



2012-2013 School Nominee Presentation Form

PART I - ELIGIBILITY CERTIFICATION

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.



U.S. Department of Education Green Ribbon Schools 2013

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

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

Official School Name Berkshire School
(As it should appear in the official records)

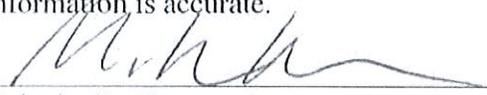
School Mailing Address 245 N Undermountain Rd
(If address is P.O. Box, also include street address.)
Sheffield MA 01257
City State Zip

County Berkshire County State School Code Number* NA

Telephone (413) 229-8511 Fax (413) 229-~~1010~~ **1010**

Web site http://www.berkshireschool.org/page.cfm?p=1 E-mail mmaher@berkshireschool.org

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

 Date FEBRUARY 4, 2013
(Principal's Signature)

Name of Superintendent* N/A
(Specify: Ms., Miss, Mrs., Dr., Mr.; Other)

District Name* N/A Tel.()

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

 Date _____
(Superintendent's Signature)

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



PART II – SUMMARY OF ACHIEVEMENTS

The school has a Director of Sustainability and a sustainability committee that are tasked by the administration to establish sustainable principles and practices that enhance the positive transformation of the campus community through the following goals:

Reduce Environmental Impacts and Costs- A long range Climate Action Plan guides the school's efforts to be carbon neutral by 2016. Berkshire tracks its carbon emissions with the Clean Air-Cool Planet calculator (the calculator is the leading tool for assessing campus greenhouse gas emissions across the country). Data goes back to Sept of 1999 and covers scope 1, 2 and a great variety of scope 3 emissions. Berkshire has shown a 31% reduction in carbon emissions since its 2005 baseline.

A revolving loan fund was established by the family of alumnus Baird Duschatko. The fund finances student projects that have a quantifiable monetary savings or return – such projects abound in the realms of renewable energy, energy efficiency, and energy conservation. Savings accrue to the fund until 125% of the loan has been paid. The EPA's portfolio manager gives all of Berkshire's dormitories an energy efficiency rating high enough to earn the Energy Star.

A two-megawatt, eight-acre solar field went live in January 2012. The project, part of an energy master plan developed by sustainability students and presented to the school's trustees in the fall of 2011, is the largest solar installation in the state of Massachusetts. It generates up to 50% of the school's electricity needs.

All building renovations meet green building standards, with 26% being LEED Gold. About 96% of students either walk, bike, or carpool. The school has a no idling policy, established carpool routes, and it is standard practice to purchase or lease high MPG rated vehicles for the school fleet. Students are involved in calculating all transportation emissions on an annual basis, resulting in purchase of carbon offsets equal to these emissions.

Finally, waste has been reduced by 39% since 2005. The recycling rate is about 14% and includes beverage containers, paper, cardboard, electronics, clothing, universal waste, and organics. Most cleaning products are Green Seal certified, all paper purchases have 100% post-consumer recycled content, and every effort is made to reuse materials in campus repairs.

Improve Student and Staff Health- Every student at Berkshire School must play a sport each season, two of which must be competitive. The school's interscholastic program embodies the school's mission: "Not just for school but for life." This program promotes character development and collaboration and believes that athletic competition is a powerful teacher.

Berkshire School uses SAGE Dining Services. Locally sourced foods are always highlighted on



the serving lines. SAGE works closely with local merchants, state farm bureaus and other community resources to feature fresh, regional products. Their goal is to purchase as much local product as possible, safely and within budget.

Campus buildings are operated and maintained in accordance with sustainable operations and maintenance guidelines and policies that cover impacts on the surrounding site, energy consumption, usage of environmentally preferable materials, indoor environmental quality, and water consumption. New construction projects are designed and built in accordance with LEED standards.

