

H. INNOVATION AND DESIGN PROCESS

1.0 Innovation in Design, Water Efficiency WEc2

Innovation and Design Process Credit 1.1: 1 (one) point

Objective: To provide design teams and protect the opportunity to be awarded points for exceptional performance above requirements set by the LEED™ Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED™ Green Building Rating System.

Narrative: 100% of the project's sewage conveyance used wastewater treated to tertiary standards, thus, reducing the use of portable water.

In writing the LEED™ Credit Equivalence Process, the following were identified: the intent of the proposed innovation credit, proposed requirement for compliance, proposed submittals to demonstrate compliance, and the design approach used to meet the required elements.

Wastewater collected within IEUA's service area is treated at the Agency's five regional plant facilities to tertiary standards. Combined, the plants have the capability to produce 67,000 acre-foot per year of recycled wastewater. The end result is a high-quality recycled water product that can be used for industrial processes, irrigation, and other non-potable uses, such as flushing of toilets and urinals.

Recycled water supplied by IEUA meets the stringent requirements set by the California State Department of Health Services under Title 22 of the State Health Code. The reclaimed water produced by IEUA is of such high quality that it has an unrestricted use permit, which means that it can be used for most purposes, including swimming. Thousands of tests are performed each year to ensure proper water quality.

Projects and Activities: The headquarters is connected to IEUA's recycled water system. Dual plumbing has been provided for all restrooms; all water closets and urinals on-site are connected to the recycled water supply, while lavatories and showers are supplied with potable water. This connection allows the project to reduce domestic water demand for sewage conveyance by 100% from a baseline design. See Attachment 'Q' for a description on IEUA's water recycling programs.

The use of a municipally operated central plant for wastewater treatment benefits the project by reducing the need for complicated infrastructure and spreads the cost of treatment over multiple users throughout the region. This centralized plant approach also reduces the cost of maintenance and water quality testing, while ensuring the highest quality recycled water product.

2.0 Innovation in Design, Water Efficiency, WEc3

Innovation and Design Process Credit 1.2: 1(one) point

Objective: To provide design teams and protect the opportunity to be awarded points for exceptional performance above requirements set by the LEED™ Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED™ Green Building Rating System. To reduce potable water demand by an additional 10% (minimum 40% total efficiency increase).

Narrative: In writing the LEED™ Credit Equivalence Process, the following were identified: the intent of the proposed innovation credit, proposed requirement for compliance, proposed submittals to demonstrate compliance, and the design approach used to meet the required elements.

Projects and Activities: The project has incorporated a combination of high-efficiency plumbing fixtures, such as dual-flush water closets, ultra-low-flow urinals, and low flow lavatories to reduce the overall quantity of water consumption. Furthermore, all water closets and urinals in the project have been connected to a municipal recycled water supply. By combining all of these elements, the project has been able to achieve an overall water use reduction of 73% from a traditional base case design.

All recycled water used on the project is treated at IEUA’s regional water treatment plants. The wastewater is collected from the Agency’s service area and is treated to tertiary standards. The water quality is continuously monitored by the Agency in accordance with Title 22 of the State Health Code. The water produced by the Agency is of such high quality that it has an unrestricted use permit allowing it to be used for most applications, including swimming. Documentation of the Agency’s recycled water program is included in the submittal for Innovation and Design Process Credit 1.1.

The table below provides information on products considered and a list of companies that supply these products. **Please note:** this list should not be considered as a recommendation. Individuals/organizations using this information are responsible for researching the products and companies prior to engaging in any business agreement.

Product Used	Company	Address	Phone	Fax	Web site
Royal Model Flushometer	Sloan Valve Company	10500 Seymour Ave. Franklin Park, IL 60131	800-671-4300	800-447-8329	www.sloanvalve.com
Afwall Elongated Flush Valve Toilet	2000 American Standard Inc.	One Centennial Ave. PO Box 6820 Piscataway, NJ 08854	732-980-3000	732-980-3335	www.americanstandard-us.com
Walvit Wall-Hung Bowl, Water Wafer MK3, Leda Urinal	Caroma USA, Inc.	9117 W. Lake Drive Pound, WI 54161	920-897-2569	920-897-4730	www.caromausa.com
Lavatory Faucets	Delta Faucet Company	55 East 111th St. Indianapolis, IN 46280	317-848-1812	317-573-3499	www.deltafaucet.com
Temptrol Shower system	Symmons Industries, Inc.	31 Brooks Dr. Braintree, MA 02184	781-848-2250	781-843-3849	www.symmons.com

3.0 Innovation in Design, Alternative Fuel Vehicle Fleet

Innovation and Design Credit 1.3: 1 (one) point

Objective: To provide design teams and projects the opportunity to be awarded points for exceptional performance above requirements set by the LEED™ Green Buildings System and/or innovative and performance in Green Building categories not specifically addressed by the LEED™ Green Building Rating System.

