



2014-2015 School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

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

- 1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
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.
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 2014-2015

Charter Title I Magnet Private Independent

Name of Principal: Dr. Kelly A. Luscre

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

Official School Name: Big Shanty Intermediate

(As it should appear on an award)

Official School Name Mailing Address: 1575 Ben King Rd., Kennesaw GA 30144

(If address is P.O. Box, also include street address.)

County: Cobb Code Number \*: 0504

Telephone: 678-594-8023 Fax: 678-594-8026

Web site/URL: http://www.cobbk12.org/BigShanty/ E-mail: Kelly.luscre@cobbk12.org

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

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

I have reviewed the information in th... ncipal's Signature)

Date: 1-28-15

(Principal's Signature)



Name of Superintendent: **Mr. Chris Ragsdale**

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

District Name: **Cobb County School District**

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

reviewed the information in this app

(Superintendent's Signature)

Date: **1-22-15**

**(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: **Georgia Department of Education**

Name of Nominating Authority: **Mr. Richard Woods**

(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.

provisions above

(Nominating Authority's Signature)

Date: **1-27-15**

(Nominating Authority's Signature)

**SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS**

Provide a coherent "snapshot" 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 and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

**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](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: February 28, 2015

**Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response,



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

**Big Shanty Intermediate School** is the only third through fifth grade intermediate school in Cobb County. We serve 758 students and have 54 certified staff members. Our diverse population includes: 43.8% economically disadvantaged, 15.4% students with disabilities, 14.9% EIP at-risk learners, 12.1% Gifted students, 4.4% ELL students, and a 16.5% transiency rate. Our dedicated staff includes: 20% Special Education Educators, 70% hold advanced degrees, 57% have served Cobb County students for 10 years or longer, and we house the only Special Education unit for Moderate Intellectual Disabilities and Autism in Cobb County. We have a strong PTA presence and community involvement. For the past several years, we have had 100% staff/faculty membership earning us the Oak Tree Award. In 2012, the Big Shanty PTA won 1st Place for the State of Georgia PTA as a Model School PTA for schools with over 750 students.

The Green Team is a Key Team committee created by the current administration to assist our school in order to create green environments by impact, promoting health, and ensuring a high-quality environmental and outdoor education to prepare students with the 21st century skills and sustainability concepts needed in the growing global economy.

The Green Team is comprised of 6 teachers, 2 administrators, and 1 parent. In April, 2014, we had 624 community volunteers during our Comcast Cares campus clean-up. We received recognition by the City of Kennesaw for helping to make our campus more inviting and environmentally sound. Comcast donated over \$9,000 worth of supplies and then an additional \$12,000.00 towards school improvement. We were able to plant trees, create gardens, maintain the existing landscape, and create lasting relationships within our Kennesaw community. Big Shanty's outdoor learning centers grew from a humble beginning of three cedar garden boxes, in 2007. We have grown to twelve purposeful garden areas, including our sensory garden, memorial butterfly garden, fairy gardens, salsa garden, and the fifth grade mosquito gardens. Our next projects include our shuffle board court and perimeter garden which has help solve a water retention issue on our playground. Future plans include revamping our nature trail and bridge, while continuing to plan innovative outdoor classroom spaces. Our sensory garden space is specifically designed for our intellectually disabled special needs students. They are able to practice self-regulation through sensory strategies, outdoor living through garden maintenance, and build self-confidence as they watch their garden grow.

One message that Big Shanty has focused on is air pollution, specifically promoting "No Idling", carpool, and riding the bus. We make "No Idling" a part of our school routines through signs, encouragement, education, and events. Our annual events are the "We're Not Scared to be Green" scarecrow tour and school-wide contest during fall conference week. Each team creates an environmental themed scarecrow for judging. Another "No Idling" event "Cocoa for Carpool" was created by a former student to



rally car line parents to turn off their engines on the cooler days of fall and early winter.

Academically, we support our children through our pursuit of a STEM school certification. Presently, our school has a Technology lab and a Math Lab as part of the students' connections. We also use Environmental Education in the content areas, including Science, Reading, Social Studies, Math, and Health. School-wide, we have hosted multiple events. One event, Sci-Con, students traveled room to room to engage in age appropriate STEM activities, like creating "junk-ropes" out of plastic grocery bags.