Provide Effective Sustainability Education- The department heads conduct an ongoing curriculum review of the courses offered and identify the extent to which nine sustainability standards are taught. Sustainability-focused courses are those that cover at least five standards. Sustainability-related courses are those that cover between one and three standards. Fifth and sixth formers who demonstrate the commitment and aptitude to work independently at an advanced level may develop a sustainability-focused independent study project in consultation with a faculty sponsor

Sustainability is a central topic during new student orientation. Student leaders engage all new students to impress upon them the importance of conserving energy, recycling, and making informed purchasing decisions. All new students are also required to take a sustainability literacy assessment during orientation, the results of which are compared to the same assessment administered before graduation.

Berkshire School adopted the sustainability benchmarking program produced by the Association for the Advancement of Sustainability in Higher Education (AASHE). The Sustainability Tracking, Assessment and Rating System (STARS) is arguably the most comprehensive of its kind in the country, used by both the Princeton Review and the Sierra Club for their rankings. Berkshire not only is currently earning silver rating, but leading the effort with eight other prominent boarding schools to build a web platform that will make data very transparent. Berkshire School has won awards and recognition from the National Wildlife Federation, Student Conservation Association, Sustainable Endowment Institute, EE Ford Foundation, PV America East, DoSomething.org, Green School Alliance, Berkshire Taconic Community Foundation, the National Association of Independent Schools, Second Nature, USA Today, and the United States Green Building Council.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

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



Nominating Authority's Certifications

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

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

Name of Nominating

Agency Massachusetts Department of Elementary and Secondary Education

Name of Nominating

Authority Mitchell D. Chester, Ed.D., Commissioner

(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.

[Handwritten Signature]
(Nominating Authority's Signature)

Date 2/13/13

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: February 28, 2015

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid



OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



ED-GRS Sample Nominating Authority Application

Thank you for your interest in completing the Massachusetts application for nomination to U.S. Department of Education Green Ribbon Schools (ED-GRS). In order to complete this application, you will need to collect data about your school's facility, health and safety policies; food service; and environmental and sustainability curriculum.

ED-GRS recognizes schools taking a comprehensive approach to greening their school. A comprehensive approach incorporates environmental learning with improving environmental and health impacts. Becoming a U.S. Department of Education Green Ribbon School is a two-step process. The first step is to complete and submit this form to be selected as a nominee by Massachusetts Department of Elementary and Secondary Education (ESE). The second step of the process requires signatures for the nominee package that will be sent to the U.S. Department of Education (ED).

ED selects honorees from those presented by states and other eligible nominating authorities nationwide. Selection will be based on documentation of the applicant's high achievement in the three ED-GRS Pillars:

Pillar I: Reduce environmental impact and costs.

Pillar II: Improve the health and wellness of students and staff.

Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways.

Schools demonstrating exemplary achievement in all three Pillars will receive highest rankings. It is important to document concrete achievement.

It will help you to assemble a team to complete the application. This team might include: a facilities manager, physical education director, food services director, curriculum director, finance department representatives, teachers and students. You should consult the [ESE Green Ribbon Schools](#) page for Massachusetts specific resources and the ED-GRS [resources page](#) for standards, programs and grants related to each Pillar, Element and question. This is an excellent clearinghouse of resources for all schools, not just those who apply. ESE encourages schools to reach out to the contacts provided if you are not able to provide documentation in certain areas. They are willing to assist you in compiling and accessing this information.

The questions in this application will help you demonstrate your high achievement in these Pillars as well as provide space for you to include pertinent documentation. You will receive points when you provide documentation for your answers. Please attach responses that require more space than provided and include the corresponding application question number. **Applications are due to ESE by December 14, 2012.**

Applications may be sent electronically to Lauren Greene at lgreene@doe.mass.edu (781-338-3107)

Note that if selected for nomination to ED-GRS, the school principal and district superintendent must be prepared to certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true; however, in no case is a private school required to make any certification with regard to the public school district in which it is located.



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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.

