

## Henry Sibley High School 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

X Public  Charter  Title I Magnet Private Independent Rural Name of Principal: Mr. Ron Monson
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)
Official School Name: Henry Sibley High School (As it should appear on an award)
Official School Name Mailing Address: 1897 Delaware Ave, Mendota Heights, MN 55118 (If address is P.O. Box, also include street address.) County: Dakota State MN School Code Number *: 053
Telephone: 651-403-7100 Fax: 651-403-7110
Web site/URL: <u>Henry Sibley High School website</u> E-mail: <u>ron.monson@isd197.org</u> *Private Schools: If the information requested is not applicable, write N/A in the space

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

Date: 1/12/2016

(Principal's Signature)

Name of Superintendent: Dr. Nancy Allen-Mastro

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

District Name: West St Paul, Mendota Heights, Eagan School District 197

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

Nancy allen mastro, Ed. D.

Date: 1/12/2016

(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.
- 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)

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

Brenda Canellus

Date: 1/27/2016

(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.

Minnesota Department of Education



# US Department of Education Green Ribbon Schools Award 2015-16 Minnesota Prek-12 School Application

## **School/District Information**

School: Henry Sibley High School

Street Address: 1897 Delaware Ave

City/State/Zip: Mendota Heights MN 55118

Website: www.isd197.org

Principal Name: Ron Monson

Principal Email Address: ron.monson@isd197.org

Phone Number: <u>651-403-7101</u>

Lead Applicant Name (if different): Lisa Johnson

Lead Applicant Email: lisa.johnson@isd197.org

Phone Number: 651-403-7324

School District Name/number (if applicable): District 197-W. St Paul, Mendota Heights, Eagan

Superintendent Name: Dr. Nancy Allen-Mastro

Superintender	nt Email Address: <u>nancy.allenmastro@isd197.org</u>
School levels:	(place an "x" after your choice)
	Early Learning Center:
	Elementary (PK-5 or 6):
	K-8, Middle (6-8 or 9):
	High (9 or 10-12): X
	Other:
School Type:	
	Public: X
	Private/Independent:
	Charter:
How would yo	u describe your school:
	Urban:
	Suburban: <u>X</u>
	Rural:
Total Enrolled	: 1345
Does your sch	ool serve 40% or more students from disadvantaged households? Yes or No: Yes
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Percentage receiving Free or Reduced Priced Lunch: <u>39%</u>

Percentage limited English proficient: 9%

Other measures:

Graduation Rate (if high school):89.9%

Attendance rate: 96%

### **Summary Narrative:**

Henry Sibley High School serves more than 1400 students from the communities of Eagan, Inver Grove Heights, Lilydale, Mendota, Mendota Heights, Sunfish Lake and West St. Paul, Minnesota. Henry Sibley High school is fortunate to have a vibrant school community filled with a variety of academic, athletic, and artistic opportunities for student's in grade 9 to grade 12.

Henry Sibley is committed to operating its building efficiently and fully supports all of the initiatives of LIVEGREEN. LIVEGREEN is the district's own sustainability program, which promotes energy saving and recycling initiatives throughout all schools and offices. Henry Sibley has a LIVEGREEN Club consisting of high school students and two teachers. The team helps implement low-cost or no-cost strategies to reduce energy use, promote recycling and composting, and focuses on conserving resources. LIVEGREEN goes beyond a standard energy-reduction program by incorporating right-sizing

waste streams, recycling, composting, green cleaners, diesel emissions reduction, paper reduction, behavioral changes, and engineering controls into its initiatives. Through sustainability efforts, Henry Sibley has avoided more than \$600,000 in utility costs since 2008.

We have reduced our bus fleet from 67 buses 5 years ago to 58 buses today, by consolidating routes. We have replaced 18 of our older buses with newer buses equipped to reduce emissions and improve fuel mileage. We have also partnered with Donaldson Corp and installed Doc mufflers and Engine breather kits on all of our 2003 and older buses. We require positive bus registration from all students which cuts down on unnecessary routing and saves fuel.