Another event, Caine's Arcade, students created unique and original arcade games from boxes and recycled items. National Green Week will be observed by Big Shanty March 16-20, 2015. Each day will have a different theme. Make a Difference Monday asks the students to bring a re-useable water bottle, Think Green Tuesday asks students to wear green and asks teachers to reduce their class's energy use throughout the day by turning their lights off as much as possible, including the halls and cafeteria. Wear Your Trash Wednesday encourages students to carry their garbage, with the exception of lunch trays and milk cartons, throughout the day to become more conscious of how much we use and throw away. Tip Your Hat Thursday allows students to wear hats made of recycled items. Photosynthesis Friday culminates our week with a school-wide planting and gardening event. Physically, we provide the students with recess daily with a minimum of 90 minutes weekly, and opportunities, like STRONG 4 LIFE. Lastly, we are teaching our students to become global citizens and thinkers through our actions as a staff. It is the notion that one person can and will make a difference, even in simple ways; turning off the faucet while brushing teeth, turning off the engine at car line, riding the bus, asking a question, participating in a service project, or paying it forward.

## **Q1: District Contact Information**

**School Name:** Big Shanty Intermediate School

**District Name:** Cobb County

**Principal Name:** Dr. Kelly Luscre

**Address:** 1575 Ben King Rd, Kennesaw, GA 30144

**Lead Applicant Name:** Jamee Douglas

**Lead Applicant Email Address:** Jamee.Douglas@cobbk12.org

**Lead Applicant Phone Number:** 678-594-8023

## **Q2. School Information**

**How would you describe your school:** Suburban

**Does your school serve 40% or more students from disadvantage households? Yes**

**% receiving FRPL:** 44%

**%limited English proficient:** 10%

**Other Measures:** Students with Disabilities (15.4%), Early Intervention Program (14.9%), Advanced Learning Program (12.1%);

High Incident Special Education teachers (20%)

**School Type:** Public

**Level:** Elementary

Big Shanty Intermediate-ED-GRS (2014-2015)

**Total Enrolled:** 776

**Attendance Rate:** 98%

**Is your school participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?** Yes, Georgia Department of Transportation- Clean Air School Anti-Idling Campaign

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

**Award(s) and year(s)** Yes, Governor's Shape Platinum Award (2013-14),

Clean Air Campaign Champion of the Year, Jamee Douglas (2011-12),

Hoops For Hearts Fit Friendly School (2012-14),

Hoops For Heart (2010-14)

**Pillar I: Reduced Environmental Impact and Costs**

**Q3. Energy**

**Energy A. Can your school demonstrate a reduction in Greenhouse Gas emissions? Yes**

- **A2. Percentage reduction:** 11%
- **A3. Over (m/yy - m/yy):** (6/12-6/14)
- **A4. Initial GHG emissions rate (MT eCO<sub>2</sub>/person):** 570.8
- **A5. Final GHG emissions rate (MT eCO<sub>2</sub>/person):** 505.4
- **A6. Offsets:** NA
- **A7. How did you calculate the reduction?** Big Shanty calculated the reduction in Greenhouse Gas emissions through the Energy Star Portfolio Manager.

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

Currently, Big Shanty has not received the EPA Energy Star certification, although, we do have plans to pursue the certification as a goal for our Green Team Key for the 2015-2016 school year.

- **B2. Year(s) and score(s) received:** We have not applied for the EPA Energy STAR, however we have a 9% reduction from 2012-2014.

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

- **C2. Current energy usage (kBtu/student/year):** Our current kBtu/student/year in June 2014 was 88, from 79 in June 2012.
- **C3. Current energy usage (kBtu/sq. ft./year):** Our current kBtu/sq. ft. is currently 33.3 from 37.6
- **C4. Percentage reduction:** 11%
- **C5. Over (m/yy - mm/yy):** (6/12-6/14)
- **C6. How did you document this reduction?** Our reduction of non-transportation energy was documented through our

lighting retrofit and the HVAC upgrade.

