U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

2012-2013 Nominee Presentation Form

PART I - ELIGIBILITY CERTIFICATION

School and District's Certifications

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

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)

2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.

3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.

4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.

5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.

6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.

7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

U.S. Department of Education Green Ribbon Schools 2013

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

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

Official School Name Cane Run Elementary
(As it should appear in the official records)

School Mailing Address 3951 Cane Run Road
(If address is P.O. Box, also include street address.)

Louisville Kentucky 40211
City State Zip

County Jefferson State School Code Number* 005

Telephone (502) 485-8223 Fax (502) 485-8659

Web site/URL _____ E-mail gwen.goffner@jefferson.kyschools.us

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

Dr. Gwendolyn Goffner Date February 13, 2013
(Principal's Signature)

Name of Superintendent* Donna M. Hargens, Ed.D.
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name* Jefferson County Public Schools Tel. (502) 485-3011

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

Donna Hargens Date 2/14/13
(Superintendent's Signature)

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

U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

PART II – SUMMARY OF ACHIEVEMENTS

Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

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

Nominating Authority's Certifications

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

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)

2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.

3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Kentucky Department of Education (KDE)

Name of Nominating Authority: Mr. Hiren Desai, Associate Commissioner, Office of Administration & Support

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

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

_____ Date 2/14/13

(Nominating Authority's Signature)

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: February 28, 2015

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

Cane Run Elementary School
3951 Cane Run Road
Louisville, KY 40211
(502) 485-8223

U.S. Department of Education Green Ribbon Schools
Section II. Summary of Achievements

At Cane Run Environmental Magnet School, we focus on the whole child, individually and collectively. We work to make sound decisions in the areas of environmental impact and cost utilizing the resources of staff, building and our district policies and guidelines. The environmentally retrofitted building is an outstanding tool for us to use as we implement the serious business of teaching and living environmental literacy and sustainability. We have created partnerships with businesses and organizations that help us make informed quality decisions as we create opportunities for our students across the curriculum. KAEE, NAAEE, NSTA, KY Green and Healthy Schools, NEED, AG in the Classroom, Center for Green Schools and other resources assist us in designing and building environmental awareness and education. We are committed to embedding STEM in a rigorous academic curriculum supported by consistent outdoor investigations. We believe that student and staff health is impacted by our strategies to teach healthy food choices through gardening. As students, staff and partners build gardens, plant and grow food and then prepare meals, they grow in food literacy and learn to make healthy choices which positively impact their future. Programs like our Breakfast in the Classroom and Healthy Fruits and Vegetable teach nutritional values and help level the food playing field for our students, 95% of whom live below the poverty level. We also believe that environmental awareness in the areas of transportation, recycling and composting will have life long lasting effects on the members of our school community.

As we work to reduce our carbon footprint, students, staff, families and partners wrote their personal pledges on little green paper apples. We hung those apples in the front hall of our school to remind us daily of our commitment. We also worked with a partner to create a beautiful local stone sculpture that holds a time capsule with our hopes and dreams for this environmental school's future.

Utilizing our environmentally friendly building with its geothermal heating and cooling and excellent solar features, we provide hands-on, real life learning experiences for children that will make sense in the real world. Environmental education is cross curricular and inquiry based by its very nature and is woven throughout the curriculum at Cane Run. Our school motto is, "*Teaching With the Future in Mind*". We are dedicated to providing a rich, progressive and interactive curriculum with the outdoor classroom site and environmental program that allows

each child, staff member and family to develop an appreciation and stewardship of the environment at Cane Run Elementary and in our community.

Part III – Documentation of State Evaluation of Nominee

The Kentucky Nominating Authority for U.S. Department of Education Green Ribbon School Program consisted of various energy partner representatives. Each Kentucky Green Ribbon School Application was reviewed and evaluated by the Nominating Authority to ensure high achievement based on the school's documented achievement toward reaching the goals of each of the three U.S. Department of Education Green School Pillars and elements.

