



# California Regional Water Quality Control Board

## Los Angeles Region



Linda S. Adams  
Agency Secretary

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

Arnold Schwarzenegger  
Governor

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Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

October 8, 2008

Ms. Julie Babcock  
Reliant Energy Mandalay, Inc.  
7251 Amigo Street, Suite 120  
Las Vegas, NV 89119

Dear Ms. Babcock:

### WASTE DISCHARGE REQUIREMENTS FOR RELIANT ENERGY MANDALAY, INC., 393 NORTH HARBOR BOULEVARD, OXNARD, CALIFORNIA (FILE NO. 02-158, CI-8561)

Our letter of September 5, 2008, transmitted revised tentative Waste Discharge Requirements (WDR) including Monitoring and Reporting Program for Reliant Energy Mandalay, Inc.

Pursuant to Division 7 of the California Water Code, this Regional Board at a public meeting held on October 2, 2008, reviewed the revised tentative WDRs, considered all factors in the case, and adopted WDRs Order No. R4-2008-0087 (copy enclosed) relative to this discharge. Standard Provisions, which are a part of the WDRs, are also enclosed.

You are required to implement the Monitoring and Reporting Program No. CI-8561 on the effective date of Order No. R4-2008-0087. Your first monitoring report under these Requirements is due to this Regional Board by January 15, 2009. All monitoring reports should be sent to the Regional Board, Attn: Information Technology Unit, and please reference all monitoring reports to our Compliance File No. CI-8561.

We are sending the WDRs and MRP to the Discharger (Reliant Energy Mandalay, Inc) only. For recipients on the mailing list, an electronic or hard copy of these enclosures will be furnished upon request.

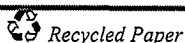
If you have any questions regarding this matter, please contact Mr. Orlando H. Gonzalez at (213) 620-2267 or Dr. Rebeca Chou at (213)620-6156.

Sincerely,

Wendy Phillips, Section Chief  
Groundwater and Cleanup Permits

### California Environmental Protection Agency

\*\*\*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption\*\*\*  
\*\*\*For a list of simple ways to reduce demand and cut your energy costs, see the tips at: <http://www.swrcb.ca.gov/news/echallenge.html>\*\*\*



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

Ms. Julie Babcock  
Reliant Energy Mandalay, Inc.

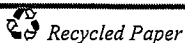
- 2 -

October 8, 2008

cc: Mr. Bill Stratton, Ventura County Environmental Health Division, Liquid Waste  
Mr. Rob Roshanian, Development Service Manager, City of Oxnard  
Mr. Edward M. Malinowski, Env. Specialist, Mandalay Generating Station

***California Environmental Protection Agency***

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**STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**ORDER NO. R4-2008-0087**

**WASTE DISCHARGE REQUIREMENTS  
FOR  
RELIANT ENERGY MANDALAY, INC.  
(MANDALAY GENERATING STATION)  
(File No. 02-158)**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

**PURPOSE OF ORDER**

1. Reliant Energy Mandalay, Inc. (hereinafter Discharger) owns and operates the Mandalay Generating Station, which is a power generation plant (Plant) with a capacity of 560 megawatts located at 393 North Harbor Boulevard, Oxnard, California (Figure 1).
2. Section 13260(a)(1) of the California Water Code (CWC) requires that any person discharging wastes, or proposing to discharge wastes, within any region that could affect the quality of the waters of the state, other than into a community sewer system, shall file with the appropriate regional board a report of waste discharge. The Regional Board shall then prescribe requirements for the discharge or proposed discharge of wastes. Consequently, the waste discharge requirements (WDRs) for Reliant Energy Mandalay, Inc. are being prescribed.
3. Municipal domestic wastewater from the administration building, maintenance shop, and main units of Mandalay Generating Station (Plant) is discharged through a subsurface drip system field regulated under Waste Discharge Requirements (WDRs) contained in Order No. R4-2003-0109 (Order), adopted by the Regional Board on August 7, 2003.
4. On February 7, 2008, the Discharger filed a Revised Report of Waste Discharge (ROWD) and applied to the Regional Board for renewal of its WDRs for disposal of treated wastewater from the Plant. The Discharger was originally discharging domestic wastewater from the Plant since 1960 through July, 2004, through two septic tank and leach fields disposal systems. The Order allow the Discharger to continue discharging through the two old septic tanks and leach fields system and required the Discharger to upgrade treatment and disposal system to include disinfection treatment within a year period according Time Schedule Order R4-2003-0110 because of the shallow groundwater and the discharge vicinity to the ocean. In July 2004, the Discharger started to operate an advance onsite treatment system and properly abandoned the old septic systems. The new treatment system consists of a 3,800 gallons recirculation tank, Orenco AdvanTech AX-100 filtration unit, UV disinfection unit, and subsurface drip system.

## **FACILITY AND TREATMENT PROCESS DESCRIPTION**

5. The Plant is located in an unsewered area of the City of Oxnard. This area relies upon subsurface disposal systems. The nearest sewer collection system is approximately four to five thousand feet from the Plant.
6. Wastes generated on-site include hazardous wastes, domestic sewage waste, and other wastes currently discharged to surface water under a National Pollutant Discharge Elimination System (NPDES) permit. Hazardous wastes are stored on-site and shipped to authorized disposal facilities. Only treated domestic sewage is discharged through the advance treatment system and subsurface drip system.
7. The Plant employs approximately 40 employees and operates 24 hours per day. Approximately 800 gallons per date (gpd) of disinfected treated wastewater is discharged through the advance treatment and drip disposal system. The treatment system receives the 800 gpd of wastewater from the administration building, maintenance shop and main units.

