Winston H. Hickox Secretary for

Environmental

Protection

California R Zional Water Quality ontrol Board

Los Angeles Region

320 W. 4th Street, Suite 200, Los Angeles, California 90013 Phone (213) 576-6600 FAX (213) 576-6640 Internet Address: http://www.swrcb.ca.gov/~rwqcb4



May 5, 1999

Gerald Weeks Dominguez Energy L.P. and Dominguez Properties, L.P. 22010 S. Wilmington Ave., Suite 400 Carson, CA 90745

WASTE DISCHARGE REQUIREMENTS FOR LAND TREATMENT OF PETROLEUM-HYDROCARBON-CONTAMINATED SOILS AT 1556 EAST VICTORIA STREET, CARSON, (ORDER NO. 99-021) (FILE NO. 86-75)

Reference is made to our letter dated March 23, 1999, which transmitted revised tentative requirements for Land Treatment at 1556 East Victoria Street in the City of Carson.

In accordance with the California Water Code, this Board, at a public meeting held on April 22, 1999, reviewed the tentative requirements, considered all factors in the case and adopted Order No. 99-021 to the waste discharge (copy enclosed). The Standard Provisions, which were sent to you with the tentative requirements, were adopted without change and are part of this Order. A copy will be mailed upon request.

All monitoring reports should be sent to the Regional Board, Attention: Data and Information Management Unit. Reference all technical monitoring reports required by this Order to our Compliance File No. 86-75. We would appreciate it if you would not combine other reports, such as progress or technical reports, with your monitoring reports, but would submit each type of report as a separate document.

Should you have any questions, please contact Mr. Augustine E. Anijielo at (213) 576-6812.

Sincerely,

Dennis A. Dickerson

Executive Officer

Enclosures 1

Mailing List

cc: Mr. Jorge Leon, State Water Resources Control Board, Office of Chief Counsel John Youngerman, State Water Resources Control Board, Division of Water Quality Hamid Saebfar, Department of Toxic Substance Control, Region 3 - Glendale Department of Interior, U. S. Fish and Wildlife Service Department of Fish and Game, Region 5

Tom Klinger, Los Angeles County, Fire Department - Health Hazardous Materials Division South Coast Air Quality Management District City of Carson, Department of Environmental Affairs Charles Champion, Tower Petroleum Debbie Reid, Komex-H2O Science

State of California CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

ORDER NO. 99-021

REVISED WASTE DISCHARGE REQUIREMENTS ORDER NO. 98-069 FOR LAND TREATMENT OF PETROLEUM-HYDROCARBON-CONTAMINATED SOILS

DOMINGUEZ ENERGY LIMITED PARTNERSHIP AND DOMINGUEZ PROPERTIES, LIMITED PARTNERSHIP (Dominguez Hills Oil Field-Reyes Lease West of Wilmington Avenue Carson, California)

(FILE NO. 86-75)

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

- Dominguez Energy, a limited partnership and Dominguez Properties, a limited partnership, (hereinafter-called Dominguez Energy/Properties L.P.) operate the Reyes Lease (about 350 acres) in the Dominguez Oil Field, located at 1556 East Victoria Street in the City of Carson. The Reyes Lease is an active oil and gas-producing field that has been in operation since 1923.
- 2. Dominguez Energy/Properties L.P. have implemented land treatment of oil field drilling muds and petroleum hydrocarbon-contaminated soil from the Northwest portion of the Reyes Lease under Waste Discharge Requirements of Order 94-99, adopted by this Regional Board on September 26, 1994, from the Reyes Ravine of the Dominguez Oil Field under Waste Discharge Requirements Order No. 89-042, adopted by this Board on April 24, 1989, and from the Western portion of the Reyes Lease under Waste Discharge Requirements Order No. 98-069, adopted September 14, 1998.
- 3. Dominguez Energy/Properties L.P. propose to increase the volume of oil field drilling muds and petroleum hydrocarbon-contaminated soil to be land treated under Order No. 98-069 from approximately 150,000 cubic yards to 300,000 cubic yards. The primary purpose for this activity is to clean up contaminated soil on site resulting from previous oil-production operations. Dominguez Energy/Properties L.P. have filed a revised report of waste discharge for this increased volume of material to be treated.
- 4. Historic records indicate that eight above ground tanks were constructed in the 1920's in a five-acre portion of the southwest corner of the Reyes Lease, referred to as the Southern QuitClaim Area. These above ground tanks contained crude oil and water by-products produced from the Reyes and other leases. Shell removed these tanks in 1977. Subsequently, petroleum hydrocarbons (130,000 mg/kg TRPH) have been identified in site soils in this area. In November and December 1997 about 2,000 cubic yards of arsenic impacted soils were excavated, chemically fixated on-site, stockpiled and transported in May 1998 to a recycling facility in Devore, California for disposal.

