

School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

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

- 1. The school has some configuration that includes grades Pre-K-12.
- 2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
- Neither the nominated public school nor its public school district is refusing the U.S. Department of Education 3. 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.
- OCR has not issued a violation letter of findings to the public school district concluding that the nominated 4. 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

| 🛛 Public 🗌 Charter 🔲 Title I 📄 Magnet 📄 Private 📄 Independent 🗌 Rural |
|---|
| Name of Principal: Mrs. Dawn Miller |
| (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records) |
| Official School Name: Burris Laboratory School |
| (As it should appear on an award) |
| Official School Name Mailing Address: 2201 W. University Avenue, Ball State University, Muncie, IN 47306-1062 |
| (If address is P.O. Box, also include street address.) |
| County: Deleware State School Code Number *: 1441 |
| Telephone: 765-285-1131 Fax: 765-285-8620 |
| Web site/URL: http://cms.bsu.edu/web/burris/about E-mail: demiller4@bsu.edu |
| 1 P a g e |



*Private Schools: If the information requested is not applicable, write N/A in the space reviewed the information in this application and certify that to the best of my knowledge all information is

Date: 1/12/17

(Principal's Signature)

Name of Superintendent: Dr. Julie Wood

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

District Name: Burris Laboratory School

Nhave newieweektheinformation in this application and certify that to the best of my knowledge all information is accurate. Date: 1/12/17

(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: Indiana Department of Education

Name of Nominating Authority: Mr. Jarred Corwin

(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. Daned Corum Date:01/25/17

(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.

ED-GRS Indiana Department of Education Application

Thank you for your interest in completing the Indiana Department of Education 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 an eligible nominating authority. 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 eligible nominating authorities nationwide. Selection will be based on documentation of the applicant's high achievement in the three ED-GRS Pillars:

<u>Pillar I:</u> Reduce environmental impact and costs.

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

<u>Pillar III</u>: 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 ED-GRS <u>resources page</u> 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.

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. Applications are due by midnight December 14, 2016.



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.

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 as 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. 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.

School Contact Information

School Name: Burris Laboratory School

Street Address: 2201 W. University Ave..

City: Muncie State: IN Zip: 47306

Website: http://cms.bsu.edu/web/burris Facebook page: https://www.facebook.com/groups/625732920908704/

Principal Name: Dawn Miller

Principal Email Address: demiller4@bsu.edu Phone Number: 765-285-8600

Lead Applicant Name (if different): Click here to enter text.

Lead Applicant Email: Click here to enter text. Phone Number: Click here to enter text.



| School Type ⊠ Public □ Private/ Independent | How would you describe your school? ⊠ Urban □ Suburban | District Name Burris Laboratory School |
|--|--|--|
| □ Charter | □ Rural | Total Enrolled: |
| | | 643 |
| % receiving FRPL (Free 15.4%, Reduced 10.9%, Paid 73.7%) | | Graduation rate: 97.6 % |
| % limited English pr | | |
| Other measures Clic | k here to enter text. | Attendance rate: 96.1 % |
| | Public Private/ Independent Charter % receiving FRPL (1 10.9%, Paid 73.7% % limited English pr | ✓ Public ✓ Private/ Independent ✓ Charter ✓ Rural % receiving FRPL (Free 15.4%, Reduced |

Application Outline:

| Points_ |
|-----------|
| 5 points |
| |
| 15 points |
| 5 points |
| 5 points |
| 5 points |
| - |



| Element 2A: Integrated school environmental health program | 15 points |
|--|------------|
| Integrated Pest Management | |
| Contaminant controls and Ventilation | |
| Asthma control | |
| Indoor air quality | |
| Moisture control | |
| Chemical management | |
| Element 2B: Nutrition and fitness | 15 points |
| Fitness and outdoor time | |
| Food and Nutrition | |
| Pillar III: Provide effective environmental and sustainability education, | |
| incorporating STEM, civic skills and green career pathways: 35% | |
| Element 3A: Interdisciplinary learning about the key | 20 points |
| relationships between dynamic environmental, energy and human systems | |
| Element 3B: Use of the environment and sustainability to develop STEM content, | 5 points |
| knowledge, and thinking skills | |
| Element 3C: Development and application of civic knowledge and skills | 10 points |
| Total | 100 points |
| | - r |