The raw sewage is discharged first to an existing 3,800 gallons septic tank for primary treatment. Effluent from the primary treatment tank flows to a 5,000 gallon secondary septic tank used as the circulation tank. The secondary tank is equipped with a lift pump to circulate the wastewater through the AX-100 filter media tank and circulation tank. At the median tank, wastewater is percolated through fiber glass media for treatment by microorganisms populating the fiber glass filter. Return flow from the media filter tank flows to a circulation valve that splits the flow between the circulation tank and a sump. During periods of low flow 100% of the treated wastewater is returned from the media tank to the circulation tank for further circulation to maintain the system running. From the sump the secondary treated wastewater is lifted and pumped through the ultra violet (UV) disinfection unit and disposed at the subsurface drip system field (Figure 2). Returning effluent from the drip system is looped through the sump and disinfection unit. The disinfection unit is equipped with two UV lamps. The drip field has a disposal capacity of 1,000 gpd.

8. The Department of Public Works of the County of Ventura issued construction permits for the primary septic system on June 24, 1957 and for the secondary system in 1966. These primary and secondary septic tank systems were in operation from the 1960's and 1966's respectively to July 2004.
9. The Discharger indicated that the groundwater below the site ranges from 13.70 feet to 5.83 feet below ground surface (bgs). Groundwater levels beneath the site vary with seasonal fluctuations, ocean tides, rainfall, and irrigation activities. The Discharger installed the drip system in an approximately three feet mounded area to maintain a groundwater separation of at least five feet below the drip system.

10. Wastewaters from the advance treatment system are discharged to the groundwater through the drip disposal system. The minimum standard for the vertical separation between the bottom of the subsurface drip system and the high groundwater table should be at least ten feet. Since there is no ten-foot vertical separation between subsurface drip system and groundwater, Regional Board staff required that the existing treatment system include disinfection to protect groundwater quality. The Regional Board, in Order No. 01-031 "*General Waste Discharge Requirements for Small Commercial and Multifamily Residential Subsurface Sewage Disposal Systems*," adopted on February 22, 2002, noted in footnote c) in section E.3. that "in areas of shallow groundwater and coastal regions where a minimum of ten feet of vertical separation cannot be maintained between the bottom of the disposal system and the historic high or anticipated high groundwater...effluent shall be disinfected to levels consistent with the beneficial uses of the groundwater and the nearest surface water body." Because Regional Board staff found that the subsurface drip system have less than 10 feet vertical separation and the subsurface drip system is approximately 450 feet from the ocean, this Order requires the Discharger disinfect the effluent in order to meet the receiving water limitations for coliform that are included herein.
11. The Discharger may have sufficient land area reserved for possible future 100 percent replacement of the subsurface disposal area. The Discharger is required to maintain the contingency plan to deal with the event of failure of the disposal system or the loss of soil assimilative capacity.
12. The Plant site is located at the western margin of the Oxnard Plain groundwater basin in the Unconfined and Perched Aquifers Hydrologic Subarea within the Santa Clara Hydrological Area of the Ventura Central Hydrologic Unit. Effluent from the Plant's advance treatment and disposal systems is discharged in close proximity (approximately 450 feet) to the Pacific Ocean. Its approximate Latitude is 34 ° 7' 12" and its Longitude is 119 ° 9' 0".
13. There are no drinking water supply wells located within one mile of the property. The City of Oxnard Water Division provides potable water.
14. The Discharger discharges wastewater to surface waters from its Mandalay Generating Station Plant under waste discharge requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit contained in Order No. 01-057 adopted by the Regional Board on April 26, 2001 (NPDES Permit No. CA0001180). The NPDES permit is for discharging of up to 255.3 million gallons per day (mgd) of wastes consisting of once-through cooling water from two steam electric generating units (four condenser halves), metal cleaning waste, and other low volume waste into the Pacific Ocean at Mandalay Beach in Oxnard.

## **APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS**

15. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). Subsequently, amendments to the Basin Plan have been adopted by the Regional Board in 1997 (Resolution No. 97-02); 1998 (Resolution No. 1998-018); 1999 (Resolution No. 1999-013); 2000 (Resolution No. 2000-010); 2001 (Resolution Nos. 2001-013, 2001-014, 2001-018); 2002 (Resolution Nos. 2002-004, 2002-011, 2002-017, 2002-022); and 2003 (Resolution Nos. 2003-001, 2003-009, 2003-010, 2003-011, 2003-012, 2003-015). The Basin Plan (i) designates beneficial uses for surface waters and groundwaters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state antidegradation policy (*Statement of Policy with Respect to Maintaining High Quality Waters in California*, State Water Resources Control Board [State Board] Resolution No. 68-16, October 28, 1968), and (iii) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates by reference applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Regional Board prepared the 1994 update of the Basin Plan to be consistent with previously adopted State and Regional Board plans and policies. This Order implements the plans, policies, and provisions of the Basin Plan.
16. On November 16, 2000, the State Board adopted a revised *Water Quality Control Plan for the Ocean Waters of California* (Ocean Plan). The State of California Office of Administrative Law and the United States Environmental Protection Agency (EPA) approved the Ocean Plan on July 9, 2001 and December 3, 2001, respectively. The Ocean Plan contains water quality objectives for coastal waters of California. This Order includes receiving water limitations, prohibitions, and provisions that implement the objectives of the Ocean Plan.
17. The Basin Plan designates beneficial uses and water quality objectives for the following water bodies:

### Groundwater (Oxnard Plain - Unconfined and Perched Aquifers):

Existing: municipal and domestic water supply, and agricultural supply.  
Potential: industrial service supply

### Coastal Features (Mandalay Beach)

Existing: Navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, Marine habitat, wildlife habitat, rare, threatened or endangered species and shellfish harvesting.

