



**U.S. Department of Education Green Ribbon Schools**

**2012-2013 Presentation of Nominee to the  
U.S. Department of Education**

---

**Kinard Core Knowledge Middle School -  
Colorado**



## 2012-2013 School Nominee Presentation Form

### **PART I - ELIGIBILITY CERTIFICATION**

#### **School and District's Certifications**

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

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

U.S. DEPARTMENT OF EDUCATION  
**GreenRibbonSchools**

ED-GRS (2012-2013)

Page 1 of 4

U.S. Department of Education Green Ribbon Schools 2013

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

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

Official School Name Kinard Core Knowledge Middle School  
(As it should appear in the official records)

School Mailing Address 3002 E. Trilby Rd.  
(If address is P.O. Box, also include street address.)

Fort Collins CO. 80526  
City State Zip

County Larimer State School Code Number\* School: 4698 District: 1550

Telephone (970) 488-5400 Fax (970) 488-5402

Web site/URL http://kin.psdschools.org/ E-mail cbergman@psdschools.org

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

Joe Cuddemi Date 1/25/2013  
(Principal's Signature)

Name of Superintendent\* Nancy Wright, Ed.D.  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name\* Poudre School District Tel. (970) 490-3502 Facility Services

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.

Nancy Wright Date 1/25/2013  
(Superintendent's Signature)

\*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.

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

Colorado Department of Education

Name of Nominating  
Authority

Commissioner Robert Hammond

(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.

\_\_\_\_\_  
(Nominating Authority's Signature) Date 1-25-13

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

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

**Public Burden Statement**

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



## Kinard Core Knowledge Middle School – Green Ribbon School Profile

Located in the heart of Northern Colorado, Kinard Core Knowledge Middle School is a proud part of the Poudre School District and the City of Fort Collins. Built in 2005, Kinard continues to be a national leader in environmental leadership and sustainable design. With unique energy features like geothermal heating and cooling, wind powered electricity, and open-space daylight features, Kinard is the only school in the state of Colorado that scores a perfect 100, based on Energy Star rating standards. In fact, Kinard was the first school in the nation to move from a “Designed to Earn” Energy Star status to being awarded the Energy Star Award within the first year after occupancy in 2007.

Perhaps one of the most impressive aspects of Kinard Middle School’s efforts to reduce environmental impact and minimize energy costs is the sustainability of the building. In the true essence of the word *sustainability*; the energy savings at Kinard is only getting better as the building gets older. In 2012, Kinard hit its lowest energy usage yet with a mark of **20.1kBTU/sq. ft./year**, the lowest in the state of Colorado. Poudre School District and Kinard Middle School are also committed to reducing Greenhouse Gas emissions. Based on Platte River Power Authority data, Kinard has documented a 57% reduction in Greenhouse Gas emissions from 2006-2012. While some external factors, like major weather patterns, influence the data above, the conservation efforts of staff and students are remarkable considering that the building is now seven years old and still setting state records for energy and cost reductions.

A variety of innovative building features and technologies are what make the conservation efforts of Kinard possible. The most unique of which, the geothermal HVAC system, provides year round heat and air conditioning and very low utility costs. This on-site geothermal system circulates water underground to capture the natural thermal energy from the earth and pumps it back into the building where it is converted into comfortable indoor air temperatures for staff and students. The building is also equipped with a superior building envelope, low-E operable windows, and an automated energy management system to provide a maximum efficiency of energy usage.

While Kinard devotes 100% of its electrical usage to off-site wind credits, electricity consumption is reduced greatly due to the transparency of the building. Solatubes® and other architectural features are designed to maximize natural daylight throughout the school. Colorado has over 300 blue-sky days annually, which helps to minimize the use of electricity and provides a healthy learning environment in the classroom.

The facility is not the only unique trait that defines Kinard. Student leadership programs are the heart of all environmental conservation efforts and sustainable practices that drive the healthy culture at Kinard. Kinard C.A.R.E.S. (Community – Action – Results –Environment – Service) is one of a variety of student leadership groups at Kinard. This dedicated group of students have designed, built, and implemented one of the most successful resource management systems in the State. This four-stream recycling and composting center diverts over 20,000 lbs. of food waste from the landfill each year at a diversion rate of over 84%. Student leaders in Kinard C.A.R.E.S. and Global Leadership classes have also taken an active role in spreading important environmental awareness, reducing use of plastics, improving local air quality, and promoting a healthy, active lifestyle. These exceptional student contributions were recognized as one of only four schools in the state to receive the Bronze Achievement Award from the Colorado Environmental Leadership Program.

