checkbox"/> Charter	How would you describe your school? <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban <input type="checkbox"/> Rural	Total Enrolled: <b>788</b>
Does your school serve 40% or more students from disadvantaged households? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	% receiving FRPL: <b>51%</b> % limited English proficient: <b>108, 15%</b> Other measures: Click here to enter text.		Graduation rate: <b>not applicable</b> Attendance rate: <b>96%</b>

**Application Outline:**

<b>ED-GRS Pillars and Elements</b>	<b>Points</b>
Cross-Cutting Question: Participation in green school programs	5 points
<b>Pillar I: Reduce environmental impact and costs: 30%</b>	
Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions (preference for schools that have used <u>State of Minnesota B3 Benchmarking</u> ) Energy Buildings	15 points
Element 1B: Improved water quality, efficiency, and conservation Water Grounds	5 points
Element 1C: Reduced waste production Waste Hazardous waste	5 points
Element 1D: Use of alternative transportation	5 points
<b>Pillar II: Improve the health and wellness of students and staff: 30%</b>	
Element 2A: Integrated school environmental health program Integrated Pest Management Contaminant controls and Ventilation Asthma control Indoor air quality Moisture control Chemical management	15 points
Element 2B: Nutrition and fitness Fitness and outdoor time Food and Nutrition	15 points
<b>Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways: 35%</b>	
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems	20 points
Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills	5 points
Element 3C: Development and application of civic knowledge and skills	10 points
<b>Total</b>	<b>100 points</b>

### Cross-Cutting Programs

1. Is your school participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?

Yes  No Program(s) and level(s) achieved: **B3 Benchmarking, Energy Star Portfolio Manager**

2. Has your school, staff or student body received any awards for facilities, health or environment?

Yes  No Award(s) and year(s): **Xcel Energy Efficiency Partner 2009, Energy Star 2008, Energy Star Leader 2005, 2009, 2010, Energy Star Top Performer 2009, 2010, EPACT Certification 2010**

### Pillar I: Reduced Environmental Impact and Costs

**Energy** (please note that preference will be given to schools that have used the State of Minnesota B3 Benchmarking)

1. Can your school demonstrate a reduction in Greenhouse Gas emissions?

Yes  No Percentage reduction: **21% Over (mm/yyyy - mm/yyyy): 1/2007-11/2012**

Initial GHG emissions rate (MT eCO<sub>2</sub>/person): **2.36**

Final GHG emissions rate (MT eCO<sub>2</sub>/person): **1.33**

Offsets: Click here to enter text. How did you calculate the reduction? **B3 Benchmarking**

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

Yes  No Year(s) and score(s) received: **2008 100pts; current rating is 88**

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

Current energy usage (kBTU/student/year): **10,067**

Current energy usage (kBTU/sq. ft. /year) **42.56**

Percentage reduction: **47% Over (mm/yyyy - mm/yyyy): 1/2007-11/2012**

How did you document this reduction? **B3 Benchmarking**

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

On-site renewable energy generation **0**: Type: Click here to enter text.

Purchased renewable energy: **15%** Type: **A combination of wind 10.3, hydro 3.7, Biomass 1.2 and Solar .2 Electricity accounts for 58% of our energy used.**

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: **No**

5. In what year was your school originally constructed? **1951**

What is the total building area of your school? **174,085**

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

For new building(s): Percentage building area that meets green building standards: Click here to enter text.

Certification and level: Click here to enter text. Total constructed area: Click here to enter text.

For renovated building(s): Percentage of the building area that meets green building standards: Click here to enter text.

Certification and level: Click here to enter text. Total renovated area: Click here to enter text.

### **Water and Grounds**

7. Can you demonstrate a reduction in your school's total water consumption from an initial baseline?

Average Baseline water use (gallons per occupant): **99.4 gallons/student/year.**

Current water use (gallons per occupant): **30.9 gallons/student/year.**

Percentage reduction in domestic water use: **69%**

Percentage reduction in irrigation water use: **3%**

Time period measured (mm/yyyy - mm/yyyy): **1/2007-10/2012**

How did you document this reduction (i.e., ENERGY STAR Portfolio Manager, utility bills, school district reports)? **Utility reports.**

8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? **100%**  
Types of plants used and location: **Zone 4a perennials, evergreen, deciduous. They are planted in several locations around the building.**

9. Describe alternate water sources used for irrigation. (50 words max)

**None**

10. Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (50 words max)

**75% of our site is green space, lawn, regionally appropriate landscaping and sports fields.**

11. Our school's drinking water comes from:

- Municipal water source  
 Well on school property  
 Other: Click here to enter text.