School Contact Information

School Name: Berkshire School

Street Address: 245 N Undermountain Rd

City: Sheffield State: MA Zip: 01257

Website: http://www.berkshireschool.org/page.cfm?p=1166 Facebook page: _____

Principal Name: Michael Maher

Principal Email Address: mmaher@berkshireschool.org Phone Number: (413) 229-1213

Lead Applicant Name (if different): Frank Barros

Lead Applicant Email: fbarros@berkshireschool.org Phone Number: (413) 429-7175



Level <input type="checkbox"/> Elementary (PK - 5) <input type="checkbox"/> Middle (6 - 8) <input checked="" type="checkbox"/> High (9 - 12)	School Type <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private/Independent <input type="checkbox"/> Charter	How would you describe your school? <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input checked="" type="checkbox"/> Rural	District Name <u>Southern Berkshire</u> <input type="checkbox"/> Largest 50 Districts
			Total Enrolled: <u>388</u>
Does your school serve 40% or more students from disadvantaged households? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	% receiving FRPL _____ % limited English proficient _____ Other measures <u>30% of students on financial aid</u>	Graduation rate: <u>100%</u> Attendance rate: _____	

Application Outline:

<u>ED-GRS Pillars and Elements</u>	<u>Points</u>
Cross-Cutting Question: Participation in green school programs	5 points
Pillar I: Reduce environmental impact and costs: 30%	
Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions Energy Buildings	15 points
Element 1B: Improved water quality, efficiency, and conservation Water Grounds	5 points
Element 1C: Reduced waste production Waste Hazardous waste	5 points
Element 1D: Use of alternative transportation	5 points
Pillar II: Improve the health and wellness of students and staff: 30%	
Element 2A: Integrated school environmental health program Integrated Pest Management Contaminant controls and Ventilation Asthma control Indoor air quality Moisture control	15 points



Chemical management	
Element 2B: Nutrition and fitness Fitness and outdoor time Food and Nutrition	15 points
Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways: 35%	
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems	20 points
Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills	5 points
Element 3C: Development and application of civic knowledge and skills	10 points
Total	100 points

Summary Narrative: Provide a 500 word maximum narrative describing your school’s efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.

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This program promotes character development and collaboration and believes that athletic competition is a powerful teacher.

Berkshire School uses SAGE Dining Services. Locally sourced foods are always highlighted on the serving lines. SAGE works closely with local merchants, state farm bureaus and other community resources to feature fresh, regional products. Their goal is to purchase as much local product as possible, safely and within budget.

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Berkshire School has

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

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

Sustainability Tracking, Assessment and Rating System (STARS)-----Silver Rating

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

(X) Yes () No Award(s) and year(s)

<u>National Wildlife Federation Campus Ecology Award</u>	<u>2005</u>
<u>National Wildlife Federation Campus Ecology Award</u>	<u>2006</u>
<u>Green Cup Challenge</u>	<u>2008</u>



National Wildlife Federation "Innovation and Experiential Solutions" Contest	2007
DoSomething.org "Increase Your Green "	2009
Student Conservation Association "Green Your School" Contest	2010
Berkshire Taconic Community Foundation "Green Your Pastures" Grant	2010
Sustainable Endowment Institute's "Billion Dollar Challenge"	2011
Recycle Bowl Champion	2011
EE Ford Foundation Grant	2012
PV America East "Project of Distinction" honorable mention	2013

Pillar I: Reduced Environmental Impact and Costs

Energy

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

(X) Yes () No Percentage reduction: 31% Over (m/yy - m/yy): 2005-2012

Initial GHG emissions rate (MT eCO₂/person): 8.11 MT eCO₂/person

Final GHG emissions rate (MT eCO₂/person): 5.61 MT eCO₂/person

Offsets: _____ How did you calculate the reduction?

Used the carbon calculator published by Clean Air-Cool Planet.

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

(X) Yes () No Year(s) and score(s) received:

At least 7 of 9 dorms have received certification every year between 2007 and 2011. The scores range from high 70's to mid-90's.

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

Current energy usage (kBTU/student/year): 202,474 kBTU/student/year

Current energy usage (kBTU/sq. ft./year): 138 kBTU/sqft/year

Percentage reduction: see below over (m/yy - mm/yy): 2005-2012



How did you document this reduction? NOTE: we are a boarding school, so the kBTU/student value will look rather large. Also, our baseline usage was 162 kBTU/sqft/year. So, our campus has become much more efficient. We use 24 kBTU/sqft less than our baseline. We used the carbon calculator published by Clean Air-Cool Planet.