Teachers at Kinard believe in providing students with an authentic and engaging learning experience that reflects the civic responsibilities they will face as citizens in the real world. This guiding value, combined with a powerful Core Knowledge curriculum sequence, creates a genuine 21<sup>st</sup> century learning experience. With a focus on whole child education, students at Kinard have the opportunity to explore a variety of applications in STEM, while maintaining a well-balanced experience in the arts, humanities, and wellness. Environmental science curriculum is integrated into

theme-based units across all grade levels at Kinard and connects state standards to important community issues regarding air quality, water quality, alternative energy, and erosion through the use of Project Based Inquiry Science books. Student leaders in science also engage in adventure travel trips to Catalina Island, CA and Costa Rica to serve other communities around the world.

Kinard's academic approach has yielded excellent results in achievement and growth. Based on the school performance framework that is used to evaluate schools, Kinard "exceeds" expectations on the academic achievement indicator. Science test scores reported that 83% of Kinard students were "proficient and above" in 2011, as compared to the state average of only 49%. Clearly, Kinard Middle School truly making as big of an impact on its students as it does on the sustainability of the community.



# Green Ribbon Schools

<b>PART I: COVER PAGE</b> <i>(Complete and attach as the first page of proposal)</i>	
<b>School Name:</b>	Kinard Core Knowledge Middle School
<b>District Name</b> <i>(if applicable):</i>	Poudre School District
<b>Mailing Address:</b> 3002 E. Trilby Rd. Fort Collins, CO. 80528	
<b>School Website:</b>	<a href="http://kin.psdschools.org/">http://kin.psdschools.org/</a>
<b>School Code*:</b> 4698	<b>District Code*:</b> 1550
<b>Principal Name:</b>	Joe Cuddemi
<b>Telephone:</b> (970) 488-5403	<b>E-mail:</b> <a href="mailto:jcuddemi@psdschools.org">jcuddemi@psdschools.org</a>
<b>Signature:</b>	
<b>Lead Applicant Name</b> <i>(if different than principal):</i>	Chris Bergmann
<b>Telephone:</b> (970)218-9686	<b>E-mail:</b> <a href="mailto:cbergman@psdschools.org">cbergman@psdschools.org</a>
<b>Signature**:</b>	
<b>School Type:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Institute Charter School <input type="checkbox"/> Private	
<b>Level Served:</b> <input type="checkbox"/> Elementary (PK – Grade 5) <input type="checkbox"/> K-8 <input checked="" type="checkbox"/> Middle (Grades 6-8) <input type="checkbox"/> High (Grades 9 – 12)	
<b>Percentage of students eligible for Free and Reduced Lunch:</b>	
<b>Is your school participating in a local, state or nationally recognized green school program (e.g., National Wildlife Federation Eco-Schools USA, Project Learning Tree’s Green Schools, LEED or CO-CHPS)? <i>If yes, please explain below the program and level (if applicable) your school has achieved:</i></b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Has your school, staff or student body received any green school, environmental, healthy school, environmental education or sustainability education awards? <i>If yes, please list below:</i></b>	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>ENERGY STAR labels in 2007, 2008, 2009, 2010, 2011 &amp; 2013.</b>	

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

*\*\*By signing this application, Principal and/or Lead Applicant assure that the information provided is accurate to the extent possible.*

## 2013 Green Ribbon Schools Application Template

**Directions:** This template **must be used** to complete the application. Answer each question below by checkbox or typing in the information requested. Free responses are limited to the word limit noted following the question. **Note:** to activate the checkboxes below, double click on the box and select 'checked' when prompted. No written narrative is required outside of what is requested within this template.

### Part II

#### **Pillar 1: Reduced Environmental Impact and Costs**

Buildings, grounds and operations goal: The school has made significant progress toward "net zero" environmental impact (zero carbon, solid waste, and hazardous waste footprints). See Attachment B Glossary of Terms for additional information.

Pillar 1 includes four main elements:

- Reduced or eliminated greenhouse gas emissions (including, but not limited to: construction, maintenance, cleaning and contaminants from mechanical systems), using an energy audit or emissions inventory and reduction plan, cost-effective energy efficiency improvements, conservation measures and/or on-site renewable energy and/or purchase of green power;
- Improved water quality, efficiency and conservation (including storm water and potable water);
- Reduced solid and hazardous waste production, through increased recycling, reduced consumption, and improved management, reduction or elimination of hazardous waste streams; and
- Expanded use of alternative transportation to, during and from school, through active promotion of existing locally-available, energy-efficient options and implementation of alternative transportation supportive projects and policies.