How often is the school's drinking water tested for possible contaminants? (50 words max)

**Lead in water testing was done in 2012 by the school district. It is done whenever there is renovation to the plumbing. Our water comes from St Paul Regional Water Services. SPRWS tests drinking water monthly for possible contaminants.**

12. Describe how the water source is protected from potential contaminants. (50 words max)

**St Paul Regional Water Services tests water monthly for possible contaminants. We have backflow prevention at all potential contamination points such as, cleaning chemical dispenser's.**

13. Describe the program you have in place to control lead in drinking water. (50 words max)

**The district has performed lead in drinking water sampling. Through renovation, all of our fixtures were replaced with lead free fixtures in 2006-2008. Our last lead in drinking water was tested in 2012.**

14. Describe how the school grounds are devoted to ecologically beneficial uses. (50 word max)

**The grounds at Heritage follow the model of beneficial landscaping. We encourage natural and native landscaping. We select regionally native plants as the backbone of our landscape. We follow best practices to reduce the harmful effects of chemicals. We practice soil and water conservation by using mulch around our plants.**

### Waste

15. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or organics diversion (food to people, food to hogs and/or composting)? Note that Minnesota Statutes, section 115A.151 requires that schools must recycle a minimum of three material types. 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): **8x8x1=64**

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): **8x8x1=64**

C - Monthly organics diversion (food to people, food to hogs and/or composting) volume(s) in cubic yards (leftover food collection bin/food scrap and/or soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): **10x4x1=40**

Recycling and Diversion Rate =  $((B + C) \div (A + B + C) \times 100)$ : **62%**

Monthly waste generated per person = (A/number of students and staff): **8 lbs.**

16. What percentage of your school's total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed by the Forest Stewardship Council (If a product is only 30% recycled content, only 30% of the cost should be counted)? **90% of our paper comes from mills that are SFI Certified Sourcing.**

17. What percentage of the total office/classroom paper content by cost is totally chlorine-free (TCF) or processed chlorine free (PCF)? **90% or more.**

18. List the types and amounts of hazardous waste generated at your school. (Note that Minnesota Statutes, section 121A.33 bans mercury in Minnesota schools.)

Flammable liquids	Corrosive liquids	Toxics	Other
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

How is this measured? [Click here to enter text.](#)

How hazardous waste disposal is tracked and where was it disposed? [Click here to enter text.](#)

Describe other measures taken to reduce solid waste and eliminate hazardous waste (i.e., bottled water campaign, food waste reduction, etc.) (100 word max)

**The LIVEGREEN team held fundraisers to purchase a filtration station to promote reusable water bottles. On-going education was provided to all students/staff about composting. Visuals were mounted on all receptacles to help all understand where to discard items (compost, waste, garbage). In addition, school-wide vegetable gardens were grown and used by students to make fresh salads. Videos were made by the LIVEGREEN Team and played on school-wide video announcements to communicate going Green building-wide.**

19. Which green cleaning custodial service standard is used (i.e., Green Seal Standard for Commercial and Institutional Cleaning Services (GS-42), the ISSA Cleaning Industry Management Standard – Green Building)?

**Our cleaning chemicals meet Ecologo Standards, the generic label for Green Seal Standard for Commercial and Institutional Cleaning Services.**

What percentage of all products is third-party certified? **95%**

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

**Ecologo**

**Alternative Transportation**

20. What percentage of your students walk, bike, bus, or carpool (2 or more students in the car) to/from school? (Note if your school does not use school buses.) **40% walk, bike or carpool. 60% ride the school bus.**

How is this data calculated? (50 word max)

**We have 732 registered students attending Heritage ESTEM, 471 students ride the bus. During the fall and spring Minnesota weather allows for children to safely ride their bikes to school. Heritage provides two bike racks that on average houses 100-150 bikes that equates to 10-15% of our student population. During the winter the number of students who walk or carpool increases. Our school district busing policy requires students that live one mile or less to walk to school. On average 20% of our students walk or ride their bike to school. Carpooling is around 10%; students riding a bus are close to 60% based on home addresses.**

21. Has your school implemented any of the following? Check all that apply.

- Designated carpool parking stalls.
- A well-publicized no idling policy that applies to all vehicles (including school buses).
- Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.
- Safe Pedestrian Routes to school or Safe Routes to School.