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

Burris Laboratory School is a K-12 school that is located on the campus of Ball State University (BSU) in Muncie, Indiana. Burris is the only school in the Burris Laboratory School Corporation and has the entire state of Indiana as its enrollment district. We would like to highlight our efforts to become a green and healthy school. We created a Wellness Committee at our school to lead efforts in reducing our environmental impact and costs. The members of this committee audit our energy usage at the beginning of the year and then plan and implement various initiatives to improve in areas they identify as areas for growth. We have been successfully recycling for several years now. Burris, as part of Ball State University, is currently piloting Canvas to explore net generation learning environments. With a simple user interface, easy navigation, and seamless integration with 3rd party tools, Canvas has become one of the most highly adopted learning management systems' in higher education in the last 5 years. Using the Canvas system, we reduced a huge amount of paper usage by our school. We are a 1:1 iPad school, therefore teachers and students use a file sharing system to send things electronically and use iPads to sign and submit papers electronically. We use technology to be more environmentally friendly. One of our goals is to become more energy efficient.

Burris Laboratory School has implemented several wellness initiatives to improve student and staff health. We have a full-time school nurse that works with teachers and families to help with students' needs. Our school provides physical education daily to students in K-8, which is approximately 450 students. Our physical education teacher has formed a wellness committee program, PE activity, school fitness club, walking club, yoga and fitness activities. Students and staff



on this team brainstorm and implement healthy activities within the school. They also monitor our school's health policy, which stipulates the amount of activity our students receive and the types of food that is served. Activities have included walking to the Ball State Green House and Christy Woods, field trips, annual fishing and hiking trips, Jump Rope for Heart American Association, and the annual owl walk, where students from K-12 walk alongside Ball State campus and play recreational games. We also have physical activity breaks during staff meetings. Our students receive daily physical education classes, health classes, and a guidance class for emotional and social well-being. Our high school students have open lunch for 1 hour where they can play outside and have lunch. Middle and high school students have PE classes on school grounds from August through November, weather permitting.

Our school's science lab provides environmental lessons to all students throughout the year and also brings in many community partners like DNR, YMCA, the Downtown Farm Stand, Youth Opportunity Center, Ball State University faculty. Lessons include water quality and conservation, human impact on the environment, and energy education and sustainability. Partnerships are chosen carefully and are only implemented because of the wide scope impact that they have. For example, our students in partnership with Student Voluntary Services at Ball State and the Indiana DNR are actively involved in doing volunteering to clean the White River and clean up areas in southern Indiana after tornado damage in 2012.

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?

 \boxtimes Yes \square No Program(s) and level(s) achieved: Click here to enter text.

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

 \boxtimes Yes \square No Award(s) and year(s) Click here to enter text.

Optional work: Certain questions have been labeled optional. These questions require more research than the applicant may have capacity to answer or the school currently may not be tracking the requisite data. Answering these questions will provide reviewers a more complete view of your green efforts. However, if you do not have the capacity to answer the question in the format it is asked; please provide either estimates or plans of how you intend to begin collecting this data.

Pillar I: Reduced Environmental Impact and Costs

Energy

1. (Optional) Can your school demonstrate a reduction in Greenhouse Gas emissions? ⊠Yes □No Click here to enter text.