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

On-site renewable energy generation: 50% Type photo-voltaic system

Purchased renewable energy: 28% Type "small" hydroelectric and wind power

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? 1907

What is the total building area of your school? 557,991 sqft

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

For new building(s): Percentage building area that meets green building standards: 100%

Certification and level: 26% LEED Gold

Total constructed area: 182,276 sqft but 87,345 sqft razed in the process

For renovated building(s): Percentage of the building area that meets green building standards:

100% Certification and level: _____ Total renovated area: 92,211 sqft

Water and Grounds

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

Average Baseline water use (gallons per occupant): 30,410 gallons

Current water use (gallons per occupant): 18,620 gallons

Percentage reduction in domestic water use: unknown

Percentage reduction in irrigation water use: unknown

Time period measured (mm/yyyy - mm/yyyy): 2005-2012



How did you document this reduction (ie. ENERGY STAR Portfolio Manager, utility bills, school district reports)?: facilities reports

8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate?: 95% Types of plants used and location: native trees and plants to Berkshires

9. Describe alternate water sources used for irrigation. (100 words max)

All pure water is pumped from a well into a large holding tank. Next to the holding tank is an overflow basin: when the holding tank reaches maximum capacity and the excess water needs somewhere to go, it is transferred into the overflow basin. This extra water is used for irrigation on the fields. The irrigation system is weather-dependent. The main goal is to use as little water as possible and let nature work its course on the athletic fields and grassed areas.

10. Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces. (100 words max)

All surface stormwater joins a local brook. As part of all new construction and major renovation projects, underground detention systems are built to mitigate stormwater runoff impacts. A landscape consultant helps Berkshire mitigate stormwater runoff impacts of ongoing campus operations through a variety of technologies which include swales, retention ponds, and/or porous paving.

11. Our school's drinking water comes from: () Municipal water source (X) Well on school property ()
Other: _____

12. Describe how the water source is protected from potential contaminants. (100 words max)

It is a matter of topography. The school is at the base of a bowl-shaped watershed on the eastern side of Mt. Everett. There is nothing but forested land on the slopes of the mountain. Berkshire school taps into the water cycle via wells just uphill from the main campus.

13. Describe the program you have in place to control lead in drinking water. (100 words max)

Berkshire School does a test for "lead and copper" in 5 different buildings throughout campus each month. This test also includes coliform, VOC's, SOC's, radon, perchlorate, etc. If the test shows high levels of these substances, corrective action is taken immediately.

14. What percentage of the school grounds are devoted to ecologically beneficial uses? (100 word max)

Roughly 60% is devoted to ecologically beneficial uses. The school's main campus has 208 acres of forested land. The forested land has a conservation restriction, with permanent study sites set up in each forest stand. Behind the school's math/science building are planting beds and a rain garden for student research. There is a community vegetable garden maintained by staff and faculty. Finally, Berkshire School funnels all its grey water through a water treatment plant before releasing it back into the calcareous wetlands to the southeast.

Waste

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

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 261.8 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): 33 cubic yards

C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected):
9.4 cubic yards

Recycling Rate = $((B + C) \div (A + B + C)) \times 100$: 14%

Monthly waste generated per person = $(A/\text{number of students and staff})$: 0.47 cubic yards/month

16. What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free? 100%

17. List the types and amounts of hazardous waste generated at your school:

Flammable liquids minimal	Corrosive liquids minimal	Toxics minimal	Mercury minimal	Other: minimal
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How is this measured? It is not measured due to such low volumes.

How is hazardous waste disposal tracked? NA

Describe other measures taken to reduce solid waste and eliminate hazardous waste. (100 word max)

It is the school's default to make course catalogs, schedules, directories, bulletins, report cards, registration materials, etc. available only through the school's website. Student led programs include unsubscribing unwanted magazine subscriptions, promoting sustainable events, encouraging zero waste meals, and eliminating bottled water. It is also standard practice in physical plant to reuse resources whenever possible in retrofits and campus repairs. Tray use was discontinued in 2009. Berkshire uses recycled napkins, recycled roll towels, and prioritizes the use of china, glass and silverware. Batch cooking techniques are used to maximize flavor and minimize waste.