Kentucky 2012-2013 Green Ribbon Schools Application

Thank you for your interest in completing the Kentucky 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. In Kentucky, becoming a U.S. Department of Education Green Ribbon School is a three-step process.

> First - submit a "letter of intent" to KDE via email to Paige.Patterson@education.ky.gov to indicate your school's desire to submit an application. *Deadline is February 1, 2013.*
>
> Second - complete and email this form Kentucky to Paige.Patterson@education.ky.gov, for evaluation as a nominee for. *Deadline is February 6, 2013.*
>
> Third - work with KDE to complete a nomination package provided by the USDOE. *Deadline is February 13, 2013.*

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:

Pillar I: Reduce environmental impact and costs.
Pillar II: Improve the health and wellness of students and staff.
Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways.

Schools demonstrating exemplary achievement in all three Pillars will receive highest rankings. It is important to document concrete achievement. It will help you to assemble a team to complete the application. This team might include: a facilities manager, physical education director, food services director, curriculum director, finance department representatives, teachers and students. You should consult the ED-GRS resources page for standards, programs and grants related to each Pillar, Element and question. This is an excellent clearinghouse of resources for all schools, not just those who apply.

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, per the scoring rubric listed below.

Application Scoring Rubric:

ED-GRS Pillars and Elements	Points
Cross-Cutting Question: Participation in green school programs	5 points
Pillar I: Reduce environmental impact and costs: 30%	
Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions Energy Buildings	15 points
Element 1B: Improved water quality, efficiency, and conservation Water Grounds	5 points
Element 1C: Reduced waste production Waste Hazardous waste	5 points
Element 1D: Use of alternative transportation	5 points
Pillar II: Improve the health and wellness of students and staff: 30%	
Element 2A: Integrated school environmental health program Integrated Pest Management Contaminant controls and Ventilation Asthma control Indoor air quality Moisture control Chemical management	15 points
Element 2B: Nutrition and fitness Fitness and outdoor time Food and Nutrition	15 points
Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways: 35%	
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems	20 points
Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills	5 points
Element 3C: Development and application of civic knowledge and skills	10 points
Total	100 points

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: Cane Run Elementary_____ District: _Jefferson County Public Schools

Street Address: 3951 Cane Run Road

City: ___Louisville State: KY Zip: 40211

Website: http://www.jefferson.ky12.ky.us/Schools/Elementary/CaneRun/index.html

Facebook page: _____

Principal Name: Dr. Gwen Goffner

Principal Email Address: gwen.goffner@jefferson.kyschools.us

Phone Number:_502-485-8223

Lead Applicant Name (if different): Darleen Horton

Lead Applicant Email: Darleen.horton@jefferson.kyschools.us

Phone Number: 502-485-8223 or 502-551-9907

Level [x] Elementary (PK - 5 or 6) [ ] K - 8 [ ] Middle (6 - 8 or 9) [ ] High (9 or 10 - 12)	How would you describe your school? (x) Urban ( ) Suburban ( ) Rural
Does your school serve 40% or more students from disadvantaged households? (x) Yes ( ) No	Graduation rate:___N/A_____ Attendance rate: _95.6 Total Enrolled: 564

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

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

Louisville Energy Alliance Kilowatt Crackdown

EPA – Indoor Air Quality

National Energy Education Development Project

Kentucky Green and Healthy Schools – School in Progress

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

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

NEED – 2012 Rookie School of the Year Elementary Level – State and National Winner

Kentucky Association of Environmental Educators – Darleen Horton, Cane Run Environmental Magnet Coordinator, 2012 *Outstanding Environmental Educator*

Darleen Horton – The Charlie Hutton Award in honor of outstanding leadership and service given to the Rubbertown Community Advisory Council, 2012 (The RCAC works on areas of health, environment and community)

Louisville Energy Alliance Kilowatt Crackdown - Kilowatt Cup Finalist

Healthier US School Challenge – Gold Level Team Nutrition School 2008-2010

Pillar I: Reduced Environmental Impact and Costs

Energy

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

(x) Yes ( ) No Percentage reduction: 51% Over (m/yy - m/yy):2007 - 2012

Initial GHG emissions rate (MT eCO2/person): 1,290 lb nitrogen oxides, 4,073 lb sulfur dioxide, 1,717,713 lb carbon dioxide. These numbers are total, not per person.