Each question in this section is designed to measure your school's progress towards Pillar I and its associated 4 elements.

#### A. Energy

<p><b>Can your school demonstrate a reduction in Greenhouse Gas emissions?</b>  <i>If yes, Percentage reduction: 57% Over (m/yy-m/yy): 7/2006-6/2012</i>  <i>Initial GHG emissions rate (MT eCO<sub>2</sub>/person): 1.18</i>  <i>Final GHG emissions rate (MT eCo<sub>2</sub>/person): 0.51</i>  <i>Offsets: None</i>  <i>How did you calculate the reduction? Local emissions factors and data provided by Platte River Power Authority data</i></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p><b>Has your school received EPA ENERGY STAR certification, or does it meet the requirements for ENERGY STAR certification?</b>  <i>If yes, in what year(s) was the certification earned? 2007, 2008, 2009, 2010 &amp; 2011</i>  <i>Score(s) received: 2007-95, 2008-97, 2009-99, 2010-99, &amp; 2011-100</i></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Has your school reduced its total non-transportation energy use from an initial baseline? <i>If yes, answer the following:</i>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Percentage reduction:	<b>57%</b>	Current energy usage (kBTU/student/year): <b>2,926</b> Current energy usage (kBTU/sq. ft./year): <b>20.1</b>	
Time period measured:	From(m/yy): <b>2006/2007</b> To(m/yy): <b>2011/2012</b>		
How did you document this reduction? Each year, PSD produces a Sustainability Management System report (SMS) to document all data trends and goals monitoring energy and resource reduction. See attached energy report.			
<b>What percentage of your school's energy consumption is derived from:</b>			
On-site renewable energy generation:	<b>0%</b>	Type: Purchased renewable energy: <i>*See Below</i>	<b>None</b> Type: <b>Wind</b>
<i>*Kinard is designed to obtain ¾ of its total utility usage through electrical systems. All of the electricity at Kinard is purchased as wind energy credits through Community Energy (3<sup>rd</sup> party company). These credits offset 100% of the electricity used at Kinard.</i>			
Do you participate in USDA Fuel for School, DOE Wind for Schools or other federal or state school energy programs? <i>If yes, please describe:</i>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
In what year was your school constructed?		<b>2006</b>	
What is the total building area of your school?		<b>112,735 sq. ft.</b>	
Has your school constructed a new building or renovated an existing building in the past ten years?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
For <b>new</b> building(s)	Percentage building area that meets green building standards: <b>100% based on PSD's Sustainable Design Guidelines</b>	Certification and level: <b>Chose Not to Certify Bldg.</b>	Total constructed area: <b>112,735</b>
For <b>renovated</b> building(s)	Percentage building area that meets green building standards:	Certification and level:	Total renovated area:
<b>B. Water and Grounds</b>			
What percentage of your landscaping is considered water-efficient and/or regionally appropriate?		<b>10%</b>	
Describe types of plants used and location:	<b>Main entrance grounds landscape design includes a drought tolerant native grass mix. We also have a synthetic turf athletic field to minimize water usage.</b>		