Since 2009, Henry Sibley has had single-stream recycling school wide and organics collection for lunch room waste. In 2012 the high school won the statewide KAB Recycle Bowl competition. In collaboration with Dakota County, we conducted a school wide waste sort and this year an event waste sort at Matson Field after a football game. In both cases the results informed us of what we are getting right and what we need work on. To help students get it right at the bin in the lunchroom we have a weekly event, Trash Talk Tuesday, volunteers from inside and outside the school help by challenging students to get it right at the bin.

LIVEGREEN events promoted by the LIVEGREEN Club are scheduled throughout the school year and include the Keep America Beautiful Recycle Bowl, MOVEGREEN, Video Contest- You've Got the Power, LIVEGREEN Week, Earth Day, and compost sales. LIVEGREEN is always looking for smart, green, and efficient practices to incorporate into its school.

Four water-bottle filling stations have been installed at the high school with plans to add more. These hydration stations deliver a clean water bottle fill and enhance sustainability by minimizing our dependency on disposable plastic water-bottles. The first filling station was purchased with the help of our high school LIVEGREEN Club. The club sold reusable water bottles, and the proceeds paid for the hydration station.

Through many activities and partnerships District 197, works hard to improve the health and wellness of students and staff. Thanks to a generous grant from C. H. Robinson Worldwide, Inc. and the Let's Move Salad Bars to Schools initiative, Henry Sibley operates a salad bar that features a variety of fruit, vegetable, whole grain, legume, and low-fat dairy options during breakfast and lunch.

All 9th grade Social Studies classes do a full unit (four weeks) on Human-Environment interaction, consisting of an in-depth study of hydraulic fracturing and its impact on the environment. Students are required to do research and present on an issue of their choice; deforestation, new forms of energy, effect on wildlife, etc.

Henry Sibley FACS teacher started the first high school indoor garden in the Twin Cities. She used it to teach about indoor gardening and motivate her students to eat healthy foods. Some of the bounty is used by the kitchen staff to bring fresh produce to the lunch line.

The River to River Greenway is part of Dakota County's planned county-wide 200 mile greenway network. Henry Sibley High School was part of a greenway gap between Hwy 110 in Mendota Heights and Garlough Environmental Magnet School in West St. Paul until 2015. In 2015, construction of missing greenway segment was completed. The overall 1 + mile project provides a non-motorized trail

for recreation and transportation, preserves high-value trees, enhances a degraded wetland, removes invasive plants, promotes environmental learning, and includes 2,300 square feet of vegetated filter strips for treating storm water.

For the second year in a row the district was awarded a full-time Minnesota GreenCorps member. Minnesota GreenCorps is a statewide program that places GreenCorps members with local governments, educational institutions and non-profit organizations to help preserve and protect Minnesota's environment. The GreenCorps position is a great way to bring new ideas on how to engage students and staff regarding sustainability efforts across the district.

# **Cross-Cutting Programs**

1. Is your school participating in a local, state or national school program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree Green Schools, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?

Yes or No: Yes

If yes, enter the program(s) and level(s) achieved:

Energy Star- 82

B3 Benchmarking- which stands for Buildings, Benchmarks, and Beyond, puts the power of building energy data in your hands. Using basic building and meter information, the online tool summarizes energy consumption, costs, and carbon emissions in easily digestible monthly and annual reports for Minnesota public buildings.

B3 uses complex analyses that allow you to compare a building from four major perspectives; benchmark, peer comparison, Energy Star and baseline. This multiple-angle approach helps you identify weak buildings and gives you the confidence that an identified poor performer is truly in need of improvement and will yield significant returns on investment.

Benchmark- 5 out of 5 stars

Peer comparison- 74<sup>th</sup> percentile

Baseline- 22.76% less than baseline year 2008

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

Yes or No: Yes

If yes, enter the Award(s) and year(s) received:

Green Ribbon Awards: Garlough Environmental Magnet 2012, Heritage E-STEM Magnet 2013, District Award 2015

District 197 has earned ENERGY STAR Leaders Top Performer recognition for achieving an average energy performance rating above 75. The 2009 rating was 81 and in 2010 it climbed to 93. The district was recognized by the U.S. Environmental Protection Agency for increasing its energy efficiency by 10 percent in 2005, 20 percent in 2009 and 30 percent in 2010. Since launching its energy efficiency program in September 2003, the district has avoided more than \$1.9 million in energy costs.