Final GHG emissions rate (MT eCO2/person): 624 lb nitrogen oxides, 1,970 lb sulfur dioxide, 830,916 lb carbon dioxide. These numbers are total, not per person.

Offsets: line loss 5.82%

How did you calculate the reduction? Monthly KWH for 2007 and 2012 were entered into EPA website – http://oaspub.epa.gov/powpro/ept_pack.emissions?p_zip=40209&p_egcid=1088

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

(x) Yes ( ) No Year(s) and score(s) received:2010 score: 92

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

Current energy usage (kBTU/student/year):4,565/460/2012
Current energy usage (kBTU/sq. ft./year): 31.35/67,000/2012

Percentage reduction: 65% over (m/yy - mm/yy): 2007 kBTU compared to 2012 kBTU

How did you document this reduction? Utility Bills

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

On-site renewable energy generation: not measureable Type: solar domestic Hot Water

Purchased renewable energy: _0 Type_____

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program:
_____

5. In what year was your school originally constructed? 1971

What is the total building area of your school? 60,107

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

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

Certification and level: _____Total constructed area:_____

For renovated building(s): Percentage of the building area that meets green building standards: Certification and level: Energy Star 92

Total renovated area: 100%_____

Water and Grounds

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

Average Baseline water use (gallons per occupant): 3,786 in 2008

Current water use (gallons per occupant): 3,528 in 2012

Percentage reduction in domestic water use: .068

Percentage reduction in irrigation water use: No irrigation system installed

Time period measured (mm/yyyy - mm/yyyy): 2008 compared to 2012

How did you document this reduction (ie. ENERGY STAR Portfolio Manager, utility bills, school district reports)?: Energy Watchdog and Utility Bills

8. What percentage or your landscaping is considered water-efficient and/or regionally appropriate?: _Types of plants used and location:

native plants, apple orchard, vegetable gardens,

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

__NA_____

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

Pervious parking was added in 2009. A bio-swale was also added . Students routinely clean debris from storm drains and have placed stones around the drains to prevent or slow eroded materials from clogging the drains.

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

_____

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

Environmental Working Group (population over 250,000) tests for chemicals, individual pollutants, common pollutants (disinfection byproducts, nitrate and arsenic). Louisville ranked 22nd least polluted in the nation http://www.ewg.org/tap-water/rating-big-city water

_____

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

The school has been tested for lead in drinking water. We partner with the Louisville Water Company to retest.

_____

14. What percentage of the school grounds are devoted to ecologically beneficial uses?_ (50 word max)

As an environmental magnet school, all of our grounds are used for environmental studies – with the exception of the impervious pavement. The pervious pavement is actually more beneficial than regular parking lots. The estimation is 90%.

Waste

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

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 8 yard dumpster, emptied 8 times per month. Monthly average is 34.64 yards of trash.

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected):

(2) 8 yard dumpsters emptied 8 times per month at 75 – 100% full. Average material weight per pick up is 390 LBS.

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):

Organics/food waste/composting – 4,763 lbs (from May, 2012) This is 40 containers per month emptied.

Recycling Rate = ((B + C) ÷ (A + B + C) x 100):

(3,120 +4,763) divided by (8,160) x100 = 97

Monthly waste generated per person = (A/number of students and staff):
_____(_34.64 / (564 + 75)_)__= 0.05421_cubic yards_____

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? Paper products purchased through our district are 30% Post-Consumer Fiber.

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

Flammable liquids	Corrosive liquids	Toxics	Mercury	Other:
0	0	0	0	0

How is this measured?_____

How is hazardous waste disposal tracked? In the event there is a hazardous waste on site (such as an older light bulb or a battery leaking acid), the plant operator contains the waste and calls the Safety and Environmental Department for pick up and disposal.

