



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Acting Secretary for
Environmental Protection

Recipient of the 2001 *Environmental Leadership Award* from *Keep California Beautiful*

Edmund G. Brown Jr.
Governor

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Mr. George Piantka
El Segundo Energy Center LLC
301 Vista Del Mar
El Segundo, California 90245

WATER QUALITY CERTIFICATION FOR PROPOSED EL SEGUNDO POWER REDEVELOPMENT PROJECT (Corps' Project No. 2010-01051-CO), CITY OF EL SEGUNDO, LOS ANGELES COUNTY (File No. 10-158)

Dear Mr. Piantka:

Board staff has reviewed your request on behalf of El Segundo Energy Center LLC (Applicant) for a Clean Water Act Section 401 Water Quality Certification for the above-referenced project. Your application was deemed complete on January 7, 2010.

I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges that have received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

The Applicant shall be liable civilly for any violations of this Certification in accordance with the California Water Code. This Certification does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

Should you have questions concerning this Certification action, please contact Valerie Carrillo, Lead, Section 401 Program, at (213) 576-6759.



Samuel Unger, P.E.
Executive Officer

March 8, 2011
Date

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

DISTRIBUTION LIST

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Charles R. Posner
Date

Charles R. Posner
Executive Director

ATTACHMENT A

Project Information

File No. 10-158

1. Applicant: Mr. George Piantka
El Segundo Energy Center LLC
301 Vista Del Mar
El Segundo, California 90245
Phone: (760) 710-2156 Fax: (760) 710-2158
2. Applicant's Agent: John McKinsey
Stoel Rivers LLP
500 Capitol Mall, Ste. 1600
Sacramento, California 95814
Phone: (916) 319-4746 Fax: (916) 447-4781
3. Project Name: El Segundo Power Redevelopment Project
4. Project Location: El Segundo (Beach), Santa Monica Bay, Los Angeles County

<u>Latitude</u>	<u>Longitude</u>
33.910569	118.425453
33.910550	118.425506
33.910689	118.425519
33.910669	118.425561
33.910658	118.425589
33.910617	118.425703
33.910542	118.425528
33.910506	118.425636

5. Type of Project: Closure of El Segundo Generating Station (ESGS) Intake and Outfall Pipes
6. Project Purpose and background: The California Energy Commission (CEC) issued their initial Decision approving a license to construct the El Segundo Power Redevelopment Project (ESPRP) in 2005. The 2005 Decision approved the construction of a 630-megawatt (MW) combined-cycle power generating facility replacing older power generating Units 1 and 2 which were retired in 2002. The 2005 Decision

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included the use of once-through cooling in the design.

However, on June 15, 2007, El Segundo Energy Center LLC (ESEC) subsidiary of NRG Energy and developer of the ESPRP filed a Petition to Amend the 2005 Decision, converting the plant design to a 560-megawatt (MW) rapid-response combined-cycle facility using dry-cooling and zero liquid discharge technology. The new design eliminates the use of once-through cooling water for the new units (Units 5, 6, 7 & 8). The construction of the new El Segundo Energy Center will lead to the retirement of seawater intake for three of the four units currently at the El Segundo facility.

The El Segundo facility is permitted under a National Pollutant Discharge Elimination System (NPDES) permit to discharge 607 million gallons per day (MGD). Retired Units 1 & 2 have been permitted for 207 MGD through Outfall # 001. Unit 3, which will retire in 2013 when the El Segundo Energy Center is constructed, will be permitted to discharge 200 MGD through Outfall # 002. Unit 4 will continue to operate and discharge ocean water for cooling through Outfall # 002. Thus, the El Segundo Energy Center project will eliminate over 400 MGD of once-through cooling discharge at this facility. The CEC issued their Decision on Petition to Amend on June 30, 2010, thereby approving the El Segundo Energy Center project.

In order to construct the new dry-cooled combined cycle plant, the existing cooling tunnels that supported the operation of the retired Units 1 & 2 must be plugged. The plugging will be completely within the boundaries of the El Segundo facility.

Plans for a new upgraded station are in place for construction to begin sometime during summer 2011.