HealthierUS School Challenge: Silver Award Winner (2012) Henry Sibley

## Pillar I: Reduced Environmental Impact and Costs

Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions (preference for schools that have used <u>State of Minnesota B3Benchmarking</u>)

1. Can your school demonstrate a reduction in Greenhouse Gas emissions? Yes or No: Yes

Percentage reduction: 23.51% Over (mm/yyyy - mm/yyyy): 01/2008-01/2014

Initial GHG emissions rate (MT eCO2/person): 1.93/person

Final GHG emissions rate (MT eCO2/person): 1.55/person

Offsets: \_\_\_\_\_ How did you calculate the reduction? B3 Benchmarking

Does your school have an Energy Master Plan? Yes or No: Yes

If yes, enter a description of the areas it covers: \_

In 2003 we implemented an energy efficiency program with a 10% energy reduction goal, setting the 2002-2003 academic year as our baseline year to compare future results. In 2008 we reset our baseline to the 2007-2008 academic year because performance goals became too easy to reach. We used a third party utility tracking service, Bishop Engineering, from 2003-2013, and EnergyPrint from 2013-2015. Currently Henry Sibley uses B3 Benchmarking a free online tool that summarizes energy consumption, costs, and carbon emissions in easily digestible monthly and annual reports for Minnesota public buildings. Thanks to diligent energy management during the past decade Henry Sibley has avoided spending close \$800,000 in energy costs. Additionally, since 2003, Henry Sibley has met or exceeded the goal of 10% energy reduction every year.

We have an energy efficient product purchasing and procurement program in place. 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 times. We have MAH (Makeup air handling units) in our kitchen to capture exhaust.

2. Do you track resource use in EPA ENERGY STAR Portfolio Manager? Yes or No: Yes

If yes, what is your score? 82

If score is above a 75, have you applied for and received ENERGY STAR certification?

Yes or No: Yes Year: 2010

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

Yes or No: Yes

Current energy usage (kBTU/person/year): 13,414.7 kBTU/person/year

Current energy usage (kBTU/sq. ft. /year): 59.3kBTU/sq ft/year

Percentage reduction: <u>22.76%</u> Over (mm/yyyy - mm/yyyy): <u>7/2008-7/2015</u>

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:

Purchased renewable energy: Our electric utility provider is Xcel Energy: 20% of electricity from Xcel is from renewable energy. Electricity is 35.3% of total energy used. Type: Combination of, wind, hydro, biomass, solar.

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? 1970

What is the total building area of your school? <u>348,416</u>

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

#### For new building(s):

Percentage building area that meets green building standards: \_\_\_\_

Certification level and year: \_\_\_\_\_ Total constructed area: \_\_\_\_\_

### For renovated building(s):

Percentage of the building area that meets green building standards:

Certification level and year: \_\_\_\_\_Renovated area:\_\_\_\_\_

### Element 1B: Improved water quality, efficiency, and conservation

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

Yes or No: Yes

Average Baseline water use (gallons per occupant): 2394

Current water use (gallons per occupant): 2102

Percentage reduction in domestic water use: <u>12.2% reduction</u>

Percentage reduction in irrigation water use: <u>58%</u>

Time period measured (mm/yyyy - mm/yyyy): <u>10/2008-10/2015</u>

Explain how you documented this reduction (e.g. ENERGY STAR Portfolio Manager, utility bills, school district reports): Utility bills.