18. Which green cleaning custodial standard is used?

LEED green cleaning standards

What percentage of all products is certified? over 50% (very conservative estimate)

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

Alternative Transportation

19. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses) 96%

How is this data calculated? (100 word max)

There are 380 students at Berkshire School. A large majority of the students are boarders. Of the 23 day students, 6 of them carpool (as identified in a survey).

20. Has your school implemented?

designated carpool parking stalls.

a well-publicized no idling policy that applies to all vehicles (including school buses).

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

Safe Pedestrian Routes to school or Safe Routes to School

Describe activities in your safe routes program: Not applicable (rural location) (100 word max)

21. Describe how your school transportation use is efficient and has reduced its environmental impact. (100 word max)

We have a working carpool map using Google Map Maker. It displays commuting routes and contact information of all off-campus staff, faculty and day students. It is also standard practice to purchase and/or lease campus vehicles that have the highest miles per gallon (MPG) ratings.

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

All emissions due to transportation are calculated on an annual basis. This includes emissions from commuting traffic, campus vehicles, airplane use for development, admissions, sports, etc., and bus travel. The community is made aware of our annual progress. Students are involved in the data collection process. In addition, students research ways to offset these emissions, resulting in the annual purchase of carbon offsets.

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

Environmental Health

1. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use:
0.26 grams/student/year—Berkshire filed an Integrated Pest Management Plan with the state.

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

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

The anti-smoking policy is clearly stated in both the student and employee handbooks.



Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. All remaining sources of mercury were removed when the math and science departments moved into their new building this past year.

Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) Berkshire School has carbon monoxide sensors in its main buildings.

Our school does not have any fuel burning combustion appliances

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

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

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

Berkshire School filed indoor and outdoor Integrated Pest Management plans with the state of Massachusetts. Berkshire School housekeeping eliminated almost all of its aerosol sprays and strong cutting agents from its shelves. The main distributor for cleaning products is Johnson Diversey. The products that we purchase from them are all Green Seal certified. Paints have no volatile organic compounds (VOC's). Berkshire School also avoids purchasing furniture and appliances that will produce outgassing.

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

Berkshire School avoids purchasing furniture and appliances that will produce outgassing. The HVAC systems in all buildings are checked three times a day to make sure that they are running properly. The filters for each system are checked three to four times a year and are changed if needed. Berkshire's main academic buildings and a majority of its dorms are connected with an energy management system via a BACnet platform. The system uses sensors and alarms to monitor ventilation systems and inform facilities when spaces are not adequately ventilated.



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

Buildings are cleaned each morning. When students leave campus, each building goes through a major cleaning to ensure it is sanitary. This is done to make sure the building remains sterile and uncontaminated. To ensure the buildings are always in top shape and in working order, Berkshire uses a web-based program hosted by SchoolDude.com to file maintenance requests from staff and faculty. These requests are processed daily by housekeeping and maintenance.

6. Our school has installed local exhaust systems for major airborne contaminant sources. (X)Yes ()No

7. 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)

The HVAC systems in all buildings are checked three times a day to make sure that they are running properly. The boilers are cleaned once a year. The filters for each system are checked three to four times a year and are changed if needed. Filters are replaced twice a year regardless if they need replacement or not. The filters that we use are MERV 8 pleated filters produced by Airex.

8. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (100 word max)

Berkshire's main academic buildings and a majority of its dorms are connected with an energy management system via a BACnet platform. The system uses sensors and alarms to monitor ventilation systems and inform facilities when spaces are not adequately ventilated. In addition, students use tools from the Collaborative for High Performance Schools (CHPS) to monitor indoor air quality, as well as thermal comfort, sound insulation and background noise, and light levels. The collected data helps facilities personal know when a building is not performing to optimal standards.



9. Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (100 word max)

In order to maintain a hygienic and stunning campus, buildings are cleaned each morning. The custodians clean everything from dust on the windowsills, to gum on the floor, to dirt on the walls. When students leave campus, each building goes through a major cleaning to ensure it is sanitary. This is done to make sure the building remains sterile and uncontaminated. To ensure the buildings are always in top shape and in working order, Berkshire uses a web-based program hosted by SchoolDude.com to file maintenance requests from staff and faculty. These requests are processed daily by housekeeping and maintenance.

