U.S. Department of Education  
Green Ribbon Schools 2012

For Public Schools only: (Check all that apply)  [ ] Charter  [X] Title I  [ ] Magnet  [ ] Choice

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

Official School Name  Ewa Makai Middle School  
(As it should appear in the official records)

School  
Mailing Address  91-6291 Kapolei Parkway  
(If address is P.O. Box, also include street address.)  
Ewa Beach  Hawaii  96706

City  State  Zip

County  Honolulu  State School Code Number*

Telephone  (808) 687-9500  Fax  (808) 685-2052

Web site/URL  www.ewamakai.org  E-mail eoshiro@ewamakai.org

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4, and certify that to the best of my knowledge all information is accurate.

(Principal’s Signature)  
Date  March 22, 2012

Name of Superintendent*  Ms. Kathryn S. Matayoshi  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name*  Hawaii State Department of Education  
Tel. (808) 586-3340

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4, and certify that to the best of my knowledge all information is accurate. I concur that this is one of the highest performing green school applicants in our state.

(Superintendent’s Signature)  
Date  March 22, 2012

*Private Schools: If the information requested is not applicable, write N/A in the space.
toward the three Green School Pillars and Elements.

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

Name of Nominating Agency: Hawaii State Department of Education

Name of Nominating Authority: Ms. Kathryn S. Matayoshi

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

I have reviewed the information in this application, including the award and eligibility requirements on pages 2-4, and certify, to the best of my knowledge through a documentary verification assessment, that the school meets the provisions in this Part of the Nominee Presentation Form.

Date March 22, 2012

(Nominating Authority’s Signature)

Note to Nominating Authority: The application, including the signed certifications and documentation of evaluation in the three pillars should be converted to a PDF file and emailed to Director, ED-Green Ribbon Schools at green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

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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.
Ewa Makai Middle School – Introduction of the school

Ewa Makai Middle School is a new school, built to LEED® Gold standards. The school campus opened to students at the beginning of the second semester of School Year 2010-11. Its SY 2011-12 enrollment is 773, with the following breakdown of the free and reduced-price meal students:

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly certified free</td>
<td>92</td>
<td>11.9%</td>
</tr>
<tr>
<td>Free per application for F/R meals</td>
<td>116</td>
<td>15.0%</td>
</tr>
<tr>
<td>Reduced price per application for F/R meals</td>
<td>96</td>
<td>12.4%</td>
</tr>
<tr>
<td>Subtotal F/R</td>
<td>304</td>
<td>39.3%</td>
</tr>
<tr>
<td>Total enrollment</td>
<td>773</td>
<td></td>
</tr>
</tbody>
</table>

Approximately 7% of the students have limited English language proficiency.

Student ethnicity for School Year 2010-11 (self-reported by students) was:

Filipino 38%
Native Hawaiian 22%
White 11%
Japanese 4%
Black 4%
Mixed 9%
All other 12%

The school is located in a relatively new subdivision of the suburban community of Ewa Beach on the island of Oahu. The school serves the communities of Ewa, Ocean Pointe and Ewa Beach, and has a diverse student population. Ewa is a former sugar plantation town. The sugar mill closed in the 1970s, and the Ewa community has expanded with a mix of single family homes and townhomes. Ocean Pointe is a newer development of single family homes and townhomes that began in the 1990s and continues today. Ewa Beach is mostly older tract homes built in the 1950s and 1960s.

Ewa Makai Middle School is one of two grade 7-8 schools serving the greater Ewa Beach community. Planned for grades 6-8, funding was not sufficient to build the school as envisioned. A third wing, to house 6th graders, is designed and ready to build when funding is available.

Designed to LEED® Silver standards, the school had sufficient LEED® points to qualify for and was certified by the U.S. Green Buildings Council as LEED® Gold. Unlike most newer schools in Hawaii, which are multiple buildings for different uses, Ewa Makai is constructed under one roof and core team teachers are located in their grade level “neighborhood.” All classes are located in close proximity. Teachers in interdisciplinary teams share common students to provide a nurturing learning environment to foster positive relationships. The faculty and staff are committed to provide quality student support to meet the unique needs of every student.
Ewa Makai Middle School has a strong academic core program, thriving arts program and progressive athletics program. The school implements standards-based instruction in all content areas focusing on literacy and numeracy. Students are challenged with rigorous courses of study that prepares them for high school, post-secondary education, and careers. Co-curricular programs include Robotics, Science Club, Science Olympiad, State Science Fair, Leeward Young Artist Competition, Scholastic Art Award Competition, EMMS Media Co. Hiki No, Farmers Hawaii and American Diabetes Association video contest, Eddie Aikau Essay Contest Finalist, Senate Education Hearing for Students, National and State History Day Competition finalist. In SY2011-12 the school is implementing its first year of the Advancement via Individual Determination (AVID) program which implements best practices to open access to rigorous curriculum for all and focus on college readiness. To further develop the skills and attitude for college and career readiness the school will emphasize the 7 Habits of Highly Effective Teens. Science, Technology, Engineering, and Math (STEM) skills are emphasized through studies in robotics and aquaponics and the school is working toward implementing 3D Computer Assisted Design. Teachers utilize technology to aid in student learning. All classrooms are equipped with interactive SMART Boards and students have access to online library books and textbooks, as well as traditional hardcopy books. As Hawaii’s first public school ‘green’ campus, the school emphasizes a philosophy to reduce, reuse and recycle. Consequently, our student body president submitted resolution, SCR33 Green Hawaii Program promoting the implementation of at least five “green” initiatives in all public schools by SY2015-16. Senate Education Committee heard on March 16, 2012 at the State Capitol. The Senate Education Committee is contemplating amending the resolution into a bill. As a LEED® Gold project, the school was designed with air conditioning and natural day lighting design for energy conservation.

School address: 91-6291 Kapolei Parkway, Ewa Beach, HI 96706

School website: www.ewamakai.org

Principal: Edward Oshiro
eoshiro@ewamakai.org
808-546-9988

Lead applicant: Vanessa Kealoha
vkealoha@ewamakai.org
808-687-9513
Ewa Makai Middle School – summary of achievements

Ewa Makai Middle School opened to students on its new campus in January 2011. The Hawaii Department of Education has been notified by the U.S. Green Building Council that it will be certified LEED® Gold.

Ewa Makai follows the recommendations of the LEED® for Existing Buildings recommendations and the Hawaii DOE Superintendent’s Memo on “General Fund spending Restrictions, dated 7/18/2011, which provide:

1. All appliances (refrigerators, microwave ovens, toasters, coffee makers, rice cookers, etc.) in classrooms and offices should be Energy Star-rated appliances.
2. Personal appliances should be limited to no more than one of each on each floor of a building. Other personal appliances shall be removed immediately.
3. Purchase or lease only Energy Star-rated computers, copiers, printers, and servers.

100% of computer purchases are of EPEAT Gold-highest certification.

We dispose of our unwanted computer and electronic products using the STATE OF HAWAII ELECTRONIC DEVICE RECYCLING PROGRAM.

100% of cleaning products are green.

Our custodial practices are based on a green program provided through one of our vendors. All custodians have gone through this training that involved watching a video and written exams in which they were rated. Each custodian was issued a laminated reference guide of the training and is to be kept on their cleaning carts for easy access. The school staff is aware of the green products used by the custodians seen through observations.

Our custodial program has been certified by the ISSA Cleaning Industry Management Standard - Green Building.