7. Project Description:

The proposed project is located within the man-made, concrete cooling water intake and discharge conduits of ESGS Units 1 & 2. The intake and outfall pipes will be allowed to stay in place, and the in-plant forebay will be completely dewatered. The area must be dewatered in order for below-grade utility decommissioning to take place.

The plugging operation will begin with a dive team constructing the

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bulkhead from the ocean side of the tunnels. Once the wooden and steel forms are constructed from the ocean side of the project, the areas will be plugged and concrete will be poured from the plant side. These concrete barriers will allow the units to stay in place and avoid movement. Concrete Pour will be pre-made prior to placement and will be placed using a tremie pour hose. The use of the tremie concrete method will preclude the need to excavate and shore pour points from the surface beach area. The two 10-foot diameter tunnels will each be plugged against bulkheads with approximately 500 square feet (0.01 acres) of concrete.

The intake and outfall pipes are licensed under a lease with the State Lands Commission. There is an obligation to notify the State Lands of improvements to the intake/outfall and to restore the leased area upon termination of the lease. A plan will be prepared within 90 days of notification of the lease termination which outlines removal/restoration of the leased area (i.e., the area encumbered by the intake and outfall pipes). A Feasibility Study will then be developed to determine options for removal and will be subject to environmental review and permitting separately from this proposed project.

In October 2005, U.S. Fish and Wildlife Service designated Critical Habitat for the Pacific coast population of western snowy plover. Twenty-four acres were designated immediately upcoast from the ESGS. However, due to the design of the proposed project, there are no anticipated effects to western snowy plover or its critical habitat.

The 2005 Decision included several project specific Conditions of Certification (COCs) to mitigate potential environmental and community impacts. One specific condition concerning the use of once-through cooling systems included payment to the Santa Monica Bay Restoration Commission to assess the ecological condition of the Santa Monica Bay and to develop and implement actions to improve the ecological health of the Bay. El Segundo Power submitted \$1,000,000 to the Santa Monica Bay Restoration Commission in compliance with the associated COCs.

8. Federal Agency/Permit: U.S. Army Corps of Engineers
NWP No. 3 (Permit No. 2011-01051-CO)

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9. Other Required Regulatory Approvals: None
10. California Environmental Quality Act Compliance: The proposed project is under the oversight of the California Energy Commission and is exempt from CEQA pursuant to the Public Resource Code (CCR 14 § 15252 (j)); § 21080.5. For purposes of CEQA, the Energy Commission is the lead agency for all power plant projects, pursuant to the Warren-Alquist Act.
- The Energy Commission originally approved the El Segundo Power Redevelopment Project on February 2, 2005. On June 30, 2010, the Energy Commission approved the Amendment for the El Segundo Power Redevelopment Project (CEC-800-2010-015).
11. Receiving Water: Pacific Ocean (Hydrologic Unit No. 402.13)
12. Designated Beneficial Uses: NAV, REC-1, REC-2, COMM, MAR, WILD, MIGR, SPWN, SHELL.
13. Impacted Waters of the United States: Ocean: 0.01 permanent acres of water (500 square feet)
14. Dredge Volume: None
15. Related Projects Implemented/to be Implemented by the Applicant: None.
16. Avoidance/Minimization Activities: The Applicant has proposed to implement several Best Management Practices, including, but not limited to, the following:
- Divers will be submerged into the conduits in order to plug the conduits and avoid any water quality impacts.
 - Tunnel inspection will be performed prior to work.
 - A screen will be in place at the end of the structure to avoid any impacts from fish or any other aquatic life from entering the project site.

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STANDARD CONDITIONS

- Best Management Practices will be implemented in order to contain and minimize the spread of any construction-related turbidity resulting from the project, including, but not limited to sand bagging, runoff diversions, and silt curtains where applicable.
17. Proposed Compensatory Mitigation: The Applicant has provided \$1,000,000 to the Santa Monica Bay Restoration Commission as a component of the ESGS project, to develop and implement actions to improve the ecological health of the Bay.
18. Required Compensatory Mitigation: The Regional Board finds the above compensatory mitigation sufficient and will not require any additional compensatory mitigation for this Certification. Construction of the new plant may be subject to further permitting, fees and compensatory mitigation.