Nutrition and Fitness

10. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100 word max each)

Our school participates in the USDA's HeathierUS School Challenge. Level and year:
_____.

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

Berkshire contracts SAGE Dining Services. At SAGE, menus are custom designed for each community. Each culinary team designs a unique menu specific for that location, to reflect the specific tastes of that population. These menus change seasonally. They reflect the fresh product available in each local market. SAGE works closely with local merchants, state Departments of Agriculture, farm bureaus, and any other resources available in each community.

Our school has an on-site food garden.

We have a community organic garden is located behind the old athletic center. It has both in-ground and raised beds for faculty use during the summer. Students maintain the garden during the school year. It is maintained by faculty during the summer months.



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

SAGE uses fresh herbs to enhance flavor, and to garnish their displays. SAGE has its own separate plot of land on campus to grow fresh herbs and vegetables. They encourage students to participate in these herb gardens.

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

All students are required to participate in afternoon sports every season. The teams meet for two hours Monday, Tuesday, Thursday, and Friday. The teams have games on Wednesdays and Saturdays.

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

Students must play sports all three seasons. Most sports in the Fall and Spring take place outdoors.

Health measures are integrated into assessments.

All sophomores must enroll in a Health and Wellness program that meets once per week. Students are required to present topics using PowerPoint.

At least 50% of our students have participated in the EPA's Sunwise (or equivalent program).

Food purchased by our school is certified as "environmentally preferable"

Percentage: unknown

Sage uses fresh, ground beef that contains no lean, finely textured beef (LFTB). SAGE supports the humane treatment of animals. They purchase only shell eggs that are cage-free and Certified Humane. The milk is 100 percent antibiotic-free and hormone-free. SAGE supports the Monterey Bay Aquarium Seafood Watch guidelines, and strives to increase purchase of sustainable seafood (tuna is dolphin-safe, packed in water)

11. Describe the type of outdoor education, exercise and recreation available. (100 word max)

Berkshire School lies at the base of Mt. Everett, the second highest mountain in Massachusetts. Berkshire celebrates the mountain it lies beneath with the Ritt Kellogg Mountain Program (RKMP), named after a 1985 alumnus who died in 1992 while climbing Mt. Foraker in Alaska. The RKMP offers the following afternoon activities to Berkshire students: rock climbing, backpacking, hiking, camping, winter mountaineering, boat building, kayaking, canoeing, fishing, and mountain biking. In addition, it also runs Berkshire's Maple Syrup Corporation, Ropes Course, and trail network.

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

SAGE's Spice of Life® Nutrition Education program provides detailed health and nutrition information for Berkshire School. Their simple Spotlight Program informs faculty, staff, and students of the relative healthfulness of foods via spotlights on the posted menu items. Their newsletter entitled SAGE Advice is dedicated to equipping Berkshire with the tools to make healthful food choices. The dining area is filled with an array of colorful signs, posters and labels: the Portion Size Poster, charts indicating fruits and vegetables in season, brochures on hydration and the importance of exercise, and much more.

Pillar 3: Effective Environmental and Sustainability Education

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

Our school has an environmental or sustainability literacy requirement. (100 word max)

The mission of our school states "...Our community fosters diversity, a *dedication to environmental stewardship*, and an enduring love for learning." We test all incoming students for sustainability literacy using questions constructed by department heads. The same test is given to graduating seniors. The results are used to help us modify curriculum.

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

Two years ago, all departments conducted a curriculum review using nine standards of sustainability (Cultural Preservation & Transformation, Responsible Local & Global Citizenship, The Dynamics of Systems and Change, Sustainable Economics, Healthy Commons, Natural Laws & Ecological

Principles, Inventing & Affecting the Future, Multiple Perspectives, and Strong Sense of Place). The depth at which each standard was covered was reviewed and appropriate changes were made. Efforts to make sure the curriculum best covers these standards continue on an annual basis.