60% of the school waste, including vegetables, fruit, whole wheat bread, and grass clippings, is composted using vermi-composting worm bins, Soldier Fly Larvae proto pod, and composting barrels. The fertilizer are used to enrich gardening soil, as mulch, and sprinkled around trees on campus.

20% of the waste is sorted and recycled, 20% is composted and only 40% is sent to the landfill or incinerator.

Instead of standard golf carts used for maintenance or deliveries on campus, the staff uses adult tricycles for deliveries and maintenance purposes.

Gold LEED® Certification Design Features of Ewa Makai Middle include:

b. designated parking for low emitting and fuel-efficient vehicles
c. use of pervious concrete for site drainage
d. excess water drains naturally into the ground below. This prevents the buildup of surface drainage.
e. Light sensors for energy efficiency
f. Solar tubes, skylights, and skylight pyramids.
g. Clerestory windows, day-lighting & light shelves
h. Low flow plumbing fixtures
i. Use of recycled materials during construction.
j. Use of the school structure is used as a learning tool in the following ways:
   i. Courtyards are used for:
      a. environmental learning
      b. service learning
      c. project based learning (container gardens & aquaponics)
   ii. Neighborhoods (common areas) are used for:
      a. collaborative student learning
      b. project demonstration
   iii. The "robotics" room is used to house equipment & supplies for student explorations in STEM initiatives, science/math club meetings, robotics programming & construction, Science Olympiad Challenges, and 3D Modeling. Additionally certain SFPT activities are conducted in this room due to close proximity to classrooms, SmartBoard, and document camera.
   iv. Whole Team (150 students) special events (guest speakers) are accommodated by opening folding doors to join 3 classrooms.
   v. Students in Leadership 7th,8th grade lead tours and deepen their understanding of the LEED features of this building, and further their public speaking skills as they led parent and community tours. They also research, report, produce, record and edit videos featuring the specs and green initiatives at EMMS.

The school uses a computer-based physical fitness assessment that tracks and records trends based on the students' physical activity. The program "Fitness Gram," also generated recommendations to improve their overall health and fitness level.

The school partners with a variety of community groups to promote student health and fitness and offers the following programs to students and/or staff:

i) Free Zumba classes for the staff Bi-weekly
ii) Fully equipped gym and dance room open to staff before and after school hours.
iii) Great Aloha Run staff participants: Teachers and staff members run together after school on campus to prepare for the 8K charity Aloha Run.
iv) UPLINK after school program for students include the following from 3:30 pm-5:30 pm:
      Basketball, Cross Country, Strength Agility and Conditioning, Soccer, Hip-hop dance, Zumba, Ultimate Frisbee, Basketball Clinic, Drama, Hula, Band, Green Club, Garden Club, PALS basketball
v) ISA (Inter School Athletic Meets with Leeward District-monthly) for all Middle School students: Track and Field, Girl's/Boy's Volleyball/Basketball/Softball/Bowling.

100% of staff and students participate in cleanliness and healthy practices: Please see ewamakai.org website for more safety and health rules. Signs and reminders are posted throughout the staff restrooms, student restrooms, locker rooms, cafeteria, kitchen, health room, staff lounges and sink areas. Healthy practices and notes from the Department of Health are promoted throughout the daily bulletin for staff and students, (i.e. wash your hands after using the restroom, and cover your mouth and nose when sneezing and coughing).
<table>
<thead>
<tr>
<th>Element 1A: Zero greenhouse gas (GHG) emissions</th>
<th>Max points</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A1. Energy Star certification: yes = 5; no certification = 0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>1A2. Reduction in non-transportation energy use: &gt;5% = 5, 0-5% = 3, none or n/a = 0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>1A3. Percentage of renewable energy (total onsite and purchased): &gt;5% = 5, 0-5% = 3, none = 0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1A4. Percentage of bids area built within the last 3 years meeting LEED or other standards:</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 60% = 5, 50-59% = 4, 35-49% = 3, 20-34% = 2, 10-19% = 1, &lt;10% or n/a = 0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1A5. Percentage of total existing bids area meeting LEED Existing Building or other standards:</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 60% = 5, 50-59% = 4, 35-49% = 3, 20-34% = 2, 10-19% = 1, &lt;10% or n/a = 0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1A6. Percentage reduction in GHG emissions: &gt;20% = 5, 15-19% = 4, 10-14% = 3, 5-9% = 2, 1-4% = 1, none = 0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Use of offsets for GHG emissions: any = 5, no = 0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>1A7. Implementation of Facility Energy Assessment Matrix: yes = 5, none = 0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Assessment of building(s) using Portfolio Manager: yes = 5, no = 0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1A8. Percentage by cost of furniture purchases certified under Business and Institutional Furniture Manufacturers Assn's &quot;level&quot; ecocert: &gt;50% = 5, 25-49% = 3, 10-25% = 1, &lt;10% or none purchased = 0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1A9. Energy and water efficient product purchasing and procurement policy: yes = 5, no = 0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1A10. Other indicators (self-assessed, max = 5)</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Element 1B: Improved water quality, efficiency, and conservation

<table>
<thead>
<tr>
<th>Element 1B: Improved water quality, efficiency, and conservation</th>
<th>Max points</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1B1. Percentage reduction in water consumption intensity: &gt;15% = 5, 10-14% = 4, 5-9% = 3, 0-4% = 2, none = 1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1B2. Audits for leaks: quarterly or more frequently = 5, less than quarterly = 2, less than annually = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1B3. Appropriateness of grading and irrigation system and schedule (self-assessed, max = 1)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1B4. All outdoor landscapes are water-efficient or regionally appropriate: yes = 2, no = 1 if 50% or more, n = 0 if &lt;50%</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1B5. Alternative water sources for irrigation: yes = 1, no = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1B6. Drinking water from school well is protected: yes = 0, no = -1, no well = 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1B7. Program to control lead in drinking water: yes = 1, no = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1B8. School cited in past 3 years for failure to meet potable water quality standards: yes = 1, no = 0, don't know = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1B9. Taps, faucets, fountains, screens, aerators cleaned regularly: yes = 2, no = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1B10. Other ways school is improving water quality, efficiency, conservation (self-assessed, max = 2)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1B11. Percentage of school grounds devoted to ecologically or socially beneficial use: &gt;50% = 1, 50-25% = 0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Element 1C: Reduced waste production

<table>
<thead>
<tr>
<th>Element 1C: Reduced waste production</th>
<th>Max points</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1C1. Percentage of waste diverted from landfill or incinerator by reuse, composting, or recycling:</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>&gt;30% = 5, 20-29% = 3, 10-19% = 2, 0-9% = 1, none = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1C2. Percentage of paper content by cost is post-consumer material or fiber from forests certified as responsibly managed: &gt;25% = 1, 0-24% = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C3. Percentage of paper content by cost is totally chlorine free or processed chlorine free:</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>managed: &gt;25% = 1, 0-24% = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C4. Pounds of hazardous waste/student/yr: &lt;1 = 1, 1 or more = 0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1C5. How school monitors hazardous waste (self-assessed, max = 1)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C6. Hazardous waste policy in place and actively enforced: yes = 12, no = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C7. School cited in past 3 years for improper management of hazardous waste: yes = 1, no = 0, don't know = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C8. Percentage of total computer purchases by cost are EPEAT certified: &gt;75% = 1, otherwise = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C9. Disposal of unwanted computer and other electronic products. Environmentally responsible = 1; otherwise = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C10. School custodial program is based on principles of effective management and green service: yes = 1, no = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C11. Custodial program has been certified: yes = 1, no = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1C12. Describe other indicators of school's reduction of solid waste and elimination of hazardous waste (self-assessed, max = 1)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Element 1D: Use of alternative transportation to, during, and from school