The Basin Plan limitations for groundwater, all of which is assumed to have potential for municipal and domestic supply uses; may not be applicable to unconfined aquifers discharging to the ocean. The potential beneficial uses of groundwater in the unconfined aquifers at the Plant near the ocean is limited.

18. Although the ultimate receiving water is assumed to be the Pacific Ocean, ocean monitoring is not proposed. An effluent monitoring program is necessary to evaluate the effectiveness of the treatment system and a groundwater monitoring program is necessary to evaluate the impacts from the discharge of treated wastewater to groundwater, which in this location is connected to the Pacific Ocean. Ocean Plan standards have been used for the limitations established herein.
19. Impacts to beachfront waters from developments along the shoreline are of concern when subsurface drip system is in relatively close proximity to the shoreline. The Discharger indicated that according to groundwater data obtained from the Plant from 1996 to the present, groundwater flow direction is parallel to the coast and towards the cooling water canal. A tidal influence study was performed on the station monitoring wells. The results of the study show that there is little or no response to tidal influences. The Discharger believes that pumping (a maximum of 255.3 million gallons per day) from the water canal for use in the cooling system is influencing the local groundwater flow direction at the Plant. The ultimate flow direction is generally toward the Ocean.
20. In accordance with the Governor's Executive Order requiring any proposed activity to be reviewed to determine whether such activity will cause additional energy usage, Regional Board staff believe that implementation of these wastes discharge requirements would cause a small increase in energy usage at the Plant.
21. The Regional Board is increasingly concerned about the aggregate effects of discharges from individual and community subsurface disposal systems on the Oxnard Watershed and groundwaters. At this time, these WDRs are being issued to regulate an individual disposal system. Future requirements, however, may require the discharge to be connected to a community collection system, or future requirements may require consistency with the WDRs established for a community collection system.

#### **CEQA and NOTIFICATION**

22. This project involves an existing facility and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, section 15301.
23. The Regional Board has notified the Discharger and interested agencies and persons of its intent to renew Waste Discharge Requirements for this discharge, and has provided them an opportunity to submit their written views and recommendations for the requirements.

24. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.
25. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if thirty day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Board by 5:00 p.m. on the next business day. Copy of the law and regulation applicable to filing petitions may be found on the Internet at: [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will provided upon request.

**IT IS HEREBY ORDERED** that, the Discharger, Reliant Energy Mandalay, Inc. shall comply with the following requirements in connection with the disposal operations at the Plant:

**A. INFLUENT LIMITATIONS**

1. Waste discharged to the wastewater treatment system shall be limited to domestic wastewater only. No water softener regeneration brines or industrial or commercial wastewater shall be discharged to the wastewater treatment system.
2. The maximum daily discharge to the wastewater treatment system shall not exceed a flow of 5,000 gpd. This flow limitation also applies to effluent discharged to the subsurface drip system.
3. No volatile organic compounds are to be discharged into the treatment and disposal system.

**B. EFFLUENT LIMITATIONS**

1. The pH of wastes discharged to the subsurface drip system shall at no time be less than 6.0 or more than 9.0 pH units.
2. Wastewater discharged to the subsurface drip system shall not contain additives or residual chlorine levels such that the biomat layer or the hydraulic capacity of the subsurface drip system is irreparably damaged.
3. The effluent discharge shall not contain heavy metals, arsenic, cyanide, or other EPA priority pollutants in concentrations exceeding the limits contained in the State Public Health Services' Primary Drinking Water Standards.
4. Radioactivity of the waste discharged shall not exceed the limits specified in California Code of Regulations, title 22, section 64441 et seq., or subsequent revisions.



C. RECEIVING WATER LIMITATIONS

- The wastewater discharged shall not cause the receiving groundwater to contain constituents in excess of the following limits:

<u>Constituent</u> <sup>1</sup>	<u>Units</u> <sup>2</sup>	<u>Monthly</u>		<u>Daily</u>
		<u>Mean</u>	<u>Median</u>	<u>Maximum</u>
Total coliform <sup>3</sup>	MPN/100ml	---	70	---
Fecal coliform <sup>3</sup>	MPN/100ml	200	---	---
Enterococcus <sup>3</sup>	MPN/100ml	24	---	---
Ammonia (as N)	mg/L	2.4	---	---
Residual chlorine	µg/L	---	---	8

<sup>[1]</sup> For the following parameters, the Discharger chose the compliance point for each parameter to be the wastewater treatment system end of pipe.

<sup>[2]</sup> mg/L: milligrams per liter; MPN/100mL: Most Probable Number per 100 milliliters; µg/L micrograms per liter.

<sup>[3]</sup> If only one sample is taken in any monthly period, that value shall be considered as the mean/median for the month.

- Receiving water, for the purpose of these waste discharge requirements, is defined as groundwater at a point no greater than fifty (50) feet hydraulically downgradient of the furthest extent of the disposal area, or the property line of the Discharger, whichever is less.
- The wastewater discharged to the subsurface drip disposal system shall not contain salts, heavy metals, or organic pollutants at levels that would impact groundwater that may be in hydraulic connection with surface waters designated for marine aquatic life or body contact recreation.
- Any wastes that do not meet the foregoing requirements shall be held in impervious containers, and discharged at a legal point of disposal.
- Compliance with these receiving water requirements shall also be based upon the upgradient quality of groundwater moving under the Plant to determine the net effect upon groundwater caused by the Discharger.

