



2013-2014 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 grades Pre-K-12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. 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.

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Vermont Agency of Education



JAN 23 2013

By: CB

U.S. Department of Education Green Ribbon Schools 2013-2014

Charter Title I Magnet Private Independent

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

Official School Name Camels Hump Middle School
(As it should appear on an award)

School Mailing Address 173 School Street
(If address is P.O. Box, also include street address.)

Richmond VT 05477
City State Zip

County Chittenden State School Code Number* PS058

Telephone (802) 434-2188 Fax (802) 434-2192

Web site/URL www.chms.k12.vt.us E-mail mark.carbone@cesvt.org
Suzanne.groendling@cesvt.org

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

[Signature] Date 1/16/14
(Principal's Signature)

Name of Superintendent* Mr. John R. Alberghini
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

Chittenden East Supervisory Union,

District Name* Mount Mansfield School District Tel. (802) 434-2128

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.

[Signature] Date 1/16/14
(Superintendent's Signature)

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

US Department of Education
Green Ribbon Principal's Narrative
Camels Hump Middle School

Introduction:

Camels Hump Middle School has a strong focus on creating and maintaining a sustainable and healthy school for students and staff. Camels Hump has made great gains in making an efficient school with healthy air quality, thermal comfort and well-designed lighting while drastically reducing the cost to provide these services. Camels Hump actively promotes and practices a rich education that includes a focus on the environment, renewable energy, nutrition and wellness. CHMS also benefits from successful partnerships with agencies that support the environment and the health of students. Students can be found on Lake Champlain research vessels, local farms, river shore preserves, wildlife refuges and granite quarries for effective hands on environmental education. Camels Hump has built effective partnerships to collaboratively engage students in the environment, health and education.

Effective Sustainability curriculum:

CHMS promotes sustainability and sustainability education by actively. Students at Camels Hump participate in many field experiences as a part of the curriculum that include investigations of the Lake Champlain Basin Watershed, research on a flood plain forest, a river shore preserve, an ecological trip to the Northeast Kingdom focused on migration and tracking, trips to local geology sites and numerous local farms. Students continue to have experiences at the Audubon Center, Green Mountain Composting, the Chittenden Solid Waste District, and the Vermont Youth Conservation Corps Monitor Barn. Sustainability partnerships include a longstanding partnership with the Vermont Reptile and Amphibian Atlas project where students collect data for statewide research. While using the environment as a platform for students to learn as scientists, students track the migration of amphibians and analyze human impact on the population. Students also participate in amphibian crossing events during the night in the spring to record spring breeding migration data.

As members of a rural community with significant farm land, students study the human impact of farming and focus on effective nutrient management strategies that lessen the environmental impact of farm run off into the Winooski River and Lake Champlain basin.

Energy Efficiency and Green Facilities:

CHMS green school practices are widespread and varied throughout the facility. In the Fall of 2011 CHMS through a partnership with Green Mountain Power and Senator Sander's office, installed a 507 panel rooftop solar array. This array produces a savings of \$25,000 a year and covers approximately 25% of the schools electric costs. "Thank you for what you are doing. Your school is doing something no other school is doing in Vermont, you are leading the way." Senator Bernie Sanders at an assembly with students, November 2011.

CHMS primarily heats the building using a biomass heating unit purchased through a Vermont company and uses Vermont wood chips. With particular attention to insulation and heat loss,

CHMS heats at a cost of \$0.31 per square foot which is below the state of average of schools heating with wood and creates a 62% savings over heating entirely with fossil fuels which results in a \$45,000 a year savings for the school district. Comparable fossil fuel cost would be \$72,000 a year while CHMS uses approximately \$27,000 in wood chips. In addition, revamping electrical needs and lights resulted in reduction from 681,000 kw / year to 215,000 kw / year usage.

Students learn daily about the energy savings from the solar array through kiosks in the building which show real time how many kilowatts are being produced, cumulative over time and the energy saved equivalence to a gallon of gasoline. Students also see over time the total number of pounds of sulfur oxide offset.

Student Health Wellness and Nutrition:

This year we have also been hard at work on our new partnership with the UVM Extension service on a program called PROSPER. Through this program we will work to strengthen families and encourage positive behavior through helping families communicate effectively about stress, peer pressure and avoiding drugs and alcohol. Students' wellness at Camels Hump is a focus not only projects and initiatives but every day activities that keep staff, students and families well. There are a variety of activities for students to engage in, and during the cold Vermont winter, CHMS maintains and outdoor ice skating rink with ample availability of skates and we enjoy a high number of active outside students throughout the day and afterschool. Camels Hump actively identifies families in need and attempts to supplement available resources for families items such as "break boxes" to ensure students have adequate nutrition while school is not in session.