<table>
<thead>
<tr>
<th>Element 1D: Use of alternative transportation to, during, and from school</th>
<th>Max points</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1D1. Percentage of students walk, bike, bus, or carpool to/from school: &gt;75% = 3, 50-75% = 2, 25-49% = 1, &lt;25% = 0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1D2. No-idling policy on file and &quot;no idling&quot; signs posted: yes = 1, no = 0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1D3. Vehicle loading and unloading areas are at least 25 ft from all building air intakes, incl doors and windows: yes = 1, no = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1D4. Describe how your school transportation use is efficient and environmentally benign (self-assessed, max = 3)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1D5. Safe routes to school have been designated, distributed to parents, and posted in the main office: yes = 2, no = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1D6. Describe any other accomplishments your school has made under Pillar One (self-assessed, max = 5)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total Pillar One (35% of total)</td>
<td>105</td>
<td>75</td>
</tr>
</tbody>
</table>
### Pillar Two: School environment has a "net positive" impact on student and staff health

<table>
<thead>
<tr>
<th>Element 2A: Integrated school health program</th>
<th>Max points</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A1. School has an integrated pest management plan in effect: yes = 3, no = 0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2A2. School provides notification of pest control policies, methods of application, and requirements for posting and pre-notification to parents and school employees: yes = 2, no = 0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2A3. School maintains annual summaries of pesticide applications, copies of pesticide labels, copies of notices and MSDS in an accessible location: yes = 2, no = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2A4. School prohibits children from entering pesticide area for at least 8 hours following application, or longer if feasible or if required by the pesticide label: yes = 2, no = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2A5a. School meets strictest standard of ventilation for indoor air quality: yes = 3, no = 0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2A5b. Percentage of school classrooms have window air conditioning units: &gt; 50% = 0, 25-50% = 1, 0-25% = 2, none = 3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2A6. Local exhaust systems are installed at all major airborne contaminant sources: yes or no contaminant sources = 3, no = 0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Local exhaust systems are consistently used: yes = 2, no = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2A7. School has energy recovery ventilation systems where feasible: yes = 2, no = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2A8. School has an inventory of all combustion appliances and inspects annually to assure no release of CO: yes or no combustion appliances = 2, no = 0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2A9a. School has installed CO alarms yes = 1, no or not needed = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2A9b. Unnecessary mercury containing devices have been replaced: yes or no such devices = 1, no = 0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2A9c. School recycles or disposes of unwanted mercury in accordance with environmental regulations: yes = 1, no = -1, no mercury on campus = 0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2A10. All wooden decks, stairs, playground equipment, etc treated with CCA has been sealed within the past 12 months or replaced: yes or no CCA on campus = 3, no = 0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2A11. Smoking is prohibited on campus: yes = 3, no = 0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2A12. School has an asthma management program in place consistent with Asthma Friendly Schools Guidelines: yes = 2, no = 0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2A13. School has an indoor air quality management program consistent with IAQ Tools for Schools: yes = 3, no = 0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2A14. All structures are visually inspected regularly and are free of mold, moisture &amp; water leakage: yes = 4, no = 0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2A15. School has a chemical management program in place: yes = 3, no = 0</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

### Element 2B: High standards of nutrition, nutrition education, physical activity, physical education, fitness and quality of outdoor time for both students and staff

| 2B1. School has earned USDA’s HealthierUS School Challenge award for school food: yes = 3, no = 0 | 3 | 0 |
| 2B2. Percentage by cost of food purchased is certified "environmentally preferable":＞25% = 2, 5-24% = 1, 0-4% = 0 | 2 | 0 |
| 2B3. Percentage by cost of food purchased is grown and processed within 200 miles of the school:＞25% = 3, 10-25% = 2, 0-10% = 1, none = 0 | 3 | 1 |
| 2B4. School has an onsite food garden: yes = 3, no = 0 | 3 | 3 |
| School garden supplies food for school cafeteria: yes = 1, no = 0 | 1 | 0 |
| 2B5. Percentage of students engaged in at least 150 minutes of school-supervised physical education and/or outdoor activity per week:＞90% = 3, 50-89% = 2, 25-49% = 1, ＜25% = 0 | 3 | 3 |
| 2B6. Average time each student engages in school-supervised physical education (incl outdoor activity) per week:＞150 min = 3, 100-149 min = 2, 50-99 min = 1, ＜50 min = 0 | 3 | 3 |
| 2B7. Percentage of school-supervised physical education is spent outdoors annually:＞90% = 3, 50-89% = 2, 25-49% = 1, ＜25% = 0 | 3 | 1 |
| 2B8. Percentage of current student body has participated in EPA’s Sunwise Program or equivalent regarding UV protection and skin health:＞90% = 3, 50-89% = 2, 25-49% = 1, ＜25% = 0 | 2 | 2 |
| 2B9. School uses a coordinated school health approach or other health related initiatives to address overall school health issues: yes = 2, no = 0 | 2 | 2 |
| 2B10. School partners with community group(s) to support student health and/or safety: yes = 2, no = 0 | 2 | 2 |
| 2B11. Describe any other measures regarding the school’s built and natural environment that your school takes to protect student and staff health and which you feel should be considered (self-assessed, max = 3) | 3 | 3 |

**Total Pillar Two (25% of total):** 75 / 59
Pillar Three: 100% of the school’s graduates are environmentally and sustainability literate

| Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems |
|---|---|
| **3A1.** Percentage of last year’s graduates scored proficient or better on state or school assessments: |
| **environmental:** > 75% = 5, 65-74% = 4, 55-64% = 3, 45-54% = 2, 35-44% = 1, < 35% or no assessment = 0 |
| **sustainability:** > 75% = 5, 65-74% = 4, 55-64% = 3, 45-54% = 2, 35-44% = 1, < 35% or no assessment = 0 |
| **environmental science:** > 75% = 5, 65-74% = 4, 55-64% = 3, 45-54% = 2, 35-44% = 1, < 35% or no assessment = 0 |
| Max points | 5 | 1 |
| Your score | 5 | 2 |

| **3A2.** School or state has an environmental or sustainability literacy graduation requirement: yes = 5, no = 0 |
| Max points | 5 | 0 |

| **3A3.** Environmental and sustainability concepts are integrated throughout the curriculum: max 10 points |
| Max points | 10 | 5 |

| **3A4.** If school is a high school, percentage of graduates last year who completed AP environmental science: |
| > 50% = 5, 40-49% = 4, 30-39% = 3, 20-29% = 2, 10-19% = 1, < 10% = 0 |
| Percentage of these students scoring 3 or better on the AP environmental science assessment: |
| > 50% = 5, 40-50% = 4, 30-39% = 3, 20-29% = 2, 10-19% = 1, < 10% = 0 |
| Max points | 5 | 0 |
| Your score | 5 | 0 |

| **3A5.** Percentage of students taking assessments last year on environmental science, sustainability, or environmental education who scored proficient or better: > 75% = 5, 65-74% = 4, 55-64% = 3, 45-54% = 2, 35-44% = 1, < 35% or no assessment = 0 |
| Max points | 5 | 0 |

| **3A6.** Teacher professional development opportunities in environmental and sustainability education are provided for all teachers: max = 5 |
| Max points | 5 | 3 |

| **3A7.** School’s environmental education program pays particular attention to scientific practices: max 5 points |
| Max points | 5 | 5 |

| **3A8.** Students have meaningful outdoor experiences at every grade level: max 5 points |
| Max points | 5 | 5 |