Describe activities in your safe routes program and other events to encourage students to walk, bike or carpool, including number of participants. (50 word max)

**We have added a walk/ride to school day to occur during the 2013 National Environmental Education week. Our student LIVEGREEN Team will be leading this event as we take part in this national celebration.**

22. Describe how your school transportation use is efficient and has reduced its environmental impact. (50 word max)

**The Transportation Department at ISD 197 has improved routing by consolidating pick up and drop off locations for several schools. These fewer stops per route allow us to save fuel and help with parts costs and usage as we can put on more miles between scheduled replacements. Most exhaust emissions are worse at take-off and if we minimize these actions our tailpipe emissions are also reduced. We have taken every effort to track our bus load counts to determine how many students actually use the bus. Because of these efforts we were able to determine the specific bus numbers we need to get our students safely to school. This past summer we were able to combine several routes which allowed us to cut 6 bus runs from our schedule. These practices have helped reduce our carbon footprint and also made us a more efficient department.**

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

**We have Indoor temperature standards for both the heating and cooling season. Our building automation system for heating, cooling and lighting allows us to schedule buildings for occupied and unoccupied. We have MAH Makeup air handling unit in our kitchen to capture exhaust. This is the fourth year we have composted lunch waste. We partnered with Dakota County to enhance our recycling; we have recycle bins in every classroom, office and hallway. Every trash, recycle and compost bin has a label so what goes where is clear. We have right sized our trash pick-ups to cut down on unnecessary trips and trip charges. The heated pool and building is closed for summer months (consolidate school programs district wide to reduce energy), LIVEGREEN club that promotes energy conservation and recycling through behavior changes.**

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

### **Environmental Health**

1. What is the volume of your annual pesticide use (gallons/student/year)? **.027 per student per year**

Describe your efforts to reduce use: Click here to enter text.

2. Which of the following practices does your school employ to minimize use of and exposure to pesticides? Provide specific examples of actions taken for each checked practice.

Our school has an integrated pest management plan in place to reduce and/or eliminate pesticides and pest control policies, methods of application, and posting requirements are provided to parents and school employees in accordance with the Janet B. Johnson Parents' Right-to-Know Act (Minn. Stat. § 121A.30).

Click here to enter text.

Copies of pesticide labels, copies of notices, MSDS and annual summaries of pesticide applications are all available and in an accessible location.

Click here to enter text.

Our school prohibits children from entering a treated area for at least 8 hours after the treatment or longer if required by the pesticide label.

**We spray during the summer when school is not in session.**

3. 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 has a comprehensive indoor air quality management program that is consistent with Minnesota Department of Health best practices which are based on EPA's IAQ Tools for Schools.

**We do annual indoor air quality testing. The testing is performed by Michaels Engineering.**

Our school prohibits smoking on campus and in public school buses.

Click here to enter text.

Our school is in compliance with Minnesota Statutes, section 121A.33 and has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. (This does not apply for fluorescent bulbs, mercury thermostats, switches and gauges for HVAC systems.)

**Mercury was removed**

Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO).

Our school does not have any fuel burning combustion appliances.

Click here to enter text.

Our school has tested all frequently occupied rooms in the last five years 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.

Click here to enter text.

Our school has identified and properly manages or has removed, where applicable, asbestos-containing materials, according to U.S. EPA AHERA regulations and, where applicable, the Minnesota Department of Health asbestos abatement rules.

**We do asbestos inspecting every 6 months. Every three years we do**

Our school has identified and properly removed sources of lead according to the U.S. EPA's Renovation, Remodeling and Painting Rule where lead containing paint may be disturbed in areas used by children under the age of six.