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

- **D1.** On-site renewable energy generation: None
- **D2.** Type NA
- **D3.** Purchased renewable energy: NA
- **D4.** Type NA
- **D5.** Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: NA

**E. In what year was your school originally constructed?** 1969

**E2.** What is the total building area of your school? 84,461 sq. ft

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

- **F2.** For new building(s): Percentage building area that meets green building standards: NA
- **F3.** Certification and level: NA
- **F4.** Total constructed area: NA
- **F5.** For renovated building(s): Percentage of the building area that meets green building standards: NA
- **F6.** Certification and level: NA
- **F7.** Total renovated area: NA

**Q4. Water and Grounds**

**A.** Describe alternate water sources used for irrigation. Big Shanty uses three rain barrels that capture and store rainwater draining from our roof. Our barrels are 50 gallons and have a spigot for filling watering cans and a connection for a soaker hose. We use approximately 20 gallons from each barrel, per month.

**B.** Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces. Rain barrels help reduce the flow of storm runoff by capturing water that would have swept over a paved surface or lawn. Our students also helped to create a "V" drain to help divert sitting water to a nearby drainage area. We also have trees, shrubbery, and ground cover in our large, east parking lot. Our two playgrounds have rubber –based ground cover, our garden beds have mulch or pine straw, and our non-garden areas are sod or gravel to reduce excess run-off.

**C.** Our school's drinking water comes from Municipal water source: Municipal Water Source.

**D.** Describe how the water source is protected from potential contaminants. One way the Cobb County Water and Sewage Authority prevents pollution and contaminants to the school's drinking water are the installation of backflow prevention devices on Big Shanty Intermediate-ED-GRS (2014-2015)

the meter.

**E.** Describe the program you have in place to control lead in drinking water. In October 1988, the Lead Contamination Control Act was passed which provided direction to schools for reducing lead in water in schools, as a result all Cobb County School District drinking fountains were tested for lead and those fountains exceeding the allowable limits were removed from service. In April 1989, the EPA published a list of drinking fountains known to contain lead components. All CCSD water fountains were surveyed and those identified from the list were removed from service and replaced with units that were manufactured lead free.

**F.** What percentage of the school grounds are devoted to ecologically beneficial uses? Approximately 10% of our school’s campus is devoted to ecologically beneficial uses such as erosion control, wildlife habitat, and garden use. We use regionally acceptable plants for erosion control (i.e. crepe myrtle, maple, dogwood, and oak). Our wildlife habitats include butterfly gardens, pollinator gardens, and a wooded nature trail that was planted by the Georgia Forestry to specifically include pine trees and native ferns. We fight erosion through the use of planting ground covers and sod. We also use mulch, gravel, and a permeable rubber-based ground cover to control storm runoff.

**Q5. Waste**

**A.** 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. Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 66 cubic yards of trash for November, 2014.

- **A2. Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected):** 40 cubic yards for November 2014.
- **A3. 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):** Cobb County School District does not provide compost management, however, Big Shanty students and staff have a pot-bellied compost bin provided by Cobb County’s Food and Nutrition Department. We compost approximately 5lbs of waste per month. We have several dedicated classrooms, or 17% of our classrooms that compost, regularly.
- **A4. Recycling Rate = ((B + C) ÷ (A + B + C) x 100):** Cobb County Maintenance estimates a 50/50 ratio of trash to recycling.
- **A5. Monthly waste generated per person = (A/number of students and staff):** 13.4%

**B.** 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%

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

- **C1.** Flammable liquids- Paints approximately 25 gallons or less per year.

- **C2.** Corrosive liquids 0
- **C3.** Toxics 0
- **C4.** Mercury- Estimated 320 bulbs per year containing trace amounts of mercury.
- **C5.** Other- Latex and oil based paints 25 gallons or less per year, aerosol spray cans 5 cans or less per year, fluorescent light bulbs estimated 320 four foot bulbs, per year.
- **C6.** How is this calculated? Estimates for paints, 40,000 bulbs are purchased yearly, which averages 320 bulbs per location for disposal.
- **C7.** How is hazardous waste disposal tracked? Hazardous waste disposal is provided to each school on a request basis. Cobb County School District has a disposal contractor on bid that can remove, dispose of or recycle hazardous waste. Upon completion of each disposal, a waste manifest is provided to the school indicating the disposal method in accordance with EPA requirements.

