# Pilot Knob School, Minnesota 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 2015-2018

x Public □ Charter □ Title I □ Magnet □ Private □ Independent □ Rural Name of Principal: Mr. Thomas Benson (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)
Official School Name: Pilot Knob STEM Magnet (As it should appear on an award)
Official School Name Mailing Address: 1436 Lone Oak Road, Eagan MN 55121
County: Dakota State School Code Number : 820
Telephone: 651-403-7901 Fax: 651-+403-7910
Web site/URL: http://www.pilotknob.isd197.org/ E-mail: thomas.benson@isd197.org

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

(Principal's Signature) Jon Banson

Date: 1/18/2017

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.

Manay allen Mastro, Ed. D. Date: 1/18/2017

(Superintendent's Signature)

# Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

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

Name of Nominating Agency: 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

(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 green.ribbon.schools@ed.gov 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.

### Pilot Knob STEM Magnet School, Eagan Minnesota

#### **Summary Narrative:**

Pilot Knob STEM Magnet School is one of eight schools in Independent School District 197 with more than 408 Kindergarten to grade 4 students from the communities of Eagan, West St. Paul and Mendota Heights, Minnesota. Pilot Knob Elementary serves a diverse school community with 18 languages spoken, 22% of students have limited English proficiency and 43% of students qualify for Free or Reduced Lunch.

Pilot Knob 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. Pilot Knob has a LIVEGREEN Club consisting of third and fourth grade students and a teacher. 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, Pilot Knob has avoided more than \$17,000 in utility costs since 2009.

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, Pilot Knob has had single-stream recycling school wide and organics collection for lunchroom waste. In collaboration with Dakota County, we conducted a waste sort in 2014. The results informed us of what we are getting right and what we need work on. To help students avoid confusion, we have bins labeled with posters and pictures of what goes where. Through a grant provided by Dakota County, Pilot Knob received all new bins in the cafeteria that are more user friendly for our smallest recyclers.

LIVEGREEN events promoted by the LIVEGREEN Club are scheduled throughout the school year and include MOVEGREEN, Lower the Lights, LIVEGREEN Week, Earth Day and compost sales. LIVEGREEN is always looking for smart, green, and efficient practices to incorporate into its school. The LIVEGREEN Club promotes recycling and composting, water reduction and energy conversation. Mr. Benson, Pilot Knob principal visits every classroom and teaches a lesson about energy conservation and waste reduction. Students are taught how much soap and hand drying paper is necessary and not wasteful. "One, two, three is enough for me," is the slogan that students use when getting paper towels to dry their hands.

Two water-bottle filling stations were installed at the elementary during the winter break 2016. The hydration stations deliver a clean water bottle fill and enhance sustainability by minimizing our dependency on disposable plastic water-bottles. (The first filling station in the district 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.) Teachers and staff also have easy access to a purified water system to fill-up water bottles.

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, Pilot Knob operates a salad bar that features a variety of fruit, vegetable, whole grain, legume, and low-fat dairy options during breakfast and lunch.

All Pilot Knob students participate weekly in a STEM specialist class where the curriculum focuses on technologies that improve the environment. Students learn about wind and solar power and do activities that demonstrate how they work to produce clean energy. We are hoping someday soon we will have both a solar and wind system to provide some power to Pilot Knob. In our STEM Sparks classes, students select courses that teach about solar power and engineering.

All 408 Pilot Knob students spend time in the school garden planting, tending, harvesting and then eating the fresh vegetables and herbs. We have an outdoor learning space (classroom) complete with tables and benches for students and teachers.

Behind our school we have a wooded area with a trail that we use to take students into the woods to explore nature. Students use this area outdoor for science, forestry and wildlife lessons and activities.

# **School/District Information**

School: Pilot Knob STEM Magnet School Street Address: 1436 Lone Oak Rd City/State/Zip: Eagan MN 55121 Website: http://www.pilotknob.isd197.org/ Principal Name: Tom Benson Principal Email Address: thomas.benson@isd197.org Phone Number: 651-403-7901 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): School District 197 West St Paul, Mendota Heights, Eagan Superintendent Name: Dr Nancy Allen-Mastro Superintendent Email Address: nancy.allenmastro@isd197.org School levels: Elementary (PK-5 or 6) School Type: Public: Describe your school: Suburban: Total Enrolled: 406 Does your school serve 40% or more students from disadvantaged households? Yes or No: Yes Percentage receiving Free or Reduced Priced Lunch: 43%

Percentage limited English proficient: 22%. There are 18 languages spoken at Pilot Knob Attendance rate: 96.77%

# **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: Pilot Knob earned the Energy Star Label in 2009 Current Energy Star Rating- 88 B3 Benchmarking- stands for Buildings, Benchmarks, and Beyond, a free online tool that summarizes energy consumption, costs, and carbon emissions in easily digestible monthly and annual reports for Minnesota public buildings. B3 uses basic building and meter information.