D. PROHIBITIONS

- The discharge or use of raw or inadequately treated sewage at any time is prohibited.
- The discharge of wastes to any point(s) other than specifically described in this Order is prohibited and constitutes a violation thereof.

3. Wastes shall not be disposed of in geologically unstable areas or so as to cause earth movement.
4. Wastes discharged shall not impart tastes, odors, color, foaming or other objectionable characteristics to the receiving water.
5. Waste discharged shall not cause any impact on the indigenous marine life and diverse marine community.
6. Adequate facilities shall be provided to divert surface and storm water away from the wastewater treatment system and subsurface drip disposal systems and from areas where any potential pollutants are stored.
7. The wastewater treatment system, disinfection treatment system, collection system and the disposal system shall be protected from damage by storm flows or runoff generated by a 100-year storm with 24 hour duration.
8. There shall be no onsite disposal of sludge. Any offsite disposal of sewage or sludge shall be made only to a legal point of disposal. For purposes of this Order, a legal disposal site is one for which requirements have been established by a regional water quality control board, and which is in full compliance therewith. Any sewage or sludge handling shall be in such a manner as to prevent its reaching surface waters or watercourses.
9. The treatment system, including the collection system that is a part of the treatment system and the disposal system, shall be maintained in such a manner that prevents sewage from surfacing or overflowing at any location.
10. Sewage odors shall not be detectable.
11. Wastes discharged shall at no time contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
12. The discharge of waste shall not create a condition of pollution, contamination, or nuisance.
13. Nutrient materials in the waste discharged shall not cause objectionable aquatic growths or degrade indigenous biota.
14. The waste discharged shall not cause the concentration of organic materials in fish, shellfish or other marine resources used for human consumption to bioaccumulate to levels that are harmful to human health.
15. The direct or indirect discharge of any wastewater to surface waters or surface water drainage courses is prohibited.

16. Under no circumstances shall there be a groundwater separation of less than five feet below the subsurface drip system.

E. PROVISIONS

1. A copy of this Order shall be maintained at the Plant so as to be available at all times to operating personnel.
2. In the event of any change in name, ownership, or control of this waste treatment and disposal facility, the Discharger shall notify the Regional Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Board.
3. The Discharger shall file with the Regional Board technical reports on self-monitoring work performed according to the detailed specifications contained in Monitoring and Reporting Program No. CI 8561 attached hereto and incorporated herein by reference, as directed by the Regional Board Executive Officer (Executive Officer). The results of any monitoring done more frequently than required at the location and/or times specified in the Monitoring and Reporting Program shall also be reported to the Regional Board.

Monitoring and Reporting Program No. 8561 contains requirements, among others, specifying that a monitoring program for groundwater shall be established so that the groundwater immediately downgradient and upgradient from the discharge area can be measured, sampled, and analyzed to determine if discharges from the subsurface drip system is impacting water quality. Submittal of a plan for monitoring groundwater, which is subject to the approval of the Executive Officer, is due by 60 days after adoption of this Order.

4. The Discharger shall ensure that the capacity of the disposal area is adequate for the discharge and that adequate steps are taken to accommodate system failures and/or to deal with loss of the soil assimilative capacity.
5. The Discharger shall prepare a spill response plan with 24-hour availability phone numbers for complaint.
6. The Discharger shall cause the treatment/disposal system to be inspected annually during the life of this Order by a professional inspector to be retained by the Discharger. National Sanitation Foundation standards should be applied where possible to the inspection. The inspector shall also specify the capacity and condition of the treatment system and of the leachfields and the corrections needed. The Discharger shall provide information regarding the separation distance between groundwater and the leachfield, information regarding the capacity and adequacy of the treatment system and disposal area to handle the

discharge, and establish the contingency plan measures needed to accommodate disposal system failures or to deal with loss of assimilative capacity of the soils.

7. The Discharger shall comply with all applicable requirements of chapter 4.5 (commencing with section 13290) of division 7 of the California Water Code.
8. In accordance with section 13260(c) of the California Water Code, the Discharger shall file a report of any material change or proposed change in the character, location, or volume of the discharge.
9. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment which are installed or used by the Discharger to achieve compliance with the conditions of this Order.
10. The Discharger shall file a written report with the Regional Board within 90 days after the average dry-weather flow for any month equals or exceeds 90 percent of the design capacity of the waste treatment and/or disposal facilities. The report shall detail provisions to cope with flows in excess of 90 percent of the design capacity.
11. The Regional Board will develop a Total Maximum Daily Load (TMDL) for coliform and historic pesticides in the Ventura Coastal Watershed Management Area, including the subject site. When the study is completed, coliform-loading rates will be assigned to dischargers. The Discharger shall comply with waste load and/or load allocations developed and approved pursuant to the process for the designation of the coliform TMDL for the area. The Regional Board may subsequently require that the Discharger meet coliform discharge limits stricter than those imposed in this Order. The Regional Board may also require monitoring for historic pesticides.
12. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
13. The Discharger shall notify the Regional Board within 24 hours, by telephone or electronically, of exceedance of any effluent limitation or any adverse conditions resulting from this discharge. Written confirmation by the Discharger shall follow within one week and shall include information relative to the location(s), estimated volume, date and time, duration, cause, and remedial measures taken to effect cleanup and measures taken to prevent any recurrence. This information shall be confirmed in the next monitoring report; in addition, the report shall also include the reason for the violations or adverse conditions, the steps to be taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.

