

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2006-0057

FOR

NICOLETTI OIL, INC.
AND
EXXONMOBIL CORPORATION
NICOLETTI OIL FACILITY
MERCED COUNTY

This Order is issued to Nicoletti Oil, Inc. and ExxonMobil Corporation (hereafter jointly referred to as the Discharger) for the subject facility based on provisions of California Water Code (Water Code) Section 13304, which authorizes the Regional Water Quality Control Board, Central Valley Region (Water Board) to issue a Cleanup and Abatement Order.

The Water Board finds that, with respect to the Discharger's acts or failure to act, the following:

BACKGROUND

1. Mobil Oil Corporation owned a bulk and retail fuel distribution facility located at 2801 Blossom Street, Dos Palos, CA (the Site, shown on Attachment A, which is made part of this Order), from 1946 until 1980 (in 1999, Mobil Oil Corporation became part of ExxonMobil Corporation [ExxonMobil] as a result of a merger). Nicoletti Oil, Inc. (Nicoletti) operated the facility as an ExxonMobil consignee from about 1950 to 1980. In 1980, Nicoletti purchased the facility and continued operation of the Nicoletti Oil Facility.
2. Petroleum products, primarily gasoline and diesel fuel, were stored and dispensed at the facility. The facility had both underground storage tanks (USTs) and above ground storage tanks (ASTs) and still maintains AST storage of gasoline and diesel fuel.
3. In July 1988, petroleum hydrocarbons were discovered in soil and groundwater following the removal of two 5,000-gallon aviation fuel USTs and one 350-gallon waste oil UST.
4. In 1992, the Discharger installed four soil borings and three groundwater monitoring wells at the facility. Petroleum hydrocarbons in both soil and groundwater, resulting from operations at the facility were discovered as a result of those, and subsequent investigations.
5. Investigation reports prepared by the Discharger document the extent of petroleum hydrocarbons - gasoline and diesel fuel - in soil, groundwater, and soil vapor

associated with the Site. Gasoline and diesel fuel have been found in dissolved phase and floating upon the groundwater at the Site (floating, “pure phase” petroleum hydrocarbons is also known as “separate phase hydrocarbons” or “SPH”). SPH underlies the facility and road immediately north of the facility. Chemical analyses of the SPH show that the SPH is a mixture of gasoline and diesel fuel containing tetraethyl lead (TEL) and methyl tertiary butyl ether (MTBE).

6. The dissolved phase petroleum hydrocarbons extend to beneath the residential properties located across the street from the Site. Shallow groundwater, which has been encountered at less than 4 feet below ground surface, and soil contain petroleum hydrocarbons where persons may contact them through several exposure pathways, including direct contact in the event of an excavation to groundwater, and by breathing contaminated vapors if they were to collect in an excavation or confined space above ground. The Discharger has issued a precautionary advisory to discourage resident activity that could result in such exposures.
7. A map depicting site features, including the Site, residences, and extent of petroleum hydrocarbons in groundwater is attached hereto as Attachment B, made a part of this Order.
8. Recently measured dissolved concentrations of petroleum hydrocarbons in groundwater are summarized below:

Constituent	Concentration, $\mu\text{g/L}^1$
TPHd	3,100,000 ² (MW-14, 03/06)
TPHg	1,273,000 ² (MW-05, 03/06)
Benzene	9,800 (MW-12, 03/06)
Toluene	2,100 (MW-8, 03/06)
Ethylbenzene	1,400 (MW-13, 03/06)
Xylenes	2,650 (MW-14, 03/06)
Naphthalene	1,200 (MW-14, 03/06)
MTBE	2,700 (MW-Z, 03/06)

¹ $\mu\text{g/L}$ = micrograms per liter

²Data may represent wells that contained SPH at time of sampling.

Discharger will prepare an amended first quarter 2006 groundwater monitoring report to clarify this condition.