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

As an environmental magnet school, the entire staff and study body is committed to reducing solid waste. There is a very strict policy in place restricting hazardous waste from being brought into the building. Bio-medical waste from illness or emergencies is handled strictly according to district, state and health department standards and codes.

_____

18. Which green cleaning custodial standard is used? EPA Tools for Schools

What percentage of all products is certified? 90% + (only 1 product used is not certified)

What specific third party certified green cleaning product standard does your school use? _____GS - 42_____

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 & Bike – 1% Bus – 74% Carpool – 25%

How is this data calculated? (50 word max) Data from student records, transportation department for the district and carpool lists was compiled. Percentages were calculated according to transportation mode and total number of students.

_____

20. Has your school implemented?

[x] designated carpool parking stalls.

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

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

[x] Safe Pedestrian Routes to school or Safe Routes to School

Describe activities in your safe routes program: The district evaluates route for safe walking, biking and car riding. Improvements were made utilizing funds from Safe Routes to School as well as an educational video currently being created on Safe Pedestrian Routes. (50 word max)

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

We have created idle free zones around the school. The district has 50 hybrid buses; older buses are retrofitted with exhaust emission particulate traps. (KRS 15819) Buses are routed using GPS and bus routing software. A depot is used to minimize neighborhood mileage. Buses use bio-diesel fuel.

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

- Geothermal well fields supply 45 heat pumps and kitchen walk-in refrigeration units, using environmentally safe refrigerant 410a for heating and cooling.
- 2 large dedicated outside air handler units

- Direct Digital Controls (DDC) provide logic for mechanical system – viewed on JCPS Wide Area Network
- Occupancy sensors bring on light and temperature from standby setpoint to occupied
- Solatube lighting in all interior rooms
- Solar collector panels for domestic hot water
- New exterior windows with solar film and new white granular surface roof
- Special coloration treatment'stained' concrete floors in corridors
- LED exit signs
- Outdoor Classroom "porch" with water, electricity and Wireless
- Extensive outdoor classroom created through partnerships

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

Environmental Health

1. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: We use "integrated pest management" – IMP with near 0 pesticide usage. We exhaust all non-chemical pest controls and get to the 'root cause'. If totally necessary, we use the most environmentally preferred product when no students are in the building and this is a very rare situation throughout the district.

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.

[x] Our school prohibits smoking on campus and in public school buses. Note: No smoking in the building expands to entire campus July 1st, 2013.

[x] Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. _____

[N/A] Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) _Cane Run uses solar hot water and geothermal heating_____

[x] Our school does not have any fuel burning combustion appliances

[x] 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. _____

[N/A] Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. There are no wood playground structures._____

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

Housekeeping and Food Service chemicals are purchased on district-wide basis utilizing green products – all chemical components are reviewed before purchase. All MSDS sheets are on site and comply with JCPS Chemical Hygiene Plan.

4. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100 word max) Cane Run practices the EPA's Tools for Schools Program which provides procedures to manage Indoor Air Quality. JCPS Health Services/Maintenance, along with Louisville Metro Public Health and Wellness Department work together to ensure improved air quality. All school staff and central office departments work together to ensure good air quality. JCPS has been awarded 2 national EPA awards for Indoor Air Quality.

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) The Plant Operator has systems in place to efficiently and quickly address maintenance items through work orders to district maintenance departments. Procedures are to address maintenance issues promptly to prevent mold. Housekeeping procedures are written; training performed; and support is available to advise best practices.

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

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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)

School staff provides monthly inspection (more often if needed). Filters are changed and replaced – multi-pleated filters are used. All units are monitored on the Plant Operator's computer. Entire unit ventilators are vacuumed out and cleaned annually in the summer. HVAC department assists as needed and responds to work orders for repair and checking proper operation.

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)

Ventilation designed per KY State Building Code – 2006; International Mechanical Code – 2006, and ASHRAE 62.1-2004. Dedicated outdoor air system utilized and conditioned ventilation air is delivered directly to classrooms. Code required airflow always provided independent of the HVAC system, keeping the CO_2 levels well below ASHRAE levels of 1,000 ppm or 700 ppm above baseline. Energy recovery utilized in outdoor air system to pre-condition outside air and hydronic coil further conditions air to dehumidify during summer. Ventilation air conditioned to neutral temp of 68F in summer and 75F in winter so does not impact space conditioning with significant amount of energy is saved.

