

**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. R4-2003-0109). The first monitoring report under this Program shall be received at the Regional Board by October 15, 2003. 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, 2004, 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 Department of 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

July 1, 2003

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) 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</u>
Total Flow	gal/day	--	monthly
pH	pH units	grab	quarterly
Oil and Grease	mg/L	grab	quarterly <sup>1</sup>
Ammonia-N	mg/L	grab	quarterly <sup>1</sup>
Nitrate-N	mg/L	grab	quarterly <sup>1</sup>
Nitrite-N	mg/L	grab	quarterly <sup>1</sup>
Organic-N	mg/L	grab	quarterly <sup>1</sup>
Residual Chlorine <sup>3</sup>	µg/L	grab	quarterly <sup>1,2</sup>
Fecal coliform	MPN/100mL	grab	quarterly <sup>1,2</sup>
Total coliform	MPN/100mL	grab	quarterly <sup>1,2</sup>
Enterococcus	MPN/100mL	grab	quarterly <sup>1,2</sup>
Phosphorous <sup>4</sup>	mg/L	grab	semi-annually <sup>1</sup>

- [1] If the Discharger selects the compliance point at end of pipe.
- [2] For the first 3 months of the disinfection system start-up and testing period, wastewater must be analyzed for the constituent on a monthly basis. After the start-up period and the establishment of system operational performance and a baseline, the effluent monitoring frequency shall be reduced to a quarterly interval.
- [3] If chlorination is used for disinfection. Statement must be included in monitoring reports attesting that chlorine is not used if sampling is not conducted.
- [4] Semi-annual samples in 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/septic tank) 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 septic/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 ground water monitoring program shall be designed to evaluate impacts of wastewater discharged through the leachfields to groundwater. If the Discharger chooses the compliance point for the limitations at the end of pipe, the groundwater monitoring workplan may not be required. If a downgradient monitoring well will be used for compliance point, a groundwater monitoring workplan must be submitted to the Regional Board for review in accordance with Time Schedule Order No. R4-2003-0110 and is subject to approval by the Executive Officer prior to implementation. The Discharger must notify the Executive Officer of the selection of the compliance point within 30 days from the effective date of Order No. R4-2003-0109. The groundwater monitoring well construction must meet the following requirements:

1. Groundwater immediately upgradient and downgradient from the leachfields must be evaluated.
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 10 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</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
Phosphorus <sup>1</sup>	mg/L	grab	quarterly
Residual Chlorine <sup>2</sup>	µg/L	grab	monthly <sup>3</sup> /quarterly
Fecal coliform	MPN/100mL	grab	monthly <sup>3</sup> /quarterly
Total coliform	MPN/100mL	grab	monthly <sup>3</sup> /quarterly
Enterococcus	MPN/100mL	grab	monthly <sup>3</sup> /quarterly

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

[2] If chlorination is used for disinfection. Statement must be included in monitoring reports attesting that chlorine is not used if sampling is not conducted.

[3] For the first 3 months of the disinfection system start-up and testing period, wastewater must be analyzed for the constituent on a monthly basis. After the start-up period and the establishment of system operational performance and a baseline, the effluent monitoring frequency shall be reduced to a quarterly interval.

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: \_\_\_\_\_  
Dennis A. Dickerson  
Executive Officer

Date: August 7, 2003