**D. Which green cleaning custodial standard is used? What percentage of all products is certified? What specific third party certified green cleaning product standard does your school use?**

- **D1.** Which green cleaning custodial standard is used? Oxy Sc- Green Choice and Oxy Orange are the dominant cleaners used. Our floor strippers and finish is Green Seal Certified, as well as all paper products and soaps.
- **D2.** What percentage of all products is certified? 100%
- **D3.** What specific third party certified green cleaning product standard does your school use? The 3rd party certification is "Green Seal Certified".

**E. Describe other measures taken to reduce solid waste and eliminate hazardous waste.** Fifth grade students have spent the first semester measuring the trash from breakfast and creating solutions for waste reduction. They are also composting lunch and breakfast organic waste. We are promoting waste free lunch and recycling of unused worksheets to reduce our solid waste. Our school posed a math question to the entire school to help solve our paper towel over consumption issue. The students calculated whether we should keep the brown paper towels that dispense one at a time or switch to the white paper towels that are connected. Students worked for a week in groups and individually to solve the problem and the overall best solution was to switch. Our data is still being collected but the students felt ownership over their decision to help reduce waste. The entire school recycles paper, aluminum cans, and plastic within the classroom. In the cafeteria, we recycle our food trays.

**Q6. Alternative Transportation**

- **A1.** 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) How is this data calculated? 2% walk to school; 81% ride the bus; 16% carpool to and from school on an average day.
- **A2.** We gathered this data by surveying the parents at the beginning of the school year and by taking a poll of the students at the mid-year.

**B. Has your school implemented?**

- **B1. Designated carpool parking stalls.** Yes, we have a carpool lane. We have also solved a community issue of blocking the main road, by providing two carpool lanes and a through lane.
- **B2. A well-publicized no idling policy that applies to all vehicles (including school buses).** Yes, the Cobb County School Bus fleet has add-on emission controls and an anti-idle program. The School of Civil and Environmental Engineering is instrumenting 500 buses with vehicle monitoring and anti-idle shutoff systems. When bus drivers idle their engines beyond a time-limit in an anti-idle zone, the fleet supervisor is notified that an excess idle event is underway. After a second time threshold is exceeded, the Georgia Tech anti-idle system automatically shuts down the engine to save fuel and reduce emissions.
- **B3.** Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows. Yes
- **B4.** Safe Pedestrian Routes to school or Safe Routes to School Yes, pedestrian routes are clearly defined in the front, with a cross walk, and rear of the school building, with a sidewalk.

**C. Describe how your school transportation use is efficient and has reduced its environmental impact.** Big Shanty has consistently promoted Clean Air School and the No Idling Program since 2009. Big Shanty promotes the Clean Air School's initiatives through the No Idling program and Young Lungs at Work Cartoon Contest. We create events that inform and include the students, staff and community. Our events include creating awareness through flyers, signs, events, and in school announcements. Big Shanty participates in the Young Lungs at Work Contest annually.

**D. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships.** We have several staff members that carpool together on a daily basis to reduce environmental impact; one pair has carpooled for 9 years. We have Clean Air Campaign promotional events, like "Cocoa for Carpool" where staff and students educated our car line parents to "Warm up with hot cocoa while they cool off their engines". We have had Clean Air Bear visit our school to visit bus riders. Our rider event is called "SMARTIES ride the bus and save little lungs," handing out candy as the students get off the bus. Our school is very fortunate to have a close working relationship with Joey Guinta with The Clean Air Campaign's Clean School Program. Their support has helped our school grow more confident in our Environmental Education initiatives. We have been participating in the No Idling program since 2007. Jamee Douglas was named Clean Air Campaign Champion of the Year for 2011-2012, due to the efforts of Big Shanty Elementary School and the influence of The Clean School Program.

**Pillar 2: Improve the Health and Wellness of Students and Staff**

**Q7: Environmental Health**

**A. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use:** Pest Control is

provided to all schools in the Cobb County District upon request. We utilize an Integrated Pest Management program, which emphasizes the elimination of water, shelter and food that attract pest to unwanted areas. When pest are encountered, the application method is to treat only the affected area and not the entire school. Applications are usually baits and gels. All treatments occur after school hours.