**Element 3B: Use of the environment and sustainability tools develop science, technology, engineering & math (STEM) content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy**

| **3B1.** Students graduate with a robust general science education that includes a deep understanding of life, physical, and earth science: yes = 10, no = 0; partial score as self-assessed and explained |
| Average number of hours/week students spend in science content classes: |
| > 5 = 10, 4.4-8.9 = 8, 3.9-6.9 = 6, 2.9-4.9 = 4, < 2 = 0 |
| Max points | 10 | 6 |

| **3B2.** If school is a high school, curriculum provides a demonstrated connection between classroom content, college and career readiness, and post-secondary career and study options focuses on environmental and sustainability fields: |
| yes = 10, no = 0; partial score as explained |
| Max points | 10 | 0 |

**Element 3C: Development of civic engagement knowledge and skills, and students’ application of these to address sustainability and environmental issues in their community**

| **3C1.** All students are required to conduct an age-appropriate, self-selected civic/community engagement project at every grade level: yes = 4, no = 0; partial score as explained |
| Percentage of these projects focuses on environmental or sustainability topics: |
| > 50% = 4, 34-49% = 3, 20-34% = 2, 0-19% = 1, < 10% = 0 |
| Percentage of students that satisfactorily completed such a project last year: |
| > 90% = 4, 70-89% = 3, 60-69% = 2, < 60% = 0 |
| Max points | 4 | 4 |

| **3C2.** Percentage of last year’s graduates that scored proficient or better on a community or civic engagement skills assessment: > 50% = 4, 34-49% = 3, 20-34% = 2, 10-19% = 1, < 10% or no assessment = 0 |
| Max points | 4 | 4 |

| **3C3.** School partners with others to help advance your school, other schools (particularly schools with lesser capacity in these areas) and community toward the three pillars: max 5 points |
| Max points | 5 | 4 |

| **3C4.** School provides outdoor learning opportunities for students: max 5 points |
| Max points | 4 | 5 |

| **3C5.** Describe other indicators or benchmarks (quantified if possible) of your progress toward the goal of 100% of your graduates being environmentally and sustainability literate that you feel the review committee should consider: |
| max 5 points |
| Max points | 5 | 5 |

**Total pillar three (40%)**

| Summary: |
| Max points | 120 | 66 |

| Pillar One |
| Max points | 105 | 75 |

| Pillar Two |
| Max points | 75 | 59 |

| Pillar Three |
| Max points | 120 | 66 |

| Total all pillars |
| Max points | 300 | 200 |
Application of Ewa Makai Middle School  
91-6291 Kapolei Parkway  
Ewa Beach, HI 96706  

List the school team that worked on this application.  

Response  
Carlos Dias, Jordan Higa, Vanessa Kealoha, Brenda Lowrey, Edward Oshiro, David Wong  

Q 1A2. If your school reduced your total non-transportation energy use (i.e., electricity and gas) from an initial baseline, please provide: Percentage reduction  

Response  
NO, ONLY OPEN FOR 1 YEAR.  

Q 1A3. What percentage of your school's energy consumption is derived from: On-site renewable energy generation  

Response  
None  

Q 1A3. What percentage of your school's energy consumption is derived from: Purchased renewable energy  

Response  
70% of total usage for 2 years = 1,993,261 kWh. Ewa Makai is a LEED Gold school. The LEED rating system gives credits (1 or 2) to projects that purchase green power through an REC "Renewable Energy Credit" for one or two years for at least 70% of the annual electricity usage of the building. For Ewa Makai the project earned two credits by purchasing two years worth of RECs. The purchase of renewable certificates is supporting renewable electricity production. Ewa Makai MS will continue to receive a separate electricity bill from their utility bill. For every unit of renewable electricity generated, an equivalent amount of renewable certificates are produced. This purchase builds a market for renewable electricity, but does not directly offset carbon dioxide emissions.  

Q 1A4. Building Design: If your school constructed and/or renovated buildings in the past three years, what percentage of the building area meets Leadership in Energy and Environmental Design (LEED), Collaborative for High Performing Schools (CHPS), Green Globes or other standards?  

Response  
100%  

Please provide the following information in square feet: What is the total area constructed (past 3 years)?  

Response  
202,409 SF
Please provide the following information in square feet: What is the total area renovated (past 3 years)?

**Response**
N/A OPEN since Jan, 2011

Please provide the following information in square feet: Area of all other buildings

**Response**
(CENTRAL PLANT) 10,856 SF

Please provide the following information in square feet: Total area of all buildings

**Response**
213,265 SF

Which certification (if any) did you receive (LEED, CHPS, Green Globes, Other)?

**Response**
LEED Certification for Schools

What level of certification did you receive (e.g. Silver, Gold, Platinum)?

**Response**
GOLD

Q 1A5. Building Operations: What percentage of your school's total existing building area has achieved LEED Existing Buildings: Operation & Maintenance, CHPS Operations, Green Globes or other standards?

**Response**
100%

Please provide the following information: What is the total building area (sq. ft)?

**Response**
202,409 SF

Please provide the following information: Which certification (if any) did you receive (LEED, CHPS, Green Globes, Other)?

**Response**
LEED Certification

Please provide the following information: What level of certification did you receive (e.g. Silver, Gold, Platinum)?

**Response**
Response
Gold

Q 1A6. If your school reduces or offsets the Green House Gas (GHG) emissions from building energy use, please provide: Current Total GHG Emissions (MtCO2e) Note: : MtCO2e = metric tons of carbon dioxide emissions

Response
N/A

Q 1A7. Is your school fully implementing the Facility Energy Assessment Matrix within EPA's Guidelines for Energy Management?

Response
Yes

Has the school building been assessed using the Federal Guiding Principles Checklist in Portfolio Manager?

Response
Yes

Q 1A8. What percentage by cost of all your school's furniture purchases in the past three years are certified under the Business and Institutional Furniture Manufacturers Association's "level" ecolabel?

Response
100%
Furniture was purchased from the 2010-11 price list which is "Greenguard" certified.

Q 1A9. Does your school have an energy and water efficient product purchasing and procurement policy in place (e.g., Energy Star and Low Flow fixtures)?

Response
Yes
Ewa Makai follows the recommendations of the LEED for Existing Buildings recommendations and the Superintendent's Memo on "General Fund spending Restrictions, dated 7/18/2011:
All appliances (refrigerators, microwave ovens, toasters, coffee makers, rice cookers, etc.) in classrooms and offices should be Energy Star-rated appliances.
Personal appliances should be limited to no more than one of each on each floor of a building. Other personal appliances shall be removed immediately.
Purchase or lease only Energy Star-rated computers, monitors, copiers, printers, and servers.

Q 1B1. If you can demonstrate reduced total water consumption intensity (measured in average gal/square foot of school land area/day) from an initial baseline, please provide: Percentage reduction
Response
NOT AT THIS TIME, OPEN SINCE JAN, 2011

Q 1B2. How often does your school conduct audits of facilities and irrigation systems to ensure they are free of significant water leaks and to identify opportunities for savings

Response
Audits of facilities and irrigation systems are done quarterly by custodial staff and contracted authorities. A monthly log is kept to ensure that there are no leaks by conducting a thorough test of the irrigation system. Any problems/issues are noted. Repairs or adjustments in the control systems are made to address these.

