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 Green Ribbon Schools 2013

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

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

Official School Name: Northern Elementary
(As it should appear in the official records)

School Mailing Address: 3600 Cincinnati Pike
(If address is P.O. Box, also include street address.)

City: Georgetown

State: Kentucky

Zip: 40324

County: Scott

State School Code Number: 525035

Telephone: (502)868-5007
Fax: (502)863-6654


E-mail: judi.hunter@scott.kyschools.us

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

Judi Hunter
(Principal's Signature)

Date: 2/12/2013

Name of Superintendent: Mrs. Patricia Putty

District Name: Scott County

Tel: (502)863-3663

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.

Patricia Putty
(Superintendent's Signature)

Date: 2/12/2013

*Private Schools: If the information requested is not applicable, write N/A in the space.
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)
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.
In 2009, Scott County Schools began to focus on Energy Management and Sustainability. In the summer of that year, Elizabeth Cook, a fourth grade teacher at Northern Elementary, and Jim McClanahan, the Assistant Director of Maintenance, attended the Kentucky NEED Energy Tour. In October 2009, Jim provided training on Energy Management and Sustainability developed by the Kentucky Energy Efficiency Programs for Schools (KEEPS) for all Head Custodians of Scott County Schools. This training was attended by Bobby Scuten, Northern’s newly promoted Head Custodian. Bobby had a passion in this area and took what he had learned back to Northern. Bobby worked with Judi Hunter, principal, and Elizabeth, teacher who attended NEEDS, and initiated the energy program at Northern. From that start, Northern has been the star school in our efforts. They had the lowest rating of any school in the district when tracking for the Energy Star rating and site energy intensity began in February 2010 (Energy Star rating – 25/site energy intensity - 72.5 kbtu/sq. ft.) From that point to the end of that school year, the team at Northern improved their Energy Star rating to 33 and the site energy intensity to 67.3 kbtu/sq.ft.

Besides being Assistant Director of Maintenance, in June 2010, Jim became the Energy Manager, a new position with Scott County Schools. This position allowed Jim to work with all Scott County Schools to improve their efforts in Energy Management and Sustainability. The 2009 – 2010 school year was established as the base year for base data comparison.

Northern’s Principal, Judi Hunter, invited Jim to speak to the staff about saving energy and getting the students involved in this effort. Judi has not only encouraged Northern to get involved but she has also encouraged other principals in the district to support the program. From that point on, Northern was the star performer for the district and led the way in what they were able to accomplish. Northern entered the 2011 EPA Energy Star National Building Competition and achieved a 28.55% reduction as compared to calendar year 2010. This was the largest reduction of any building from Kentucky who entered the contest. They achieved the Energy Star Award in 2012 and continued to improve their rating. At the end of the last school year, June 2012, Northern had an Energy Star rating of 85 and the site energy intensity was only 39.2 kbtu/sq. ft. which was over a 40% reduction.
The unique thing about Northern was that millions of dollars were not spent on energy improvements. Bobby Scouten, the Head Custodian, working with Elizabeth Cook, the fourth grade teacher, and Elizabeth’s student energy team, did low cost projects like adding insulation to areas of need. The only large projects were replacing all of Northern’s T12 lamps with energy efficient 28 watt T8 lamps with electronic ballasts plus replacing incandescent exit signs with LED exit signs. Bobby, as the crew leader, with other qualified maintenance staff members did the projects during 2010’s fall and winter breaks. Later the old metal halide gym lights were replaced with newer pulse start metal halide lights. The material for these projects costs less than $12,000 plus $3,489 in rebates were received from the utility company. Unfortunately, in September 2011, Bobby, who was one of the driving forces behind the movement at Northern, had a severe heart attack and died. The entire school population had come to love and respect Bobby. While mourning Bobby they also vowed to continue with the energy program Bobby had worked so hard to establish. Northern’s new Head Custodian, Donnie Hollingsworth, has continued this effort. The entire culture at Northern has changed and they are continuing on the path of saving energy and caring about sustaining the earth’s resources.