- 5. Reyes Well Number 27 was located about 80 feet west of the centerline of Wilmington Avenue and 2,400 feet south of Victoria Street. The well was excavated in 1991 for abandonment in accordance with California Division of Oil and Gas requirements. The excavation associated with the abandonment of the well was about 90 feet by 200 feet by 60 feet below street level. An 8 feet by 8 feet area immediately around the well was extended to 90 feet below street level. The excavation grew to this size to remove hydrocarbon-contaminated soils. The excavation was discontinued due to safety concerns associated with the stability of the excavation adjacent to Wilmington Avenue, a major thoroughfare for the area.
- 6. Investigation of the remaining contamination underlying and adjacent to the Reyes Well No. 27 excavation identified two zones of contamination, the first, estimated to be about 16,000 cubic yards, extended from 60 feet (the bottom for most of the excavation) to about 110 feet below street level over an area of about 80 feet by 105 feet. The second, estimated to be about 64,000 cubic yards, extended from 130 feet to 240 feet below street level over an area of about 120 feet by 130 feet. The maximum soil contamination identified in these two zones are tabulated below:

Zone Depth range below street in feet)	Maximum Maximum TPH- TRPH Gasoline (mg/kg) (mg/kg)	Maximum Benzene (mg/kg)	Maximum Toluene (mg/kg)	Maximum Ethylbenzene (mg/kg)	Maximum Xylene (mg/kg)
First (60 - 110)	43,000 770	1.4	7.0	13	19
Second (130 - 240)	35,000 1,300	2.4	3.1	12	23

Also, halogenated VOCs, including carbon tetrachloride, chlorobenzene, chloroform, 1,1-dichloroethane, 1,1 dichloroethylene, tetrachloroethylene, trichloroethylene, and 1,1,1-trichloroethane, were identified in boring 3 - 105 feet below street level. No other samples at the site contained halogenated VOCs, except methylene chloride, which was reported to be a laboratory contaminant.

- 7. Dominguez Energy/Properties L.P. concluded that the remaining contamination posed no immediate risk to the ground water or human health if allowed to remain in place, and that insitu remediation will be the only practical means for remediation of this material. On November 20, 1992, staff concurred with this conclusion and allowed Dominguez Energy/Properties L.P. to backfill the excavation.
- 8. In March 1995, ground water was encountered at about 235 feet below street level in boring number 4 near the Reyes 27 Well. This boring was converted into a ground water monitoring well and the October 1997 Quarterly Ground Water Monitoring Report indicated that ground water is 239.7 feet below ground surface. Ground water flow in the vicinity of the site is reported to be south/southeast.

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- 9. The Reyes Lease is believed to be underlain by at least two ground water aquifers: a merged Lynwood/Silverado aquifer¹, the principal ground water source for the region, at a depth of about 270 feet bgs and the deeper Sunnyside aquifer at about 600 feet bgs. Between the Silverado and Sunnyside aquifers is a 150-foot thick blue clay layer that functions as an aquitard.
- 10. The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region on June 13, 1994. This Water Quality Control Plan designates beneficial uses and establishes water quality objectives for all ground water within the Region. Existing or potential beneficial uses for ground water in the Los Angeles San Gabriel River Hydrologic Unit, Coastal Plain Hydrologic Area, where the sites are located, are municipal and domestic supply, agricultural supply, and industrial service and process supply. The requirements contained in this Order, as they are met, will be in conformance with the Objectives of the Water Quality Control Plan.
- 11. Section 20250(b)(5) of Chapter 3, Division 2, Title 27 of the California Code of Regulations, requires Regional Boards to specify, in Waste Discharge Requirements, the elements of land treatment programs by dischargers who treat or dispose of wastes in land treatment waste management units. The requirements contained in this Order, as they are met, will be in conformance with the goals of Title 27 regulations for land treatment units.
- 12. On November 20, 1990, the City of Carson adopted Ordinance No. 90-924 adopting the Dominguez Technology Centre Specific Plan No. 2-89 with amendments and conditions thereto, and certifying the Final Environmental Impact Report in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et. seq.) and State Guidelines. No substantial adverse changes in environment as a result of the project have been identified in the environmental impact report.

