

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
MONITORING AND REPORTING PROGRAM NO. CI 8215
FOR
NORTH SHORE AT MANDALAY BAY
NORTHEAST CORNER OF FIFTH STREET AND HARBOR BOULEVARD
(OXNARD, CALIFORNIA)

(FILE NO. 98-197)

North Shore at Mandalay Bay, LLC. (hereinafter "Discharger") shall implement this Monitoring and Reporting Program on the effective date of this Order.

The first monitoring report under this program is due at the end of the first complete reporting period immediately following project startup. The first report shall include all previously acquired data. Subsequent quarterly progress and monitoring reports shall be submitted by the dates in 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

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. The data shall be summarized to determine compliance with waste discharge requirements. If there is no discharge, the report shall so state. In addition, the quarterly progress report shall address the progress of site remediation and provide data and information on the location and concentrations of contamination identified during remediation activities.

I. GROUND WATER MONITORING

Before commencing remediation the Discharger shall install and maintain, comprehensive and accessible monitoring wells (acceptable to the Executive Officer) perforated in the perched ground water aquifer, upgradient, downgradient and surrounding the project site to serve as ground water monitoring stations. In addition, monitoring wells shall be installed and screened immediately beneath the perched groundwater aquifer to provide information on the vertical distribution of dissolved compounds. Prior to installation of additional ground water monitoring wells, a workplan describing the proposed well locations and well construction shall be submitted to this Regional Board. Well installation shall take place after approval of the workplan by this Regional Board. A California licensed land surveyor must survey all groundwater monitoring wells to a County maintained benchmark. The survey report, signed by the licensee, shall be included in a report to the Regional Board. Well installation must be conducted or directly supervised by a registered civil engineer or registered geologist. At least one groundwater monitoring event, utilizing the comprehensive monitoring well system, shall be conducted prior to commencing remediation activities.

November 15, 2000

The following shall constitute the ground water monitoring program for the above-described ground water monitoring stations:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Water Elevation	Feet-relative to sea level to 0.01 of a foot	---	Quarterly
pH	pH units	grab	Quarterly
Turbidity	NTU	grab	Quarterly
Total petroleum hydrocarbon (EPA Method 8015M HC Scan)	µg/l	grab	Quarterly
Volatile Organic Compounds and MTBE (EPA Method 8260)	µg/l	grab	Quarterly
Semi-Volatile Organics (8270)	µg/l	grab	Quarterly
PNAs (EPA Method 8310)	µg/l	grab	Quarterly
Base/Neutrals and Acids (EPA Method 625)	µg/l	grab	Quarterly
Pesticides (EPA Method 8081)	µg/l	grab	Quarterly
Herbicides	µg/l	grab	Quarterly
CAM Metals	mg/l	grab	Semi-annually
Chloride	mg/l	grab	Quarterly
Sulfate	mg/l	grab	Quarterly
Nitrate	mg/l	grab	Quarterly
Total Alkalinity	mg/l	grab	Quarterly
Hardness	mg/l	grab	Quarterly
Electrical Conductivity	millimhos/cm	grab	Quarterly
Chemical Oxygen Demand	mg/l	grab	Quarterly
Biological Oxygen Demand	mg/l	grab	Quarterly
Dissolved Oxygen	mg/l	grab	Quarterly
Carbon Dioxide	mg/l	grab	Quarterly
Total Organic Carbon	mg/l	grab	Quarterly
Total Dissolved Solids	mg/l	grab	Quarterly

II. SURFACE WATER MONITORING

Before commencing remediation the Discharger shall develop and maintain a surface water monitoring network for the Edison Canal which is capable of detecting a release from this site. Prior to sampling, a workplan describing the proposed monitoring stations shall be submitted to the Regional Board. Samples shall be analyzed for the constituents listed above.

III. LEACHATE MONITORING

If any leachate or free liquid is encountered in any excavation or boring made within the vadose zone at this site, a representative sample shall be obtained and analyzed for the groundwater constituents listed above.

IV. LAND TREATMENT FACILITY SOIL MONITORING

- A. A soil sampling grid shall be established for the land treatment units (LTUs) and the sampling locations shall be located where representative soil samples can be obtained. Soil samples shall be collected and analyzed for the parameters in Table 1, below:

TABLE 1

<u>Parameter</u>	<u>Unit</u>	<u>Frequency¹</u>
Bacteria Plate Count	Colonies/gm	Quarterly
Soil Moisture Content	%	Quarterly
Total Petroleum Hydrocarbons (EPA Methods 418.1 & 8015-C ₄ to C ₂₈ Hydrocarbon Scan)	mg/kg	Quarterly

- B. Final verification samples shall be collected at the end of treatment, just prior to removal and reuse and analyzed as described in Table 2, below:
- C. Remediation of waste at the site shall only be conducted in accordance with a detailed remedial work plan. The detailed workplan must be submitted to and approved by the Executive Officer before the start of any activities associated with soil remediation.