The foodservice director at Camels Hump focuses on nutritional and seasonal recipes and actively works with the Vermont Food Education Every Day program. The food program focuses on the Vermont Harvest calendar, scratch cooking and ways to make local food affordable. Students participate in the school garden, use the garden to make food in Health and Nutrition class and assist in harvesting food to be served in the cafeteria. Also, students compost all food in the cafeteria and learn how to separate food for effective composting for the environment.

Camels Hump Middle School in Richmond, Vermont is an amazing place to work, grow and learn. CHMS instills in students a lifelong practice of health, productivity and green practices.

Group photo of students at Whitcomb Farm in North Williston learning about nutrient management programs and water quality of the Winooski River and Lake Champlain Basin

Kirsten Workman from UVM extension talking about growing cover crops to hold nutrients on the farm to make farms more sustainable and protect Lake Champlain





120 State Street, Montpelier VT 05620-2501
(p) 802-828-3135 | (f) 802-828-3140

STATE OF VERMONT EVALUATION OF NOMINEE #2

CAMELS HUMP MIDDLE SCHOOL (CHMS)

In the shadow of Vermont's iconic Camels Hump mountain, CHMS has the distinction of being one of Vermont's shining examples of fossil fuel reduction. 30% of the school's electricity and 90% of its heat are generated on-site using renewable resources. Administrators and students leverage CHMS's high-profile energy stewardship into learning opportunities by partnerships and events with the University of Vermont (UVM), Green Mountain Power, Chittenden Solid Waste District, the Audubon Center, and other agencies.

Pillar #1: Score 85%

Like the other two VT nominees, CHMS was named one of Vermont's first Energy Star schools in 2013. CHMS has made a significant investment in both renewables and energy efficiency. The woodchip heating system, installed in 1992, heats the building at approximately 65% lower cost than would fuel oil. When the 116 kW solar array was installed, it was the biggest on a VT school at the time, we believe the biggest on any building in the state. CHMS replaced aging electric transformers, redesigned the electricity distribution system, and used a zero-interest Qualified School Construction Bond to fund a lighting efficiency project that reduced the connected load in the building by 33%.

Pillar #2: Score 84%

In addition to being a renewable energy superstar, CHMS is Vermont's highest-scoring applicant in Pillar #2. All 370+ students participate in physical education classes at least twice weekly, with almost 50% of classes held outside. Notable physical education components of CHMS include a student/faculty running club of more than thirty people who run legs of the Vermont City Marathon and an outdoor ice skating rink also available for recess and after school use from December through March. The creative, rich curriculum of required Health class includes second-hand smoke, body art safety, and pesticide use as well as nutrition, fitness, and the societal health benefits of locally-grown food from family farms. CHMS was named a VT Fit and Healthy School in 2011 and in 2013 received the VT Dept. of Health School Wellness Recognition award.

Pillar #3: Score 63%

Kiosks in the school lobby provide students a continuous real-time window into the solar energy being produced and used on site, and classes study the carbon-neutrality of the school's biomass heat plant designed and installed by a Vermont company and fueled with Vermont-harvested wood chips. In the first six weeks of the current school year, sustainability curriculum drove such experiences as UVM-led investigations of the Lake Champlain watershed, research in a flood plain forest, a river shore preserve, and trips to numerous farms and a local geology site. The strength of CHMS's STEM curriculum is evidenced by consistently-strong assessment results, a competitive robotics club, and a program of eighth graders tutoring local elementary school students in science and mathematics topics. #end



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 Pre-K-12. (Schools on the same campus with one principal, even a Pre-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 VERMONT AGENCY OF EDUCATION

Name of Nominating Authority Ms. Catherine M. Hilgendorf
(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.

CM Hilgendorf Date 1-29-14
(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.