<p><b>Describe alternate water sources used for irrigation. (50 words max)</b></p> <p>Kinard has no access to alternate water sources for irrigation.</p>	
<p><b>Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (50 words max)</b></p> <p>Bio-swales were designed into the landscaping as a retention aid to minimize downstream run off and naturally strain contaminants from the water.</p> <p>Weather station data feeds evapotranspiration rates daily to adjust the automated irrigation system quantities on site at Kinard.</p>	
<p><b>Our school's drinking water comes from:</b></p> <p><input checked="" type="checkbox"/> Municipal water source</p> <p><input type="checkbox"/> Well on school property</p> <p><input type="checkbox"/> Other: _____</p>	
<p><b>Please describe how the water source is protected from potential contaminants. (Maximum 50 words)</b></p> <p>Water from our school is supplied by the Colorado Big Thompson Water Project. Water from the Western Slope of Colorado is transported to Soldier Canyon Treatment Plant in Fort Collins, Colorado. The water is then filtered and treated for use and supplied to Kinard by the Fort Collins-Loveland Water District.</p>	
<p><b>Please describe the program you have in place to control lead in drinking water. (Maximum 50 words)</b></p> <p>See Above - Municipal water source, Fort Collins Loveland Water District.</p>	
<p><b>What percentage of the school grounds are devoted too ecologically beneficial uses? Please Describe. (Maximum 50 words)</b></p> <p>Approximately 10-15% of Kinard's grounds are designated for ecological use. A vermicomposting bin currently exists in the place of a potential outdoor learning center that will surround the composting area in the future (design pending). Additionally, drought tolerant native grasses and a synthetic athletic field are used to reduce watering.</p>	
<p><b>C. Waste</b></p>	
<p><b>What percentage of solid waste is diverted from landfilling or incinerating due to recycling and/or composting? Complete all calculations below to receive points.</b></p>	
<p>A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected).</p>	<p><b>15 yards/week (105/lbs/Yrd.)</b></p>
<p>B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected).</p>	<p><b>20 yards/week (80/lbs/Yrd.)</b></p>
<p>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).</p>	<p><b>6,729/lbs/month</b></p>
<p>Recycling Rate = <math>( (B + C) \div (A + B + C) \times 100 )</math></p>	<p><b>84.1%/Diversion</b></p>
<p>Monthly waste generated per person = <math>A/\text{number of students and staff.}</math></p>	<p><b>Approx. 0.07 yds/person/mo.</b></p>

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?	Colored Paper Only 30%
--	------------------------

**List the types and amounts of hazardous waste generated at your school:**  
 There is no hazardous waste generated at Kinard to the best of our understanding. However, there are systems in place at the district level that provides accommodations, protocols, and procedures in the event that there is a disposal need for hazardous and/or electronic waste. There is an e-waste deposit bin that is available for electronics and batteries onsite at Kinard.

Flammable Liquids None	Corrosive Liquids None	Toxics None	Mercury Florescent lighting fixture pickup and disposal is facilitated by district personnel
---------------------------	---------------------------	----------------	---

How is this calculated? \_\_\_\_\_

How is hazardous waste disposal tracked? Hazardous waste is documented and tracked using a Poudre School District inventory form that is used to facilitate the pickup and disposal of any hazardous waste.

<b>Which green cleaning custodial standard is used? Clean Industrial Management Standard</b>	
What percentage, by volume, of all cleaning products in use are certified?	80%
What specific third party certified green cleaning product standard does the school use?	Green Seal/Equal Logo

**Describe the other measure taken to reduce solid waste and eliminate hazardous waste. (Maximum 100 words)**  
 To reduce solid waste, Kinard's student leadership program (Kinard C.A.R.E.S.) has successfully implemented a fully functioning resource management system in our school cafeteria. Each year, this program has diverted over 20,000 pounds of food waste from the landfill with onsite vermicomposting and a heat composting service run by A1 Organics.

Poudre School District has a coordinated system in place to train chemical safety coordinators in each of its buildings. Kinard's chemical safety coordinator is Chris Bergmann. Every year, he inventories each classroom in our school and trains staff to help meet state and district policies regarding chemical and fire safety.

**D. Alternative transportation**

**What percentage of your students walk, bike, bus or carpool (2 + students in the car) to/from school? Note if you school does not use school buses. How is this data calculated? (Maximum 50 words)**  
 65% - As a 100% choice school, no district buses are provided. Data is collected over intermittent checks during various weather conditions by counting bikes and carpool traffic, resulting in approximations. Various weather indicates: on colder days, 10% of students bike/ walk, 30% carpool. On warm days, 60% bike/ walk, 30% carpool.

**Has your school implemented:**

- Designated carpool parking stalls?
- Well-publicized no idling policy that applies to all vehicles (including school buses)?
- Vehicle loading/unloading areas that are at least 25 feet from building air intakes, doors and windows?
- Safe Pedestrian Routes to school, which are distributed to parents and posted in our office?

**Describe activities in your safe routes program. (Maximum 50 words)**

All students participate in a Safe Routes to School bike and pedestrian training annually through our physical education classes in the spring. This training is designed and facilitated by the City of Fort Collins.

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

*(Maximum 50 words)*

Kinard is a school of choice with no neighborhood boundaries to determine student enrollment. Therefore, Poudre School District does not supply bussing for our population. All students ride their bikes, walk, or carpool in personal vehicles. Our students run a campaign to encourage carpooling and to reduce idling emissions.