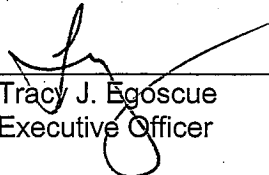
14. The Discharger shall notify the Regional Board within 24 hours, by telephone or electronically, of any bypassing or surfacing of wastes. Written confirmation by the Discharger shall follow within one week and shall include information relative to the location(s), estimated volume, date and time, duration, cause, and remedial measures taken to effective cleanup and measures taken to prevent any recurrence.
15. This Order does not relieve the Discharger from the responsibility to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
16. Any discharge of wastewater from the treatment systems (including the wastewater collection system) at any point other than specifically described in this Order is prohibited and constitutes a violation of this Order.
17. After notice and opportunity for a hearing, this Order may be terminated or modified for causes including, but not limited, to:
  - a) Violation of any term or condition contained in this Order;
  - b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or
  - c) A change in any condition, or the discovery of any information, that requires either a temporary or permanent reduction or elimination of the authorized discharge.
19. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
20. Should monitoring data indicate impacts to groundwater, the Discharger shall submit, within 90 days after determination of the problem, plans for measures that will be taken, or have been taken, to mitigate any long-term effects that may result from the subsurface disposal of wastes. Any water quality impact to groundwater such as, but not limited to, risks to human health from pathogens shall be reported.
21. This Order includes the attached Monitoring and Reporting Program. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the Monitoring and Reporting Program prevail.

22. This Order includes the attached *Standard Provisions Applicable to Waste Discharge Requirements* which are incorporated herein by reference. If there is any conflict between provisions stated herein and the *Standard Provisions Applicable to Waste Discharge Requirements*, the provisions stated herein will prevail.
23. The Discharger shall submit to the Regional Board, within 180 days of the date of adoption of this Order, procedures that will be, or have been, taken to ensure that no discharge or recycling of any untreated or partially treated sewage will result from the treatment facility in the event of equipment failure.
24. The waste discharge requirements contained in this Order will remain in effect for a period of ten years. Should the Discharger wish to continue discharging to groundwater for a period of time in excess of ten years, the Discharger must file an updated Report of Waste Discharge with the Regional Board no later than 180 days in advance of the tenth-year anniversary date of the Order for consideration of issuance of new or revised waste discharge requirements. Any discharge of waste ten years after the date of adoption of this Order without obtaining new waste discharge requirements from the Regional Board is a violation of California Water Code section 13264. The Regional Board is authorized to take appropriate enforcement action for any noncompliance with this provision including assessment of penalties.
25. In accordance with California Water Code section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into the waters of the State are privileges, not rights.

#### F. REOPENER

This Order may be reopened to delete outdated requirements, or to include additional or modified requirements to address pollutant loading problems verified by monitoring data, Discharger work plans or mitigation plans, or TMDL or Basin Plan mandates.

I, Tracy J. Egoscue, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on October 2, 2008.

  
\_\_\_\_\_  
Tracy J. Egoscue  
Executive Officer

PACIFIC OCEAN

BM 16

3789

MacGrath  
Take

12'30"

BM 16

Mandalay

3786

BM 13

BEACH

Mandalay Generating Station  
393 N. Harbor Boulevard  
Oxnard, CA 93035

24

30

OXNARD

MC GRATH

WEST

ROAD

WEST

WEST

OXNARD

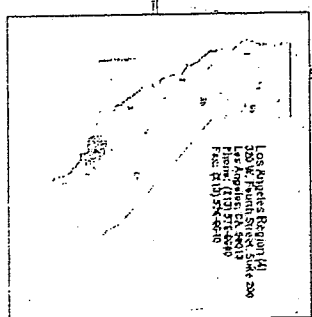
24

FIFTH

27

TEAL CLUB

32



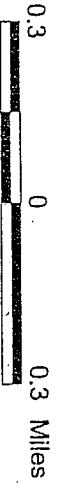
Los Angeles Region  
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Regional Water Quality Control Board