The Regional Board has notified Dominguez Energy/Properties L.P. and interested agencies and persons of its intent to issue Waste Discharge Requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED that the Dominguez Energy, Limited Partnership, and Dominguez Properties, Limited Partnership, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

¹ Woodward-Clyde, "Land Treatment Site Closure Report", page 2-2, April 1994.

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A. Waste Discharge Requirements:

- 1. Wastes discharged at the Reyes Lease West of Wilmington site for biodegradation by a land treatment process shall be limited to oil field drilling mud and petroleum hydrocarbon-contaminated soil, as proposed. The land treatment process, which includes nutrients and/or bacterial addition to soil, and soil aeration, shall be conducted in such a way that no contaminants are added to surface water or ground waters.
- 2. Neither the disposal nor any handling of waste shall cause pollution, or nuisance odor at the Reyes Lease West of Wilmington site boundary.
- 3. No off-site soils shall be imported for treatment at this site unless specifically approved by the Executive Officer. Treated soils may be reused at the Reyes Lease West of Wilmington site, after achieving specified cleanup values, or at other specific locations following prior written approval by the Executive Officer and in accordance with requirements that have been established by a California Regional Water Quality Control Board.
- 4. Any excavated hazardous waste shall be transported off-site to a legal point of disposal. For the purposes of this requirement, a legal point of disposal is one for which the requirements have been established by a California Regional Water Quality Control Board or the Department of Toxic Substances Control.
- 5. All contaminated soil shall be treated to concentrations equal to, or below, those established by this Order, unless authorized in witting by the Executive Officer.
- 6. All soils suitable for reuse on-site, shall have contaminant concentrations less than the limits tabulated below:

<u>Parameter</u>	<u>Limit</u> (mg/kg)
Total Petroleum Hydrocarbons - Ranges: $C_4 - C_{12}$ $C_{13} - C_{22}$ $C_{23} - C_{32}$	1,000 10,000 50,000
Aromatic Volatile Organic Compounds (VOCs) Benzene Toluene Ethylbenzene Xylenes (Total)	0.30 1.18 0.81 0.48
Halogenated VOCs	
Carbon tetrachloride	0.14

Dominguez Energy, L.P. and Dominguez Properties, L.P.
(Dominguez Oil Field-Reyes Lease West of Wilmington Avenue,
Carson, California)

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<u>Parameter</u>	<u>Limit</u> (mg/kg)
Chlorobenzene Chloroform Dichlorobenzene (total) Dichloroethane (total)	0.14 0.14 0.14 0.14
Dichloroethylene (total)	0.14
Methylene Chloride	0.50
Tetrachloroethylene	0.14
Trichloroethylene	0.14
1,1,1-Trichloroethane	0.20
Semi-Volatile Organic Compounds	Non-detect ²

Semi-Volatile Organic Compounds

7. All soil collection, transport, treatment, or disposal shall be conducted in such a way that no contaminants are allowed to impact surface or ground water. All facilities used for collection, transport, treatment, or disposal of waste shall be adequately protected against overflow, washout, inundation, or structural damage. resulting from a storm or flood having a recurrence interval of once in 100 years.

B. Provisions:

- This Order includes "Standard Provisions Applicable to Waste Discharge 1. Requirements". If there is any conflict between provisions stated herein and the "Standard Provisions Applicable to Waste Discharge Requirements", these provisions stated herein will prevail.
- A copy of these requirements shall be maintained at Dominguez Energy/Properties 2. L.P.'s on-site office and be available at all times to operating personnel.
- In the event of any change in name, ownership, or control of these facilities, 3. Dominguez Energy/Properties L.P. shall notify this Board in writing 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 Board.
- Dominguez Energy/Properties L.P. must notify this Board by telephone within 24 4. hours, followed by written notification within one week, in the event they are unable to comply with any of the conditions of this Order due to:
 - Breakdown of waste treatment equipment, a.

² Non-detect at the method detection limits for each compound specified in EPA Method 8270 as contained in SW846 Third Edition, December 1996.