**This is the end of Pillar 1. Please describe any other accomplishments or efforts your school has made towards reducing/eliminating environmental impacts focusing on innovative or unique practices and partnerships. (Maximum 100 words)**

Kinard has a unique, on-site geothermal HVAC system. 100 bore holes with piping that circulates 300' below the surface of our school provides the building with the thermal needs to produce a comfortable environment. Kinard also has a high performing building envelope. The insulation features retain heating and cooling to optimize the efficiency of our HVAC system.

Kinard is 100% wind powered and has been designed with unique day lighting architectural features (building transparency) to maximize natural daylight and minimize the use of electrical lighting. Sola-Tubes are located in the ceilings providing sunlight to classrooms. Rooftop sensors regulate the indoor lights during the day.

## Part III

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

An integrated school environmental health program based on an operations and facility-wide environmental management system that considers student, visitor and staff health and safety in all practices related to design, construction, renovation, operations and maintenance of grounds; and high standards of nutrition, fitness, and quantity of quality outdoor time for both students and staff.

Each question in this section is designed to measure your school's progress toward Pillar 2.

<b>A. Environmental Health</b>	
<b>What is the volume of your annual pesticide use (gal/student/year)?</b> Describe efforts to reduce use. Pests are not a problem in Northern Colorado and we do not use pesticides on our campus.	<b>None</b>
<b>Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific example of actions taken for each checked practice. (Please check all that apply)</b>	
<input checked="" type="checkbox"/> Our school prohibits smoking on campus and in public buses. _____ <input checked="" type="checkbox"/> Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. _____ <input type="checkbox"/> Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO). _____ <input checked="" type="checkbox"/> Our school does not have any fuel burning combustion appliances. _____ <input checked="" type="checkbox"/> 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 4pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4pCi/L. <input type="checkbox"/> Our school has identified any wood playground or other structures that contains chromate copper arsenate and has taken steps to eliminate exposure. _____	
<b>Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. (100 words max)</b>	
<p>Poudre School District has a coordinated system in place to train chemical safety coordinators in each of its buildings. All building coordinators come together annually to be trained and updated on how to communicate to staff members in an effort to keep chemical needs within the state health department standards. Kinard's chemical safety coordinator is Chris Bergmann. Every year, he inventories each classroom in our school and trains staff on how to help meet state and district policies regarding chemical and fire safety. He also communicates regularly with administration and staff to comply with all state health standards.</p>	
<b>Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (Maximum 100 words)</b>	
<ul style="list-style-type: none"> <li>• Follow ASHRAE 62.1 indoor air quality standards based on applicable codes when school was completed in 2006.</li> <li>• Air filters are maintained and changed every 6 months.</li> <li>• PSD green cleaning procedures.</li> </ul>	
<b>Describe actions your school takes to control moisture from leaks, condensation and excess humidity and promptly cleans up mold or removes moldy materials when it is found. (Maximum 100 words)</b>	
<ul style="list-style-type: none"> <li>• Leaks are immediately addressed.</li> <li>• Routine building maintenance.</li> <li>• Follow ASHRAE 62.1 indoor air quality standards based on applicable codes.</li> </ul>	

<p><b>Our school has installed local exhaust systems for major airborne contaminant sources. (If yes, please describe):</b></p>	<p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</p>
<p><b>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. (Maximum 100 words)</b></p> <ul style="list-style-type: none"> <li>• Biannual Preventative HVAC system maintenance.</li> <li>• Biannual filter replacements.</li> </ul>	
<p><b>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. (Maximum 100 words)</b></p> <ul style="list-style-type: none"> <li>• Preventative HVAC system maintenance.</li> <li>• ASHRAE 62.1 compliance.</li> <li>• Whole-building monitoring through the building automation system.</li> <li>• Biannual filter replacements</li> </ul>	
<p><b>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. (Maximum 100 words)</b></p> <ul style="list-style-type: none"> <li>• Annual inspections from Larimer County Health Department.</li> <li>• Annual fire inspections through Poudre Fire Authority</li> </ul>	
<p><b>B. Nutrition and Fitness</b></p>	
<p><b>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 innovation or unique practices and partnerships. (Maximum 100 words each)</b></p> <p><input type="checkbox"/> Our school participates in the USDA's Healthier School Challenge. Level and year: _____</p> <p><input checked="" type="checkbox"/> Our school participates in a Farm to School program to use local, fresh food. <b>Our school district gets seasonal fruits and vegetables from local CSAs and farms when possible (ex. Watermelon from Fossil Creek Farms)</b></p> <p><input type="checkbox"/> Our school has an onsite food garden. <b>Currently being designed and planned.</b></p> <p><input type="checkbox"/> Our school garden supplies food for students in the cafeteria, a cooking or garden class or to the community. _____</p> <p><input checked="" type="checkbox"/> Our students spend at least 120 minutes per week (over the past year) in school supervised physical education. <b>Students at Kinard get at least 60 hours of physical activity across all grade levels.</b></p> <p><input checked="" type="checkbox"/> At least 50% of our students' annual physical education takes place outdoors. <b>Weather permitting; the majority of all physical education courses take place outside on school grounds.</b></p> <p><input type="checkbox"/> Health measures are integrated into assessments. _____</p> <p><input type="checkbox"/> At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). _</p> <p><input checked="" type="checkbox"/> Our school uses a coordinated school health approach or similar initiative to address overall school health. <b>Kinard has designed and implemented a school-wide wellness committee with both staff and student leadership. This is also one of six focus projects for Poudre School District.</b></p> <p><input type="checkbox"/> Our school partners with community organizations that promote health, wellness and fitness (i.e., 9Health Fair, Jump Rope 4 Heart, etc.). _____</p>	