B3 uses complex analyses that allow you to compare a building from four major perspectives; benchmark, peer comparison, Energy Star and baseline. This multipleangle 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.

Pilot Knob Benchmark- 4 out of 5 stars

Pilot Knob Peer Comparison- 59th percentile

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:

Healthier US School Challenge: Silver Award Winner (2011) Pilot Knob Elementary

Awards for other schools in School District 197: Green Ribbon Awards: Garlough Environmental Magnet 2012, Heritage E-STEM Magnet 2013, District Award 2015, Henry Sibley High School 2016

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.

# **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: 30% Over: 01/2008-01/2015

Initial GHG emissions rate (MT eCO2/person): 2715/person

Final GHG emissions rate (MT eCO2/person): 1905/person

Offsets: 43,742- equal to 9240 cars driven for one year. 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. Pilot Knob Elementary 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.

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.

Pilot knob has experienced a steady climb in enrollment. In 2008 student enrollment was 301, this year enrollment is more than 400. Even with 35% more students Pilot Knob has avoided spending close \$16,990.00 in energy costs since 2008.

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

If yes, what is your score? 88

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

Yes or No Yes Year 2009

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

Yes or No: Yes

Current energy usage (kBTU/student/year): 9498/student/year

Current energy usage (kBTU/sq. ft. /year): 65.47/sq. ft./year

Percentage reduction: 3.75% Over: 1/2008-1/2015

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 utility company Dakota Electric uses 10% wind,4% hydro, 1% biomass. Type: combo of wind, hydro and biomass

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? 1968

What is the total building area of your school? 58,896 sq. ft.

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

### 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): 354 units x 748= 264,792/301(students)=

880 gallons per student per year.

Current water use (gallons per occupant): 299 units x 748 units = 223, 652/406(students)=

551 gallons per student per year.

Percentage reduction in domestic water use: 37%

Percentage reduction in irrigation water use: No irrigation

Time period measured: 1/2008-12/2015

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. We have installed aerators on all sinks to reduce volume.

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 stormwater runoff and/or reduce impermeable surfaces. (50 words max).

We are working with Dakota County and the City of Eagan to create a rain garden to reduce stormwater runoff from our parking lots and other impermeable services. We have had a site meeting to determine the best location for the rain garden. Next step is design and plans, our hope is install will be summer of 2017.

12. Our school's drinking water comes from: Municipal water source:

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 is done every 5 years. It was done in 2012 by the school district and will be done again in 2017. It is done whenever there is renovation to the plumbing.

Our water comes from the City of Eagan. The City of Eagan tests drinking water monthly for possible contaminants. Eagan water is tested daily for magnesium, iron and chlorine, there are 882 samples taken annually for bacteria testing.

We also 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? (50 word max):

More than 10% - Pilot Knob partnered with Tree Trust and planted and landscaped a section next to the parking lot with native trees and shrubs. <u>http://treetrust.org/about-us/</u>

There is a path through a natural wooded area that is available for students to explore with an abundance of mature trees. The outdoor classroom was installed with the help of an Eagle Scout, it has tables, benches, a butterfly garden and includes native plantings.

# **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.

We have right sized all of our bins - they are full or nearly full every week

- A. Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 8x4=32 cubic yards
- B. Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 10x4=40 cubic yards
- 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): 6x4=24 cubic yards

Recycling and Diversion Rate =  $((B + C) \div (A + B + C) \times 100)$ : 64/80= 80%

Monthly waste generated per person = (A/number of students and staff): .07 cubic yards per person

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)? 90% of our paper comes from mills that are SFI Certified Sourcing.

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.)

Mercury: Burned out fluorescent light bulbs are picked and recycled by Green Lights Recycling.

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)

Waste is handled at a district level. 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.) We have about 30 students who walk daily or nearly everyday to Pilot Knob STEM Magnet School.

On two days a year we have all of our students walk from the Eagan Community Center to Pilot Knob a .8 mile walk.

How is this data calculated? (50 word max)

Observation and transportation department data.We calculated our number of students who walk by observing in the mornings and afternoons. students who walk receive a walk/bike to school

bookmark.

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

Designated carpool parking stalls: X

A well-publicized no idling policy that applies to all vehicles (including school buses): We publish a no idling policy out to all of our parents informing them of our no idling policy. X

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

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

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 are a member of the Safe Routes to School program and have worked with Dakota County to get grants to purchase bikes and other equipment to make Pilot Knob more pedestrian friendly.