**With our 2008 renovations, all identified contaminants were removed according to the EPA's Rule.**

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.

**All structures containing chromate copper arsenate have been removed.**

4. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. (100 word max)

**Green cleaners are used for the all cleaning. Teachers and students do not have access to any cleaning chemicals, only trained staffs use cleaning products.**

5. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100 word max)

**We use Merv 8 filters in our ventilation system. These filters will collect particles as small as 3 microns, some of the common particles related to MERV ratings are pet dander, insecticide dust, smog, dust, viruses, wood, tobacco smoke, spores, bacteria and pollen.**

6. Describe actions your school has taken to have your school bus fleet retrofitted with cleaner burning engines or to acquire cleaner burning buses or fuel.

**In 2009 we partnered with Project Green Fleet, an effort of the Minnesota Environmental Initiative to improve Minnesota's air quality by reducing diesel emissions. 33 of our 61 buses were made "green" by the installation of federally approved catalyst mufflers that can reduce engine emissions by up to 25%. Buses eligible for retrofits are older buses with diesel engines that are expected to still provide many years of service — newer buses create less pollution and don't benefit from the retrofits. The majority of the remaining buses meet the 2009 emission standards.**

7. If your school owns or operates an indoor ice arena, describe your compliance with state laws regarding certification, routine testing and other steps you have taken to maintain acceptable air quality.

**We do not have an arena.**

8. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly clean up mold or remove moldy materials when it is found. (100 word max)

**We control moisture in our building through a desiccant based cooling system.**

9. Our school has working local exhaust systems for major airborne contaminant sources.  Yes  No

**All exhaust systems are functional and balanced to maintain slightly positive air pressure.**

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 (Minnesota State Mechanical Code/American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) guideline or 15 cubic feet per minute (cfm) of fresh air per occupant). 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)

**We hire Michaels Engineering to ensure all classrooms and other spaces are adequately ventilated with outside air, consistent with ASHRAE standards and guidelines. Michaels Engineering perform IAQ surveys during the months of Jan and Feb 2012. The IAQ surveys were based on the EPA's Tools for Schools protocol. Assessments included teacher checklist for concerns about workspace, lead engineer interview about HVAC maintenance and operations etc., building walk through, measurement of carbon dioxide, carbon monoxide, temperature and humidity.**

11. Describe steps your school takes to protect indoor environmental quality, such as access to daylight, lighting quality, views to nature, acoustics, thermal comfort, etc. (200 word max)

**We have district standards to address thermal comfort for heating and cooling seasons. All classrooms have windows for day-lighting in the classroom.**

12. Describe any other actions your school takes to do periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (200 word max)

**Walk throughs are performed by district maintenance staff regularly to check on HVAC, fire extinguishers and lights. HVAC consultants from Michaels Engineering do annual checks. Our district insurance carrier sends people in to assess our buildings.**

### **Nutrition and Fitness**

13. 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 the USDA's Healthier US Gold Challenge at the Gold level. Students are required to participate in physical education on an every other day schedule. Each student is physically active for at least 120-150 minutes of gym class each week that is organized and taught by our physical education teachers. Our physical education classes are outside as long as it's not raining or snowing. Our teachers plan on taking our students outside even during the winter as long as it's not below 15 degrees. We understand we live in a state with many weather changes so our students come to school prepared are to play organized sports/games and winter athletics outside during gym classes. We even provide outdoor clothes to students who come not prepared. Our health and science classes have built in to their skin care units the Sun Wise Program.**

Our school participates in a Farm to School program to use local, fresh food.  
Click here to enter text.

Our school has a fruit, vegetable and greens salad bar.

**The Heritage lunch program offers a daily vegetable and fruit bar that changes daily.**

Our school has an on-site food garden.

**Heritage has an outdoor garden used primarily in the fall. Fall crops that are grown are tomatoes, eggplant, squash, cucumbers, broccoli, celery, lettuce (variety), and peas.**

Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community.

**Students in our Family and Consumer Science, Special Education and Science classrooms all utilize our gardens for cooking, developing gardening skills and harvesting.**

Food purchased by our school is certified as "environmentally preferable" (certified organic, Fair Trade, Food Alliance or Rainforest Alliance).