ADDITIONAL CONDITIONS

1. The Applicant shall submit to this Regional Board copies of any other permit and agreements required for this project, including, but not limited to the U.S. Army Corps of Engineers' (ACE) Section 404 Permit. These documents shall be submitted prior to any discharge to waters of the state.
2. The Applicant shall adhere to the most stringent conditions imposed with ACE Section 404 Permit.
3. The Applicant shall comply with all water quality objectives, prohibitions, and prohibitions both in the Water Quality Control Plan for the Santa Monica Bay Region (WQCP) as amended.
4. The Avoidance/Minimization activities proposed by the Applicant as detailed in Attachment A No. 10, are incorporated as additional conditions herein.
5. The Applicant and all contractors employed by the Applicant shall have copies of this Certification, the approved maintenance plan, and all other regulatory requirements for this project on site at all times and shall be familiar with all conditions set forth.

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STANDARD CONDITIONS

Pursuant to §3860 of Title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and Article 6 (commencing with 23 CCR §3867).
2. This Certification action is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR Subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR Chapter 28 and owed by the Applicant.

ADDITIONAL CONDITIONS

Pursuant to 23 CCR §3859(a), the Applicant shall comply with the following additional conditions:

1. The Applicant shall submit to this Regional Board copies of any other final permits and agreements required for this project, including, but not limited to, the U.S. Army Corps of Engineers' (ACOE) Section 404 Permit. **These documents shall be submitted prior to any discharge to waters of the State.**
2. The Applicant shall adhere to the most stringent conditions indicated with ACOE Section 404 Permit.
3. The Applicant shall comply with all water quality objectives, prohibitions, and policies set forth in the *Water Quality Control Plan, Los Angeles Region (1994)*, as amended.
4. The Avoidance/Minimization activities proposed by the Applicant as described in Attachment A, No. 16, are incorporated as additional conditions herein.
5. The Applicant and all contractors employed by the Applicant shall have copies of this Certification, the approved maintenance plan, and all other regulatory approvals for this project on site at all times and shall be familiar with all conditions set forth.

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6. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the State. At no time shall the Applicant use any vehicle or equipment which leaks any substance that may impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of waters of the State.
7. All excavation, construction, or maintenance activities shall follow best management practices to minimize impacts to water quality and beneficial uses. Dust control activities shall be conducted in such a manner that will not produce downstream runoff.
8. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards, shall be located in a manner which may result in a discharge or a threatened discharge to waters of the State. Designated spoil and waste areas shall be visually marked prior to any excavation and/or construction activity, and storage of the materials shall be confined to these areas.
9. All waste and/or dredged material removed shall be relocated to a legal point of disposal if applicable. A legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith. Please contact the Land Disposal Unit at the Regional Board for further information.
10. The Applicant shall implement all necessary control measures to prevent the degradation of water quality from the proposed project in order to maintain compliance with the Basin Plan. The discharge shall meet all effluent limitations and toxic and effluent standards established to comply with the applicable water quality standards and other appropriate requirements, including the provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act. This Certification does not authorize the discharge by the applicant for any other activity than specifically described in the 404 Permit.
11. The discharge shall not: a) degrade surface water communities and populations including vertebrate, invertebrate, and plant species; b) promote the breeding of mosquitoes, gnats, black flies, midges, or other pests; c) alter the color, create visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters; d) cause formation of sludge deposits; or e) adversely affect any designated beneficial uses.
12. The Applicant shall allow the Regional Board and its authorized representative entry to the premises, including all mitigation sites, to inspect and undertake any activity to determine compliance with this Certification, or as otherwise authorized by the California Water Code.
13. The Applicant shall not conduct any construction activities within waters of the State during a rainfall event. The Applicant shall maintain a **five-day (5-day) clear weather forecast** before conducting any operations within waters of the State.

