**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**SAN DIEGO REGION**

**ADDENDUM NO. 1**
**TO**
**ORDER NO. R9-2005-0005**
**NPDES PERMIT NO. CA0108073**

**WASTE DISCHARGE REQUIREMENTS**
**FOR**
**SOUTHERN CALIFORNIA EDISON**

**DISCHARGE TO THE PACIFIC OCEAN THROUGH**
**OUTFALL 002 FROM**
**SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2**
**SAN DIEGO COUNTY**

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Water Board), finds that:

1. On May 11, 2005, this Regional Water Board adopted Order No. R9-2005-0005, National Pollutant Discharge Elimination System (NPDES) permit No. CA0108073, Waste Discharge Requirements for Southern California Edison (SCE). Order No. R9-2005-0005 establishes the requirements for the discharge flow rate (30-day running average) of up to 1,287 gallons per day of combined discharges of cooling water flows and in-plant waste streams from Outfall 002 at the San Onofre Nuclear Generating Station (SONGS) Unit 2 facility located in northern San Diego County within the boundaries of Camp Pendleton, a United States Marine Corps Base.

2. By letter dated November 15, 2005, SCE requested an increase in the flow rate limitation for the Unit 1 dewatering waste stream discharge from Unit 1 to the Unit 2 combined discharge from 0.864 MGD to 3.75 MGD. An increased flow rate limitation was also requested for the Unit 1 yard drain waste stream discharge from Unit 1 to the Unit 2 combined discharge from 0.360 MGD to 8.64 MGD.

3. With the exception of the amount of flow, the characteristics of the Unit 1 dewatering waste stream will not change. The SONGS Unit 1 facility is being decommissioned. The original dewatering flow rate limitation incorporated into the permit was based on SCE's estimate of dewatering needs during the decommissioning process. As the scope of the project became more defined, SCE realized that up to 3.75 MGD would be needed to remove some Unit 1 structures.

4. With the exception of the amount of flow, the characteristics of the Unit 1 yard drain waste stream will not change. The existing Unit 1 yard drain sump is not capable of controlling stormwater from a major rain event. The sump floods and causes closure to part of the Unit 1 plant area. SCE is installing a new yard drain sump with a capacity of 8.64 MGD in order to prevent plant area closure due to flooding.

5. The total requested increase in flow rate for both dewatering and yard drain waste streams is 11.17 MGD, which accounts for less than one percent of the total allowed discharge of 1,287 MGD from Outfall 002. The flow rate and effluent limitations on the combined discharge from Outfall 002 will remain unchanged. The overall impact on the ocean from adoption of the increased dewatering and yard drain flow rate limitations is negligible.

6. Section III, paragraph C of Order No. R9-2005-0005 establishes concentration and mass-based effluent limitations for Total Suspended Solids (TSS), Oil and Grease, and toxic pollutants for the combination of all low volume, in-plant waste streams. Section III, paragraph F of Order No. R9-2005-0005 establishes concentration and mass-based effluent limitations for TSS and Oil and Grease for the individual dewatering and yard drain waste streams. Mass-based limitations increase proportionally as flow rate increases. Concentration-based limitations will not change due to increased flow rates.

7. The increased maximum mass-based effluent limitations for TSS, Oil and Grease, and toxic pollutants in the combination of all low volume, in-plant waste streams are expected to slightly lower the existing receiving water quality previously established by Order No. R9-2005-0005. This lowering of water quality, however, is not expected to be significant and is not expected to cause adverse effects to the overall receiving water. Furthermore, historical data indicates that concentrations of pollutants are typically much lower than the effluent limitations. The increase in maximum flow rates for the combination of all low volume, in-plant waste streams will correspond to less than one percent of the total allowed discharge of 1,287 MGD from Outfall 002. While the maximum allowable mass of pollutants in the in-plant waste streams will increase, this change will be immeasurable in the discharge from Outfall 002. For these reasons, the possible impacts on the Pacific Ocean resulting from the relaxation of mass emission rate limitations in the combination of all low volume, in-plant waste streams are negligible. An antidegradation analysis is not required.

8. The issuance of this Addendum is exempt from the requirements for preparation of environmental documents under the California Environmental Quality Act in accordance with Section 13389 of the Porter Cologne Water Quality Control Act.