**B. 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.**

**B1.** Our school prohibits smoking on campus and in public school buses. Yes, Cobb County School System strictly enforces a zero tolerance rule for alcohol, tobacco, and drugs on campus.

**B2.** Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. Yes, Big Shanty prohibits the purchase and use of mercury in the building; however, there are no records of mercury in our school. Cobb County's Maintenance Department has an Indoor Environmental Quality that is responsible for the conditions inside our school building, including air quality, lighting, thermal conditions, ergonomics, and their effects on our staff and students.

**B3.** Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO). No

**B4.** Our school does not have any fuel burning combustion appliances. Yes

**B5.** 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. Yes

**B6.** Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. Yes

**C. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure.**

Big Shanty custodial staff works diligently to avoid exposing our students and staff to harsh cleaning chemicals; therefore, they do their "deep" cleaning of restrooms and hallways when students and staff have left for the evening or vacations. All chemicals are housed in a well-ventilated shed that is within the standards of OSHA and the EPA.

**D. Describe actions your school takes to prevent exposure to asthma triggers in and around the school.** Big Shanty helps reduce asthma triggers within the classroom by encouraging teachers to avoid using air fresheners in their classroom and add live plants instead. We participate in an air quality flag program to promote the air quality index: yellow, orange, or red days to families and students. When the air quality index is yellow or above Big Shanty Elementary holds indoor recess and PE. Our school nurse facilitates the individual asthma action plan and tracks each individual student that has been identified as having asthma. Our plan is to work with the doctor's orders to create an environment conducive to minimizing time out of class. Individual health care plans are addressed in a Federal 504 Plan or an Individual Education Plan. Asthmatic students are encouraged to pre-treat with their medications before physical education classes on days that require physical exertion. These days are announced by the PE teacher to the entire school via the school-wide broadcast.

**E. 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.** Cobb County conducts biannual moisture inspections through their maintenance department and our custodial staff. We address any sitting water or leaks quickly. We maintain indoor humidity levels between 30% and 60%.

**F. Our school has installed local exhaust systems for major airborne contaminant sources.** Yes

**G. 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.** Cobb County maintenance and the IEQ management team inspects the HVAC units, change ventilation filters every six months, and clean intakes and/or returns. Teachers and custodial staff ensure that the intake areas are free of debris and not blocked for adequate air flow.

**H. 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.** Classrooms are well ventilated; we have air conditioning and heat levels, according to the weather. All classrooms have windows that open, for outside air access. We encourage teachers to open classroom doors for adequate ventilation.

**I. 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.** The Cobb County Indoor Environmental Quality Team inspects all of the classrooms and facilities at Big Shanty biannually to test the air quality and dust levels. The testing includes air velocity, temperature, and relative humidity as well as VOC and CO2. Inspections include looking for any leaks in the classrooms and above the ceiling tiles. Leaks are noted and followed up on until resolution is confirmed by the IEQ Team. Disaster Recovery Vehicles are deployed from the district office for any issues that arise. These vehicles include air scrubbers, fans and additional equipment to reduce occurrence of mold.

#### **Q8: Nutrition and Fitness**

**A. 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.**

**A1.** Our school participates in the USDA's HealthierUS School Challenge. Level and year: No

**A2.** Our school participates in a Farm to School program to use local, fresh food. Cobb County Schools highlight Georgia grown and locally grown fresh fruits and vegetables in their cafeterias including a "Georgia-grown" vegetable of the month.

**A3.** Our school has an on-site food garden. Yes, our school has an on-site food garden that is accessible to the students and the

community. During the late summer and early fall we have many night blooming plants, like tomatoes, eggplant, and peppers. We have many beds of strawberries and some blueberry bushes. We use edible cover crops in the winter, such as black eyed peas and buckwheat. We have many, many herb gardens throughout the property, including rosemary, thyme, lemon thyme, mint, catnip, and fennel.

**A4.** Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. Currently, our school participates in the Kitchen Cart program provided by Captain Planet where the students are able to harvest and prepare fruits and vegetables from their garden. We are also in the process of receiving and implementing a Vitamix blender, from the vendor, in order to utilize a healthy and creative way to entice the students to sample vegetables from the garden in the form of a healthy and organic smoothie.