Percentage reduction: 28.64%



Over (m/yy - m/yy): 2010-2016

Initial GHG emissions rate (MT eCO2/person): 159,037

Final GHG emissions rate (MT eCO2/person): 113,496

Offsets: N/A

How did you calculate the reduction? The greenhouse gas emissions rate was calculated by inputting the energy data for RCES into the Greenhouse Gas Equivalencies Calculator on the EPA website. The calculator converted annual kilowatt-hours into Metric Tons of CO2.

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

 \Box Yes \boxtimes No Year(s) and score(s) received: Click here to enter text.

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

Click here to enter text.

Current energy usage (kBTU/student/year): 169,654

Current energy usage (kBTU/sq. ft./year):109,088

Percentage reduction: 35.70%

Over (m/yy - mm/yy): 06/2010-06/2016

How did you document this reduction? Annual assessments

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

On-site renewable energy generation: Click here to enter text. Type In 2009, Ball State began construction on the world's largest geothermal project of its kind. Hot and cold water produced by the ground source geothermal operation began to flow throughout campus. The heating and cooling system uses the Earth's ability to store thermal energy- eliminating the use of coal on campus. The infrastructure and piping were routed and installed in 2016 so that Burris Laboratory School will have Geothermal heating and cooling by March 2017.

Purchased renewable energy: 2.2% Type 2014/2015 purchased 2,653,000 kwh of electrical equivalent in renewable energy credits, or 2.2% of our 121,632,171 kwh consumption for the entire campus 2015/2016 purchased 2,653,000 kwh of electrical equivalent in renewable energy credits, or 2.2% of our 120,081,058 kwh consumption for the entire campus.

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: Ball State University purchased from Carbon Solutions CSG Clean Build RECs in 2014 for 2-year Electricity Usage 5,310 with 70% Green Power.



5. In what year was your school originally constructed? 1928

What is the total building area of your school? 130,745

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

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

Certification and level: Total constructed area:

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

Water and Grounds

7. (**Optional**) Can you demonstrate a reduction in your school's total water consumption from an initial baseline? \Box Yes \boxtimes No

Click here to enter text.

Average Baseline water use (gallons per occupant): Click here to enter text.

Current water use (gallons per occupant): Click here to enter text.

Percentage reduction in domestic water use: Click here to enter text.

Percentage reduction in irrigation water use: Click here to enter text.

Time period measured (mm/yyyy - mm/yyyy): Click here to enter text.

How did you document this reduction (ie. ENERGY STAR Portfolio Manager, utility bills, school district reports)?: Click here to enter text.

8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate?: N/A Types of plants used and location: Click here to enter text.

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

None

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

As a standard, Ball State uses permeable concrete in parking lots to collect storm water and block debris from entering the storm water systems and ultimately toe open waterways. The University labels with medallions all open storm water



grates on campus that read "storm water only". In addition, Burris students have installed rain barrels to capture rain runoff from the roof of the school building.

11. Our school's drinking water comes from: \square Municipal water source \square Well on school property \square Other:

Indiana American Water Company

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

A reduced pressure backflow preventer is installed at the domestic water entrance. This device allows a one-way flow of water and prevents the reverse flow of polluted water from entering into the potable water supply.

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

Lead free plumbing components were utilized during renovation.

14. What percentage of the school grounds are devoted to ecologically beneficial uses? 85%

Waste

15. (**Optional**) What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? Click here to enter text.Complete all the calculations below to receive points.

In 2015 Burris generated 92,880 pounds or 46.44 tons of trash, 22,610 pounds or 11.31 tons of recycling for a total waste stream of 115,490 pounds or 57.75 tons. This calculates to a recycling rate of 19.6%. Weights are obtained through scales on the truck at the time of pick up.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): Trash containers are emptied each day Monday through Friday. Both containers are 8 cubic yards in size.

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): Recycling containers are emptied each day Monday through Friday. Both containers are 8 cubic yards in size.

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): No food waste is collected for composting from Burris or Wagoner Dining.

Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: N/A

Monthly waste generated per person = (A/number of students and staff): The average monthly amount of trash generated is 7740 pounds or 3.87 tons. The average monthly amount of recycling generated is 1884.2 pounds or 0.9 tons.