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)

There are two large dedicated outside air handler units, each with an energy recovery wheel that utilizes exhaust air to preheat/precool and wring out incoming air before it enters the occupied area.

The Plant Operator, housekeeping staff, nutritional staff, as well as teachers and other staff remain constantly aware of any issues that could create environmental health and safety issues. Immediate action is taken by appropriate personnel. Additionally, the environmental club utilizes the Kentucky Green and Healthy School Surveys and NEED curriculum surveys to monitor the building and outside areas.

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)

[x] Our school participates in the USDA's HeathierUS School Challenge.

Level and year: Cane Run Elementary was recognized as a Gold Level Team Nutrition School for 2009 – 2010.

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

We currently partner with six local farms to provide a variety of fresh, local food, in addition to the district's purchasing plan of high quality foods.

[x] Our school has an on-site food garden. We have 30 raised bed vegetable gardens of various sizes in addition to a large Three Sisters Native American Garden, where we grow corn, beans and pumpkins. We grow a wide variety of vegetables and herbs, including spring gardens, summer gardens and late fall gardens. The gardens are planted and tended by students and staff throughout the year, including a summer garden club.

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

The gardens supply food for students as part of their environmental studies integration. The garden club and environmental club utilize food from the gardens to learn healthy cooking and eating practices. Additionally, our students have prepared a meal for local senior citizens and shared how they planted, grew, harvested and cooked the food. Students also take home vegetables to share with their families. Individual classes harvest food and prepare it as part of their integrated environmental literacy and other curricular areas.

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

Cane Run students spend 150 minutes of supervised physical education per week. They additionally utilize 'brain breaks of organized exercise' in the classroom.

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

Students utilize the fitness trail that surrounds our school property, the grassy geo-thermal field behind the school (soccer, kickball, organized relays, etc.); as well as the handicapped accessible playground.

[x] Health measures are integrated into assessments.

The assessments are primarily a part of the practical living curriculum.

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

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

Percentage:_____ Type:

There are a limited number of products being purchased which fall into this category according to Nutritional Services.

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

Classroom teachers utilize the outdoor spaces around the school, such as the fitness trail, grassy areas and playground for a large variety of outdoor education such as organized exercises, games, races and activities. Along with our programs during school hours, we have a walking club as well as Girls on the Run Club. Students in our before and after school Child Enrichment Program utilize the playground, fitness trail and open spaces for physical activity as well. We have a school gym that is also heavily used.

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

One of our partnerships provides Breakfast in the Classroom to all Cane Run students and teachers. This gives our students a healthy and nutritious start to their day and is highly successful. Another partnership provides healthy fruit and vegetable snacks to our students 3 times per week. We provide healthy food in backpacks for students to take home over the weekends. This is provided through a community partnership. We also have a school food pantry.

Cane Run After Hours is a program available to our students and others living in the nearby community. They offer Zumba classes, Yoga, Gardening, Walking and the American Heart's Jump Rope/Hoops Program. Our Environmental Club is focusing on the Science of Food and Energy from the Sun. They study the energy transfers involved in gardening, cooking and eating foods as they learn to make healthy food choices. We partner with a local business, DuPont for the EE Club's food focus.

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.

[x] Our school has an environmental or sustainability literacy requirement. (200 word max)

Cane Run Elementary is an Environmental Studies Program and the vision is that students will achieve success and become productive, cooperative adults who are motivated to protect and respect the environment to improve our school, community and world. In order to fulfill this vision, environmental literacy is an expected and required part of the curriculum. We have books and printed materials; science kits; tools for investigations and technology to support our programs.