**A5.** Our students spent at least 120 minutes per week over the past year in school supervised physical education. Yes, the students at Big Shanty have physical education three times per week with 45 minutes per class for a total of 135 minutes per week.

**A6.** At least 50% of our students' annual physical education takes place outdoors. Yes, at least 50% of our student's annual physical education occurs outside. We are fortunate to live in Georgia, with mild winters and hot summers. This lends itself naturally to outdoor physical education with students participate in football, soccer, track, kickball, 4-square, and many other outdoor activities.

**A7.** Health measures are integrated into assessments. Yes, Big Shanty uses objective measurements to evaluate performance for each fitness area, body composition, abdominal strength, and endurance. These physical fitness tests, call Fitnessgrams, provide the staff, students, and families with vital information about the students overall physical health.

**A8.** At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). We currently do not have a policy on using sunblock on children, however, students are encouraged to wear hats and sunblock on planned outdoor activities such as Field Day, Wellness Walks, and gardening events.

**A9.** Food purchased by our school is certified as "environmentally preferable." Big Shanty adheres to federal nutrition guidelines for school meals, ensuring that meals offered are healthy, well-balanced and provide students the nutrition they need to grow and develop. Cobb County Food and Nutrition Services Department's is dedicated to the vision of "Linking Nutrition to Life Long Learning."

**A10.** Percentage: 100%

**A11.** Type: Fruits and Vegetables

**B. Describe the type of outdoor education, exercise and recreation available.** Big Shanty students have many outdoor options. During P.E., students play a variety of individual and team sports, from jump rope, shooting baskets, distance throwing, soccer, t ball, lacrosse, track, rock climbing, push-ups and many more. During recess, students are able to play basketball, 4 square, kickball, shuffle board, and free play. In our after school clubs, we have Boys Running club, the Kilometer Kids, and the Girls running club.

**C. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships.**

Our Wellness Committee hosts "Fruity Friday's" to serve fruit to the staff as a healthy snack. The students are encouraged to bring healthy snacks, as well. The committee also hosts "Wellness Walks" for the students once a month, where the entire grade level

walks on the track at the same time, instead of specials. The staff has after school walks, at predetermined places around Kennesaw, where staff members are able to leave work after the students get on the buses to exercise once a month. Lastly, our school's Foundation has hosted a 5K Superhero run, and participated as teams in many 5Ks.

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

#### **Q9. A. 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.** Big Shanty has a unique, grass-roots approach toward environmental science because of the fantastic “Green” relationships that we foster. We have a Green Team that is composed of 6 teachers, 2 Administrators, and 1 parent. The Green Team works hard to create innovative and exciting school-wide lessons for the students, staff, and the Kennesaw community. We utilize the school’s weekly news broadcast to share the latest information about recycling, air/water pollution, energy conservation, and information about our gardens. We host several community events to promote environmental education, such as “We’re Not Scared Being Green” Scarecrow tour and school-wide contest during conference week, where each team created a scarecrow with an environmental theme; “Cocoa for Carpool”, where we hand out hot cocoa to drivers who turn off their engines in the car line. We also take the opportunity to discuss why we are discouraging idling in car line; “Smarties- Ride the Bus”, event where students are given candy when they get off the bus with a note explaining they helped reduce air pollution just by riding the bus to and from school; “Earth Day STEAM Statues”, school-wide statue tour and contest open to the community, where each team is asked to design and create a STEAM-based earth awareness sculpture made from recycled/ found materials. Our Green Team works extremely close with Betsey Norton, with Going Green Horticultural, who has spent the last nine years helping us build our garden and “Green” program sustainably. We also utilize our rich relationships with Cobb County Water, The Clean Air Campaign, Comcast Cares, Helping Hands of Atlanta, Captain Planet, Kennesaw State University sustainability Committee, Keep Kennesaw Beautiful, Keep Cobb Beautiful, Lowes, Eagle Scouts, and our very own PTA. Lastly, we have a few staff members who strive to lead by example and have carpooled together for nearly nine years, consistently.