Percentage: Click here to enter text. Type: Click here to enter text.

Our students spent at least 120 minutes per week over the past year in school supervised physical education.

**Students are required to take physical education classes. Heritage students alternate every other day taking physical education classes that are 55 minutes in length. Students are also supervised while outside at Dodge Nature Center where students are often hiking and participating in other outdoor activities.**

At least 50% of our students' annual physical education takes place outdoors.

**Heritage Physical Education teachers take students outside when the weather is cooperative. Students run the mile outdoors on a bi-weekly basis and partake in outdoor instruction as often as they can. Our staff utilizes an outdoor track, soccer and baseball fields located on our school property.**

Health measures are integrated into assessments.

**Students use the program Fitness Gram to load their data into their own personalized learning data base. Every year teachers load their data from the presidential fitness assessments into Fitness Gram to monitor student's personal health.**

At least 50% of our students have participated in the EPA's Sunwise program (or equivalent UV protection and skin health education program).

**Our health teachers instruct our students on the important of skin health care which includes the importance of using sunscreen during the summer and winter months.**

14. Describe the type of outdoor education, exercise and recreation available, including features such as trails, natural playgrounds, gardens, habitat projects and outdoor classrooms and the average number of minutes your students are outside each week. (100 word max)

**Our outdoor education is a collaborative approach between our physical education and core content teachers. We have an educational partnership with Dodge Nature Center. Our students are involved in outdoor learning during monthly field experiences that are 1.5 hours in length. Students are walking around natural trails partaking in cross-curriculum lessons involving nature. Our school has outdoor classroom used for gardening and creating a natural prairie along with maintaining a butterfly garden. Heritage utilizes our districts outdoor athletic complex and two neighborhood parks.**

15. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (100 word max)

**Our school has begun using Fitness Gram that is part of the Presidential Youth Fitness Program. We are also working with our local YMCA branch to incorporate to expose our youth to variety of fitness programs in order to promote lifelong fitness.**

### **Pillar 3: Effective Environmental and Sustainability Education**

1. 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)

**Our School follows The Environmental literacy standards, which are at the foundation of our environmental education. Teachers work towards the following: Demonstrate knowledge and understanding of the environment and the circumstances and conditions affecting it, particularly as relates to air, climate, land, food, energy, water and ecosystems. Demonstrate knowledge and understanding of society's impact on the natural world (e.g., population growth, population development, resource consumption rate, etc.) Investigate and analyze environmental issues, and make accurate conclusions about effective solutions. Take individual and collective action towards addressing environmental challenges (e.g., participating in global actions, designing solutions that inspire action on environmental issues). Teachers have re-examined what we are teaching and how they could modify our lesson plans/units to include the Environmental Literacy Benchmarks. Assessments have been included in our science units and supported through our Dodge Nature Center Naturalists to ensure environmental literacy is measured and supported.**

- Environmental and sustainability concepts are integrated throughout the curriculum. (200 word max)

**We use the Environmental Literacy benchmarks as a guide for our middle school staff. When teams meet to write and update curriculum the environmental standards and benchmarks are incorporated. As an environmental school, we strive to make these benchmarks part of our curriculum in all classes. We know in order to be environmental stewards we need to provide experiences to support how students are part of our environment and how their actions along with our society has ramifications and long lasting implications. We make real-life connections to our environment and how our systems influence one another.**

- Environmental and sustainability concepts are integrated into assessments. (200 word max)

**Environmental literacy is assessed formally and informally throughout the school year. Our science teachers along with Dodge Nature Center Naturalists have incorporated assessments of these standards with small group conversations, informal assessments and in unit tests and quizzes. We have a student led recycling and composting program that is measured by our sanitation company on a weekly basis. We are able to observe participation in both of these programs.**

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

**Students have been awarded as being proficient environmental stewards from Eagle Bluff and Wolf Ridge Environmental Centers for the past two years along with leading the district in recycling and composting. Our successes demonstrate that our students are sustaining their skills and applying them to their daily life. Teachers and Naturalists use informal assessments to monitor student's environmental literacy and data is gathered from our waste haulers to monitor our recycling and composting.**