Summer of 2012, a renewed focus on recycling started. Earlier efforts were limited because no recycling company would pick up at Northern; instead teachers took recycled material to the county’s recycling center. The school district developed a partnership with a private waste hauler to provide and pick up weekly an 8 cu.yd. container for recycled material. Northern has embraced this effort and fills the container each week! This has resulted in our ability to reduce the number of pickups for regular waste from two times per week to only once, a 40% reduction of trash that goes to the landfill.

Other than the school building, driveway, and parking lot, the rest of Northern’s 29 acres are used in various ways to support learning. Northern has trails that go into the woods plus a stream where the students can witness first hand many of nature’s wonders.

Northern has also excelled in academics! Their score on the new Kentucky State Accountability Test classified them as a Distinguished School ranked at the 93rd percentile overall plus a science achievement score of 100!
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:

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

Street Address: 3600 Cincinnati Pike

City: Georgetown  
State: KY  
Zip: 40324

Website: http://www.scott.ky.us/school_profile.aspx?schoolid=14

Facebook page: N/A

Principal Name: Mrs. Judi Hunter

Principal Email Address: judi.hunter@scott.kyschools.us

Phone Number: (502) 868-5007 Ext. 2111

Lead Applicant Name (if different):

Lead Applicant Email:

Phone Number:

<table>
<thead>
<tr>
<th>Level</th>
<th>How would you describe your school?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[x] Elementary (PK - 5 or 6)</td>
<td>( ) Urban</td>
</tr>
<tr>
<td>[ ] K - 8</td>
<td>( ) Suburban</td>
</tr>
<tr>
<td>[ ] Middle (6 - 8 or 9)</td>
<td>(x) Rural</td>
</tr>
<tr>
<td>[ ] High (9 or 10 - 12)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Does your school serve 40% or more students from disadvantaged households? 44% of students have free or reduced lunch and breakfast.</th>
<th>Graduation rate: 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(x) Yes ( ) No</td>
<td>Attendance rate: 95.35%</td>
</tr>
<tr>
<td></td>
<td>Total Enrolled: 388</td>
</tr>
</tbody>
</table>
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:

Energy Star Portfolio Manager

Energy Star Achieved in 2012

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

(x) Yes ( ) No  Award(s) and year(s) 2011 Energy Star National Building Competition – Kentucky State Winner & Energy Star in 2012

Pillar I: Reduced Environmental Impact and Costs

Energy

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

(x) Yes ( ) No  Percentage reduction: 40% from June 2010 to June 2012

Initial GHG emissions rate (MT eCO2/person): 1.3365

Final GHG emissions rate (MT eCO2/person): 0.8014

Offsets: N/A

How did you calculate the reduction? Using Energy Star Portfolio Manager

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: 2012 with a rating of 77 at that time

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

(x) Yes ( ) No

Current energy usage (kBTU/student/year): 4319.7 kbtu/student/year
Current energy usage (kBTU/sq. ft./year): 39.2 kbtu/sq.ft./year

Percentage reduction: 40% from June 2010 to June 2012

How did you document this reduction? Energy Star Portfolio Manager

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

On-site renewable energy generation: 0% Type N/A
Purchased renewable energy: 100% Type N/A
Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: No
5. In what year was your school originally constructed? 1989

What is the total building area of your school? 46,080 square feet

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

For new building(s): Percentage building area that meets green building standards: N/A Certification and level: N/A Total constructed area: N/A

For renovated building(s): Percentage of the building area that meets green building standards: N/A Certification and level: N/A Total renovated area: N/A

Water and Grounds

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

   Average Baseline water use: 2385 gallons per occupant
   Current water use: 1644 gallons per occupant
   Percentage reduction in domestic water use: 31%
   Percentage reduction in irrigation water use: N/A (Do not irrigate)
   Time period measured: June 2010 to June 2012
   How did you document this reduction (ie. ENERGY STAR Portfolio Manager, utility bills, school district reports)?: School Dude Utility Direct & Utility Bills

8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate?

   100% Types of plants used and location: KY fescue and other plants that do not require irrigation.

9. Describe alternate water sources used for irrigation.

   N/A as we do not irrigate the landscaping for the school grounds

10. Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces.