TABLE 2

LAND TREATMENT UNITS

<u>Parameter</u>	<u>Unit</u>	<u>Frequency²</u>
Total Petroleum Hydrocarbons (EPA Methods 418.1, 8015 Modified-Extractable & 8015 Modified-Purgable)	mg/kg	Once per 1,000 CY
Volatile Organic Compounds (EPA Method 8240B or Method 8260A or EPA Methods 8010/8020 or Methods 8010/8021)	µg/kg	Once per 5,000 CY
Semi-volatile Organic compounds (EPA Method 8270)	µg/kg	Once per 5,000 CY
CAM Metals	mg/kg	Once per 5,000 CY

Note: 1. In the event the land treatment of a lift is complete prior to the date of the first monitoring report, then final verification samples for the lift shall be collected and analyzed in lieu of the sampling frequency of this Order.
 2. A minimum of three verification samples must be collected from each lift.

- C. Treated soils that exceed the Waste Discharge Limits are to be re-treated and resampled to verify that treated soils are below discharge limitations prior to re-use.

V. GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

- A. All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services, or approved by the Executive Officer. No changes shall be made in sampling points without prior approval of the Executive Officer.
- C. All verification sampling require 72 hours written and verbal notice to the Board in order for staff to participate in the sampling.

VI. SPECIFIC REPORTING REQUIREMENTS

- A. The following technical reports shall be filed with the Regional Board:
 - 1. A "Petroleum Hydrocarbon Contamination Removal Report", shall be submitted within 30 days of removal of contaminated soil from each specific development phase, verifying that all hydrocarbon saturated material and contaminated soil has been removed for land treatment, and including all soil verification data supporting the nature and extent of removed soil and nature and extent of contaminated soils to remain in place.
 - 2. The second semi-annual report of each year (January 15), shall also serve as an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the 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.
 - 3. A "Land Treatment Completion Report" shall be submitted within 30 days of completing land treatment of soils from each specific development phase, verifying that biodegradation is complete for the land treatment zone. The report shall include all data collected to date verifying that cleanup levels have been met.
 - 4. A "Final Closure Report" shall be submitted within 30 days of completing all treatment in the land treatment units. This report shall include analyses of soil samples underlying the treatment cells documenting that any contaminants that may have been released during its life have been remediated.

- B. All technical reports submitted shall contain the following minimum information:
1. Quantity of waste material treated during the reporting period.
 2. Analytical results, from:
 - a. Land treatment zone soil sampling,
 - b. Soil monitoring in the excavated areas, and
 - c. If a lift was removed, all data collected during the reporting period verifying that cleanup levels set by the Executive Officer have been met.
 3. Estimated time until completion of the next lift in each LTU and final disposition of any soils removed from the treatment cells during the reporting period.
 4. A statement certifying that storm water runoff was prevented from entering the land treatment area, other than rainfall directly on the LTUs, and that no wastes material was carried away from the land treatment area by rainfall runoff.
- C. All technical reports prepared for submittal to the Regional Board shall be signed by either a California Registered Civil Engineer, a Registered Geologist, or Certified Engineering Geologist.
- D. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. The data shall be summarized to determine compliance with waste discharge requirements and, where applicable, shall include receiving ground water observations. In addition, monitoring reports shall describe the facility name, location, and location at the facility where any contaminated soil originated (including a site map), verify that all contaminated soil has been removed for land treatment or document the contaminants remaining, and including all soil verification data supporting the nature and extent of removed soil and nature and extent of contaminated soils to remain in place. In addition, the report shall state the volume of contaminated soils placed into each treatment cell.
- E. For every item where the requirements are not met the discharger shall submit a statement of the actions undertaken or proposed, together with a timetable, to bring the discharge back into full compliance with the requirements at the earliest time.
- F. Monitoring reports submitted to the Regional Board shall be signed by:
1. In the case of a corporation, the principal executive officer, at least of the level of Vice President or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

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2. In case of a partnership, a general partner;
3. In case of a sole proprietorship, the proprietor;
4. In the case of a municipal, state or public facility, either a principal executive officer, ranking elected official, or other duly authorized employee.

Each report shall contain the following completed declaration:

" I declare under penalty of perjury that the foregoing is true and correct.

Executed on the day of _____ at

_____ (Signature)

_____ (Title)"

Ordered by
Dennis A. Dickerson
Executive Officer

Date: December 7, 2000