View Summary

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Response Type:
Normal Response

Collector:
VT ED-GRS 2014 Application
(Web Link)

Custom Value:
empty

IP Address:
65.19.74.209

Response Started:
Wednesday, December 4, 2013 8:19:55 AM

Response Modified:
Monday, December 9, 2013 10:02:07 AM

1. Vermont School Name and Address

School Name: - Camels Hump Middle School
 Address: - 173 School Street
 City/Town: - Shelburne
 ZIP: - 05482
 Email Address: - suzanne.gruending@cesuvt.org
 Phone Number: - 802-434-2188

2. School Principal :

Name: - Mark Carbone
 Phone: - 802-434-2188
 Email Address: - Mark.Carbone@cesuvt.org

3. Primary Contact Name (if different):

Name: - Suzanne Gruending
 Phone: - 802-434-2188
 Email Address: - suzanne.gruending@cesuvt.org

4. Primary Contact Phone:

802-434-2188

5. Primary Contact Email:

suzanne.gruending@cesuvt.org

6. School Type

Public

7. School Level:

Middle (6-8 or 9)

8. Enrollment Information:

Total School Enrollment: - 374
 School District Name: - Chittenden East School District
 School District Total Enrollment: - 2651

9. Total District Enrollment:

2651

10. Does your school serve 40% or more students from disadvantaged households (40% Free or Reduced-price Lunch (FRPL) eligibility)

No

11. What is the % of students receiving FRPL?

25%

12. Please provide a 500-word maximum narrative describing your school's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships. This is your chance to put your "best foot forward" and highlight your most stand-out "green" accomplishments.

Camels Hump Middle School has a strong focus on creating and maintaining a sustainable and healthy school for students and staff. Camels Hump has made great gains in making an efficient school with healthy air quality, thermal comfort and well designed lighting while drastically reducing the cost to provide these services. In addition, Camels Hump students receive a rich education that includes a focus on the environment, renewable energy, nutrition and wellness. CHMS also benefits from successful partnerships with agencies that support the environment and the health of students. In the first 6 weeks of this school year, students at Camels Hump had participated in many field experiences as a part of the curriculum that included investigations of the Lake Champlain Watershed with UVM, research on a flood plain forest, a river shore preserve, a 3 day ecological trip to the Northeast Kingdom, trips to local geology sites and numerous farms. Students also had experiences at the Audubon Center, Green Mountain Composting and the Chittenden Solid Waste District. Daily students participate in the school garden, use the garden to make food in Health and Nutrition class and assist in harvesting food to be served in the cafeteria. Also, students compost food as well as monitor the energy produced through our solar array through two real time kiosks in the school. In the Fall of 2011 CHMS celebrated the installation of our solar array. "Thank you for what you are doing. Your school is doing something no other school is doing in Vermont, you are leading the way.", Bernie Sanders at an assembly with students, November 2011. CHMS through a partnership with Green Mountain Power and Senator Sander's office installed a 507 panel solar array. This array produces a savings of \$25,000 a year and covers approximately 25% of the schools electric costs. CHMS primarily heats the building using a biomass heating unit purchased through a Vermont company and uses Vermont wood chips. With particular attention to insulation and heat loss, CHMS heats at a cost of \$0.31 per square foot which is below the state of average of schools heating with wood and creates a 62% savings over heating entirely with fossil fuels which results in a \$45,000 a year savings for the school district. Comparable fossil fuel cost would be \$72,000 a year while CHMS uses approximately \$27,000 in wood chips. In addition, revamping electrical needs and lights resulted in reduction from 681,000 kw / year to 215,000 kw / year usage. This year we have also been hard at work on our new partnership with the UVM Extension service on a program called PROSPER. Through this program we will work to strengthen families and encourage positive behavior through helping families communicate effectively about stress, peer pressure and avoiding drugs and alcohol. This is all part of why Camels Hump Middle School in Richmond, Vermont is an amazing place to work, grow and learn.

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

Yes, please list award(s) and year(s) achieved: - Vermont Energy Star School 2013 Vermont Department of Health School Wellness Recognition 2013 Fit and Healthy School 2011

14. Can your school demonstrate a reduction in energy use for space heating?

Yes

\$45,000 per year.

15. What was the before and after use for electricity during the time period identified in question 14?

Before kWh/year - 538,000 / year

After kWh/year - 215,000 / year

16. What type of fuel is used for water heating (if not included with space heating fuel)

Fuel Type - Wood chip (winter) Natural Gas (summer)

Previous - Electricity

Current - Wood chip

17. Please describe student involvement in the reduction of any type of fuel use (be specific). Max. 300 words.

Student education on BioMass plant and renewable energy. Students in addition learn about renewable sources of energy and can actively monitor the schools energy use and production of solar energy through two wall mounted kiosks that provide information on the real time amount of energy being produced by the roof mounted solar array.