8. What measures are you taking to reduce water consumption, such as controlling leaks and waterefficient devices? Water conservation has been part of the District 197 LIVEGREEN Sustainability program for many years. Our water comes from municipal water sources. We use motion sensors to control water usage on toilets, urinals and sinks. Additionally, we monitor all buildings monthly for leaks or high water usage. With the help of St Paul Water we created a process for calculating water usage while buildings are not in use for the sole purpose of uncovering leaks, running toilets, etc. In order to calculate this potential wasted water, building engineers from each school report monthly water meter readings at the end of an evening shift and again first thing in the morning. We also conduct annual audits of irrigation systems to ensure they are free of significant water leaks and to identify opportunities for savings.

We have deduct meters at Henry Sibley High School. The deduct meters measure water that does not end up in the sewer system, which is water from our irrigation and cooling towers. The readings from the deduct meters are recorded and reported for a credit.

9. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? 100%

Types of plants used and location: The plants we use are Zone 4a perennials, evergreen, and deciduous. The grounds department takes great care not to overwater landscaping

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

We practice soil and water conservation by using mulch around our plants.

11. Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces.

75% of our site is green space, lawn, regionally appropriate landscaping and sports fields. Native and drought tolerant plants are incorporated in our grounds; they are designed to grow well in the climate without additional watering needs. Natural prairie and woodland restorations are also part of the grounds, both for identification and water conservation/erosion reasons, taking advantage of rainfall and storm water runoff and serve to slow the storm water as it travels downhill giving the storm water more time to infiltrate and less opportunity to cause erosion.

12. Our school's drinking water comes from: (place an "x" after your choice)

Municipal water source: X

Well on school property:

Other:

13. How does the school ensure drinking water is safe, such as lead testing, well testing, and steps to reduce lead (50 word max):

The district has performed lead in water sampling. Through renovations, all of our fixtures were replaced with lead free fixtures in 2006-2008. 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. We have backflow prevention at all potential contamination points such as, cleaning chemical dispensers.

14. What percentage of the school grounds are devoted to ecologically beneficial uses such as natural areas, rain gardens, and run-off buffer? <u>10% or more</u>

Native and drought tolerant plants are incorporated in our grounds; they are designed to grow well in the climate without additional watering needs. Natural prairie and woodland restorations are also part of the grounds, both for identification and water conservation/erosion reasons, taking advantage of rainfall and

storm water runoff and serve to slow the storm water as it travels downhill giving the storm water more time to infiltrate and less opportunity to cause erosion.

With the completion of the River to River Greenway corridor in 2015, Henry Sibley added <sup>3</sup>/<sub>4</sub> mile trail on school property, the space provides for regional recreation and enables safe walking and biking to school. An outdoor classroom was added; it's surrounded by an oak savanna and promotes outdoor learning. The <sup>3</sup>/<sub>4</sub> acre native oak savanna restoration (10% of the 6.8 acre school site) reduces mowed area, enhances storm water infiltration and provides habitat. The 300 trees and 500+ shrubs provide shade, enhance storm water infiltration, and buffer the trail from the roadways, creating a high-quality pedestrian and biking experience. Native tree and shrub varieties were specified including Dogwood, Hazelnut, Oak, and Aspen.

## Element 1C: Reduced waste production

16. 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.

- Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): <u>128 cubic yards</u>
- Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): <u>128 cubic yards</u>
- 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): <u>10 cubic yards</u>
- Recycling and Diversion Rate = ((B + C) ÷ (A + B + C) x 100): <u>59.2%</u>

Monthly waste generated per person = (A/number of students and staff): .08 cubic yards

17. 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)? <u>0%</u>

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:

Mercury:

Other: We have paint, science lab chemicals and used oil, which qualify as hazardous waste.

How is this measured? How is hazardous waste disposal tracked? We track these products using vendor manifests and the hazardous waste is disposed of quarterly using Industrial Waste services.

19. Describe other measures taken to reduce solid waste and hazardous waste, use recycled materials, and properly dispose of hazardous materials. Include electronic devices. (100 word max)

Description: We participate in the Books for Africa program, and any books that are not accepted as a donation are recycled. We recycle scrap metal at Great Western, computers go to Asset Recovery, and used fluorescent light bulbs are picked up twice a year by Green Lights. Our old batteries are brought to Batteries Plus. We participate in the University of Minnesota's hazardous waste program.