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14. No activities shall involve wet excavations (i.e., no excavations shall occur below the seasonal high water table). A minimum **5-foot** buffer zone shall be maintained above the existing groundwater level. If construction or groundwater dewatering is proposed or anticipated, the Applicant shall file a **Report of Waste Discharge** to this Regional Board and obtain any necessary NPDES permits/Waste Discharge Requirements prior to discharging waste. Sufficient time should be allowed to obtain any such permits (generally 180 days). If groundwater is encountered without the benefit of appropriate permits, the Applicant shall cease all activities in the areas where groundwater is present, file a Report of Waste Discharge to this Regional Board, and obtain any necessary permits prior to discharging waste.
15. All project maintenance activities not included in this Certification, and which may require a permit, must be reported to the Regional Board for appropriate permitting. Bank stabilization and grading, as well as any other ground disturbances, are subject to restoration and revegetation requirements, and may require additional Certification action.
16. The Applicant shall restore all areas of TEMPORARY IMPACTS to waters of the United States and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the State. Restoration shall include grading of disturbed areas to pre-project contours and revegetation with native species. Restored areas shall be monitored and maintained with native species as necessary for five years. The Applicant shall implement all necessary Best Management Practices to control erosion and runoff from areas associated with this project.
17. The Applicant shall submit to this Regional Board **Annual Project Monitoring Report** (Annual Reports) by **January 1st** of the year following project completion. The Annual Reports shall describe in detail all of the project/construction activities performed during the previous year and all restoration efforts. At a minimum the Annual Reports shall include the following documentation;
 - (a) Color photo documentation of the pre- and post-project site conditions;
 - (b) Geographical Positioning System (GPS) coordinates in decimal-degrees format outlining the boundary of the project and mitigation areas;
 - (c) The overall status of project including a detailed schedule of work;
 - (d) Copies of all permits revised as required in Additional Condition 1;
 - (e) Water quality monitoring results (as required) compiled in an easy to interpret format;

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- (f) A certified Statement of “no net loss” of wetlands associated with this project;
 - (g) Discussion of any monitoring activities and exotic plant control efforts; and
 - (h) A certified Statement from the permittee or his/her representative that all conditions of this Certification have been met.
18. All applications, reports, or information submitted to the Regional Board shall be signed:
- (a) For corporations, by a principal executive officer at least of the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates.
 - (b) For a partnership, by a general partner.
 - (c) For a sole proprietorship, by the proprietor.
 - (d) For a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

19. Each and any report submitted in accordance with this Certification shall contain the following completed declaration:

“I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on the _____ day of _____ at _____.

_____ (Signature)

_____ (Title)”

20. All communications regarding this project and submitted to this Regional Board shall identify the Project File Number **10-158**. Submittals shall be sent to the attention of the 401 Certification Unit.
21. Any modifications of the proposed project may require submittal of a new Clean Water Act Section 401 Water Quality Certification application and appropriate filing fee.

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22. The project shall comply with the local regulations associated with the Regional Board's **Municipal Stormwater Permit** issued to Los Angeles County and co-permittees under NPDES No. CAS004001 and Waste Discharge Requirements Order No. 01-182. This includes the Standard Urban Storm Water Mitigation Plan (SUSMP) and all related implementing local ordinances and regulations for the control of stormwater pollution from new development and redevelopment. The project shall also comply with all requirements of the National Pollutant Discharge Elimination System (NPDES) **General Permit** for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. All stormwater treatment systems shall be located outside of any water of the State and shall not be used as a wetland or riparian mitigation credit.
23. Coverage under this Certification may be transferred to the extent the underlying federal permit may legally be transferred and further provided that the Applicant notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new Applicants containing a specific date of coverage, responsibility for compliance with this Certification, and liability between them.
24. The Applicant or their agents shall report any noncompliance. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
25. *Enforcement:*
 - (a) In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
 - (b) In response to a suspected violation of any condition of this Certification, the State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the SWRCB deems appropriate, provided that the burden, including costs, of the reports shall be a

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reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

- (c) In response to any violation of the conditions of this Certification, the SWRCB or RWQCB may add to or modify the conditions of this Certification as appropriate to ensure compliance.
26. This Certification shall expire **five (5) years** from date of this Certification. The Applicant shall submit a complete application prior to termination of this Certification if renewal is requested.