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

Environmental education at Cane Run is cross curricular and inquiry based and is woven throughout the curriculum in literacy, science, math, social studies, creative arts, technology, practical living and physical education. All students participate in embedded environmental lessons – frequently set in the outdoor classroom. We are dedicated to providing a rich, progressive and interactive curriculum with the outdoor classroom site and environmental program that allows each child to develop an appreciation and stewardship of the environment. An example of classroom use would be student informational and persuasive writing about environmental issues, such as planting trees, reducing auto emissions from idling and water quality. Gardening is a broad option for integrating measurement, insects, plant structures and life cycles, nutritional facts, creating eco art and a vast array of science lessons.

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

Formative assessments are utilized as a vital part of the learning process for environmental and sustainability concepts. Teachers use writing, math and science journals for student observations, investigations and summaries to show understanding of key concepts. Students are engaged in environmental education as an integrating context for instruction and are using real world connections to foster a deeper understanding of core content concepts. Outcomes are measured by formal and informal assessment including student writing and work samples, student and staff participation in field studies both on school grounds and on off- site trips, as well as increased scores on school and state assessments, student, staff and family surveys.

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

Cane Run students achieved high levels of proficiency as they worked through the Kentucky Green and Healthy Schools Surveys as well as the National Energy Education Development projects. Our team of fifth grade students were awarded first place in Kentucky and the Nation for their energy and sustainability projects last spring. Classroom teachers embed environmental literacy assessment in content areas.

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[x] Professional development in environmental and sustainability education are provided to all teachers. (200 word max)

All staff engages in in-depth, sustained and job-embedded professional development on how to use the environment as an integrating context for teaching and learning. Example: Math in the Garden for K-5, Science and Literacy Note-booking Strategies. We also have a Green Leadership Team that works together to continually assess areas of need and then design professional development. The environmental coordinator provides on-going, in depth professional development. She has taught professional development on *Growing STEM in Outdoor Classrooms* locally and at state and national conferences. Creating a sustainable environment within the school, our school family, and the community are a strong part of professional development for Cane Run's teachers and staff.

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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: _____Percentage scoring a 3 or higher: _____

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)

Cane Run students engage in authentic STEM activities and lessons in an outdoor setting. For example, fourth graders used math skills and tools to design, build and plant a pizza garden where each 'slice' represented the amount of that ingredient necessary for a pizza. Technology was used for scale to design a large butterfly shaped, native plant garden to attract butterflies, bees and birds. They used problem solving and measurement skills to design and make individual bricks to outline the garden. Students put their engineering strategies to work as they solved a real world problem in building a greenhouse over a raised bed garden to prolong the growing season. Science and especially environmental science are bridges that connect problem solving and creativity across the curriculum. STEM makes learning real and valuable to inquiring young students.

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

As educators, we have a focus on career readiness for our students. Our environmentally outfitted building and world class outdoor classroom provide amazing and exciting opportunities for our students to learn about careers in earth science through a study of geo-thermal energy and solar energy. Recycling and composting, reducing waste and reusing materials offer hands on learning opportunities. A good example is that the EE Club decided to tackle the problem of people using too many paper towels for drying hands. They conducted experiments and surveys to see how many towels were actually needed; collected and presented data to each classroom and reduced the amount of paper towels actually used. Gardening, landscaping, water studies and the school's orchard are also springboards for a future in green industries and technologies. In a recent survey, students across grades 3 – 5 indicated high levels of interest in fields of science, technology and the environment. This was a dramatic change from past years when sports figures and movie stars were popular career choices.

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

Each class at Cane Run participates in service learning projects throughout the year that connect community engagement and sustainability. These projects can be as simple as picking up litter in the school yard or the surrounding community to create a more sustainable environment. Students plant and maintain gardens for the community nearby (many of our neighbors are senior citizens who can no longer maintain their own gardens). Gardening is a real life skill that integrates a healthier life style, nutrition, economics, as well as science. Students help maintain the storm drains on our school property to prevent debris from getting into the water and causing contamination.