### **Element 1D: Alternative Transportation**

21. 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.) <u>20 bikers, 200 carpoolers, 850 students ride the bus.</u>

How is this data calculated? (50 word max)

Answer: Student poll, observation, transportation department data.

22. Has your school implemented any of the following? (place an "x" after all that apply)

Designated carpool parking stalls: No

A well-publicized no idling policy that applies to all vehicles (including school buses): Yes

Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows: Yes

Safe Pedestrian Routes to school or Safe Routes to School: Yes

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)

MOVEGREEN is the new monthly event for staff and students promoting green commuting. One day a month, staff and students are encouraged to bike, walk or carpool to school. Pop up prizes are randomly given to those caught moving green. Taking and sharing a selfie from carpool or bike with the LIVEGREEN leader will increase chances to win a Chipotle gift card.

23. Describe how your school transportation use is efficient and has reduced its environmental impact.

We have reduced our bus fleet from 67 buses 5 years ago to 58 buses today. This is due to route consolidations and efficiencies even though we actually transport more students today than we did 5 years ago. We have replaced 18 of our older buses with newer buses equipped to reduce emissions and improve fuel mileage. We require positive bus registration from all students which cuts down on unnecessary routing and saves fuel.

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

We have partnered with Donaldson Corp and installed DOC mufflers and Engine breather kits on all of our 2003 and older buses to reduce diesel emissions. The diesel oxidation catalyst (DOC) promotes oxidation of several exhaust gas components by oxygen, which is present in ample quantities in diesel exhaust. When passed over an oxidation catalyst, diesel pollutants can be oxidized to harmless products, and thus can be controlled using the DOC.

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

### Element 2A: Integrated school environmental health program

1. Describe your school's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspections, pest identification, monitoring, record-keeping, pesticide reduction notification of staff and parents etc. (100 word max)

All staff and students are notified annually of our pesticide and herbicide application timelines. We only apply pesticides/herbicides during 2 weeks of the year when there are no students present. The first week is in mid-June and the second week is in mid-August. The high school is monitored by a professional pest control company monthly. Only live trapping is used for mice and non-toxic sprays are used for ant control. We promote an indoor environment that does not attract pests whenever possible.

2. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? State yes, no or not apply and explain with specific examples of actions taken. (50 word limit for each response)

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: <u>Yes</u>

Our school prohibits smoking on campus and in public school buses: Yes

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.): <u>Yes</u>

Our school uses fuel burning equipment (such as boilers, water heaters and ovens) and has taken steps to protect occupants from carbon monoxide (CO): <u>Yes</u>

Our school has sampled 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: <u>No</u>

Our school has identified and properly manages or has removed, where applicable, asbestoscontaining materials, according to U.S. EPA AHERA regulations and, where applicable, the Minnesota Department of Health asbestos abatement rules: <u>Yes</u>

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: <u>Yes</u>

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure: <u>Yes</u>

Our school has working local exhaust systems for major airborne contaminant sources. Yes

3. Describe how your school controls and manages chemicals routinely used in the school (including science, shop and maintenance) to minimize student and staff exposure. (100 word max)

Description: Our designated high school chemical hygiene officer Greg Schmidt is committed to managing chemical safety in an effort to maintain a safe environment for all employees and students.

4. 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)?

We use a single source for our cleaning chemicals. 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%

5. 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. (100 word max)

Description: We have replaced 18 of our older buses with newer buses equipped to reduce emissions and improve fuel mileage. We have also partnered with Donaldson Corp and installed Doc mufflers and Engine breather kits on all of our 2003 and older buses.

6. 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)

Description: Our staff is trained to report mechanical deficiencies to the building office that then create a work order that is assigned to a maintenance person to investigate. Any stained ceiling tile is reported and removed and if a roof leak or pipe leak is found we promptly fix the issue. If we have a leak that causes carpet or wall material to get wet, we have a practice of drying out the material within 24 hours and testing with a moisture meter. If we are not able to get carpet dried we replace the carpet. Any sheetrock that gets wet we cut out and replace. All staff are surveyed annually regarding indoor air quality and all ventilation units are inspected by an outside testing firm to verify operation and cleanliness. All other buildings have air conditioning systems with reheat that controls humidity levels in the buildings.