<b>Food purchased by our school is certified as “environmentally preferable.”</b>	Percentage: 20%	Type: Organic Produce
---	--------------------	--------------------------

**Describe the type of outdoor education, exercise and recreation available. (Maximum 100 words)**

Students at Kinard Core Knowledge Middle School are required to take at least one semester credit of physical education and wellness each year. This is an important part of our well-rounded Core Knowledge academic program that fosters a “whole-child” experience. This means that students at Kinard get at least 60 hours of physical activity across all grade levels in a year. Most of these activities take place outside (as weather permits).

**Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (Maximum 100 words)**

Kinard’s wellness team has integrated healthy eating and physical activity into our daily culture in a variety of ways. For example, every week on video announcements, students are encouraged to participate in a “Mustang Minute” to get active in class. The wellness team also offers staff challenges to promote healthy lifestyles throughout the school year. A few of these challenges include a holiday fitness challenge and weekly fitness activities for staff in the morning before school. Kinard has also participated in the NFL’s “Fuel Up to Play 60” program. This promotes healthy active kids through an activity log incentive program.

## Part IV

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

Student achievement goal: 100% of the school's graduates are environmentally and sustainability literate. Pillar III includes three main elements.

- 1) Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems.
- 2) Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy.
- 3) Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community.

Each question in this section is designed to measure your school's progress toward Pillar 3.

**Which practices does your school employ to ensure environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships. (Please check all that apply)**

Our school has an environmental or sustainability literacy graduation requirement. (Maximum 200 words)

Environmental and sustainability concepts are integrated throughout the curriculum. (Maximum 200 words)

Environmental science curriculum and concepts in sustainability are integrated into theme-based units across all grade levels at Kinard. Our curriculum connects the CDE state standards to important community issues regarding air quality, water quality, alternative energy, and erosion through the use of Project Based Inquiry Science books (PBIS). We have also integrated elements of STEM into our whole-child, core knowledge curriculum package with courses in math, technology, and science elective courses. Our science elective courses offer students unique leadership opportunities rooted in environmental service-learning, sustainable living curriculum, enhancing our school building and systems, partnering with community professionals, and adventure travel trips to Catalina Island, CA, and Costa Rica to serve other communities around the world. For more insight into these programs, please visit [www.kinardcares.com](http://www.kinardcares.com)

Environmental and sustainability concepts are integrated into assessments. (Maximum 200 words)  
Advanced level questions on teacher created common assessments require students to connect curriculum topics to contextual environmental issues in constructed response questions that simulate real world problem solving skills (for example, oil spill cleanups in oceans).

Students evidence high levels of proficiency in the above assessments. (maximum 100 words)  
Kinard is proud to have earned some of the highest achievement scores in the State of Colorado. This gives Kinard the proud distinction of being the only 6-8 middle school in Fort Collins to earn the Governor’s John Irwin School of Excellence Award. This award is given to schools that demonstrate excellent academic achievement. Based on the school performance framework that is used to evaluate schools, Kinard “exceeds” expectations on the academic achievement indicator. Also, science TCAP scores reported that 83% of Kinard students were “proficient and above” in 2011, as compared to the state average of only 49%.

Professional development in environmental and sustainability education is provided to all teachers. (Maximum 200 words)

**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:

**How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (Maximum 200 words)**

Environmental science curriculum and concepts in sustainability are integrated into theme-based units across all grade levels at Kinard. Our curriculum connects CDE state standards to important community issues regarding air quality, water quality, alternative energy, and erosion through the use of Project Based Inquiry Science books (PBIS). We have also integrated elements of STEM into our whole-child, core knowledge curriculum package with courses in math, technology, and science elective courses.