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? Post-consumer material, fiber from forests certified as responsibly managed: 0% Chlorine Free: 0%

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

| Flammable liquids | Corrosive liquids | Toxics | Mercury | Other: |
|-------------------|-------------------|--------|---------|--------|
| N/A | N/A | N/A | N/A | N/A |
| | | | | |
| | | | | |

How is this measured? Campus has a contract with Tradebe Environmental Services in East Chicago, Indiana, a permitted hazardous waste transporter and treatment, storage, and disposal facility, for the pickup, segregation, lab-packing, transportation, treatment, recycling, and disposal of our campus chemical and hazardous wastes. The contract prohibits land disposal of the wastes. The wastes may be handled in a number of ways depending on the waste type: All Chemical and hazardous waste on campus is picked up by the department of environmental specialist and from there the department evaluates the waste and prepare them for shipment in our waste accumulation room in Cooper Physical. Other times we will stop at Burris with the Tradebe Treatment and Recycling facility truck and personnel to directly retrieve the chemical wastes. TRADEBE has provided the university with several innovative and environmentally friendly disposal techniques. Through TRADEBE fuel blending, solvent reclamation, and other programs, the university has sent hazardous waste for recycling/reuse. 1. Solvents may be distilled for recovery; 2. Mercury and contaminated equipment will be retorted for recovery; 3. Flammables and other wastes with fuel (BTU) value will be blended as synthetic fuels for energy recovery in cement kilns; 4. Acids/caustics may be neutralized or used to neutralize other waste materials; 5. A variety of other waste handling methods are utilized to deactivate or neutralize the hazardous characteristics of the waste before disposal or recovery. Other "Universal" hazardous wastes such as lamps and used batteries are collected and prepared for transport by Veolia for recycling through Central Stores.

How is hazardous waste disposal tracked? N/A

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

In 2015, Burris had 92,880 pounds or 46.44 tons of trash and 22,610 pounds or 11.31 tons of recycling. Total waste stream amount was 115,490 pounds or 57.75 tons. Recycling rate averages around 20%.

Ball State and Burris have been reducing its waste throughout campus in a variety of ways, including waste diversion, materials exchange, chemical reuse, and the reduction of waste products. One example of waste product elimination is the campus installed 32 water-bottle filling stations in 15 buildings to avoid bottle waste. Other campus waste initiatives sponsor recycling systems throughout dining services, residence halls, and at events. Recycling containers are placed throughout campus, including academic and administrative buildings. In addition, Burris recycles cardboard and purchased 30% post-consumer recycled copier/ printer paper.



18. Which green cleaning custodial standard is used? Ball State Residence Halls uses very little chemicals for cleaning, they use a system called the Lotus Pro. This Cleaning System transforms ordinary tap water into the world's most effective toxin-free commercial cleaner by infusing it with ozone. This 'Stabilized Aqueous Ozone' eliminates germs, odors, stains, mold, mildew and other contaminants on any item or surface before changing safely back into water and oxygen. The test in the residence halls have been successful and plans to roll out to more buildings in the future.

What percentage of all products is certified? 85%

What specific third party certified green cleaning product standard does your school use? The DEB hand soap used on campus is Green Seal Certified/USDA Certified Biobased Product. Trash Bags that are used on campus are 100% recycled material in the black and 96% recycled material in the blue. The toilet tissue from Cascade and Envision used on campus is Green Seal Certified, processed Chlorine Free Certified Ecologo CCD-082. The paper towels used on campus is from Cascade Moka, the towel is Green Seal Certified, Eco Logo Certified and offset with Green-e certified renewable energy.

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) Walk – 5%, bike – 5%, bus – no bus transportation is offered, carpool – 80% most of our parents are Ball State University and Ball Memorial employees, public transportation – 10%

How is this data calculated? (50 word max) The survey has been taken and distributed among the school staff, faculty, and stduents.