7. 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)

Description: Our Architectural design firm WOLD A&E designed the mechanical ventilation systems for our High School to comply with the following design criteria, 1) 2001 International Building Code 2) 2000 International Mechanical Code 3) ASHREA Standards 62-2001 Ventilation for acceptable Indoor Air quality 4) ASHREA Standard 15- Safety Code for Mechanical Refrigeration 5) MN Plumbing Code 6) NFPA Code 13 for standard sprinkler install 7) 2001 International Fuel Gas Code 8) MN Energy. An annual IAQ inspection is done from an outside firm, and every 3 years we do a complete recommissioning of mechanical systems. To complete the recommissioning we hire a mechanical engineering firm as a test and balancing firm to verify operation.  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)

Description: In 2008 the high school did a major renovation. Prior to the remodel all classrooms had interior walls with no daylight exposure. After construction well over 50% of the classrooms have daylight from south facing windows. To ensure acoustic comfort, we access classrooms based on the OSHA allowable 8 hour TWA exposure rates. If we determine an environment is above that, we install acoustical architectural improvements, such as sound panels and replacing ceiling tiles. During the heating season the building engineer will maintain a building temperature of 68 degrees F. during the day with 1-2 degrees of variation. During the cooling season the building engineer will maintain a building temperature of 74 degrees F. Deviations from this standard do occur from time to time due to the range of temperature changes we experience in Minnesota. This temperature standard ensures that we operate our buildings efficiently while providing a comfortable environment in which to learn and work.

9. Describe any other actions your school takes to manage indoor environmental hazards such as ice arena contaminants, PCBs, kitchen equipment, and air quality in swimming pools. Including doing periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action.

Description: We have 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. The testing is done annually. All staff are asked to participate in an annual air quality survey for school buildings. Our schools prohibit smoking and all other forms of tobacco, including e-cigs, while on campus and in public school buses. Our schools use fuel burning equipment (such as boilers, water heaters and ovens) and have taken steps to protect occupants from carbon monoxide (CO).

Our schools have identified and properly managed or, where applicable, have removed asbestoscontaining materials in accordance with U.S. EPA AHERA regulations and the Minnesota Department of Health asbestos abatement rules. Our schools have 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.

### **Element 2B: Nutrition and Fitness**

10. Which practices does your school employ to promote nutrition, physical activity and overall school health? State yes, no or not apply and explain with specific examples of actions taken. (50 word max each) - **please attach answers on a separate document**)

Our school participates in the USDA's HealthierUS School Challenge. <u>Yes</u> Level and year: <u>Silver Award 2012-2016</u>

Our school participates in a Farm to School program to use local, fresh food: Yes

Our school has a fruit, vegetable and greens salad bar: Yes

Our school has an on-site food garden: Herb Garden

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

Food purchased by our school is certified as "environmentally preferable" (USDA certified organic, Fair Trade, Food Alliance or Rainforest Alliance): <u>No</u> Percentage:\_\_\_\_\_\_Type:\_\_\_\_\_

Our students spent at least 120 minutes per week over the past year in school supervised physical education: <u>No</u>

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

Health measures are integrated into assessments: Yes

At least 50% of our students have participated in the EPA's Sunwise program (or equivalent UV protection and skin health education program): <u>Yes</u>

11. Describe the type of outdoor learning activities, exercise and recreation available, including features such as trails, natural playgrounds, gardens, habitat projects and outdoor classrooms and describe the frequency of use. (100 word max)

Description: Physical education and health courses help students learn about making lifelong healthy decisions. Physical education courses explore exercise and fitness, strength training techniques, and rules and etiquette of individual and team sports. All Physical Education classes use the new River to River Greenway trail that includes natural prairie and woodland restoration areas. It's used for conditioning; walking, running, team relays. Physical Education classes also include; golf, tennis, track, soccer, touch football, ultimate Frisbee, disk golf and softball. There is a new natural amphitheater that provides space for classroom learning in an outdoor environment.