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- b. Accidents caused by human error or negligence,
- c. Other causes such as acts of nature, or
- d. Reyes Lease operations.
- 5. A plan for remediation of the contamination remaining near Reyes Well Number 27, if required, shall be submitted to this Regional Board before any development on this site is initiated during the life of this Order.
- 6. At least 180 days prior to closure of the land treatment units, Dominguez Energy/ Properties, L.P. shall submit operation plans for precipitation and drainage controls, any required cover, a closure and post-closure maintenance plan acceptable to the Executive Officer as set forth in Title 27, California Code of Regulations Division 2, Chapter 3, Subchapter 3; and Subchapter 5, Sections 21090, 21740 through 21769.
- 7. In accordance with Section 13260 of the California Water Code, Dominguez Energy/Properties L.P. shall file a report with this Regional Board of any material change or proposed change in the character, location or volume of the discharge.
- 8. In accordance with Section 13263 of the Water Code, these waste discharge requirements are subject to periodic review and revision by this Regional Board.
- 9. In accordance with Section 13267 of the California Water Code, Dominguez Energy/Properties L.P. shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer. The specifications are subject to periodic revisions as may be warranted.
- 10. The Regional Board and other authorized representative shall be allowed:
 - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Access to copy any records that are kept under the conditions of this order;
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order; and
 - d. To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the California Water Code.

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- 11. These requirements do not exempt the Discharger from compliance with any other laws, regulations, or ordinances, which may be applicable. They do not legalize these waste treatment and disposal facilities and they leave unaffected any further restraints on those facilities that may be contained in other statutes or required by other agencies.
- I, Dennis A. Dickerson, 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 April 22, 1999.

DENNIS A. DICKERSON Executive Officer

/AA

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

REVISED MONITORING AND REPORTING PROGRAM NO. CI 7945 FOR

DOMINGUEZ ENERGY, LIMITED PARTNERSHIP AND DOMINGUEZ PROPERTIES, LIMITED PARTNERSHIP (Dominguez Hills Oil Field-Reyes Lease West of Wilmington Avenue Carson, California)

(FILE NO. 86-75)

Dominguez Energy L.P. and Dominguez Properties L.P. shall implement this Monitoring and Reporting Program on the date of issuance of the Waste Discharge Requirements.

The first monitoring report under this program is due on July 15, 1999, for the second quarter 1999. Subsequent quarterly progress and monitoring reports shall be submitted by the date in the following schedule:

Reporting Period	Report Due
January - March April - June July - September October - December	April 15 July 15 October 15 January 15
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I. GROUND WATER MONITORING

The land treatment activity specified in these waste discharge requirements are not expected to impact the quality of ground water identified at least 235 feet below ground surface. Therefore, ground water monitoring is not a part of these waste discharge requirements.

II. LAND TREATMENT FACILITY SOIL MONITORING

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 following Parameters:

<u>Parameter</u>	<u>Unit</u>	<u>Frequency</u> '	
Bacteria Plate Count	Colonies/gm	Quarterly	

¹ Final verification samples shall be collected from each 550 cubic yards of treated soil at the end of treatment and just prior to removal and reuse. In the event the land treatment of a lift is completed prior to the due 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.

Monitoring and Reporting Program For Dominguez Energy, L.P. and Dominguez Properties, L.P. (Dominguez Hills Oil Field-Reyes Lease West of Wilmington Avenue, Carson, California)

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<u>Parameter</u>	<u>Unit</u>	Frequency ²
Soil Moisture content	%	Quarterly
Total Petroleum Hydrocarbons (EPA Method 8015-Gasoline, EPA Method 8015-Diesel, and EPA Method 8015-(C ₄ to C ₂₈ Hydrocarbon Scan)	mg/kg	Quarterly
Priority Pollutants		·
Volatile Organic Compounds	·	
(EPA Method 8240 or EPA Methods 8010/8020)	μ g/kg	As described ³
Semivolatile Organic compounds		
(EPA Method 8270)	mg/kg	As described ³

III. 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.

IV. SPECIFIC REPORTING REQUIREMENTS

- A. The following technical reports shall be filed with the Regional Board:
 - 1. The fourth quarter report of each year, beginning in January 2000, 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.
 - 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.

² Final verification samples shall be collected from each 550 cubic yards of treated soil at the end of treatment and just prior to removal and reuse. In the event the land treatment of a lift is completed prior to the due 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.

³ Final verification samples shall be collected from each 1,000 cubic yards of treated material at the end of treatment and just prior to removal and reuse.

- 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, Dominguez Energy/Properties L.P. 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, quarterly 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 Dominguez Energy/Properties L.P. 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

Monitoring and Reporting Program For Dominguez Energy, L.P. and Dominguez Properties, L.P. (Dominguez Hills Oil Field-Reyes Lease West of Wilmington Avenue, Carson, California)

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originates;

- 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: April 22, 1999

/AA