Each year we sponsor at least two Walk and Bike to School Days. On these days we have our six buses drop our students off at the Eagan Community Center where we then walk and or bike the .8 of a mile to school. Teachers and staff walk with us to promote healthy activities and the reduction of emissions. This is a very popular event that is enjoyed by the school community. We also participate in the District Wide MOVEGREEN Event for a week in the fall and spring. MOVEGREEN promotes commuting green by encouraging staff and students to walk, bike or carpool to school.

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

We have reduced the number of buses at Pilot Knob from eight buses to five 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 our older full size diesel powered special education buses with newer type 3 gas buses 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. This year we started using our first propane powered bus to reduce emissions and improve reliability during cold months.

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

MOVEGREEN is a fall and spring event promoted by LIVEGREEN the district wide sustainability program. MOVEGREEN encourages green commuting. One week in the fall and the spring, staff and students are encouraged to bike, walk or carpool to school. Participants register so we can track the number of green commuters and how they are commuting. Prizes are randomly given to those caught moving green.

# 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. Pilot Knob 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.

 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: Yes

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.): Yes

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

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: No

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: Yes

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: Yes

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

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

 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)

Staff are trained on proper use of cleaners when they are hired. They also participate in an annual chemical cleaning and safety training in accordance with OSHA Employee Right to Know.

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)

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.

 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)

Our staff is trained to report mechanical deficiencies to the building office who 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)

Our Architectural design firm Wold A&E designed the mechanical ventilation systems 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, and 8.) MN Energy.

An annual IAQ inspection is done from an outside firm, and every 3 years we do a complete retro-commissioning of mechanical systems. To complete the retro-commissioning, we hire a mechanical engineering firm as a test and balancing firm to verify operation.

8. 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)

70% of the classrooms at Pilot Knob Elementary have daylight directly from windows. The interior media center has 4 turret style skylights. To ensure acoustic comfort, we assess classrooms annually 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. We utilize a night setback temperature of 55 degrees to conserve energy. During the cooling season the building engineer will maintain a building temperature of 74 degrees F during the day and a night setback of 80 degrees. 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.

 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. (200 word max)

Pilot Knob Elementary 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. The testing is done annually. All staff are asked to participate in an annual air quality survey for school buildings.

Pilot Knob Elementary prohibits smoking and all other forms of tobacco, including e-cigs, while on campus and in public school buses.

Pilot Knob Elementary is in compliance with Minnesota Statutes, section 121A.33 and have identified and properly removed sources of elemental mercury and prohibits its purchase and use in schools. (This does not apply for fluorescent bulbs, mercury thermostats, switches and gauges for HVAC systems.)\_\_\_

Pilot Knob Elementary uses fuel burning equipment (such as boilers, water heaters and ovens) and have taken steps to protect occupants from carbon monoxide (CO).

Pilot Knob Elementary has identified and properly managed or, where applicable, have removed asbestos-containing materials in accordance with U.S. EPA AHERA regulations and the Minnesota Department of Health asbestos abatement rules.\_\_\_\_\_

Pilot Knob Elementary 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.

Pilot Knob Elementary has identified all wood playground or other structures that contain chromate copper arsenate and have removed them and replaced with recycled material.

Staff are trained to report mechanical deficiencies to the building office who then create a work order that is assigned to a maintenance person to investigate. Any stained ceiling tile is reported/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. Pilot Knob Elementary has air conditioning systems with reheat coils that controls humidity levels in the buildings.

#### 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) -

Our school participates in the USDA's Healthier US School Challenge. Level and year: Silver Award Winner 2011

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

Our school has a fruit, vegetable and greens salad bar: Since 2012

Our school has an on-site food garden: Yes

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

At Pilot Knob STEM Magnet School all of our K-4th grade students work in the garden by planting seeds (sowing), tending the garden (weeding, soil care) and harvesting vegetables. All of the students eat what they have grown in the garden and excess food is donated to a local food shelf. Last year we donated over 300 pounds of fresh vegetables. Vegetables are also used in the school lunch program in the fresh salad bar.

Food purchased by our school is certified as "environmentally preferable" (USDA certified organic, Fair Trade, Food Alliance or Rainforest Alliance): No

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

All Pilot Knob students spend 240 minutes (4 hours) in structured physical education classes with a licensed physical education teacher (90 minutes) and another 150 minutes at supervised active outdoor recess.

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

Our physical education program is outside as often as possible and our recess program takes place outside everyday for 30 minutes unless the temperature is below -10 degrees.

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):

We have not participated in the EPA's Sunwise program, but we educate parents about the sun and benefits of sunscreen. We will be looking into the EPA's Sunwise program.