Mandalay Generating Station

Site Location Map

Figure 1



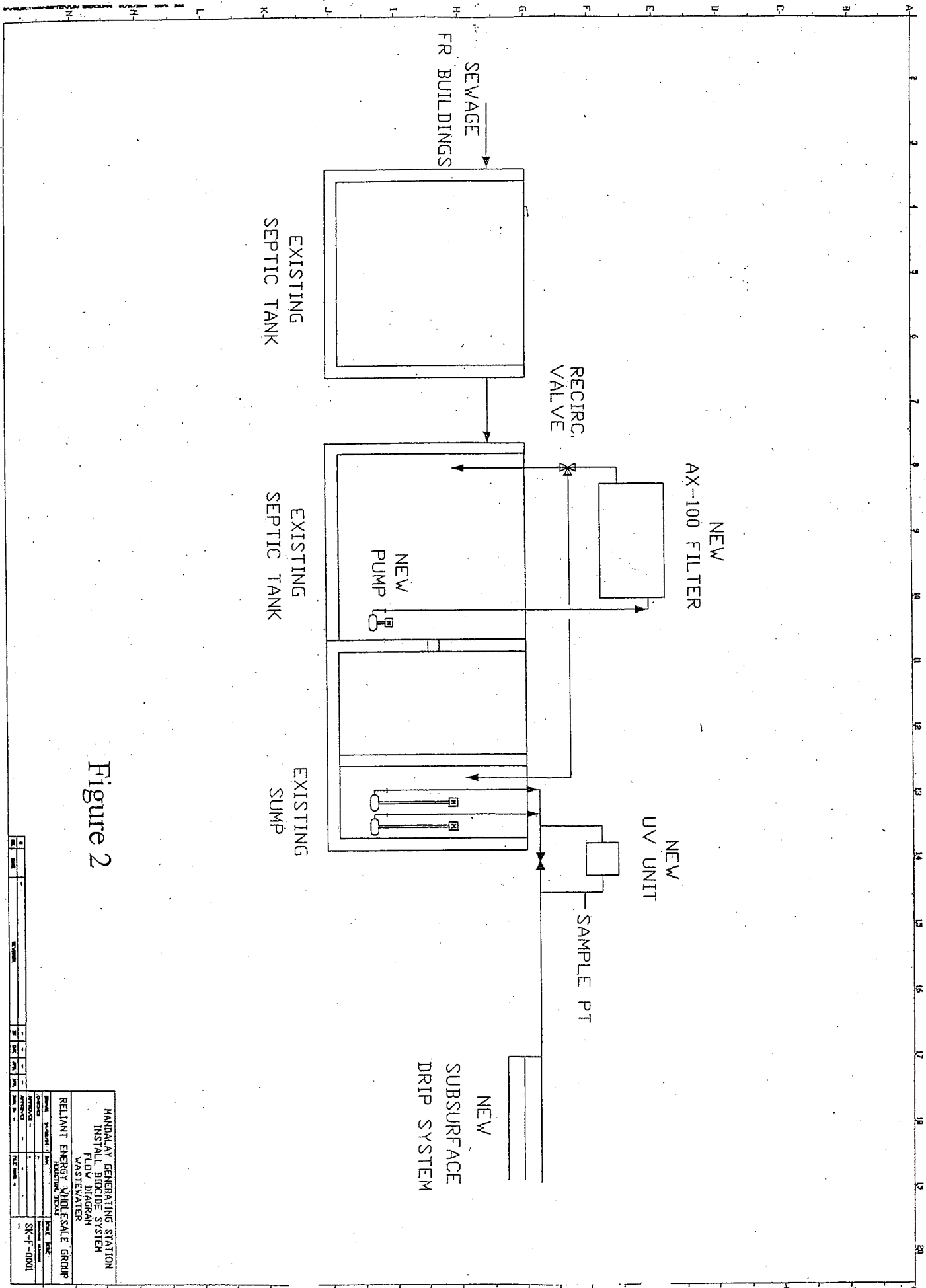


Figure 2

PROJECT INFORMATION		PROJECT NAME	
PROJECT NO.	SK-F-1001	PROJECT LOCATION	
DATE		CLIENT	
PROJECT DESCRIPTION		PROJECT TYPE	
HANDALAY GENERATING STATION INSTALL BIOCLIDE SYSTEM FLOW DIRAKAH VASTESAWATER		WASTEWATER TREATMENT	
DESIGNED BY		DATE	
CHECKED BY		SCALE	
APPROVED BY		PROJECT NO.	SK-F-1001



STANDARD PROVISIONS  
APPLICABLE TO WASTE DISCHARGE REQUIREMENTS

1. DUTY TO COMPLY

The discharger must comply with all conditions of these waste discharge requirements. A responsible party has been designated in the Order for this project, and is legally bound to maintain the monitoring program and permit. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. [CWC Section 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350]

2. GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code (CWC). [H&SC Section 5411, CWC Section 13263]

3. AVAILABILITY

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. [CWC Section 13263]

4. CHANGE IN OWNERSHIP

The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on. [CWC Sections 13267 and 13263]

5. CHANGE IN DISCHARGE

In the event of a material change in the character, location, or volume of a discharge, the discharger shall file with this Regional Board a new Report of Waste Discharge. [CWC Section 13260(c)]. A material change includes, but is not limited to, the following:

- (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the Waste.

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Standard Provisions Applicable to  
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- (b) Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
- (c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
- (d) Increase in flow beyond that specified in the waste discharge requirements.
- (e) Increase in the area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CCR Title 23 Section 2210]

6. REVISION

These waste discharge requirements are subject to review and revision by the Regional Board. [CCR Section 13263]

7. TERMINATION

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information. [CWC Sections 13260 and 13267]

8. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. [CWC Section 13263(g)]

9. SEVERABILITY

Provisions of these waste discharge requirements are severable. If any provision of these requirements are found invalid, the remainder of the requirements shall not be affected. [CWC Section 921]

Standard Provisions Applicable to  
Waste Discharge Requirements

10. OPERATION AND MAINTENANCE

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order. [CWC Section 13263(f)]

11. HAZARDOUS RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the discharger is in violation of a prohibition in the applicable Water Quality Control plan. [CWC Section 1327(a)]

12. PETROLEUM RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This provision does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan. [CWC Section 13272]

Standard Provisions Applicable to  
Waste Discharge Requirements

13. ENTRY AND INSPECTION

The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any location. [CWC Section 13267]

14. MONITORING PROGRAM AND DEVICES

The discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted. [CWC Section 13267]

All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Office a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

Unless otherwise permitted by the Regional Board Executive officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The Regional Board Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" [40CFR Part 136] promulgated by the U.S. Environmental Protection Agency. [CCR Title 23, Section 2230]

Standard Provisions Applicable to  
Waste Discharge Requirements

15. TREATMENT FAILURE

In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost. [CWC Section 13263(f)]

16. DISCHARGE TO NAVIGABLE WATERS

Any person discharging or proposing to discharge to navigable waters from a point source (except for discharge of dredged or fill material subject to Section 404 of the Clean Water Act and discharge subject to a general NPDES permit) must file an NPDES permit application with the Regional Board. [CCR Title 2 Section 22357]

17. ENDANGERMENT TO HEALTH AND ENVIRONMENT

The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger 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. The following occurrence(s) must be reported to the Executive Office within 24 hours:

- (a) Any bypass from any portion of the treatment facility.
- (b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.
- (c) Any treatment plan upset which causes the effluent limitation of this Order to be exceeded. [CWC Sections 13263 and 13267]

18. MAINTENANCE OF RECORDS

The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and record of all data used

Standard Provisions Applicable to  
Waste Discharge Requirements

to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Records of monitoring information shall include:

- (a) The date, exact place, and time of sampling or measurement;
  - (b) The individual(s) who performed the sampling or measurement;
  - (c) The date(s) analyses were performed;
  - (d) The individual(s) who performed the analyses;
  - (e) The analytical techniques or method used; and
  - (f) The results of such analyses.
19. (a) All application reports or information to be submitted to the Executive Office shall be signed and certified as follows:
- (1) For a corporation – by a principal executive officer or at least the level of vice president.
  - (2) For a partnership or sole proprietorship – by a general partner or the proprietor, respectively.
  - (3) For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected official.
- (b) A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents if:
- (1) The authorization is made in writing by a person described in paragraph (a) of this provision.
  - (2) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
  - (3) The written authorization is submitted to the Executive Officer.

Any person signing a document under this Section shall make the following certification:

Standard Provisions Applicable to  
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"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [CWC Sections 13263, 13267, and 13268]"

20. OPERATOR CERTIFICATION

Supervisors and operators of municipal wastewater treatment plants and privately owned facilities regulated by the PUC, used in the treatment or reclamation of sewage and industrial waste shall possess a certificate of appropriate grade in accordance with Title 23, California Code of Regulations Section 3680. State Boards may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Board may approve use of a water treatment plant operator of appropriate grade certified by the State Department of Health Services where reclamation is involved.

Each plan shall be operated and maintained in accordance with the operation and maintenance manual prepared by the municipality through the Clean Water Grant Program [CWC Title 23, Section 2233(d)]

ADDITIONAL PROVISIONS APPLICABLE TO  
PUBLICLY OWNED TREATMENT WORKS' ADEQUATE CAPACITY

21. Whenever a publicly owned wastewater treatment plant will reach capacity within four years the discharger shall notify the Regional Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The discharger must demonstrate that adequate steps are being taken to address the capacity problem. The discharger shall submit a technical report to the Regional Board showing flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Board, or within 120 days after receipt of notification from the Regional Board, of a finding that the treatment plant will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Board itself. [CCR Title 23, Section 2232]

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. CI-8561  
FOR  
RELIANT ENERGY MANDALAY, INC.  
(MANDALAY GENERATING STATION)  
(File No. 02-158)

I. REPORTING REQUIREMENTS

- A. Reliant Energy Mandalay, Inc. (Hereinafter Discharger) shall implement this monitoring program on the effective date of this Order (WDR Order No. R4-2008-0087). The first monitoring report under this Program shall be received at the Regional Board by January 15, 2009. Subsequent monitoring reports shall be received by the Regional Board according to the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January – March	April 15
April – June	July 15
July – September	October 15
October – December	January 15

- B. If there is no discharge during any reporting period, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.
- C. By January 30<sup>th</sup> of each year, beginning January 30, 2009, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.
- D. Laboratory analyses – all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Public Health Services Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal certification is obtained from ELAP.
- E. The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can

August 7, 2003  
Revised September 5, 2008



demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer. The Discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC) procedures upon request by the Regional Board.

- F. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. All Quality Assurance/Quality Control (QA/QC) samples must be run on the same dates when samples were actually analyzed. At least once a year, the Discharger shall maintain and update a list of the analytical methods employed for each test and the associated laboratory QA/QC procedures. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.
- G. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services, and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.
- H. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall be located at the front of the report and shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.
- I. For every item where the requirements are not met, the Discharger shall submit a statement of the cause(s), and actions undertaken or proposed which will bring the discharge into full compliance with waste discharge requirements at the earliest possible time, including a timetable for implementation of those actions.
- J. The Discharger shall maintain all records of sampling and analytical results: date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- K. If the Discharger performs analyses on any effluent more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the report. Those results shall also be reflected in the calculation of the average values used in demonstrating compliance with average effluent limitations.

- L. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.
- M. Any mitigation/remedial activity including any pre-discharge treatment conducted at the site must be reported in the quarterly monitoring report. In addition, if effluent or groundwater monitoring programs have not yet been implemented, a short description of the status of both shall also be included.

II. WATER QUALITY MONITORING REQUIREMENTS

A. Wastewater Treatment System Effluent Monitoring

An effluent monitoring program shall be designed to evaluate the effectiveness of the treatment system module(s) (including wastewater treatment system and disinfection). An effluent sampling station(s) including a meter of the influent, shall be established at a location(s) where representative samples of treated effluent can be obtained prior to discharge to the leachfields.

- 1. The following shall constitute the effluent monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis<sup>1</sup></u>
Total Flow	gal/day	--	monthly
pH	pH units	grab	quarterly
BOD <sub>5</sub> (20°C)	mg/L	grab	quarterly
Suspended solids	mg/L	grab	quarterly
Oil and Grease	mg/L	grab	quarterly
Ammonia-N	mg/L	grab	monthly
Nitrate-N	mg/L	grab	quarterly
Nitrite-N	mg/L	grab	quarterly
Organic-N	mg/L	grab	quarterly
Residual Chlorine <sup>2</sup>	µg/L	grab	monthly
Chloride	mg/L	grab	quarterly
Sulfate	mg/L	grab	quarterly
Boron	mg/L	grab	quarterly
Fecal coliform	MPN/100mL	grab	monthly
Total coliform	MPN/100mL	grab	monthly
Enterococcus	MPN/100mL	grab	monthly
Phosphorous <sup>3</sup>	mg/L	grab	semi-annually