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

Description: Health courses cover nutrition; mental, emotional and sexual health; social issues; and more. Health is a required class in 10<sup>th</sup> grade. Students learn about nutrition using curriculum from the Choosemyplate.gov website. Students learn about daily requirements are, they complete a balanced meal plan, choosing from each food group and do not go over the recommended amounts. Students study about managing a healthy weight and how nutrition helps with that. Sibley offers a Personal Fitness and Wellness class. Fitness performance is evaluated using the FITNESS GRAM and Healthy Fitness Zones (HFZ) from the Cooper Institute, along with the California Department of Fitness (CDE). We employ a dietician to help plan healthy balanced school lunches. The vending machines are stocked with healthy choices. There is only water and no soda or any sugary beverages.

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

13. Does your school use a Coordinated School Health approach or other healthrelated initiatives to address overall school health issues? (X) Yes () No

If yes, describe the health-related initiatives or approaches used by the school:

We have a district-wide School Health Advisory committee (SHAC). On this committee we have Sibley parents and staff. The SHAC is focusing on the ten components of school heath;

1. Health Education,

- 2. Nutrition Environment and Services,
- 3. Employee Wellness,
- 4. Social and Emotional School Climate,
- 5. Physical Environment,
- 6. Health Services,
- 7. Counseling, Psychological, and Social Services,
- 8. Community Involvement,
- 9. Family Engagement,
- 10. Physical Education and Physical Activity.

We have a full time Licensed Chemical Dependency Counselor, which offers confidentiality based prevention, education and intervention for students and families. There is also a Chemical Health Advisory Board. We also have a wellness champion at Henry Sibley who promotes staff and student's nutrition and activity. They meet regularly with outside organizations and all schools to address wellness needs.

14. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety?
(X) Yes () No

If yes, describe these partnerships:

Both on the wellness committee and the SHAC we have outside organizations involved. We have parents and community members, YMCA, Dakota County, West St Paul police, Southdale Pediatrics', University of MN, Bethel University, Metro State, After School Program (SAC), 360 organizations. Active and social groups at Henry Sibley present on various issues. We also have guest presenters at both wellness meetings and SHAC meetings.

- 15. Does your school have a school nurse and/or a school-based health center? (X) Yes ( ) No
- 16. Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):

School Counselors and their location in the school, Mental Health Therapy, Anti-Bulling, and Warrior P.R.I.D.E.

The Whole School, Whole Community, Whole Child Model

The Whole School, Whole Community, Whole Child (WSCC) model is an expansion and update of the Coordinated School Health (CSH) approach. The WSCC incorporates the components of CSH and the tenets of the ASCD's\* whole child approach to strengthen a unified and collaborative approach to learning and health. The WSCC model focuses its attention on the child, emphasizes a school-wide approach, and acknowledges learning, health, and the school as being a part and reflection of the local community.

The Whole School, Whole Community, Whole Child Model: A New Approach

By focusing on youth, addressing critical education and health outcomes, organizing collaborative actions and initiatives that support students, and strongly engaging community resources, the WSCC approach offers important opportunities that may improve healthy development and educational attainment for students.

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

1. Which practices does your school employ to help ensure effective environmental and sustainability education? State yes, no or not apply and explain with specific examples of actions taken, highlighting innovative or unique practices and partnerships.

Our school has an environmental or sustainability literacy requirement beyond state academic standards and graduation requirements. (100 word max): <u>No</u>

Environmental and sustainability concepts are integrated throughout the curriculum. (100 word max): <u>Yes</u>

All 9<sup>th</sup> Grade Social Studies classes do a full unit (four weeks) on Human-Environment interaction. Consisting of an in depth study of hydraulic fracturing and its impact on the environment. Students are required to do research and present on an issue of their choice; deforestation, new forms of energy, effect on wildlife, etc.

The Documentary, No Impact Man is also a part freshman curriculum. The film tells the true story of author Colin Beavan, who went completely "green," giving up virtually all of the comforts of modern living -- electricity, gas-powered transportation, shipped food and public waste disposal -- in a drastic effort to curb his environmental impact.