    We did not pave the walking trail and we also installed a stormwater retention basin at the bus loading/unloading area.

11. Our school's drinking water comes from:

    (x) Municipal water source
    ( ) Well on school property
    (x) Other: Kentucky American Water Company

12. Describe how the water source is protected from potential contaminants.
Quality Control process administered by Kentucky American Water Company

13. Describe the program you have in place to control lead in drinking water.

Kentucky American Water has control over lead in the water and we do not have any lead in the plumbing system at Northern Elementary School.

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

The entire 29 acre site except for the parking lot, the road leading to the school and the school itself is devoted to ecologically beneficial uses which is approximately 80%.

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 cu.yd. x 2 dumpsters x 4 pickups per month x 0.75 full = 48 cu.yd./month

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 8 cu.yd x 4 pickups per month = 32 cu.yd./month

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): N/A

Recycling Rate = ((B + C) ÷ (A + B + C) x 100): 32/80 = 40%

Monthly waste generated per person = (A/number of students and staff): 48 cu.yd./438 = 0.11 cu.yd. per person

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?

Unknown as we buy the paper used in all district schools on a district contract and it is determined by lowest price due to our budget constraints at this time.

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

<table>
<thead>
<tr>
<th>Flammable liquids</th>
<th>Corrosive liquids</th>
<th>Toxics</th>
<th>Mercury</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

How is this measured? N/A

How is hazardous waste disposal tracked? N/A

Describe other measures taken to reduce solid waste and eliminate hazardous waste.
Northern Elementary invited an expert in recycling from the waste collection company that hauls out waste to come to the school and educate all of the 4th graders on what materials can be recycled and how to increase recycling. This team has educated the rest of the school and their efforts have reduced the waste that goes to the landfill by 40%.

18. Which green cleaning custodial standard is used? We use the chemical free auto scrubber for most of the cleaning at Northern Elementary and therefore this area is not an issue.

What percentage of all products is certified? N/A

What specific third party certified green cleaning product standard does your school use? N/A

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)

None of our students walk or ride a bike due to the location of Northern being a rural school. Less than 10% of the students get picked up with only one student per car which leaves more than 90% of the students riding the bus or carpooling.

How is this data calculated? This data was determined by performing a survey of the car rider pickup line at the school. Plus data from Infinite Campus

20. Has your school implemented?

[ ] designated carpool parking stalls.

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

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

[ ] Safe Pedestrian Routes to school or Safe Routes to School Not applicable to Northern.

Describe activities in your safe route program: N/A

21. Describe how your school transportation use is efficient and has reduced its environmental impact.

Most of the students ride the school buses with less than 10% of the students being picked up.

22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships.

Northern Elementary School has a partnership with the nearest town which is Sadieville, Kentucky, working together to improve the environmental impact of each other. The students on the energy team have hosted several visitors from the city as well as other guest speakers. The mayor of Sadieville has participated in all of our award ceremonies
as well as members of the city council. One member of the city council serves on the
Northern Elementary Energy Team.

**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 do not use pesticides at Northern Elementary.

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. This is a district wide policy

   [x] Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. We have a mercury kit at Northern Elementary in case a student was to bring some mercury into the school.

   [ ] Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) N/A as Northern Elementary does not use fuel burning appliances

   [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. Northern Elementary have no rooms below ground level but we still test the rooms for radon for the ground level rooms.

   [x] Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. All playgrounds are inspected once per month to make sure they are safe for the students.

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

   Any chemical that may be used by the custodial team is locked up and keep away from students. The district purchased a new auto scrubber that is used to clean most of the school that does not require chemicals. The Tennant T3 auto scrubber with the ecH2O system converts water into a powerful cleaning solution without the use of chemicals. This machine is the primary cleaning machine for Northern Elementary.

4. Describe actions your school takes to prevent exposure to asthma triggers in and around the school.

   Northern Elementary goes to extreme measures to insure that exposure to asthma triggers is minimized. They do not allow any potential asthma trigger into the school. Students who are identified with asthma are protected through a 504 plan plus we try to protect each student from any triggers.
5. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly clean up mold or removes moldy materials when it is found.

