

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF OCTOBER 22, 2004

Prepared September 30, 2004

ITEM: 12

SUBJECT: DUKE ENERGY MOSS LANDING LLC, MOSS LANDING FOSSIL FUELED POWER PLANT, MONTEREY COUNTY; RENEWAL OF WASTE DISCHARGE REQUIREMENTS FOR CLASS I WASTEWATER SURFACE IMPOUNDMENTS AND FOR EXEMPTIONS TO THE TOXIC PITS CLEANUP ACT, - ORDER NO. R3-2004-104

KEY INFORMATION

Location:	Intersection of Highway 1 and Dolan Road, Moss Landing, Monterey County.
Type of Waste:	Boiler Cleaning Wastewater.
Waste Management Units:	Three Hazardous Waste Surface Impoundments.
Design Capacity:	2,077,000 gallons (estimated).
Present Volume:	Variable; discontinuous batch discharge during boiler cleaning.
Treatment:	Chemical precipitation and settling.
Disposal:	Treated liquid to permitted surface water discharge, treated solid to offsite disposal and/or recycling.
Existing Order:	WDR Order No. 99-132, proposed for renewal as WDR Order No. R3-2004-104.

SUMMARY

Draft WDR Order No. R3-2004-104 is an updated version of the current WDR Order 99-132. WDR Order No. R3-2004-104 continues California Toxic Pits Cleanup Act of 1984 (TPCA) exemptions for the impoundments and reflects partial plant renovation and reconstruction.

DISCUSSION

The Duke Energy Moss Landing Power Plant (MLPP) utilizes three hazardous waste surface impoundments to treat and store batch discharges of acidic or basic boiler cleaning wastewater with elevated metal content. WDR Order No. 99-132 was adopted November 19, 1999, and expires on November 19, 2004. The Order authorizes exemptions from the CA Toxic Pits Cleanup Act (TPCA), allowing impoundment use, and contains operational and monitoring requirements for the impoundments. The impoundments are also

regulated by a Resource Conservation and Recovery Act (RCRA) hazardous waste permit administered by the California Department of Toxic Substances Control (DTSC).

WDR Order No. R3-2004-104 renews the terms of WDR Order No. 99-132 for another five years. There has been no substantial change in impoundment operation or in WDR terms. WDR Order No. R3-2004-104 essentially continues existing TPCA exemptions (i.e., exemptions from Health & Safety Code Sections 25208.4 (a) and (c) granted pursuant to Health & Safety Code Sections 25208.4 (b) and 25208.16), allowing continued impoundment use, and reflects partial plant renovation and reconstruction and relatively minor hazardous waste permit changes.

The Board granted TPCA exemptions pursuant to Health and Safety Code sections 25208.4 and 25208.16. Before these exemptions can be renewed the Board must make certain findings.

Based on monitoring report reviews, site visits, and the record, the following findings are made:

a. H&S SECTION 25208.4 b 2 A:

No hazardous waste constituents have migrated from the surface impoundments into the vadose zone or the waters of the state in concentrations that pollute the vadose zone, or pollute, or threaten to pollute, the waters of the state.

b. H&S SECTION 25208.4 b 2 B:

Continuing the operation of the surface impoundments does not pose a significant potential of hazardous waste constituents migrating from the surface impoundments into the vadose zone or the waters of the state, thus polluting the vadose zone, or polluting, or threatening to pollute, these waters.

c. H&S SECTION 25208.16 a 1:

No extremely hazardous wastes are currently being discharged into the surface impoundments, and

1. The records of the person applying for an exemption indicate that no extremely hazardous wastes have been discharged into the surface impoundment and

2. Extremely hazardous wastes are not present in the surface impoundment, in the vadose zone, or in the waters of the state.

d. H&S SECTION 25208.16 a 2:

The surface impoundment is used for the purpose of temporary storage and noncontinuous batch treatment, all hazardous wastes [resulting from discharge of restricted hazardous waste] are removed after each batch treatment within 30 days of discharge [of restricted hazardous waste] into the impoundment, and the surface

impoundment is visually inspected prior to each use and tested for integrity at least annually and complies with subdivision (a) of Section 25208.7. Reports of these tests are filed with the Regional Board.

e. H&S SECTION 25208.16 a 3:

The surface impoundment is in compliance with construction criteria and ground water monitoring requirements of Section 25208.5 and a hydrogeological assessment report has been filed pursuant to Section 25208.8.

Occasional relatively minor problems or unplanned events associated with the surface impoundments have occurred. For example, in addition to occurrences described by Finding 30 of the proposed Order, a July 2004 unauthorized sludge discharge occurred. On July 6 and 7, 2004, treated supernatant was pumped legally from Metal Cleaning Waste Pond # 2 to Monterey Bay, pursuant to the existing NPDES Permit. However, because of operator error, sludge was also mistakenly pumped into the discharge system, resulting in discharge to Monterey Bay of up to approximately 500 gallons of metal-rich nonhazardous sludge. The sludge was greatly diluted in the NPDES discharge system by 250,000 gallons per minute continuous flow of permitted, clean generator cooling water. Thus, although the sludge discharge was unauthorized, it apparently did not cause exceedance of NPDES effluent limits to Monterey Bay. Duke has discontinued nighttime supernatant pumping, has greatly increased operator inspections and enhanced operator communications during such pumping, has improved operator training and is considering physical pump configuration changes to prevent a future occurrence. Those improvements appear appropriate and adequate. This is the first unauthorized pond sludge release to the NPDES discharge system in the roughly two decades of pond operation.

ENVIRONMENTAL SUMMARY

These waste discharge requirements are for an existing facility and are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Sections 15301 and 15302, Chapter 3, Title 14, of the California Code of Regulations.

COMMENTS

Duke Energy staff recommendations were incorporated into the Draft Order. The Staff Report and Draft Order were distributed or made available to all parties on the extensive power plant Interested Parties List. No comments have been received to date.

RECOMMENDATION

Adopt WDR Order No. R3-2004-104.

ATTACHMENTS

1. Draft proposed WDR Order No. R3-2004-104.
2. Draft Monitoring and Reporting Program No. R3-2004-104

S/SLIC/Regulated Sites/Monterey Co./Moss Landing Power Plant/Duke/Hazardous Waste Ponds, WDR/Staff Rpt. WDR R3-2004-104 draft2