9. TEL has not been reported in groundwater, but was reported in samples of SPH from wells MW-12 and MW-14 in April 2005 at a concentration of 140 micrograms per gram (equivalent to parts per million by weight) in each sample.
10. In December 2004 and May 2005, the Discharger collected soil gas samples from 1 foot, 2 feet, and 3 feet below ground surface (bgs) at eight locations near the residences north of the facility. The results of the sampling at 3 feet depth, for two of the samples are tabulated below.

Constituent	Sample Location / Depth	Maximum Soil Gas Concentration ($\mu\text{g}/\text{m}^3$)	CHHSL ¹ ($\mu\text{g}/\text{m}^3$)
Benzene	NW-1 at 3 ft. bgs	20.15 ²	36.2
TEL	NW-1 at 3 ft. bgs	0.24	0.206

¹California Human Health Screening Level (CHHSL) for shallow soil gas intrusion into indoor air under residential land use scenario as established by the Office of Environmental Health Hazard Assessment (OEHHA). The CHHSL for TEL is not a promulgated standard, but is a theoretically calculated screening level.

²Benzene reported in parts per billion by volume (ppbv) converted to micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) where 1 ppbv benzene = 3.25 $\mu\text{g}/\text{m}^3$ benzene.

11. In February and May 2005, air samples were collected inside of residences and from underlying crawlspaces along the north side of Blossom Street. The samples that contained petroleum hydrocarbon constituents in vapors in excess of the CHHSL values are tabulated below; however, detectable levels of TEL were not found in subsequent sampling rounds conducted in June and October 2005.

Constituent	Sample Location / Type	Concentration ($\mu\text{g}/\text{m}^3$)	CHHSL ¹ ($\mu\text{g}/\text{m}^3$)
Benzene	2802 Blossom / Indoor Air	0.975 ²	0.084
Benzene	1411 Erskine / Crawlspace	0.65 ²	0.084
Benzene	2774 Blossom / Crawlspace	0.325 ²	0.084
Benzene	2805 Marguerite / Crawlspace	0.65 ²	0.084
Benzene	2810 Blossom / Crawlspace	0.325 ²	0.084
Benzene	2818 Blossom / Crawlspace	0.325 ²	0.084
Benzene	2833 Marguerite / Crawlspace	0.65 ²	0.084
Benzene	2834 Blossom / Crawlspace	0.325 ²	0.084
Benzene	2802 Blossom / Crawlspace	0.975 ²	0.084
TEL	2774 Blossom / Indoor Air	1.85	0.000365
TEL	2810 Blossom / Crawlspace	0.8	0.000365

¹California Human Health Screening Level (CHHSL) for indoor air under residential land use scenario as established by the Office of Environmental Health Hazard Assessment (OEHHA). The CHHSLs are not promulgated standards, but are theoretically calculated screening levels, and are below the method detection limit for both TEL and benzene. The Federal OSHA permissible exposure limit for TEL in an occupational setting is 75.0 $\mu\text{g}/\text{m}^3$.

²Benzene reported in parts per billion by volume (ppbv) converted to micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) where 1 ppbv benzene = 3.25 $\mu\text{g}/\text{m}^3$ benzene.

12. In April 2005, as a precautionary measure, the Discharger issued a community notice to residents overlying or adjacent to the plume to advise against consuming or distributing produce grown on their property and to avoid contact with groundwater or soil in contact with groundwater. In July and August 2005, also as a precautionary measure, the Discharger equipped these residences with air filtration units to remove potential volatile organic constituents (VOCs) from indoor air. From September to November 2005, the Discharger operated a high-vacuum mobile soil vapor extraction system to remove petroleum hydrocarbon vapors from the subsurface prior to design and construction of a permanent remediation system.