Also, our science elective courses offer students unique leadership opportunities rooted in environmental service-learning, sustainable living curriculum, enhancing our school building and systems, partnering with community professionals, and adventure travel trips to Catalina Island CA. and Costa Rica to serve other communities around the world. For more insight into these programs, please visit [www.kinardcares.com](http://www.kinardcares.com)

**How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (Maximum 200 words)**

Science teachers at Kinard use our unique green technology building features on-site to teach important curriculum connections in the field of alternative energy and structural engineering. Students analyze the science behind our geo-thermal HVAC system, computer automated energy features, architectural features that maximize natural daylight, etc. They connect these technologies to concepts in energy, physics, wave properties and optics in our 8<sup>th</sup> grade science curriculum. In addition, students in Kinard C.A.R.E.S. (environmental leadership elective class) perform data analysis studies on building performance and usage statistics as well as waste reduction numbers regarding our landfill diversion rate. Our unique student leadership courses engage students with contextual, impactful projects that help to foster 21<sup>st</sup> century skill sets that they will be able to utilize in future career fields. These partnerships foster possible career pathways and are described below (see community partners).

**Describe students' civic/community engagement projects integrating environment and sustainability topics. (Maximum 200 words)**

Science classes at Kinard are actively collaborating with CSU on environmental and climate change education as part of NASA and NSF grant opportunities. In addition, environmental science curriculum and concepts in sustainability are integrated into theme-based units across all grade levels at Kinard. Our curriculum connects the CDE state standards to important community issues regarding air quality, water quality, alternative energy, and erosion through the use of Project Based Inquiry Science books (PBIS). We have also integrated elements of STEM into our whole-child, core knowledge curriculum package with courses in math, technology, and science elective courses. Kinard C.A.R.E.S. is a class of student leaders who focus on Community – Action – Results – Environment - Service. For more insight into these programs, please visit [www.kinardcares.com](http://www.kinardcares.com)

Student leadership classes at Kinard (Global Leadership, Kinard C.A.R.E.S. and the Wellness Team) engage with local community experts on a variety of topics throughout the school year. These powerful partnerships benefit both our school and the local organizations with whom we collaborate. These community connections also help to make learning relevant and meaningful to students who get to apply a variety of 21<sup>st</sup> century skills in working with civic projects.

**Describe students' meaningful outdoor learning experiences at every grade level. (Maximum 200 words)**

Students at Kinard have meaningful outdoor experiences at every grade level. Seventh grade students go on a learning walk and field trip to local water ecosystems to study water quality in nearby ponds. 8<sup>th</sup> grade electives in science allow for an opportunity to explore our school grounds through partnership with CSU and an NSF grant to study natural environments and collect data. Student leadership groups at Kinard get to participate in adventure travel programs. Our Global Leadership class takes a trip to Costa Rica to enrich

their cultural and environmental awareness every year. Kinard C.A.R.E.S. is another elective class that provides an opportunity for students to travel to Catalina Island, CA. to explore ocean ecosystems annually. In the past, students have also taken a field trip to Lory State Park in the foothills of Fort Collins to explore local geology and earth science concepts.

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

Kinard offers a variety of outdoor learning experiences to create real-world impact for students and the community. Students at Kinard have the opportunity to engage with nature to provide service-learning opportunities, enrich 21<sup>st</sup> century skills, and create real-world impact.

- Catalina Environmental Leadership Program, California
  - Service-Learning (ecological restoration)
  - Environmental/Adventure Education
    - Island Ecosystem Investigations
      - Ocean Kayak
      - Kelp Forest Snorkels
      - Tide Pools
      - Terrestrial Hikes
      - Garden and Organic Farming
      - Etc.
- Global Explorers
  - Environmental and Cultural Education in Costa Rica
    - Rain Forest Ecology
    - Organic Farming
    - Beach Clean Up – Plastics
    - Sea Turtle Habitats

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

Kinard has taken pride in establishing authentic partnerships with local communities and businesses to create real-world impact for students and the community. Students at Kinard collaborate with a variety of organizations to provide service-learning opportunities, enrich 21<sup>st</sup> century skills, and create real-world impact.