18. Has your school received an Energy Star rating using Portfolio Manager?

Yes, what was the rating: - Energy Star Award School

19. Describe any quantifiable energy impacts on building as a result of changing student enrollment over past 10 years, including conscious steps taken to consolidate for optimum efficiency. (max. 30 words)

No change in enrollment.

**20. Has your school participated in energy-efficiency programs through Efficiency Vermont??
Examples: RELIGHT design program, Whole School Energy Challenge, lighting retrofit rebates**

Yes, please list program(s) date(s), results of each, and any rebates received. - CHMS has worked with Efficiency Vermont to Relight the music area as well as relighting of the gym lights at a significant savings. Efficiency Vermont was also an active participant in the Solar Array installation project and a complete revamping of costly old electrical panels.

21. Has your school had an Energy Assessment from the Vermont Superintendents Association's School Energy Management Program (SEMP) within the last three years?

Yes

22. Has the school implemented any of the following measures as recommended by SEMP?

	Yes	No
Lighting retrofit	X	
Building envelope improvements	X	
Upgrades to building system controls	X	
Heating plant improvements	X	
Created a written Facilities Operating Plan	X	
Other : Facilities Plans by CESU Facility Committee.		

**23. What other energy efficiency programs or benchmarks has your school participated in?
Please list: Name of Program, Year(s), and score(s) or award received.**

No Response

24. Does your school use any on-site renewable energy? (ex: solar, geo-thermal, wind)

Yes. Please list type of on-site renewable energy? - Solar / Woodchips

25. What percentage of your school's energy is obtained from this on-site renewable energy generation?

Heat: approximately 95% Electricity: 30%

26. Does your school use purchased renewable energy? (ex: wood chips, wood pellets, purchased solar power)

Yes. Please list type of purchased renewable energy: - Wood Chips

27. What percentage of your school's total energy used is obtained from the purchased renewable energy source(s)? (Include clarifying info as needed.)

90-95%

28. Has your school district constructed or renovated building(s) in the past ten years?

No

29. If Yes, Has your school been built or renovated in accordance with LEED standards or NE-CHPS certification protocol?

No Response

30. Does your school building include the following "green" features/components?

	No	Yes
Operable room occupancy sensors		X
Vend-misers installed on vending machines		X
High performance T8 lamps and electronic ballasts		X
HVAC ductwork is externally insulated and is cleaned following extensive renovations		X
Stoves/ovens, coffeemakers, refrigerators, and portable electric heaters are prohibited from classrooms		
Fossil fuel powered mobile machinery is not used inside the building		X
Daylight-maximizing features such as light shelves, clerestory windows, skylights,	X	
Walk-off mats, grates, and grills at all active entrances, including playground-to-classroom entrances		X
At least 90% of building is not air-conditioned		X
Variable frequency drives		X
Heat/energy recovery ventilation		X
Other (please specify):		

31. How often are HVAC filters replaced?

Monthly

32. Are alternate water sources used for irrigation (i.e. watering of grounds, fields, and gardens)? Please choose all that apply

No irrigation on site

33. Is the drinking water source protected from potential contaminants, including lead?

Camels Hump Middle School is served by town water which is protected from lead.

34. Chromate copper arsenate is most often found in pressure-treated wood. Has your school identified and removed any wood playground, bleachers, or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure?

Yes

35. Does your school operate a composting program for food and landscaping waste?

Yes

36. Does your school operate a recycling program for:

No Yes

Classroom and office paper	X
Plastics	X
Other	
Comments:	

37. Has your school implemented any of the following transportation elements?

	No	Yes
Designated carpool parking stalls and secure bicycle storage.		X
Carpools or vanpools for sporting events		X
A well-publicized no idling policy that applies to all vehicles (including school buses)		X
Enforcement of the VT State Board of Education Rule 6000 prohibiting bus idling on school grounds		X
Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows		X
An efficient transportation plan designed to reduce its environmental impact		X
Become a partner with Vermont Safe Routes to School (if yes, please indicate current level of partnership in the comments section below)		X
Comments (please limit to 80 words):		

38. Is the school building regularly tested for radon gas?

No

39. Is the school building regularly tested for mold?

No

40. Is the school building equipped with carbon monoxide (CO) monitors/alarms?

Yes

41. Does the school nurse encourage parents to use the Vermont Asthma Action Plan?

Yes

42. Has your school enrolled in Vermont Dept. of Health's Envision Program?

No

43. Vermont green cleaning legislation took effect 7/1/12. Has your school informed staff of the requirement to use "environmentally preferable cleaning products" as described in Vermont Dept. of Health's Envision Program?