13. On 3 February 2005, the Water Board issued Cleanup and Abatement Order (CAO) No. R5-2005-0701 directing the Discharger to perform certain actions including:
 - 1.) Develop and implement an interim remedial action plan to abate subsurface vapor migration
 - 2.) Submit an additional site assessment report to delineate the extent of petroleum hydrocarbons in groundwater as a means of evaluating the extent of the area at risk to soil vapor migration
 - 3.) Submit a corrective action plan (CAP) including a human health risk assessment.
14. The Discharger submitted the required reports including a 9 August 2005 Remedial Action Plan (RAP) for the Site and in response to Water Board staff comments, a 30 September 2005 supplement to the RAP (hereafter collectively referred to as the RAP). The RAP was subsequently approved for the purpose of initiating a California Environmental Quality Act (CEQA) review of the project prior to final Water Board approval.
15. Water Board staff prepared a CEQA Initial Study and based on the findings of the Initial Study, prepared a Mitigated Negative Declaration (MND) to address potential environmental impacts from operation of the proposed remediation system. The MND describes the remediation project and specifies the following mitigation measures for potentially significant impacts:
 - a) Monitoring of the treatment system emissions will be performed and if emission criteria required by the Air Pollution Control District (APCD) are not met, the system will be shut down and modified as necessary to meet the criteria,
 - b) Monitoring of the groundwater treatment plant effluent quality and flow will be performed to assure that the treated water will not adversely affect the operations of the Dos Palos municipal sewer system and if effluent criteria are not met, the system will be shut down and modified as necessary to meet the criteria,
 - c) Noise levels of the treatment systems, if unacceptable, will result in modifications to the system to reduce noise levels to acceptable levels.
16. A CEQA Notice of Completion, including the Initial Study and MND, was submitted to the State Clearinghouse on 25 October 2005 for review and comment by interested parties. Comments were received from the APCD and the Department of Transportation (CalTrans). APCD comments and concerns were addressed in a subsequently issued permit for the proposed project. CalTrans commented that additional studies might be required if an encroachment permit from CalTrans becomes necessary.

17. Comments on the MND were also received from a law firm representing the owners of seven of the residences located near the facility. The comments noted the need for monitoring of the proposed mitigation measures (effluent air and water quality), concerns as to potential contaminant exposures and noise during construction of the project, and whether the system will effectively remediate the contamination such that the health of the nearby residents is protected. Comments relating to the construction of the project were addressed by incorporating emission control measures into the project construction plans. Remaining comments are addressed through required monitoring programs and other actions required by this Cleanup and Abatement Order.
18. On 23 June 2006, the Water Board, by resolution adopted in conjunction with this Order, approved the RAP and the issuance of a Notice of Determination for the MND.
19. The APCD issued an Authority to Construct permit for the remediation system specifying emission limits and monitoring and reporting criteria. The Discharger completed construction of the proposed remediation system and initiated operation on 22 December 2005. The remediation system provides for concurrent soil vapor extraction (SVE) and groundwater/floating product removal from 19 wells, including one well (MW-14^{*}) in addition to those specified in the RAP. The remediation system design includes:
 - a) Soil vapor treatment by thermal oxidation to destroy the petroleum hydrocarbons prior to discharge to the atmosphere,
 - b) Floating product separation from groundwater for off-Site disposal at a permitted facility,
 - c) Further groundwater treatment by air stripping (with thermal destruction of the air stripper off-gas) and granular activated carbon (GAC),
 - d) Discharge of the treated groundwater to the City of Dos Palos sewer collection system.
20. Since 22 December 2005, the Discharger has operated the SVE system at the Site. The SVE system is connected to nineteen extraction wells to remove and treat soil vapor.
21. Since 22 December 2005, the Discharger has operated a groundwater pump and treat (GWP&T) system at the Site. The GWP&T system is being operated using a portion of the nineteen available extraction wells due to the high rate of waste constituent loading in the GAC vessels.

* The reference to well MW-16 in the proposed Cleanup and Abatement Order has been corrected to well MW-14 in this final Order.

AUTHORITY – LEGAL REQUIREMENTS

22. Section 13304(a) of the Water Code provides that:

- a. *“Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board cleanup the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. Upon failure of any person to comply with the cleanup and abatement order, the Attorney General, at the request of the regional board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.”*

23. Section 13305(f) of the California Water Code provides that:

“Replacement water provided pursuant to subdivision (a) shall meet all applicable federal, state and local drinking water standards and shall have comparable quality to that pumped by the public water system or private well owner prior to the discharge”

24. Section 13267(b)(1) of the CWC states that:

25. *“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”*

26. Section 13304(c)(1) of the California Water Code provides that:

“ . . . the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions. . . .”