Narrative: The project aimed at reducing pollution generated by conventional fuel service vehicle fleets.

Projects and Activities: IEUA has installed nine electric vehicle-charging stations on site to comply with the requirements of Sustainable Sites Credit 4.3 (see documentation under Sustainable Sites Credit 4.3 for further information). In addition, the Agency has elected to purchase seven alternative fuel vehicles for use by staff housed in the headquarters facility. These new fleet vehicles were purchased by the Agency to both provide environmentally preferable transportation options and to educate employees and visitors about available alternative fuel vehicle technologies. Prior to the purchase, the IEUA fleet was comprised of mid-size passenger sedans (Ford Taurus Class) and mid-size pick-up trucks (GMC Truck Class). The following vehicles were purchased in lieu of new mid-size passenger sedans for use by headquarters personnel:

- ☞ General Motors GEM Electric Vehicle (4 passenger)
- ☞ General Motors GEM Electric Vehicle (4 passenger)
- ☞ General Motors GEM Electric Vehicle (4 passenger)
- ☞ Toyota RAV4 EV Electric Vehicle (5 passenger)
- ☞ Honda Civic Hybrid Vehicle (5 passenger)
- ☞ Honda Civic Hybrid Vehicle (5 passenger)
- ☞ Honda Civic Hybrid Vehicle (5 passenger)

Agency headquarters personnel will use these vehicles for transportation during the workday. By providing a mix of hybrid and electric vehicle technology, the Agency is enabling employees to utilize these vehicles for local travel between regional plants within the service area, and also for travel to locations outside of the range of traditional electric vehicles.



Toyota RAV4 EV Vehicle

The table below provides information on products considered and a list of companies that supply these products. **Please note:** this list should not be considered as a recommendation. Individuals/organizations using this information are responsible for researching the products and companies prior to engaging in any business agreement.

Product Used	Company	Address	Phone	Fax	Web Site
Chrysler GEM Electric Vehicle	General Motors Corporation	300 Renaissance Center Detroit, MI 48265-3000	800-462-8782	313-665-0746	www.gm.com
Toyota RAV4 EV	Toyota Motors Sales USA	19001 Western Ave. Torrance, CA 90509	800-468-69682	310-381-8602	www.toyota.com
Honda Civic Hybrid	Honda	PO Box 60001 City of Industry, CA 91716	800-999-1009	310-783-3023	www.honda.com

4.0 Innovation in Design, Green Building Education Program

Innovation and Design Credit 1.4: 1 (one) point

Objective: Disseminate information on green building features, the LEED™ process and lessons learned to employees, professional organizations, and the general public to promote awareness and increase adoption of sustainable design process.

Narrative: A building education program was developed and targeted at many of the stakeholders involved in the building projects, including contractors, employees, the general public and government/agency officials. The IEUA headquarters project elected to include the following elements in its sustainable education program:

- ☞ Building tours for the general public, employee and professional groups.
- ☞ Educational signage program highlighting sustainable features of the headquarters.
- ☞ Web site posting/educational literature that describes the project and the LEED™ program.

Projects and Activities: The Agency has been embarking on the following activities as part of its effort to increase public awareness about the importance of healthy and productive environments for all generations:

Tours

IEUA developed a guided tour and program for visitors and employees to highlight specific green materials, energy efficient equipment, green architectural elements, and water/resource efficient systems. This tour was first presented during the project's grand opening celebration, on July 10, 2003. The tour focused on the project's sustainable elements, with a particular focus on the LEED™ process. IEUA has also hosted a number of educational programs at its new facility for professional organizations and other interested parties. A sample invitation letter from an event in November 2003 has been attached to this submittal as Attachment 'R.'

Signage

To further increase the educational elements of the building, IEUA developed a comprehensive signage program to educate employees and visitors on the green features of the building and the LEED™ process. The program highlights technologies used and their benefits from both an environmental and a corporate perspective. Signage also describes the implementation of the LEED™ process at the headquarters facility and efforts undertaken in pursuit of a LEED™ Platinum certification. Plans and descriptions of the signage program have been included in this submittal package (see Attachment 'S').

Educational Publications

IEUA has published a handout, entitled "IEUA LEED™ing the Way." This brochure was developed as a resource to further educate the public about the project and to increase interest in the development of sustainable buildings in the region. A copy of this pamphlet has been attached to this submittal (see Attachment 'T').

5.0 Accredited Professional

Innovation and Design Process Credit 2.0: 1 (one) point

Objective: To support and encourage the design integration required by a LEED™ Green Building project and to streamline the application and certification process.

Narrative: To support and encourage the integration of the LEED™ requirement into the project design, at least one principal participant of the project team had to successfully complete the LEED™ Accredited Professional Examination.

Projects and Activities: One principal participant of the project team successfully completed the LEED™ Accredited Professional examination.