Yes

44. What percentage of all cleaning products ON HAND as of 9/1/2013 were certified as environmentally-preferable?

80%

45. What is your school's procurement method for cleaning products?

Other distributor(s) (please list) - Purchased by MMU School District.

46. Describe any unique or innovative policies, practices, and/or partnerships that protect and/or promote improved environmental health for students and/or staff. (100 words max)

CHMS has a strong focus on encouraging environmental health for both students and staff. Health classes include education on environmentally safe practices as well as general wellness and nutrition. Students in 7th grade have many field experiences through partnerships with UVM's extension service to learn about the human impact on Lake Champlain as well as natural crop systems that filter nutrients and the effect on environmental health.

47. Does your school have an active School Health Team or Coordinated School Health Team?

Yes (go to question #48)

48. If you answered Yes to Question #47, has your School Health Team or Coordinated School Health Team used the School Health Index to conduct self-assessment and planning?

No

49. Does your school have an active School Wellness Policy that is implemented, monitored, and evaluated on a regular basis?

Yes - Please email the policy to lindsay.simpson@state.vt.us or list web link in the box below - CESU Policy

50. Has your school applied for the USDA's Healthier US School Challenge?

Yes - Please list level and year: - 2013

51. Does your school participate in a Farm to School program to use local, fresh food?

Yes

52. Does your school have an on-site food garden?

Yes

53. Are K-8 students required to take physical education class?

Yes, please describe the schedule: - Two 50 minutes classes per week.

54. Are high school students required to take physical education to graduate?

N/A

55. What proportion of physical education (K-12) takes place outside?

25-49%

56. Are K-8 students required to take health education (separately from P.E.)?

Yes, please describe the required schedule: - CHMS is a 5th - 8th grade school that requires students to take Health class each year three times a week for one trimester.

57. Are high school students required to take health education to graduate?

N/A

58. Is health education taught by a VT licensed health educator?

Yes

59. Describe any unique or innovative policies, practices, and/or partnerships to improve nutrition and fitness for students and/or staff. (100 word max)

At CHMS you will find a wide variety of students and staff engaged in fitness activities or nutrition education. CHMS runs a year long after school intramural program to help students stay fit and active. A unique feature of CHMS is the installation of an outdoor ice skating rink that weather permitting provides ice skating at recess and after school from late December to mid March. CHMS also has a staff running team that last year included 23 adult runners and 10 student runners that ran legs of the Vermont City Marathon.

60. Please identify a contact person who could provide additional information about your school's environmental and sustainability curriculum?

Name/Title: - Mark Carbone

Telephone: - 802-434-2188

Email Address: - mark.carbone@cesuvt.org

61. To what extent does your curriculum address the following VT Agency of Education Standards across all content areas in your school's curriculum?

Note: The referenced Standards are part of Vermont's Framework of Standards and Learning Opportunities and Science Grade Expectations

	Never (not addressed)	Seldom (only a few classes/courses)	Sometimes (generally addressed in most courses)	Often (addressed in all classrooms)
Vital Results Standard--Sustainability(3.9)			X	
Vital Results Standard-- Sense of Place within the Environment (4.6)			X	
Grade Expectations--Ecosystem Dynamics (GEs 30-37)			X	
Grade Expectations--Natural Resources and Agriculture (GE 50)			X	
Next Generation Science Standards - Ecosystems (2-LS2,5-LS2, MS-LS2, HS-LS2)			X	
Next Generation Science Standards - Earth and Human Activity (4-ESS3, MS-ESS3)			X	
Comments:				