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

Given the procedure used to integrate sustainability into the curriculum, having concepts integrated into assessments is unavoidable.

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

Since sustainability standards are mainstreamed throughout the curriculum, proficiency in sustainability concepts correlates with students' overall GPA.

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

The school maintains a healthy professional development budget. Professional development in environmental and sustainability education is encouraged and funded (i.e. many teachers from different departments have recently used funds to take the Appalachian Trail Conservancy's "Trail to Every Classroom" program). All new faculty and staff are trained in sustainability principles during their orientation by the school's sustainability director.

2. For schools serving grades 9-12, provide:

Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: 33% Percentage scoring a 3 or higher: 63%

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

The science and math departments design student projects that teach skills associated with four of the nine sustainability standards mentioned above. The four standards include The Dynamics of Systems and Change, Sustainable Economics, Natural Laws & Ecological Principles, and a Strong Sense of Place. There are a myriad of performance indicators which faculty choose from to assess student competency in these standards.



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

Berkshire offers a number of electives which provide this context for interested students. First, there is the Sustainability and Resource Management elective whereas students work directly with the day-to-day operations of the physical plant to develop steps towards implementing the school's sustainability plan. Secondly, the Advanced Topics in Energy is an experimentally-based course that explores the design and function of solar PV and solar thermal, wind and biomass systems. Thirdly, in the Advance Economics course students form groups to devise and write a business plan for a product or service that enhances sustainability.

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

Either through the school's sustainability elective, independent study program, or student clubs, Berkshire students use tools developed by the International Council for Local Environmental Initiatives (ICLEI) to help the local Sheffield community become more sustainable, resilient, resource-efficient, biodiverse, and low-carbon; to build a smart infrastructure; and to develop an inclusive, green urban economy. The Philanthropy Society blends community service, charitable giving and moral decision-making to help students understand and practice social sustainability in the broadest sense. Within the Berkshire School community, sustainability dorm representatives are required to lead sustainability awareness in their dorms and help administer outreach campaigns.

6. Describe students' meaningful outdoor learning experiences at every grade level. (100 word max)

Using the ninth sustainability standard, a Strong Sense of Place, all academic departments are expected to provide experiences that use our mountain as a classroom. For example, freshman study ecosystem dynamics using permanent study sites on our mountain. Sophomores measure water quality parameters in streams, brooks, and lakes throughout the local watershed. Juniors study transcendentalism in and about the exact replica of the Thoreau Cabin; built collaboratively by Berkshire students and faculty.

7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (100 word max)

The Ritt Kellogg Mountain Program (RKMP) strives to teach students a greater respect for their natural resources. RKMP faculty offer afternoon alternatives to traditional team sports (i.e. rock climbing, mountain biking, mountaineering, and kayaking) and a Beyond the Mountain program through which they guide students on adventures across the globe. The RKMP offers students a variety of activities that allow them to gain greater insight into themselves and the world around them, and to learn respect for the natural environment.



8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 100 words)

Sustainability progress is assessed at Berkshire School using the Sustainability, Tracking, Assessment and Rating Systems (STARS) developed by the Association for Advancement of Sustainability in Higher Education (AASHE). STARS is a broad-based, stakeholder-designed, tested framework. It is transparent, self-reporting, and enables meaningful comparisons over time and across institutions using a common set of measurements. Our school is working with eight other prominent New England boarding schools and the STARS steering committee to bring standardized, sustainability metrics to secondary schools across the country. Our experience with sustainability metrics has drew attention from over three dozen independent schools looking for guidance.

9. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200 words)

Berkshire is collaborating with Lucid Design Group, Inc. to produce a web-based dashboard that will fulfill the following objectives:

- a. Monitor and display building energy usage to occupants and managers enabling resource reduction.
 - b. Host engaging competitions that save energy and money, and motivate behavior change.
 - c. Build a social platform for sustainability and communicate internally to occupants and employees and externally to the public.
 - d. Track progress toward sustainability goals such as energy reduction and carbon neutrality.
 - e. Improve collaboration and align stakeholders through increased transparency of our sustainability initiatives.
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