   A new roof was installed in 2010 in order to stop the leaks that had occurred in the building. Any leak that may occur now is quickly followed up no and corrected to prevent excess humidity in the school. Most of the classrooms had carpet installed when the school was built in 1989 and we have replaced all of the classroom carpet with rubber flooring which eliminates the exposure.

6. Our school has installed local exhaust systems for major airborne contaminant sources.

   ( ) Yes
   (x) No as Northern Elementary does not have any airborne contaminant sources.

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.

   The ventilation systems are inspected on a monthly basis and new air filters are installed if needed.

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.

   All systems were designed to meet all codes and ventilation standards and we have had checking done by representatives of the EPA IAQ Tools for Schools come to Northern and measured the ventilation rates and the resulting CO2 levels.

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.

   We have implemented the EPA IAQ Tools for Schools program for keeping the indoor air quality the best it can be. We had a representative from the EPA IAQ Tools for Schools present to all district employees in October 2010 during the fall break to educate all the custodial staff on what they need to do to keep our indoor air quality the best it can be.

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: Northern Elementary received the Gold Level in 2010

    (x) Our school participates in a Farm to School program to use local, fresh food.
[ ] Our school has an on-site food garden. We have tried on-site food gardens at Northern as well as other schools in the district and they have not worked in a practical application as no one takes care of them in the summer months when school is not in session.

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

[x] Our students spend at least 120 minutes per week over the past year in school supervised physical education. Every Northern student participated in the “Get Active – Get Program” which required 15 minutes of exercise each day for 8 weeks. The students also participate in “Jump Rope For Heart” and the “President’s Physical Fitness Award” programs.

[ ] At least 50% of our students' annual physical education takes place outdoors. When the weather permits, the choice is to take students outside the building for recess and physical education. The first 5 minutes of recess must be structured physical exercise for all students.

[x] Health measures are integrated into assessments. Northern students have exceeded in the state accountability tests by scoring as Highest Performing School with a 93% ranking statewide.

[ ] At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). Some teachers have utilized the Sunwise program but not 50% of the students have participated in it.

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

Percentage: N/A Type: N/A

11. Describe the type of outdoor education, exercise and recreation available.

Northern Elementary has two playgrounds next to the school in addition to having nature trails that allows the students to see and experience nature. They also have an outdoor covered classroom.

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

Northern partnered with several outside agencies to improve the nutrition and fitness of their students. An excellent example of this is the “Girls on the Run” program that is sponsored by the school. In this program the girls practice on school grounds after school twice per week, excited to run and enjoy the outdoors. Northern has won this competition in the past two years. Northern also partners with Toyota which has a manufacturing plant in Scott County and allows students to come to Toyota and utilize their Environmental Nature Trail. Students from Northern get to take this tour each year.
Pillar 3: Effective Environmental and Sustainability Education

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

[ ] Our school has an environmental or sustainability literacy requirement.

Even though Northern Elementary does not have a specific environmental or sustainability literacy graduation requirement all of students at Northern Elementary have bought into this area as the culture at Northern Elementary have been changed over the past three years and every member of the student body and the staff understand the important of this area and the data demonstrates that they have mastered this area.

[ ] Environmental and sustainability concepts are integrated throughout the curriculum.

The Northern Elementary teachers utilize the grounds at Northern Elementary as they teach nature units during the curriculum. Students have participated in numerous projects that have focused on these topics. Teachers also integrate other core content areas, such as math (measuring steps, feet, yards, etc.), social studies (physical features of geography), and writing (subject matter for journals). The district Energy Manager has spent time in the classrooms and answered questions about environmental and sustainability concepts. The music teacher wrote a unique song about environmental concepts and Northern and the students performed this song at multiple award events at Northern and for the District Awards Ceremony held at the Scott County High School Auditorium.

[ ] Environmental and sustainability concepts are integrated into assessments.