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.

 \boxtimes Safe Pedestrian Routes to school or Safe Routes to School

Describe activities in your safe routes program: (50 word max) Our school located in the heart of Ball State campus and beside the area community hospital. We are located on a public transportation bus route, and have sidewalks, walking paths and crossing guards in place. We encourage students and staff who live within proximity to the school to walk and bike, weather permitting.

21. Describe how your school transportation use is efficient and has reduced its environmental impact. (50 word max) Our school do not offer bus service to our students because we have the entire state of Indiana as its enrollment district. Most of our parents are Ball State University and Ball Memorial employees and drive their children to school.



22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100 word max) Ball State University's geothermal conversion project replaces the university's existing coal-fired boilers and chilled water equipment with the nation's largest ground-source geothermal district energy system. This system simultaneously produces hot water and chilled water. In 2005, the Indiana General Assembly Authorized Ball State University to replace or upgrade its aging coal-fired boilers and provided the university with the initial \$44.8 million to begin the project. In 2009 Ball State University received a \$5 million dollar grant from the US Department of Energy to help fund the geothermal project, and in 2013 the Indiana General Assembly authorized an additional \$33.1 million bring the total funding required for the project to \$82.9 million. After exploring a number of alternatives, the university decided to replace its existing heating and cooling system with a geothermal ground source heat pump system. The earth's ability to maintain a constant temperature makes it a renewable energy source. The University's board of trustees approved the plan on February 6, 2009. On May 9, 2009, Senator Richard Lugar joined university officials in Muncie to break ground on the project. The project is nearly completed, with final completion anticipated by mid-2017. The university has already retired its use of coal as a fuel source, eliminating the following emissions annually: 85,000 tons of carbon dioxide, 240 tons of nitrogen oxide, 200 tons of particulate matter, 80 tons of carbon monoxide, and 1,400 tons of sulfur dioxide. The net change will cut the university's overall carbon footprint nearly in half. Dramatic energy efficiency improvement is another major benefit of the project. The current stoker boiler system has a co-efficient of performance (COP) of .62. "COP" is the standard measure of heating/cooling efficiency - the higher the COP, the better. The current electric chiller system has a COP of 5.02. The weighted average of current systems is a 1.04 COP. With the geothermal installation, the combined COP will be 7.77 - a seven-fold increase in efficiency. In monetary terms, the university has begun to save \$2 million annually in energy costs.

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

Environmental Health

1. (Optional) What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: Our school has adopted an integrated pest management plan to reduce and/or eliminate pesticides. Pest control policies, methods of application, and posting requirements are provided to parents and school employees. Copies of pesticides labels, copies of notices, MSDS and annual summaries of pesticide applications are all available and in an accessible location. Our school prohibits children from entering a treated area for at least 8 hours after the treatment, or longer if required by the pesticide label. Our integrated pest management program consists of good housekeeping techniques, reducing clutter, and preventative maintenance that controls entry. If further action is required we use baiting and trapping to remove a pest, which is provided by our contracted pest control company (Terminix). Terminix provides the routine inspections, pest identifications, and monitoring of traps. If any pest control service involves anything besides baiting and trapping, the school provides a letter home to parents and keeps a copy of what insecticides were used on file. Our priority is to conduct pesticide treatment when school is not in session. We have copies of all work orders generated by the school's requesting pest control services.



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. Click here to enter text.

 \boxtimes Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. Click here to enter text.

 \boxtimes Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) Click here to enter text.

Our school does not have any fuel burning combustion appliancesClick here to enter text.

 \boxtimes 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. Click here to enter text.

 \boxtimes Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. Click here to enter text.

3. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. (100 word max) Stock concentrations are locked in chemical stockroom, students only use diluted versions of chemicals. We follow all MSDS and FCPS guidelines on storage, usage, and disposal. Please see above for actions to minimize student/staff exposure to pesticides. Our kitchen All Purpose and Pot and Pan are Green Seal Certified, and the Envirowash carries the EPA's Design for the Environment Label. Both Green Seal, and the EPA's DFE Label are widely recognized as being generally safer/more user and environmentally friendly.

4. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100 word max) We developed an Indoor Air Quality (IAQ) management program in our school that includes asthma management strategies. We address systematically and aggressively, an IAQ program that focuses on the six technical solutions will deliver a healthier school environment. The six technical solutions are quality HVAC, control of moisture/mold, strong integrated pest management, effective cleaning and maintenance, and aggressive source control. Quality HVAC - we inspect of HVAC system regularly, establish maintenance plan, change filters regularly and ensure condensation pans are draining, and provide outdoor air ventilation according to ASHARAE Standard or local code. Control of moisture/mold - we conduct routine moisture inspections, establish mold prevention and remediation plan, maintain indoor humidity level between 30% and 60%, address moisture problems promptly, and dry wet areas within 24-48 hours. Strong integrated pest management (IPM) - we inspect and monitor for pests, establish IPM plan, use spot treatments and baits, communicate with occupants prior to pesticide use, and mark indoor and outdoor areas treated with pesticides. Effective cleaning and maintenance - we conduct routine inspections of school environment, develop a preventative maintenance plan, clean and remove dust with dump cloth, and vacuum using high-efficiency filters. Aggressive source control – we conduct regular building walking through inspections, test for radon and



mitigate if necessary, implement a hazardous material plan, and conduct pollutant-releasing activities when school is unoccupied.

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)

Our school visually inspects all structures on a monthly basis to ensure they are free of mold, moisture and water leakage

6. Our school has installed local exhaust systems for major airborne contaminant sources. \square Yes \square 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 building management system monitors the ventilation system and filter status that will alert Ball State Maintenance Unit when the unit is not functioning properly or if filters need to be cleaned and replaced.

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)

All spaces were designed to meet ASHRAE Standard 62.1-2010 (Ventilation for acceptable indoor air quality.) RH is routinely monitored and any room with RH levels above 60% is further investigated and mitigated.

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. (200 word max)

The university has a dedicated Environmental Health and Safety unit that in collaboration with Facilities Planning and Management monitors a wide variety of safety aspects of the campus. The Environmental Health and Safety unit routinely measures the face velocity of all fume hoods used in laboratories to ensure the proper capture velocity is met. The university complies with all relevant state, local and federal guideline related to mercury, hazardous materials and air pollutants. The university has a no-smoking policy on the entire campus grounds and in buildings. As noted in the previous question all ventilation systems are designed to meet or exceed ASHRAE Standard 62.1-2010.

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.

13 | Page



Level and year: Click here to enter text.

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

 \boxtimes Our school has an on-site food garden. Click here to enter text.

 \boxtimes Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. Click here to enter text.

 \boxtimes Our students spent at least 120 minutes per week over the past year in school supervised physical education. Click here to enter text.

At least 50% of our students' annual physical education takes place outdoors. Click here to enter text.

Health measures are integrated into assessments. Click here to enter text.

 \Box At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). Click here to enter text.

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

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

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

We have school fitness club, walking club, yoga and fitness, middle and high school students meet outside on playground for PE classes August through November if weather permitting. Open-lunch for an hour for high school students during the lunch hours, allow students play and have lunch on nature. K-5 go for walk to Ball State Green House and Christy Woods.

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

We have a school wellness policy that specifies the minimum amount of physical activity our students must have as well as rules on the types of snacks that can be provided and when. Our morning show includes health tips. Our students receive 30 minute lessons once every sixth day on social, emotional, personal, and physical health by our guidance or physical education teacher. Families receive a calendar each month with daily fitness challenges. Students that complete a specified percentage of activities during the month receive recognition.