- Professional development in environmental and sustainability education is provided to all teachers. (200 word max)

**During the fall of 2012 our entire staff were provided staff development at Dodge Nature Center. Our staff participated in activities that extended and supported our environmental goals**

**for the 2012-2013 school year. Our Sustainability Director met with staff to share our building goal and steps we need to take to accomplish this goal.**

2. 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: [Click here to enter text.](#)  
Percentage scoring a 3 or higher: [Click here to enter text.](#)
  
3. How does your school use sustainability and the environment as a context for learning across all academic disciplines; and in particular, in science, technology, engineering and mathematics thinking skills and content knowledge? And how are your green school efforts integrated into that learning? (200 word max)  
**Heritage is an E-STEM Magnet School. We are in our third year of integrating our theme into our core curriculum. Teachers work every year to write curriculum with the main purpose of integrating E-STEM into their daily instruction. The environment is our big our overarching goal that guides our school. We strive to integrate our green school efforts into our math and science curriculums. Our staff is passionate about the environment and is looking for ways to add other green technologies to our school. We work with our partners to ensure that we are incorporating the environment into our STEM curriculum.**
  
4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200 word max)  
**Environmental careers have been built into our science curriculums in grades 5-8. These careers are documented as teachers have been writing curriculum over the past few years. Our Language Arts teachers have include green careers as part of their career exploration unit. We are very fortunate to be partners with Dodge Nature Center. Our 5<sup>th</sup> and 7<sup>th</sup> grade students have weekly instruction from a trained Naturalist who shares many green career pathways throughout the year.**
  
5. Describe students' civic/community engagement projects integrating environment and sustainability topics. (200 word max)  
**Our students work with Dakota County to test water quality of our area lakes and rivers. These results are shared with the county and City of West St Paul. Students in 7<sup>th</sup> grade scar seeds from the prairie at Dodge Nature Center. These seeds are planted and grown over the winter at Heritage and re-planted at Dodge on our own natural prairie that we have started at Heritage. Students, staff, parents and Dodge Nature Center use our outdoor gardens. As a school we compost all of our lunch waste. The results of our energy awareness, recycling and composting is shared with our community and school district along with cost savings that have occurred with our projects.**
  
6. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max)  
**Grade 5 students participate in monthly outdoor learning at Dodge Nature Center. Fifth grade students study bees, trees, monitor water and ground temperature and pond life. Students bring pond water back to school and study till spring. Sixth grade students are at Dodge Nature Center every other month for an extended time focusing on physics and outdoor living skills. Our seventh grade students are at Dodge Nature Center six times throughout the year for an extended learning period to identify prairie plants, scar seeds, grow them during the winter and plant them at Dodge and Heritage in the spring. Our eighth grade students focus on water quality, identify pollutants and**

**life in local lake, pond and river water. All students participate in outdoor learning in our courtyard, which is set up with a garden, prairie, a stage, butterfly garden and shade plants.**

7. 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)

**As an E-STEM Magnet School we work in a cross curricular manor to incorporate outdoor learning into our student programming. Areas where we have engaged a broader community would be with our outdoor courtyard (gardening, composting, prairie restoration), water quality testing of area lakes and rivers and winter survival with Dodge Nature Center.**

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. (Maximum 200 words)

**Our primary partnership is with Dodge Nature Center. The scope and sequence of this partnership is primarily within pillars 2 and 3. Dodge Nature Center works closely with our instructional staff to incorporate STEM, deliver content with an environmental philosophy, making connections to our outdoor environment, shares green careers, provides students with outdoor learning experiences and provides professional development.**

9. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting innovative or unique practices and partnerships. This can also include before and after school, during the summer and other enrichment opportunities. Examples include childcare programs, community education courses, parent education courses, and student green teams, environmental or outdoor clubs. (Maximum 200 words)

**Our school has a student green team called LIVEGREEN. This group has a teacher leader who works with students to initiate and support green projects throughout the school year. Dodge Nature Center offers after school naturalist classes for middle school students to take throughout the school year. Dodge invites Heritage students to all events and classes offered at their site. Our Community Education Department offers E-STEM classes throughout the school year to promote our magnet theme.**

10. Attach up to 6 photos that document your green school efforts.