The assessments that are used at Northern are based on the new Kentucky Core Academic Standards. These assessments include environmental and sustainability literacy. As compared to the other elementary schools in the state, the Northern Elementary students are far superior to the other school in their understanding and knowledge of these topics. The overall assessments for Northern were excellent last year and were classified as a Highest Performing School with a ranking of 93% but the most impressive fact is that Northern was ranked 100% in science which supports the fact that the Northern students really understand environmental and sustainability concepts.

[ ] Students evidence high levels of proficiency in these assessments.

The students at Northern have exceeded in the assessments being classified as a Highest Performing School with a ranking of 93% with a 100% ranking in science.

[ ] Professional development in environmental and sustainability education is provided to all teachers. The district energy manager has met with all teachers at Northern Elementary on Energy Management and Sustainability and offered concepts on how they could work with their students to save energy at school and at home.

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

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

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?

Northern Elementary uses sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills. The entire culture at Northern Elementary has changed over the past three years and the students are excited about what they have been able to accomplish in saving energy at their school. They have lots of questions and are very eager to learn all about the science behind what they are learning. The core content of science and social studies addresses natural resources and the NEED curriculum is used during the study of energy and the environment.

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

The students who serve on the student energy team at Northern Elementary are very interested in what they are doing. They monitor the other students and staff and make sure that they follow good sustainability practices by doing building checks, etc. Some of these students have expressed an interest in a career in the green technology after they finish their schooling.

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

Northern Elementary has a partnership with the local town of Sadieville, Kentucky and the student energy team has spent time with a member of the Sadieville City Council. A member of the Sadieville City Council serves on the school energy team.

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

Each grade level utilizes the wonderful grounds at Northern Elementary. Due to the natural surroundings, teachers use the grounds as an outdoor classroom, providing an opportunity to integrate other core content areas, such as science (identifying various species of plants, trees, etc. or utilizing the creek on the property to conduct scientific investigations) or math (measuring steps, feet, yards, etc.) or social studies (physical features of geography) or writing (subject matter for journals) or reading in our outdoor garden. One goal of environmental education is for students to develop a respect for the world’s natural resources. Giving students the opportunity to have hands-on experience with these resources can assist students in developing respect for the environment.

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

By teaching the energy cycle and how electricity is produced, the students learn how important it is to reduce the use of electricity and reduce the effects of the pollutants to the environment. This effort spreads to the broader community as the students go home and talk about these issues with their parents, grandparents and their neighbors. We have several stories where the students are getting their families to reduce their energy consumption just because they have learned these skills at school. So by teaching our
students to start be a wise steward of the natural resources, they are impacting the community in total in order to make a better place for all of us to live in. This allows the students to develop the civic skills to take leadership roles in the future.

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.

Without a doubt, Northern Elementary has been the star of the Scott County District Energy Management Program. We award an energy banner each month to the school that reduces its energy consumption the largest percentage from the same period a year earlier. Northern Elementary is the leader in this category winning the energy banner 7 times. Northern has encouraged other schools in the district to become involved with the Energy Management efforts and based on the results they have achieved, have been an example to not only schools in the district but outside the district well. The Northern Elementary Case Study has been presented at a number of conferences including the Kentucky Tennessee School Plant Managers Conference in February 2012. Their story is also going to be presented at the National School Plant Manager’s Decision Maker’s Conference in Myrtle Beach, South Carolina on February 25, 2013 and at the Kentucky Need High Performing Schools Conference on March 14, 2013.

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.

The major way that Northern Elementary has integrated this into the curricula is to change the culture of the school during the past three years. By doing this they now have the students and staff aware of their actions and how their actions can impact the earth in a positive or negative way. The Northern Student Energy Team is the best Elementary School Energy Team in the district and that fact is very apparent when you look at the results that they have achieved during the past two years. The fact that students at Northern ranked 100% in the state in the science area also reinforces how much they have bought into the environmental, sustainability and green technology area.

10. Submit photos or video content, if desired.

Link to Channel 36 News Coverage of April 17, 2012 Award Celebration Event where Northern Elementary received their Energy Star Award

http://www.wtvq.com/s/OWme4NL/FJUajCx-zVRR1Sw.cspx
Video of Scott County School Awards Program at SCHS Auditorium on April 17, 2012

Located on separate storage as it was too large to submit with application.