<sup>[1]</sup> If a constituent exceed the limit, the monitoring frequency of the exceedance constituent shall

- change from quarterly or monthly to weekly until the data trend confirms compliance.
- [2] UV disinfection unit is currently used for disinfection. However, if chlorination is used in an emergency situation or special circumstance, the Discharger must monitor residual chlorine in the effluent after each application and weekly if continue more than one week and include the results in the reports.
- [3] Semi-annual samples (1<sup>st</sup> and 3<sup>rd</sup> quarters).
2. The quarterly reports shall contain the following information:
    - a. Average and maximum daily waste flow (effluent from wastewater treatment system) for each month of the quarter in gallons per day.
    - b. Estimated population served during each month of the reporting period.
    - c. Results of at least monthly observations in the disposal area for any over flow or surfacing of wastes.
  3. In addition, the Discharger shall annually inspect the wastewater treatment system, including the disposal area, and submit an operation and maintenance report on the system. The information to be contained in the report shall include, at a minimum, the following:
    - a. Results of annual inspection;
    - b. The maintenance records for the wastewater treatment system;
    - c. Type of maintenance (preventive or corrective action performed);
    - d. Frequency of maintenance, if preventive;
    - e. The periodic pumping schedule of the septic tank; and
    - f. The name of the person responsible for the operation and maintenance of the facility.

B. Groundwater Monitoring Program

A groundwater monitoring program is needed to evaluate any impact from wastewater discharges from the Orenco AdvanTech AX-100 treatment and disposal system. The Discharger shall submit within 60 days from the adoption of the Order No. R4-2008-0087 a groundwater monitoring workplan to the Regional Board for review and approval by the Executive Officer prior to implementation. The groundwater monitoring well construction must meet the following requirements:

1. Groundwater immediately upgradient and downgradient from the subsurface drip system. A minimum of three wells is required to cover the discharge area.
2. The monitoring wells are to be drilled to a depth of at least twenty-five feet and screened casing is to be placed at least 5 feet above the groundwater depth.

3. Construction and development of the monitoring wells shall be completed within 60 days in accordance with the standards in Bulletins 74-81 and 74-90 of the California Department of Water Resources.
4. Within 30 days after installation of the monitoring wells, a well installation report including a scaled plot plan, soil boring logs, water quality data, and as-built well construction diagrams shall be submitted to the Executive Officer.
5. The report must be prepared under the direction of a California Registered Geologist, or Certified Engineering Geologist, or a California Registered Civil Engineer with appropriate experience in hydrogeology.

The following shall constitute the groundwater monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis<sup>1</sup></u>
pH	pH units	grab	quarterly
Ammonia-N	mg/L	grab	quarterly
Nitrate-N	mg/L	grab	quarterly
Nitrite-N	mg/L	grab	quarterly
Organic-N	mg/L	grab	quarterly
Oil and grease	mg/L	grab	quarterly
Chloride	mg/L	grab	quarterly
Sulfate	mg/L	grab	quarterly
Boron	mg/L	grab	quarterly
Residual Chlorine <sup>2</sup>	µg/L	grab	quarterly
Fecal coliform	MPN/100mL	grab	quarterly
Total coliform	MPN/100mL	grab	quarterly
Enterococcus	MPN/100mL	grab	quarterly
Phosphorus	mg/L	grab	semi-annually <sup>3</sup>

[1] If a constituent exceed the limit, the monitoring frequency of the exceedance constituent shall change from quarterly to weekly until the data trend confirms compliance

[2] UV disinfection unit is currently used for disinfection. However, if chlorination is used in an emergency situation or special circumstance, the Discharger must monitor residual chloride in the groundwater wells and include the results in the reports.

[3] Semi-annual samples (1<sup>st</sup> and 3<sup>rd</sup> quarters).

### III. WASTE HAULING REPORTING

In the event that waste oil and grease, sludge, septage, or other wastes are hauled offsite, the name and address of the hauler shall be reported, along with types and quantities hauled during the reporting period and the location of final point of disposal. In the event that no wastes are hauled during the reporting period, a statement to that effect shall be submitted in the quarterly monitoring report.

IV. OPERATION AND MAINTENANCE REPORT

The Discharger shall annually submit a technical report to the Executive Officer relative to the operation and maintenance program for the treatment disposal site at the Mandalay Generation Station site. The information to be contained in the report shall include the following:

- a. The name and address of the person or company responsible for the operation and maintenance of the facility;
- b. Type of maintenance (preventive or corrective action performed);
- c. Frequency of maintenance, if preventive;
- d. Periodic pumping out of the septic tanks;
- e. Maintenance record of leaching/disposal fields system; and
- f. Results of at least monthly observations in the disposal area for any overflow or surfacing of waste.

This operations and maintenance record shall be kept current and filed with the annual report due by January 30.

V. CERTIFICATION STATEMENT

Each report shall contain the following declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons 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 a fine and imprisonment.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_.

\_\_\_\_\_  
(Signature)

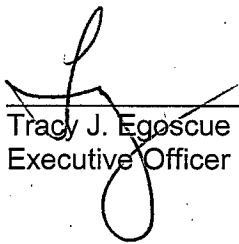
\_\_\_\_\_  
(Title)"

VI. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted to a less frequent basis or parameters dropped by the Executive Officer if the Discharger makes a request and the Executive Officer determines that the request is adequately supported by statistical trends of monitoring data submitted.

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by:



\_\_\_\_\_  
Tracy J. Egoscue  
Executive Officer

Date: October 2, 2008