9. This Regional Board has considered all environmental factors associated with the proposed and existing discharges.

10. This Regional Board has notified Southern California Edison and all known interested parties of its intent to modify Order No. R9-2005-0005.

11. This Regional Board, in a public hearing, heard and considered all comments pertaining to the modification of Order No. R9-2005-0005.

**IT IS HEREBY ORDERED,** that the following modifications shall be made to Order No. R9-2005-0005:

1. The effluent limitations for the combined low volume, in-plant waste streams in section III, paragraph C.2 shall be replaced with the following.

| | 30-Day Average[12/] | | Daily Max.[6/] | |
|---|---|---|---|---|
| **Constituent** | **mg/L** | **lbs/day** | **mg/L** | **lbs/day** |
| TSS | 30 | 6.1E+03 | 100 | 2.0E+04 |
| O&G | 15 | 3.0E+03 | 20 | 4.1E+03 |

2. The mass-based effluent limitations for the combined low volume, in-plant waste streams in section III, paragraph C.3 shall be replaced with the following.

**Limitations For Protection of Marine Aquatic Life**

| Constituent | Units | 6-Month Median[13/] | Daily Max.[6/] |
|---|---|---|---|
| Arsenic | lbs/day | 1.2E+01 | 6.5E+01 |
| Cadmium | lbs/day | 2.2E+00 | 8.9E+00 |
| Chromium (hexavalent)[10/] | lbs/day | 4.5E+00 | 1.8E+01 |
| Copper | lbs/day | 2.6E+00 | 2.3E+01 |
| Lead | lbs/day | 4.5E+00 | 1.8E+01 |
| Mercury | lbs/day | 8.8E-02 | 3.6E-01 |
| Nickel | lbs/day | 1.1E+01 | 4.5E+01 |
| Selenium | lbs/day | 3.4E+01 | 1.3E+02 |
| Silver | lbs/day | 1.2E+00 | 5.9E+00 |
| Zinc | lbs/day | 2.8E+01 | 1.6E+02 |
| Cyanide[11/] | lbs/day | 2.2E+00 | 8.9E+00 |
| Ammonia | lbs/day | 1.3E+03 | 5.4E+03 |
| Non-Chlorinated Phenolic Compounds | lbs/day | 6.7E+01 | 2.7E+02 |
| Chlorinated Phenolics | lbs/day | 2.2E+00 | 8.9E+00 |
| Endosulfan | lbs/day | 2.0E-02 | 4.0E-02 |
| Endrin | lbs/day | 4.5E-03 | 8.9E-03 |
| HCH | lbs/day | 8.9E-03 | 1.8E-02 |

**Limitations For Protection of Human Health – Non Carcinogens**

| Constituent | Units | 30-Day Average[12/] |
|---|---|---|
| Acrolein | lbs/day | 4.9E+02 |
| Antimony | lbs/day | 2.7E+03 |
| Bis (2-chloroethoxy) methane | lbs/day | 9.8E+00 |
| Bis (2-chloroisopropyl) ether | lbs/day | 2.7E+03 |
| Chlorobenzene | lbs/day | 1.3E+03 |
| Chromium (trivalent) | lbs/day | 4.2E+05 |
| Di-n-butyl phthalate | lbs/day | 7.8E+03 |
| Dichlorobenzenes | lbs/day | 1.1E+04 |
| Diethyl phthalate | lbs/day | 7.4E+04 |

| | | |
|---|---|---|
| Dimethyl phthalate | lbs/day | 1.8E+06 |
| 4,6-dinitro-2-methylphenol | lbs/day | 4.9E+02 |
| 2,4-dinitrophenol | lbs/day | 8.9E+00 |
| Ethylbenzene | lbs/day | 9.2E+03 |
| Fluoranthene | lbs/day | 3.4E+01 |
| Hexachlorocyclopentadiene | lbs/day | 1.3E+02 |
| Nitrobenzene | lbs/day | 1.1E+01 |
| Thallium | lbs/day | 4.5E+00 |
| Toluene | lbs/day | 1.9E+05 |
| 1,1,1-trichloroethane | lbs/day | 1.2E+06 |
| Tributyltin | lbs/day | 3.1E-03 |