**B. Our school has an environmental or sustainability literacy requirement.** Big Shanty supports our students with literacy across the curriculum. Within our literacy instruction, we ensure that our students are environmentally aware, possess real-world research and problem solving skills, and are exposed to the past, present, and future of local and global sustainability. We also provide our students with an opportunity to participate in our Student Leadership Team. This team is comprised of twenty-four fourth and fifth grade students who are motivated to create a better learning environment and improve the school culture at Big Shanty through service leadership. Some of their projects include coordinating the school-wide food drive to directly benefit a dozen of our Big Shanty families, organizing a Holiday Brunch for to honor our custodial, office, and cafeteria staff members, and hosting our senior citizen neighbors in afternoon games to strengthen cross generational bonds.

**C. Environmental and sustainability concepts are integrated throughout the curriculum.** In 3rd grade, students learn about soil by composting in their classrooms and in the school compost area, while also investigating beneficial insects, such as worms.

They learn about waste reduction, through investigating garbage, recycling, and re-using materials. They discover earth stewardship while researching oil spills and wetland protection. In 4th grade, students discover the life cycle of plants and animals in their backyard and beyond. They discover migration and its impact on Big Shanty, especially with the goose droppings on their playground. They visit the bird feeders to investigate which seeds attract, which type of bird to our gardens. In 5th grade, students investigate earth-made air pollutants (volcanoes) versus man-made air pollutants. They inquire about alternative forms of energy, after their unit on electricity and magnetism. They investigate micro-organisms in the soil, chemical and physical changes in the leaves and soil, and discover cells in the plants they grow. Our Students with Disabilities have a sensory garden where they work on practical skills, like weaving, checking mail, making music, and maintaining their gardens. The gardens are a constant source of math, from measuring length, width, area, volume, cubic feet, cubic yards, arrays, timing and planning for planting. Our Nature Trail is utilized for literacy walks and observing nature.

**D. Environmental and sustainability concepts are integrated into assessments.** Big Shanty uses a variety of Best Practice assessment techniques to evaluate, monitor and adjust instruction. The State and County require that we administer Georgia Milestones, Iowa, Common and Formative Assessments. Our Green Team works closely with teachers to plan appropriate project-based learning opportunities and assessments that are directly aligned to the Georgia Performance Standards in Earth Science. Our students are engaged in hands-on learning projects. Students keep an interactive Science Journal of their observations and conclusions. These journals are used as an assessment tool to gauge student participation and understanding of the concept. We also use common assessments at each grade level including culminating science days, where students create portfolios and labs to justify their learning.

**E. Students evidence high levels of proficiency in these assessments.**

Previously, the CRCT assessment was administered to our 3rd, 4th and 5th grade students. Performance on the CRCT is indicated by three categories: Do Not Meet; Meets; Exceeds. The CRCT data shows that ALL of our students consistently performed at the meets and exceeds categories in Science. Our Science trend data shows that in 2011-2012; 86% of our students performed in the meets and exceed categories on CRCT. In 2012–2013 scores increased to 87.1% and then remained stable for 2013-2014. The Iowa is administered to our 3rd and 5th grade students only. Our trend data shows that our students consistently made gains in Science. In 2013, the total of our 3rd grade students performed at the 62% National Percentile Rank in Science on the Iowa Test, while our 5th graders performed at the 63% National Percentile Rank. Local and common assessments provide the teachers with a snap shot of how the students are progressing toward Georgia Performance Standards in Science at a particular time in the year.

**F. Professional development in environmental and sustainability education are provided to all teachers.** Professional Development at Big Shanty is acquired based on the individual teacher's needs and interests. Many environmental education opportunities are available through Captain Planet, Cobb County Water System, Environmental Education Alliance, Project Wet & Wild, and Zoo Atlanta.

**Q10. A. For schools serving grades 9-12, provide:**

**A1. Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career:** NA

**A2. Percentage scoring a 3 or higher:** NA

**B. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge?**

Big Shanty works hard to integrate Science, Technology, Engineering, and Mathematics into our curriculum through real-world learning opportunities and projects. The entire school participated in STEM Night, where teachers had students make “junk-ropes” out of shopping bags, mined for chocolate chips in cookies to simulate effects of mining the earth, and took place in the International Cardboard Challenge inspired by Caine’s Arcade.