Q 1B3. Describe how your school’s site grading and irrigation system and schedule is appropriate for your soil conditions, plant materials, and climate, with an emphasis on water conservation:

Response
The site is flat with sandy coral soil (good drainage), with a tropical climate. The irrigation system is on timer and has rain sensors to control overwatering. Drip irrigation is used in planter areas with native drought tolerant plants.

Q 1B4. Do all your outdoor landscapes consist of water-efficient or regionally-appropriate (native species and/or adapted species) plant choices?

Response
No

If no, what percentage of the total consists of this type of plantings

Response
80%

Describe the type and location of plantings:

Response
The grass used throughout the campus is common Bermuda grass. It is considered drought tolerant in that it can go through periods of drought and can recover when given water. The amphitheater is planted with St. Augustine grass. It is not a drought-tolerant grass and needs irrigation.

Q 1B5. Are alternative water sources (e.g., grey water) used before potable water for irrigation?

Response
Yes

If yes, describe these alternative water sources:

Response
Response

The irrigation water comes from the Honouliuli Wastewater Treatment Plant and is labeled R-1, reclaimed water.

Q 1B6. If drinking water is acquired from the school's own well, are your drinking water sources protected?

Response

The school does not have a well for drinking water..

Q 1B7. Does your school have a program to control lead in drinking water (including voluntary testing and implementation of measures to reduce lead exposure in drinking water) in place?

Response

The Board of Water Supply (BWS) conducts periodic tests on the school's water and provides a report on this. An excerpt from the BWS website shows that at present there is no lead in the public's drinking water:

“Our laboratory has conducted a series of tests for lead in our municipal water supply. Samples were taken from BWS sources, within the distribution system in the community, and from consumers' household taps. Based on these tests, no lead was found in any of the municipal water supplies served to Oahu's residents.”

Q 1B8. Was your school cited within the past three years for failure to meet federal, state or local potable water quality standards?

Response

No

Q 1B9. Are all taps, faucets and fountains used for drinking and cooking cleaned on a regular basis to reduce possible bacterial and other contamination; and are faucet screens and aerators regularly cleaned to remove particulate lead deposits?

Response

Yes

If yes, how often is such cleaning conducted?

Response

These are done on a daily basis and are incorporated into the custodian work assignments. Reminders are sent out through email to give these areas constant attention.

Q 1B10: Describe any other ways, not addressed above, that the school is improving water quality, efficiency, and conservation:

Response

Students built rain barrels to catch rainwater and nurture their garden beds. Custodians clean water fountains and faucets daily. They replace faucet nets monthly or quarterly depending on condition.
Q 1B11. What percentage of your school grounds are devoted to ecologically or socially (e.g., playgrounds, outdoor spaces designed and used regularly for social interaction, athletics or recreational areas, etc.) beneficial uses, including those that give consideration to native wildlife?:

Response
80%

Describe:

Response
The west end of the campus includes the athletic field. Additional open areas are used for social and educational purposes, (i.e. classroom courtyards and amphitheater)

Q 1C1. What percentage of waste is diverted from the landfill or incinerator by reuse, composting, and/or recycling (total amount reused, composted or recycled)/(total amount reused, composted or recycled used + total sent to a landfill or incinerator):

Response
The following is a breakdown of waste that is generated from the school and its final destination:
40% landfill/incinerator, 40% recycled, 20% compost

Q 1C2. What percentage of total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed by the Forest Stewardship Council, Sustainable Forestry Initiative, American Tree Farm System or other certification standard (If a paper is only 30% recycled, only 30% of the cost of that paper should be counted towards the recycled portion.)

Response
30%

Q 1C2. Which standard did you use?

Response
Contract Price Listing (which lists Premium recycled Papers that is 30% Post-Consumer Content)

Q 1C3. What percentage of total office/classroom paper content by cost is "totally chlorine-free" (TCF) or "processed-chlorine-free" (PCF)?

Response
100% based on manufacturer's standard and green initiatives. Paper used is called: BOISE ASPEN 30 paper. Premium Recycled Papers with 30% fiber diverted from Landfills, certified SFI (Sustainable Forestry Initiative)

Q 1C5. How does your school monitor hazardous waste?
Response
The custodians monitor hazardous waste container semi-annually into a single container. The container is located outside of the school building and consists of a concrete containment system that is built into the ground. EMMS does not generate hazardous waste. However, in the event that disposal of hazardous waste is needed, the school contracts these services to licensed contractors.

Furthermore, the Science Department does order dissection specimens for ethical reasons which include chemical waste and storage issues related to preservatives.

Two (2) types of chemical cabinets are used:
1. Flammable
2. Corrosive

MSDS are filed in a folder and inventory is maintained by Mr. Saiki, former high school Chemistry teacher, and Mr. Wong, former high school biology teacher. Mr. Wong was also previously certified as a hazardous waste management specialist with Unitek Environmental Services in accordance with DOT Code of Federal Regulations for the storage and transportation of hazmat.

YTD, the science department has hazmat waste is limited to household chemicals in quantities consistent with and less than a micro-chemistry classroom. This is w/in the department's philosophy of a sustainable green environment curriculum.

Q 1C6: Is a Hazardous Waste Policy for storage, management and disposal of chemicals in laboratories and other areas with hazardous waste in place and actively enforced?

Response
Yes

Science Dept maintains:
1. MSDS Folder
3. Classroom laboratory safety practices compliant with national standards (NSF & NSTA)

Q 1C7. Was your school cited within the past three years for improper management of hazardous waste according to Federal and State regulations?

Response
No

Q 1C8. What percentage of total computer purchases by cost are Electronic Product Environmental Assessment Tool (EPEAT) certified products:

Response
100%

EPEAT Gold-highest certification for two types of computer products used in our school: Apple and Lenovo: Please refer to the EPEAT website: http://www.epeat.net

How does your school dispose of unwanted computer and other electronic products?

Response
Response
100%
We dispose of our unwanted computer and electronic products using the: STATE OF HAWAII ELECTRONIC DEVICE RECYCLING PROGRAM: Hawaii Department of Health Solid & Hazardous Waste Branch 919 Ala Moana Blvd., Room 212 Honolulu, HI 96814: http://hawaii.gov/health/environmental/waste/sw/hedrp/hedrp.html

Q 1C9. What percentage by cost of all cleaning products in use are certified "green," or can otherwise demonstrate that they meet the environmental standards of established eco-label programs?

Response
100%
Cleaning products were only purchased through vendors that provided green products. One of the vendors provided a line of green products that serves as our main source of cleaning products that is used throughout the school.

Which standard(s) are you using?

Response
EPA (Environmental Protection Agency) standards

Q 1C10. Is your school's custodial program based on the principles of effective management and "green" service?

Response
Yes
Our custodial practices are based on a program provided through one of our vendors. All custodians have gone through this training that involved watching a video and written exams in which they were rated. Each custodian was issued a laminated reference guide of the training and is to be kept on their cleaning carts for easy access. The school staff is aware of the green products used by the custodians seen through observations.