Our Partners:

- Colorado State University
  - College of Applied Human Sciences- Institute for the Built Environment
    - Collaboration to design our outdoor learning center
    - LENSES – development of sustainable/regenerative frameworks
  - College of Natural Sciences
    - Collaboration with CSU teacher in residence - Water conservation and data analysis
  - College of Business – Graduate program (MBA)
    - Student leadership pilot program
- Environmental Learning Center, Fort Collins
  - Collaboration regarding environmental education curriculum for use at both the ELC and

Kinard (outdoor education).

- City of Fort Collins
  - Alternative Energy Workshop
  - Clean Air Campaign
  - Service-Learning at Community Events
- Gallegos Sanitation, Inc.
  - Waste audit workshops and resource management education
- Colorado Association for Recycling (CAFR)
  - Students presented on the use social media to promote sustainable practices in business.
- Sunrise Ranch
  - Service-Learning, permaculture design, organic gardening
- High Plains Environmental Center
  - Organic Farming and Service
- Red Apple Recycling- Denver, CO.
  - Grant Funding
  - Guest Speakers

**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 innovative or unique practices and partnerships. (Maximum 200 words)**

Kinard has a competitive Science Olympiad team that participates in regional and state competitions every year. The science department at Kinard has also fostered the development of an annual science fair competition that competes for top prizes in the state every year at the Longs Peak Science and Engineering Fair. Lastly, Kinard's Robotics team also competes at high levels every year. Last year, the robotics team placed 1<sup>st</sup> in the state competition for mechanical design.

Poudre School District takes pride in writing a Sustainability Management System Report (SMS Report) every year. Kinard C.A.R.E.S. leadership students collaborate with Pete Hall and other district officials to formulate school goals that align with PSD's SMS Report. A copy of all annual reports can be seen at: <http://www.psdschools.org/facility-services/sustainability>

One of the most innovative and unique partnerships we have is with CSU's Institute for the Built Environment- an interdisciplinary research institute that engages faculty, students, and industry partners in healthy and sustainable building issues. Over the last four years, Kinard's leadership students have been collaborating with IBE and Brian Dunbar's graduate level students to develop frameworks for "whole school sustainability" and LENSES (a framework created to help project teams and communities reach beyond sustainable developments).

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

Yes  No

**Program(s) and level(s) achieved: ENERGY STAR certification, score of 100.**

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

Yes  No

**Awards(s) and year(s):**

The environmental leadership group, Kinard C.A.R.E.S. was recognized at the Colorado Environmental Leadership Awards in Denver, CO. with a Bronze Award for our school for our environmental leadership efforts in sustainability. See <http://kinardcares.com> for more details.

**Submit no more than 5 photos or up to 5 minutes of video content. Please describe what is submitted:**



Our beautiful building and some of our healthy students who take pride in our school and environmental leadership. The sign that they made represents four pillars: 1. Energy Conservation 2. No Waste in Nature 3. Biodiversity is Good 4. Everything's Connected



**Kinard has been recognized by the State of Colorado with a Bronze Achievement Award in the Colorado Environmental Leadership Program. We are one of four schools in the state who were honored with this recognition.**



**Student leaders at Kinard spread important environmental awareness across all grade levels in our school and other schools in the district.**



Students from Kinard are exposed to a variety of healthy outdoor learning projects that re-connect them with nature and the process of growing food.



Kinard students have taken an active leadership role in our building and in the community. This photo shows the resource management, recycling center that was built and maintained by student leaders in Kinard C.A.R.E.S. as well as the successful relationships that continue to be established with a variety of community partners.



Kinard offers a variety of outdoor education, service-learning adventure trips to help students live a healthy lifestyle, develop an appreciation of Earth's natural systems, and utilize important 21<sup>st</sup> century life skills.

**Video Footage** – The following video links contain footage that exceeds the maximum minutes allowed for this application. Please only watch the number of minutes advised for each link to stay within the criteria of the application.

- Interactive Building Tour Video - [https://www.youtube.com/watch?v=2dk\\_iz-XnOk](https://www.youtube.com/watch?v=2dk_iz-XnOk)
  - Please watch the first 45 seconds and then decide which additional footage to consider from the menu screen.
- Kinard C.A.R.E.S. Spreading Awareness - <https://www.youtube.com/watch?v=gGSCW4bBcJU>
  - Please watch the entire video (1:55)
- Kinard Middle School Video Showcase - <http://www.youtube.com/watch?v=3n-odph78fw>
  - Please watch the first 1:45 of this video, then disregard the remaining time.

### Kinard Natural Gas Greenhouse Gas Emissions