**C. How does your school use sustainability and the environment as a context for learning green technologies and career pathways?**

Big Shanty encourages professionals from green technologies and pathways to visit our school and share their expertise with our students. We have had many opportunities to invite horticulturists, rangers, master gardeners, garden architects, arborists, and many other professionals to visit our school and share their expertise.

**D. Describe students’ civic/community engagement projects integrating environment and sustainability topics.**

The current project we are working on is called, “Big Shanty is Bringing Shuffle Board Back!” This activity has been researched and developed by the fifth grade, after we posed the question, “What do we do with the giant bog area on the playground?” The students brainstormed ideas, like basketball, tetherball, and shuffle board. After shuffle board was chosen. The students asked professionals to help survey the land and develop plans, created a budget, ordered their supplies, learned how to play the game, wrote instructions for the entire school to follow, and spent countless hours doing the “math” to prepare for their court. We attained a \$7,000 Lowes grants to make the project happen. The court was 39’ x 6’ court has been put in. We have several painting, sealing, and waxing steps before the perimeter gardens will go in. In the end, the students will work to teach the entire school how to play the game, including the math and the manners. Lastly, we will host Daybreak Village Assisted Living Home in a Tea Party Tournament, which will culminate the project and serve as a great opportunity to bridge our youth and our elders.

**E. Describe students’ meaningful outdoor learning experiences at every grade level.**

Big Shanty students experience outdoor learning experience at every grade level. In 3rd grade, students investigate erosion and its effects on campus. They observe the same locations several times over the school year and discuss what has changed and what caused it. This on-going project shows the students a multitude of angles. In 4th grade, students investigate where drinking water comes from by visiting our stream. They assist their science teachers in measuring dissolved oxygen, temperature, and pH; thus, measuring the quality and health of their

water source. The students observe the stream at least three times per year. In 5th grade, the students walk the campus and identify native species of plants and invasive plants. They observe what is growing on, near, and beneath the plants. They also look for these plants in their own yards and off campus; showing that classifying plants and animals has a system.

**F. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills.** It is difficult to make a child look at things from a global perspective. So when we are teaching a school-wide lesson about air pollution, we teach them that 1 mile of driving = 1 pound of air pollution. Then we show them objects that weigh one pound. Lastly, we show them a box of ash that equals a pound. Our objective is to connect the big ideas and break them down into easy to understand part. Another example is when we are teaching about waste reduction, on our school's news broadcast, we have a few teachers and students show the items in their lunch bag and sort it by reusable and non-reusable. This is making the connection between a broad concept and the actions to change it.

**G. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships.** Big Shanty has developed strong relationships with the Cobb County Building and Maintenance teams to help reduce our environmental impact and costs, while we have grown our gardens and outdoor learning centers over the past 10 years. Our superior custodial staff led by Brady Taylor, the Cobb County School's Indoor Environmental Quality Team, our exceptional P.E. Staff lead by Nancy Cobelli, and our pro-active school nurse, Bev Jones has helped us achieve improved health and wellness for our children. Lastly, we have forged and fostered irreplaceable relationships with Betsey Norton of Going Green Horticulture, who has spent countless hours, planning, teaching, and building sustainable gardens and landscape solutions on our property; Joey Guinta with The Clean Air Campaign, who has assisted us in educating, rallying, and believing in us; Michael Kahle with Cobb County Water has gone above and beyond to provide our students with fantastic in-house field trips, teacher professional development opportunities, and helping push us forward on our plight to provide effective environmental and sustainability education to the students at Big Shanty.

**H. 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.** Big Shanty has several teacher-led committees that have contributed toward the implementation of a Green School. Our Green Team's goal is to help our students exercise a comprehensive approach toward creating "green" environments through reducing impact, promoting health, and ensuring high-quality environmental and outdoor education. Our STEM committee's goal is to help prepare our students for 21st century workplace careers by providing opportunities to problem solve and inquire in real-world opportunities. Our Health and Wellness committee's goal is to promote healthy eating, living, and civic responsibilities to our staff, students, and community. Our Parent Engagement committee's goal is to plan parent nights, outreach activities and encourage parents to get involved. Lastly, our Curriculum Committee's goal is to help our students achieve at their highest level, while creating engaging and meaningful experiences. Each of these committees led to one place -- the garden -- where Big Shanty's Green School began!