Q 1C11. Has your custodial program been certified by the ISSA Cleaning Industry Management Standard - Green Building (or an equivalent standard):

Response
Yes

Q 1C12. Describe any other indicators, not included above, of the school's reduction of solid waste and elimination of hazardous waste:

Response
We compost in a variety of ways, including composting with both the Epigeic Worms and Soldier Fly larvae. We also use composting barrels to compost grass clippings and leaves used to enrich our gardening soil. 40% of the wastes (paper, HI-5 and recyclable plastic containers) are recycled. 10% of the wastes include vegetables/fruit and whole wheat bread, which yields approximately 16 gallons per week, which is composted by our worms and Soldier Fly Larvae. Another 10% of the tree clippings, weeds are used as mulch, and sprinkled around trees on campus or placed in our composting barrels.
Response

The remaining 40% of the wastes placed in the landfill.

Q 1D1. What percentage of students walk, bike, bus, or carpool (2+ students in the car) to/from school?

Response

83%

Describe how this information was collected and calculated

Response

Based on the amount of student participants who took the Online Google Apps: Student Body Survey completed by students during homeroom.

Q 1D2. Does your school have a no-idling policy on file and signs posted stating that all vehicles, including school buses and other vehicles dropping off and picking up students, are prohibited from idling on school premises?

Response

No

Q 1D3. Are all vehicle loading & unloading areas at least 25 feet away from all buildings air intakes (including doors and windows)?

Response

Yes

We measured using the site plan.

Q 1D4. Describe how your school transportation use is efficient and environmentally benign (e.g. the percentage of school-owned electric/hybrid/alternative fuel vehicles in your fleet, or other indicators of significant reductions in emissions):

Response

Instead of standard golf carts used for maintenance or deliveries on campus, the staff uses adult tricycles for deliveries and maintenance purposes.

Q 1D5. Have "Safe Pedestrian Routes" to school or "Safe Routes to School" been designated, distributed to parents and posted in the main office?

Response

Yes

It is posted on the ewamakai.org website. It was presented during a bike/pedestrian safety presentation at EMMS by the Honolulu Police Department. This link is also posted on the ewamakai website to inform parents and the community: http://www.saferoutesinfo.org/
Q 1D6. Describe any other accomplishments your school made under Pillar One towards eliminating its negative environmental impact or improving your environmental footprint which you feel should be considered:

Response

Gold LEED Certification Design Features of Ewa Makai Middle include:

i) designated parking for low emitting and fuel-efficient vehicles.
ii) use of pervious concrete for site drainage.
iii) drainage of excess water naturally into the ground below. This prevents the buildup of surface drainage.
iv) use of regional materials in construction. Example: the sand used in the concrete mixes
v) light sensors for energy efficiency
vi) indoor air quality during the construction
vii) solar tubes
viii) skylights and skylight pyramids
ix) adaptive landscaping
x) clerestory windows, day-lighting & light shelves
xi) low flow plumbing fixtures
xii) use of recycled materials during construction.

xiii) use of certified FSC wood — certified under the standards set by the Forest Stewardship Council. FSC-certification is given to companies and landowners to verify that they practice forestry that is consistent with FSC standards. The FSC label on wood or paper products guarantees that consumers can trust the sources. FSC is a non-profit organization that advocates responsible management of the world’s forests and its standards ensure that forestry is practiced in an environmentally responsible way that takes into account economic viability, and social responsibility.

xiv) water savings,

xv) energy savings—$22,000 a year in electricity (Information was provided per architects employed by Nordic and the information included in the LEED brochure),

xvi) diverted construction wastes: the contractor recycled whatever wastes they could (concrete, metals, wood, paper, etc.) so that this waste would not go into the landfills.

xvii) green housekeeping (using green and non-toxic cleaners on school campus),

xviii) low mercury lighting,

xix) innovative displacement air conditioning: the ground displacement air conditioning in the classroom wings where the AC is released at ground level instead of from the ceilings.

xx) The school structure is used as a learning tool in the following ways:

1. Courtyards are used for:
   a. environmental learning
   b. service learning
   c. project based learning (container gardens & aquaponics)

2. Neighborhoods (common areas) are used for:
   a. collaborative student learning
   b. project demonstration

3. The "robotics" room is used to house equipment & supplies for student explorations in STEM initiatives, science/ math club meetings, robotics programming & construction, Science Olympiad Challenges, and 3D Modeling. Additionally certain SFPT activities are conducted in this room due to close proximity to classrooms, SmartBoard, and document camera.

4. Whole Team (150 students) special events (guest speakers) are accommodated by opening folding doors to join 3 classrooms.

5. Students in Leadership 7th, 8th grade lead tours and deepen their understanding of the LEED features of this building, and further their public speaking skills as they led parent and community tours. They also research, report, produce, record and edit videos featuring the specs and green initiatives at EMMS.

6. The student body President submitted resolution, SCR33 Green Hawaii Program promoting the implementation of at least five “green” initiatives in all public schools by SY2015-16. Senate Education Committee heard on March 16, 2012 at the State Capitol. The Senate Education
Response
Committee is contemplating amending the resolution and turning it into a bill. Leadership students also wrote testimonies and testified to support this resolution at the State Capitol.
7. Community Garden Night: March 14, 2012. Includes the distribution of seedlings and soil to the families and community to grow their own garden.

Q 2A1. Does your school have an integrated pest management plan in effect to reduce or eliminate pesticides?

Response
Yes

Q 2A2. Does your school provide notification of your pest control policies, methods of application and requirements for posting and pre-notification to parents and school employees?

Response
No

Q 2A3. Does your school maintain annual summaries of pesticide applications, copies of pesticide labels, copies of notices and MSDSs in an accessible location?

Response
Yes
We do not use pesticides, however we do use the MSDS information sheets located in the science classrooms, kitchen, custodial rooms and main office.

Q 2A4. Does your school prohibit children from entering the pesticide area for at least 8 hours following the application or longer, if feasible, or if required by the pesticide label?

Response
We do not use pesticides.

Q 2A5a. Does your school meet the stricter standard of: ASHRAE Standard 62.1-2010 (Ventilation for Acceptable Indoor Air Quality) OR your state or local code?

Response
Yes

If yes, which standard is your school using?

Response
According to the mechanical engineer, the building's AC system has automated controls to monitor the amount of re-circulated and outdoor air in order to maintain maximum indoor air quality.

Q 2A5b. What percentage of your classrooms have window air conditioning units?

Response
Q 2A6. Are local exhaust systems (including dust collection systems, paint booths, and/or fume hoods) installed at all major airborne contaminant sources, including science labs, copy/printing facilities, chemical storage rooms?

Response
Yes

If yes, are they consistently used?

Response
Yes
Exhaust system is automated and built into our HVAC system and runs with electricity. The custodians monitor the exhaust system and visually inspect air diffusers and exhaust registers.

Q 2A7. Did your school install energy recovery ventilation systems where feasible to bring in fresh air while recovering the heating or cooling from the conditioned air?

Response
Yes

Q 2A8. Carbon Monoxide (CO): If your school has combustion appliances (gas stove, gas water-heaters, Bunsen burners, settling torches, kiln, etc.), does your school have an inventory of all combustion appliances & does your school annually inspect these appliances to ensure no release of Carbon Monoxide (CO)?

Response
Yes

Water is heated through a heat recovery system and supplemental to the natural gas. This system is linked with the HVAC system that provides hot water for the locker and kitchen.

Are CO alarms installed which meet the requirements of the National Fire Protection Association code 720?

Response
No

Q 2A9a. Mercury: Have all unnecessary mercury-containing devices been replaced with non-mercury devices?

Response
No mercury containing devices.
Q 2A9b. Does your school recycle or dispose of unwanted mercury laboratory chemicals, mercury thermometers, gauges and other devices in accordance with federal, state and local environmental regulations:

Response
No mercury on campus.