**Limitations For Protection of Human Health – Carcinogens**

| Constituent | Units | 30-Day Average[12/] |
|---|---|---|
| Acrylonitrile | lbs/day | 2.2E-01 |
| Aldrin | lbs/day | 4.9E-05 |
| Benzene | lbs/day | 1.3E+01 |
| Benzidine | lbs/day | 1.5E-04 |
| Beryllium | lbs/day | 7.4E-02 |
| Bis (2-chloroethyl) ether | lbs/day | 1.0E-01 |
| Bis (2-ethylhexyl) phthalate | lbs/day | 7.8E+00 |
| Carbon tetrachloride | lbs/day | 2.0E+00 |
| Chlordane | lbs/day | 5.1E-05 |
| Chlorodibromomethane | lbs/day | 1.9E+01 |
| Chloroform | lbs/day | 2.9E+02 |
| DDT | lbs/day | 3.8E-04 |
| 1,4-dichlorobenzene | lbs/day | 4.0E+01 |
| 3,3'-dichlorobenzidine | lbs/day | 1.8E-02 |
| 1,2-dichloroethane | lbs/day | 6.3E+01 |
| 1,1-dichloroethylene | lbs/day | 2.0E+00 |
| Dichlorobromomethane | lbs/day | 1.4E+01 |
| Dichloromethane | lbs/day | 1.0E+03 |
| 1,3-dichloropropene | lbs/day | 2.0E+01 |
| Dieldrin | lbs/day | 8.9E-05 |
| 2,4-dinitrotoluene | lbs/day | 5.8E+00 |
| 1,2-diphenylhydrazine | lbs/day | 3.6E-01 |
| Halomethanes | lbs/day | 2.9E+02 |
| Heptachlor | lbs/day | 1.1E-04 |
| Heptachlor epoxide | lbs/day | 4.5E-05 |
| Hexachlorobenzene | lbs/day | 4.7E-04 |
| Hexachlorobutadiene | lbs/day | 3.1E+01 |
| Hexachloroethane | lbs/day | 5.6E+00 |
| Isophorone | lbs/day | 1.6E+03 |
| N-nitrosodimethylamine | lbs/day | 1.6E+01 |

| | | |
|---|---|---|
| N-nitrosodi-N-propylamine | lbs/day | 8.5E-01 |
| N-nitrosodiphenylamine | lbs/day | 5.6E+00 |
| PAHs | lbs/day | 2.0E-02 |
| PCBs | lbs/day | 4.2E-05 |
| TCDD equivalents | lbs/day | 8.7E-09 |
| 1,1,2,2-tetrachloroethane | lbs/day | 5.1E+00 |
| Tetrachloroethylene | lbs/day | 4.5E+00 |
| Toxaphene | lbs/day | 4.7E-04 |
| Trichloroethylene | lbs/day | 6.0E+01 |
| 1,1,2-trichloroethane | lbs/day | 2.1E+01 |

**Limitations For Protection of Human Health – Carcinogens**

| Constituent | Units | 30-Day Average[12/] |
|---|---|---|
| 2,4,6-trichlorophenol | lbs/day | 6.5E-01 |
| Vinyl chloride | lbs/day | 8.0E+01 |

3. The flow rate and mass-based effluent limitations for the Unit 1 yard drain waste stream (Outfall 001-E) and Unit 1 dewatering waste stream (Outfall 001-F) in section III, paragraph F shall be replaced with the following.

| Outfall Number | Low Volume Wastewater Source | Max Flow (MGD) | Units | Total Suspended Solids (TSS) | | Oil & Grease | |
|---|---|---|---|---|---|---|---|
| | | | | 30-Day Avg. | Daily Max. | 30-Day Avg. | Daily Max. |
| 001-E* | Yard Drains | 8.64 | lbs/day | 2.2E+03 | 7.2E+03 | 1.1E+03 | 1.4E+03 |
| 001-F* | Dewatering | 3.75 | lbs/day | 9.4E+02 | 3.1E+03 | 4.7E+02 | 6.3E+02 |

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Addendum adopted by the California Regional Water Quality Control Board, San Diego Region, on April 12, 2006.

for JOHN H. ROBERTUS
Executive Officer