62. To what extent are the following topics/practices integrated into your school's curriculum?

	Daily	Weekly	Monthly	Quarterly	Once or Twice/Year
A. Meaningful outdoor learning opportunities at every grade level to teach an array of subjects. In the comments box below, please list the name of an educator we can contact.		X			
B. Sustainability and environmental experiences as a context for learning science, technology, engineering and mathematics (STEM) thinking skills and content knowledge. Reference a specific example in the comments box below.		X			
C. Sustainability and environmental learning as a context for addressing green technologies and career pathways. List an example related to career exploration in the comment box below.		X			
D. Regular Safety Procedures in the storing, re-evaluation and disposing of laboratory chemicals		X			
E. Civic/community engagement projects integrating environment and sustainability topics		X			
Cite example in comment box below					
Please list the name of an educator and specific examples of the above, referencing A,B,C,D, or E above.: A/E: Ralph Hyland: EcoColumns, Eco system fieldtrips to Lake Champlain watershed. Sandra Fary and Gerry Feenan: Farm nutrient management programs, eco brook work with UVM Watershed Alliance, Human Impact on Water Quality, animal tracking, invasive species, species migration. Dan Hamilton: Geology experiences at local geology sites as well as Lessor's Quarry and Rock of Ages. Rebecca Thompson: Sustainable Farming B/C/D/E: Deborah Higgins: Students experiences with alternate energy, trips to Essex Treatment Plant, Wind Energy and geothermal effects on the environment. Philip Peterson: Partnerships with 8th graders teaching RES 4th graders on STEM topics. Engineering Club, Robotics Club. Sandra Fary Citizen Scientist Award Nominee: Fary leads field trips to the Winooski River, where students have mapped out trails, identified tree and animal species and worked with the Nature Conservancy in Richmond and the Richmond Land Trust to learn about the environment. In the past three years, Fary's students have been trying to save a silver maple-ostich fern floodplain forest on the bank of the river from invasive plants. (Burlington Free Press April 2011)					

63. What evidence can you provide of students' successful learning of environmental and sustainability concepts in your school? Please describe. (e.g. assessment results, AP Environmental Science course participation and results, design engineering projects, other).

Engineering Club has participated in Robotics and Engineering Competitions. Students generalize the information they have to successfully build their knowledge at the next grade level. Countless projects from the above experiences that detail students' accomplishments in learning about the environment and sustainability concepts. Data from recycling and composting initiatives.

64. Please describe assessment results related to question #63.

CHMS continues to score in the top of all schools in Vermont on the NECAP Science Assessments.

65. Please detail the ongoing professional development training and support around environmental and sustainability learning for teachers in your school? Please list specific PD events, description and frequency.

Strong focus on common core work integrated into Science to include informational text, claims and evidence and short focused research as well as the Common Core Math Practice Standards.

66. What evidence can you provide that the district-wide sustainability curriculum is resulting in changes in how students treat and respect the environment? Please describe.

Students willingness to participate in eradicating invasive species, tracking species migration and actively seeking information on the Lake Champlain watershed, flood plains and river shore preserves.

67. Please provide a website or other location where your school's curriculum is available.

<http://www.cesu.k12.vt.us/>

68. In the space provided please share any additional information that exemplifies the strength and breadth of the environmental and sustainability educational program in your school.

No Response

Ryan, Cassandra

From: Gruending, Suzanne <suzanne.gruending@cesuvt.org>
Sent: Tuesday, December 10, 2013 12:34 PM
To: Ryan, Cassandra
Subject: Re: With attachment this time

All correct but the final question is blank and should have the following:

Students in grades 5-8 are exposed to the following topics throughout the health curriculum with Rebecca Thompson:

- **Air quality, including both ambient outdoor air and indoor air quality, which also comprises concerns about environmental tobacco smoke. This year students are creating table tents to use on tables in the cafeteria for parent nights.**
- **Body art safety, including tattooing, body piercing and permanent cosmetics.**
- **Climate change and its effects on health.**
- **Disaster preparedness and response.**
- **Food safety, including in agriculture, transportation, food processing, wholesale and retail distribution and sale. Food safety portion in 7th grade, the transportation and processing/distribution in 8th grade**
- **Hazardous materials management, including hazardous waste management, contaminated site remediation, the prevention of leaks from underground storage tanks and the prevention of hazardous materials releases to the environment and responses to emergency situations resulting from such releases.**
- **Housing, including substandard housing abatement and the inspection of jails and prisons.**
- **Childhood lead poisoning prevention.**
- **Land use planning, including smart growth.**
- **Liquid waste disposal, including city waste water treatment plants and on-site waste water disposal systems, such as septic tank systems and chemical toilets.**
- **Medical waste management and disposal.**
- **Noise pollution control.**
- **Occupational health and industrial hygiene.**
- **Solid waste management, including landfills, recycling facilities, composting and solid waste transfer stations.**
- **Toxic chemical exposure whether in consumer products, housing, workplaces, air, water or soil.**
- **Vector control, including the control of mosquitoes, rodents, flies, cockroaches and other animals that may transmit pathogens.**
- **7th Grade - sustainability and farming, 8th grade - Environmental impact of feed lots versus family farms, and pesticide use.**