10. 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)

All 408 Pilot Knob students spend time in the school garden planting, tending, harvesting and then eating the fresh vegetables and herbs. We have an outdoor learning space (classroom) complete with tables and benches for students and teachers.

Behind our school we have a wooded area with a trail that we use to take students into the woods to explore nature. Students use this area outdoor for science, forestry and wildlife lessons and activities.

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

Salad Bars: Since the 2012-13 school year, all schools in the district have operated a salad bar during lunch, increasing student access to fruits, vegetables, whole grains, low-fat cheeses and yogurt. School District 197 salad bars were featured in a Star Tribune article (<u>www.startribune.com/local/south/142729425.html?refer=y</u>) and on the federal "Let's Move" website (<u>www.letsmove.gov/blog/2011/11/18/minnesota-raising-bar-school-foods</u>).

School Breakfast: Changes in K-12 breakfast increased fruits and whole grains and reduced refined white grains.

Healthy Classrooms: We have changed Pilot Knob policies and practices to prohibit candies and unhealthy treats from parties and other school events. Parents bring in books for birthdays instead of cupcakes. Instead of treats, brithday options include: longer recess, time with an iPad, sharing a favorite story, and other creative activities.

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

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

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

We share free mental health resources with staff and students. We also understand the connection between mental health and physical health and promote and encourage staff and students to be active and participate in wellness initiatives. We have a 100 Mile Club where we promote running and walking as a form of exercise and emotional wellness.

 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:

We have retired men and women who are associated with the DARTS program come into our school to mentor our students who need extra support and encouragement in reading and math and to support social skill development. This intergenerational experience is fulfilling for both the students and retirees. Pilot Knob also has over 40 mentors from Prime Therapeutics, a local business, who come Tuesday - Friday to mentor students in reading and mathematics. This has been an ongoing program that is loved by the students and mentors. We have seen increased test scores in the areas of reading and math and believe that this program has helped to support the increase in reading and math achievement. This program continues to grow each and every year.

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

At Pilot Knob we have a full time counselor who teaches lessons on how to prevent bullying. Students also attend anti-bullying rallies.

# **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):

While we do not have a specific environmental literacy requirement, we do select books and digital content that that teaches sustainability and environmental stewardship. Principal Benson reads the book Paddle to the Sea to all kindergarten - 4th grade Pilot Knob students. The story is about the impact of pollution in the Great Lakes and ocean.

Principal Benson also works with each class at the beginning of the year on the importance of keeping our school clean and picking up any litter. Principal Benson shares a story about how his mother makes it a daily goal to pick-up three pieces of litter. The students then do a math problem to figure out how much litter would be picked-up by Pilot Knob students over the course of a week, month and year.

All Pilot Knob students take three field-trips to the Dodge Nature Center. The Dodge Nature Center curriculum is focused on nature, sustainability and environmental stewardship. The classes are taught by licensed naturalists. The concepts taught at Dodge Nature Center are then reinforced and expanded on in the classrooms.

Environmental and sustainability concepts are integrated throughout the curriculum. (100 word max):

The Dodge Nature Center curriculum is focused on sustainability and environmental stewardship. In our school garden, we grow butterfly and bee friendly plants. All K-4th grade students attend 60 minutes of a STEM class where students learn about technologies that reduce the carbon footprint.

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

We are currently in the process of creating assessments in the area of sustainability and environmental stewardship.

Professional development in environmental and sustainability education is provided to all teachers. (100 word max):

In 2014 -15, all Pilot Knob teachers worked with the University of Minnesota on the Monarch Project. Now that there has been a decline in the Monarch population our teachers and students have worked to create better Monarch habitats to improve the Monarch population.

All Pilot Knob students are taught how to sort their food into: trash (non-compostable or recyclable), compostable, and recyclable. The students also sort waste into recyclables or trash in every classroom.

2. 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 child care programs, community education courses, parent education courses, and student green teams, environmental or outdoor clubs. (Maximum 200 words)

LIVEGREEN events promoted by the LIVEGREEN Club are scheduled throughout the school year and include MOVEGREEN, Lower the Lights, LIVEGREEN Week, Earth Day, and compost sales. LIVEGREEN is always looking for smart, green, and efficient practices to incorporate into its school. The LIVEGREEN Club promotes recycling and composting, water reduction and energy conversation. Mr. Benson, Pilot Knob principal visits every classroom and teaches a lesson about energy conservation and waste reduction. Students are taught how much soap and hand drying paper is necessary and not wasteful. "One, two, three is enough for me," is the slogan that students use when getting paper towels to dry their hands.