Pillar 3: Effective Environmental and Sustainability Education

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

⊠ Our school has an environmental or sustainability literacy requirement. (200 word max)

All students are taught science using the Next Generation Science Standards. Many environmental and sustainability concepts are covered through the use of these standards. Environmental and sustainability concepts taught include the impact of humans on the environment, ways to reduce the impact on the environment, energy and fuel are derived from the earth and the affect using natural resources has on the environment.

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

All students, kindergarten through fifth grade, are taught science (including environmental and sustainability concepts) through an integrated approach. The classroom teacher and science lab teacher co-teach hands-on lessons in the science lab and the classroom teachers lead literacy components in the classroom. Often, topics are also extended into math and social studies as well. For example, math and science time is used to plan our square foot garden beds. Our fifth graders learn about the importance of earth's resources to all groups that settle in an area over time.

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

Students are assessed in a variety of ways but primarily through project-based assessments and/or written explanations. For example, kindergarten students learn about ways we can positively impact our local environment in the science lab and then make recycled art (using items that would have been sent to the landfill) during art class.

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

Our students exhibit high levels of proficiency on these assessments, based on progress monitoring data completed by teachers. Students that do not meet expectations are often re-taught and re-assessed.

 \boxtimes Professional development in environmental and sustainability education are provided to all teachers. (200 word max)

Our teachers have participated in a variety of professional development sessions including promoting wellness, energy reduction in the school setting, and school gardening. Additionally, our specials teachers have formed professional learning communities to plan STEM lessons that occur in all classrooms, not just one lab. Many of these STEM lessons are related to sustainability.



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: N/A Percentage scoring a 3 or higher: Click here to enter text.

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200 word max)

We create pamphlets and handouts to community for awareness.

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200 word max)

N/A

5. Describe students' civic/community engagement projects integrating environment and sustainability topics. (200 word max)

Students did the research on roads and how they are set up and potential problems they can cause to the environment and present solutions to Muncie Transportation Department

6. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max)

We take middle and high school students to White River for water testing and stream velocity as well as hiking and fishing camp. Our K-5 students go to Christy Woods, Ministrista, and planetarium. This year we applied for School Garden grant and planning to build raised bed gardens on school for our K-5 graders. Teachers engage students through their involvement in community work to increase their awareness about nature and society. To that end, we would like to create the Friendship Garden Project not only for science students, but for the entire K-12 student population.

7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200 word max)

Our students go to Camp Crosley YMCA annually for summer camp. We also took students to Camp Crosley YMCA for planting trees. We have planted 10,000 native aquatic plants to help clean up and get the camp ready.

8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200 words)

One of the biggest supporters of Burris achieving the 3 Pillars is Ball State University. Because we are a Laboratory school, our students receive exposure to the newest curriculums, technologies, and integration techniques in education by Ball State Teacher's College Pre-Service teaching students. Further, as a public school, we build our own partnerships with Indiana DNR, the local YMCA, local farms, and other Muncie Community initiatives. The environment of Burris is truly unique – K-12 in one building, being located on a



State University Campus, proximity to IU Health Ball Memorial Hospital, adjacent to the IU School of Medicine Muncie Campus, and within walking distance to the Cardinal Greenway along the White River. This environment allows our students to participate in events sponsored by the community and our partners both during and outside of the school day – a prime example is the annual White River Clean-up day.

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)

The components outlined above allow Burris to be good stewards of our environment by converting our facility to a renewal heating and cooling source, not only teach but implement ways to reduce, reuse, and recycle our earth's resources, support global citizenship, enhance wellness education and activities of students and staff, and provide STEM education and responsible environmental curriculum to our K-12 students. The Ball State Teacher's College students provided curriculum, hands-on learning initiatives and classroom discussion on sustainability, updated practices and new technologies. Therefore, our students are not only learning about new technologies and practices, they are using, benefiting from their use, and practicing them throughout their K-12 career at Burris Laboratory School.