Q 2A10. Chromated Copper Arsenate (CCA): Have all wooden decks, stairs, playground equipment or other structures treated with Chromated Copper Arsenate been sealed within the past 12 months or replaced?

Response
No CCA containing materials on campus.

Q 12A11. Secondhand Tobacco Smoke: Is smoking prohibited on campus?

Response
Yes

Q 2A12. Does your school have an asthma management program in place consistent with the National Asthma Education and Prevention Program’s (NAEPP) Asthma Friendly Schools Guidelines?

Response
No

Q 2A13. Did your school develop and implement a comprehensive indoor air quality management program consistent with IAQ Tools for Schools?

Response
Yes
There is a written indoor air quality program. One of the ways the staff and students know it is being followed includes: The use of the tricycles instead of motorized vehicles for commuting on campus is one of them. We do not use automatic cleaning machines that are fueled by propane or chemicals and give off hazardous fumes.

Q 2A14. Are all structures visually inspected on a regular basis and free of mold, moisture & water leakage?

Response
Yes
This is done on a daily basis and is part of the work assignment of the head custodian so no written records of these inspections are kept. However if there are issues that are related to a water leak or moisture, efforts are made to resolve it if it is within the scope or abilities of the custodial staff. Work orders are submitted for those that can't be resolved.
Q 2A15. Does your school have a chemical management program in place that includes the following elements: - Chemical purchasing policy, including low- or no-VOC products - Chemical inventory - Storage and labeling - Training and handling - Hazard communication - Spills, clean-up and disposal - Select EPA’s Design for the Environment - approved cleaning products

Response
Yes

Our chemical management program is monitored by our science department and custodial staff.

Q 2B1. Did your school earn a USDA’s Healthier US School Challenge award for school food?

Response
No

Q 2B2. What percentage (by cost) of food purchased is certified as "environmentally preferable" (e.g. Organic, Fair Trade, Food Alliance, Rainforest Alliance, etc.)?

Response
Not enough data at this current time

Q 2B3. What percentage (by cost) of food purchased is grown and processed within 200 miles of the school (including food grown on school grounds)?

Response
5%

Evidence is provided by Vendor invoices that indicate the origin of the produce.

Does the school have an onsite garden in which the students participate?

Response
Yes

Q 2B4. Does the school have an onsite food garden?

Response
Yes

If yes, does the school garden supply food for the school cafeteria?

Response
No

Q 2B5. What percentage of students over the past year engaged in at least 150 minutes of school-supervised physical education and/or outdoor activity time per week?
Response
97%
(3% includes the medically fragile students) PE is a mandatory elective for all students except for the Fully Self Contained Medically Fragile students.

Q 2B6. What is the average amount of time over the past year that each student engages in school-supervised physical education (including outdoor activity time) per week (minutes/week)?

Response
Approximately 270 minutes per week.
Information was determined based on the master schedule and amount of minutes yielded per PE period, per week, per student.

Q 2B7. What percentage of school-supervised physical education is spent outdoors annually?

Response
40-50%
PE Dept designs their program with 2-3 stations with at least 1-2 more stations held outdoors.

Q 2B8. What percentage of your current student body has participated in EPA's Sunwise Program or an equivalent program regarding UV protect and skin health?

Response
97%
This is covered by Physical Education Department. PE is a mandatory elective for all students except for the 3% that represent the Fully Self Contained: Medically Fragile students.

Q 2B9. Does your school use a Coordinated School Health approach or other health related initiatives to address overall school health issues?

Response
Yes

If yes, describe the health related initiatives or approaches used by the school:

Response
We use a computer based physical fitness assessment that tracks and records trends based on the students physical activity. The program "Fitness Gram," also generated recommendations to improve their overall health and fitness level.

What evidence does the school have that it is being followed?

Response
Data is stored on school servers and reports can be generated upon request.
Q 2B10. Does your school partner with any community groups to support student health and/or safety?

Response
Yes

If yes, describe these partnerships:

Response
Based on our recent Health and Wellness Family Fair on Feb 12, 2012 these include the following community group and partners: Fire Safety and BP checks by the Honolulu Fire Dept, Zumba Fitness, Yoga, Healthy Cooking Demonstration sponsored by Whole Foods Market, Kahala, Germ City, Lei Illima: Coalition for a Drug Free Hawaii, Weed and Seed: Keiki ID, Leeward District Health and PE office led by Ann Horiuchi, Hawaii Alliance of Physical Education Recreation and Dance, The First Tee of Hawaii, Eyes Plus, Bike Safety: Queens Hospital and Ewa Weed and Seed, USTA: School's in Tennis, West Side Insaners Fitness Group, Hawaii National Guard: Drug Prevention, Yoga, American Heart Association Hawaii, Peer Education Program.

Q 2B11. Describe any other measures regarding the school's built and natural environment that your school implements to protect student and staff health and which you feel should be considered:

Response
i) Free zumba classes for the staff
ii) Bi-weekly fully equipped gym and dance room open to staff before and after school hours.
iii) Great Aloha Run staff participants: Teachers and staff members run together after school on campus to prepare for the 8K charity Aloha Run.
iv) UPLINK after school program for students include the following from 3:30 pm-5:30 pm: Basketball, Cross Country, Strength Agility and Conditioning, Soccer, Hip-hop dance, Zumba, Ultimate Frisbee, Basketball Clinic, Drama, Hula, Band, Green Club, Garden Club PALS basketball
v) ISA (Inter School Athletic Meets with Leeward District-monthly) for all Middle School students: Track and Field, Girl's/Boy's Volleyball/Basketball/Softball/Bowling.

100% of staff and students participate in cleanliness and healthy practices: Please see ewamakai.org website for more safety and health rules. Signs and reminders are posted throughout the staff restrooms, student restrooms, locker rooms, cafeteria, kitchen, health rooms, staff lounges and sink areas. Healthy practices and notes from the Health are promoted throughout the daily bulletin for staff and students, (i.e. wash your hands after using the restroom, and cover your mouth and nose when sneezing and coughing).

Q 3A1. What percentage of last year’s graduates scored proficient or better on state or school: Environmental education assessments?

Response
35-40%

What percentage of last year's graduates scored proficient or better on state or school: Sustainability assessments?
Response
45-50%

What percentage of last year's graduates scored proficient or better on state or school: Environmental science assessments?

Response
35-40%

Briefly describe the assessment(s)

Response
Project Based Performance assessments that included: Power Point presentations featuring Green Initiatives at EMMS and future sustainability projects. Students were required to create action plans for future green initiative ideas at Ewa Makai Middle. 7th grade Life Science courses required students to create science projects and science boards about sustainability and the environmental impact on their community and personal lives. 8th grade science teachers developed an aquaponics program with performance based assessments.

Q 3A2. Does your school or your state have an environmental or sustainability literacy graduation requirement?

Response
No

Q 3A3. Are environmental and sustainability concepts integrated throughout the curriculum?

Response
Yes

Describe:

Response
Teachers implement service learning and greener practices are integrated during advisory daily. Science and leadership classes integrate environmental and sustainability concepts throughout the curriculum. See curriculum maps and Green Initiatives video edited and produced by the students.

Q 3A4. If your school is a high school, what percentage of your eligible graduates last year completed Advanced Placement Environmental Science during their school career?

Response
We are not a high school

What percentage of these students scored 3 or better on the Advanced Placement Environmental Science assessment?