Students also touch on the environment during an urban-rural unit. For the agriculture unit, students do a case study on food production, commercial agriculture and factory farming and their impact on the environment.

Environmental and sustainability concepts are integrated into assessments. (100 word max): Yes

Professional development in environmental and sustainability education is provided to all teachers. (100 word max): <u>No</u>

- 2. For schools serving grades 9-12, provide:
- 3. Percentage of last year's eligible graduates who completed an AP Environmental Science course during their high school career: 0%

Percentage (of students that took the test) scoring a 3 or higher:

What other environmental courses are available?

The high school provides comprehensive science course opportunities including AP Biology, AP Chemistry and AP Physics.

Marine Biology is an independent study course. We teach and learn about marine conservation as it relates to coral reef, over fishing, and often highlight endangered creatures such as sea turtles and sharks. After completing the course, there is a week-long scuba trip to the Caribbean. Each student picks a specific marine animal to study and do a presentation on.

4. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (100 word max)

Answer: In Physics by Inquiry, a University of Minnesota College in the Schools course, students investigate how electricity is produced by different types of power plants (coal, natural gas, nuclear, wind, solar, hydroelectric, etc.). They evaluate the costs and benefits of power plant types with respect to the total energy landscape for the United States. Students analyze energy usage to understand the scale of energy needs. They also measure, calculate, record, and evaluate their own daily energy use, and try to implement changes to their routines that reduce their personal energy usage.

5. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (100 word max)

Answer: In Physics by Inquiry, a University of Minnesota College in the Schools course, students learn how electricity/energy is produced from renewable sources (solar, wind, geothermal, etc.) and how that energy is integrated into the grid or stored for future use. Students evaluate scale, efficiency, and costs associated with the technologies and envision balancing the energy needs/wants of the United States and the responsibilities to the environment.

6. Describe students' civic/community engagement projects integrating environment and sustainability topics. (100 word max)

Description\_LIVEGREEN events promoted by LIVEGREEN Club are scheduled throughout the school year and include;

Keep America Beautiful Recycle Bowl-a nationwide recycle competition, State champ in 2012, LIVEGREEN Week-every day students and staff focus on a different sustainable behavior or topic, MOVEGREEN- monthly event promoting green commuting, walking, biking or carpooling,

Video Contest "You've got the Power"- Students create a PSA promoting the power to conserve energy, water or reduce waste,

Compost sale-Students sell compost to the community from SMSC our composting facility, bringing the organics program full circle.

Another project the students are working on is bringing a Pollinator Friendly resolution to the school board for approval. They are being guided by our Green Corp member, Jay Jacoway.

7. 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)

Description: Child Care Program- the Sibley High School Play School has changed from paper plates, bowls and cups to regular dishes to reduce class trash.

8. Describe your partnerships (e.g. business, community, informal education, colleges) to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200 words)

Description:

CIS Courses in partnership with University of Minnesota MN; Physics by Inquiry

Also offered; Intro to Engineering, Principles of Engineering, Civil Engineering, Computer Integrated Manufacturing and Project Lead the Way.

The Project Lead the Way (PLTW) curriculum is used in grades 9 - 12. High school students have the opportunity to participate in four different courses and earn college credit. A committee that includes teachers, administrators and engineers from our community advises our PLTW programming. Students have an opportunity to take field trips to get first-hand experience in seeing what career fields are open through STEM. Guest speakers also visit on a regular basis to share their career and industry with students. PLTW course work is project based. All of our PLTW teachers have had extensive training equating to over 120 hours over the past five years. The district has received grants for equipment and support of the program, with one of the most recent grants coming from 3M for a 3D printer. We continue to look for partners and ways to bring more career exploration and industry experiences to our students.

Pictures of students and staff participating in LIVEGREEN Events;



Matson Field post game waste sort.



Spin the Wheel compost & recycle winner!



Henry Sibley LIVEGREEN Team



Staff at the 1<sup>st</sup> Monthly MOVEGREEN Event