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

The outdoor learning spaces at Cane Run have been designed and created to provide meaningful and long lasting experiences that are steeped in high interest and national standards based instruction. Pre-K through 5th graders experience gardens from the soil to the table – exploring and learning each step of the way, applying core content for their grade levels. The freshwater pond, with a waterfall and stream area provide countless opportunities for plant and animal studies as well as water studies and states of matter lessons, again crossing grades. There is a Discovery Zone where Kentucky rocks with fossils can be turned over to discover the tiny creatures living in the quiet, dark spaces under them. Outdoor seating areas create open air classrooms for reading, writing, listening and much more. Students of all ages are spellbound by the huge decomposing log and its many inhabitants and use it for their grade appropriate lessons. The geologic map of Kentucky teaches change over time as well as intriguing lessons on rocks and fossils. The stone amphitheater, sun dial and physical science features appeal to the inquiring minds of young students as they turn what they have learned into their own

experiments and performances. Students of all ages can be found reading under a tree, using hula hoops for venn diagrams, or skip counting along the fitness trail. Outdoor learning levels the playing field for students of all learning styles.

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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)

At Cane Run, outdoor learning is as natural to students and staff as their classroom indoors. Exposure to 'green' increases student interest and motivation, especially in children with little or no opportunity for outdoor experiences at home. Community partners provide a vast array of opportunities as they bring lessons from their farms or industries and make connections to standards across the curriculum. Classes sit on boulders or tree stumps to learn about renewable and non renewable energy sources used by neighboring companies. One class made a suggestion to the new Bio-Mass plant nearby that would help remove wood from the river that was clogging intake pipes at the power company and would provide fuel for the Bio-Mass company. Students have become proficient in teaching adults from the community as well as other students about the ways our school uses its outdoor classroom.

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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)

Building partnerships with groups such as KAIRE or NEED helps us achieve success in reducing environmental impact and costs through education and action. Partnerships allow us to grow in health and wellness through meaningful experiences. Our students, most of whom live below the poverty level, are learning to make healthy food choices through our Breakfast in the Classroom partnership and the Healthy Fruits and Vegetables Program. Students and staff are learning better ways of living and growing in a more sustainable world through the environmental studies at Cane Run. By providing professional development throughout the district, state and nation, we can assist other schools and educators as they work to help students through STEM, green careers and environmental literacy. At Cane Run, we have created a community partnership with the local businesses and companies. They help us provide outdoor classroom features, student mentors, and participate in special programs. As a member of the Rubbertown Community Advisory Council, work at Cane Run is carried over to the other schools in this area. It takes a network of partnerships to build a more sustainable environment.

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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)

We open doors and windows for our students by involving experts from the community and the state in special programs at our school. Each year we host a day of inquiry learning that celebrates Kentucky Pioneers of the Past, Present and Future. Students experience Native American and Pioneer activities; farmers, Land Grant University Outreach programs; musicians

and artists (especially with an environmental flair); and research and development scientists from neighboring companies who incorporate STEM in their activities. We host an Earth Day Celebration filled with integrated environmental and sustainability activities. We plan a career day for grades 3 – 5 along with a resume writing seminar for parents of all students. There are family math and science nights that include a free healthy meal, environmental teaching and learning stations, NEED activities and math and science activities for each grade level. STEM is embedded in these activities. Educators and others interested in outdoor classrooms and environmentally sound buildings are invited to participate in programs and tours where students share what they have learned. Cane Run has a highly successful partnership with YUM Brands that includes Peace Gardens and curriculum support throughout the year where sustainability and nutrition are paramount. Students, staff and community partners participated in a Green Apple Day of Service that focused on environmentally sustainable improvements to our outdoor classroom. All programs and special events are steeped in standards based curriculum and have strong ties to our environment studies program.

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10. Submit photos or video content, if desired.

http://www.youtube.com/watch?v=wmV5NQj5IXM

http://www.youtube.com/watch?v=8gnHgfctb70

Green Apple Day of Service 2012

Cane Run's Green Apple Energy Tree

Students, staff, families, and community partners wrote their pledges to conserve energy and reduce their carbon footprints on green apples. There are currently two green apple energy trees in the front hall as students wanted to step up their pledges this year.