Response
Q 3A5. If neither your state or school conduct environmental science, sustainability or environmental education assessments, what percentage of your students scored proficient or better on science education assessments in the last year?

Response
N/A

Q 3A6. Are professional development opportunities in environmental and sustainability education provided for all teachers in your school?

Response
Yes

Describe these professional development opportunities including the number and percentage of teachers who participated in these over the last 2 years:

Response
Green Grant provided teachers with environmental and sustainability concepts over 3 different classes. 100% of staff recycle on campus and participate in school wide weekly recycling collection throughout the school.

Q 3A7. Does your school's environmental education program pay particular attention to scientific practices, such as asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations, and engaging in argument and applications based on evidence:

Response
Yes

Scientific practices are followed in our environmental program in the following ways: scientific inquiry, and organized with the use of Thinking Maps. Our curriculum maps document how environmental education is implemented throughout our Science courses in both 7th and 8th grade. The Green Grant also furthered teachers' understanding of sustainability education so that they can make informed instruction decisions and provide students with opportunities and tools to make a change. As a result of this class, 100% of staff recycle on campus and participate in school wide weekly recycling collection throughout the school.

In addition, HECO, the local electric utility, provided Ewa Makai 7th and 8th grade students with supplies, equipment and lesson plans for implementing inquiry with sustainability as the focus. 140 7th grade students tested their skills and knowledge by creating windmills that would produce enough power to light a small light bulb, solar cells that produced enough power to pump a small amount of water up a cylinder, and solar ovens that cooked s'mores for the students. The students learned what angles are the best for producing power with solar cells, the angle and the amount of windmill blades that will produce power from a windmill and how heat transfers. The 8th graders also tested their knowledge by conducting energy audits of the school.
Q 3A8. Do your students have meaningful outdoor experiences (an investigative or experiential project that engages students in critical thinking, problem solving and decision making) at every grade level?

Response

Yes

7th grade: Life Science - Data collection for plant growth media, butterfly and chameleon ecosystem, solar cells, solar cars, & windmill generators (blade design).

8th grade: Earth Science - Data collection from launching water bottle rockets, trebuchet projectiles, and Aquaponics,

Q 3B1. Do your students matriculate or graduate with a robust general science education that includes a deep understanding of life, physical, and earth sciences?

Response

Yes

Describe (e.g., percentage of enrollment in environmental and other science courses, assessments and post-secondary school or career intended focus):

Response

Evidence includes: Hawaii Department of Education requires that all 7th and 8th grade students take science courses. Data includes student grades, student work: thinking maps, science projects, science laboratory notebook, experimental lab report, teacher generated and curriculum based, formative and summative assessments. robotics, STEM activities and after school science clubs.

How many hours per week on average do students spend in science content classes?

Response

Students spend 220 minutes per week in science content classes

Q 3B2. If your school is a high school, does your curriculum provide a demonstrated connection between classroom content and college and career readiness, particularly to post-secondary options that focus explicitly on environmental and sustainability fields, studies, and/or careers?

Response

We are not a high school

Q 3C1. Are all students required to conduct an age-appropriate, self-selected civic/community engagement project at every grade level?

Response

Yes

All students are required to create service projects through advisory

What percentage of these projects focused on environmental or sustainability topics?
Response
60% (current year)

What percentage of students satisfactorily completed such a project last year?

Response
None (there were no projects last year)
This is the first year students are required to construct a service project during their daily advisory periods (i.e., adopt a highway; Community Garden Night: provide community with seedlings in a recycled container so that they plant a garden at home; building a garden for the homeless shelter).

Q 3C2. What percentage of last year’s graduates scored proficient or better on a community or civic engagement skills assessment?

Response
75%
Assessments used include: Teacher observation, student generated graphic organizers, student reflections.

Q 3C3. Does your school partner with local academic, businesses, government, nonprofits, informal science institutions and/or other schools to help advance your school, other schools (particularly schools with lesser capacity in these areas), and community toward the 3 Pillars?

Response
Yes

Briefly describe the scope and impact of these partnerships:

Response
We have partnerships with the following non-profit and community agencies:
  i)  Isles Hawaii- aquaponics ,
  ii) CTAHR, UH Manoa College of Tropical Agriculture and Human Recources,
  iii) Earth Friendly Schools Hawaii,
  iv) Hawaii National Guard Chevron Energy Solutions,
  v) Hawaiian Electric Company,
  vi) Kokua Hawaii Foundation,
  vii) City and County of Honolulu
  viii) Discover Recycling,
  ix)  Grow Hawaii Foundation, (Kendra Hozaki),
  x)   Hapa Farms,
  xi)  Mari’s Garden and Aquaponics Farms, (Fred Lau),
  xii) Waikiki Worm (Mindy Jaffe),
  xiii) Ewa Limu Preservation (Uncle Henry),

These partnerships are designed to support recycling education and sustainability and projects and sustainable project based learning in our schools. The impact of these partnerships: In a school that is LEEDing the way in sustainable design, our students have multiple opportunities to make a difference and contribute to a more sustainable world. Our community partners
Response
provided meaningful, relevant connections to the outside world with tools to help them solve problems in our current real-world situations. In addition, they supplied multiple resources with quality instruction and guidance to develop a program to meet state standards, while fostering green practices. Our curriculum is focused on sustainability and project-based learning. These providers have also provided supplies, materials to start our programs including: recycled wood, plants, seeds and soil. In addition to a Piece of Pipeline worm bin, proto pod Solider Fly larvae containers to compost, we have also been provided with guidance to facilitate our aquaponic tanks, organic gardens, recycling bins/containers and more.

Q 3C4. Does your school provide outdoor learning opportunities for students (e.g. outdoor classrooms)?

Response
Yes

If yes, describe how outdoor learning is used to teach an array of subjects in context, engage the broader community, and develop civic skills:

Response
Outdoor learning opportunities include PE, Life science gardening projects and aquaponics, science Olympiad, district and state science fair, First Lego League, VEX Lego league, Leeward Young Artist Award Competition, Hawaii Regional Scholastic Art Competition, Math Count Competitions, standards based field trips, Inter School Athletics, Eddie Aikau Essay Contest, Intramurals used to foster community building and GLO's, service learning projects (aquaponics, adopt a highway, gardening), fundraising (McFundraiser, Recycling Drives), School Wide Recycling, Ewa Beach Community Based Development Organization, Community Watch, Secondary Student Council at the State Capitol, Green Club, Science Service Club, Green Symposium presentations and student led tours, HAMS (Hawaii Association of Middle School Conference) Tours and student led presentations.

These outdoor learning opportunities provide meaningful, relevant connections to the outside world. Teachers provide tools to help students problem solve and apply this knowledge to real world situations. In addition, they supplied multiple resources, experiences, and inspiration to become confident risk takers who want to make a change. Our curriculum is focused on sustainability and project-based learning. These opportunities to travel off campus and meet experts and mentors, as well as other competitive, talented students, provide exemplars and examples for our students to observe and exceed.

Q 3C5. What other indicators or benchmarks (quantified whenever possible) of your progress towards the goal of 100% of your graduates being environmental and sustainability literate does your school feel should be considered by the review committee?

Response
i) Vermicast composting;
ii) Recycling that nets a profit for the student government;
iii) A student garden constructed with recycled materials;
iv) An organic garden that provides produce to the cafeteria;
v) An aquaponics project based learning that combines the symbiotic production of fish & organic vegetables;
vi) The adoption of the paperless classroom that features wide use of PowerPoints, email, ebooks, laptops and iPads.