27. The State Water Resources Control Board (hereafter State Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*. This Policy sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Board Resolution 68-16, the *Statement of Policy With Respect to Maintaining High Quality of Waters in California*. Resolution 92-49 and the Basin Plan establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with Title 23, California Code of Regulations (CCR) Section 2550.4. Any alternative cleanup level to background must (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Board.
28. Chapter IV of the Basin Plan contains the *Policy for Investigation and Cleanup of Contaminated Sites*, which describes the Water Board's policy for managing contaminated sites. This policy is based on California Water Code Sections 13000 and 13304, the Title 27, Division 2, Subdivision 1 regulations, and State Board Resolution Nos. 68-16 and 92-49. The policy addresses site investigation, source removal or containment, information required to be submitted for consideration in establishing cleanup levels, and the bases for establishment of soil and groundwater cleanup levels.
29. The Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition - 1998* (hereafter Basin Plan), designates beneficial uses of the waters of the State and establishes water quality objectives (WQOs), and establishes implementation policies to implement WQOs. It also contains implementation plans and policies for protecting waters of the basin and implementing the WQOs. The Site overlies groundwater within the San Joaquin Hydrologic Basin, San Joaquin River Hydrologic Unit, Hydrologic Area 540.30 (Redinger). The beneficial uses of the groundwater beneath the site, per the basin plan, are domestic, municipal, industrial, and agricultural supply. However, residents or the City of Dos Palos do not currently use groundwater at or near the site for drinking water or for other municipal or industrial purposes.

30. The constituents detected at the Site are not naturally-occurring, and include benzene, a known human carcinogen. Pollution of groundwater with such constituents impairs and threatens to impair the beneficial uses of the groundwater.
31. WQOs listed in the Basin Plan include numeric WQOs, e.g., state drinking water maximum contaminant levels (MCL) that are incorporated by reference, and narrative WQOs, including the narrative toxicity objective and the narrative tastes and odors objective for surface and groundwater. Chapter IV of the Basin Plan contains the *Policy for Application of Water Quality Objectives*, which provides that “[w]here compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Water Board will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives.” The numerical limits for the constituents of concern listed in the following table implement the Basin Plan WQOs.

Constituent	Limit (µg/L)	WQO	Reference
TPHd	100	Narrative Objective for Toxicity	1980 U.S. EPA Suggested-No-Adverse-Response Level
TPHg	5	Narrative Objective for Toxicity	California SWRCB, <i>Water Quality Criteria</i> , McKee & Wolf, 1963 & 1978
Benzene	1	California Primary Maximum Contaminant Level	California DHS Primary MCL
Toluene	150	California Primary Maximum Contaminant Level	California DHS Primary MCL
Ethylbenzene	300	California Primary Maximum Contaminant Level	California DHS Primary MCL
Xylenes	1,750	California Primary Maximum Contaminant Level	California DHS Primary MCL
Naphthalene	170	Narrative Objective for Toxicity	California DHS, Toxicity Action Level
MTBE	13	California Primary Maximum Contaminant Level	California DHS Primary MCL
TEL	0.0007 ¹	Narrative Objective for Toxicity	USEPA IRIS Reference Dose as a Drinking Water Level

¹ Compliance with the Water Quality Objective for TEL shall be determined using the results from the laboratory analytical method approved by the Water Board. Any TEL concentrations less than the approved PQL are deemed to be in compliance with the objective.

32. The constituents listed in Finding Nos. 11 and 30 are wastes as defined in California Water Code Section 13050(d).
33. The groundwater exceeds the WQOs for the constituents listed in Finding No.30. The exceeding of applicable WQOs in the Basin Plan constitutes pollution as defined in California Water Code Section 13050(1)(1). The wastes detected in waters, soil and vapor at the site threatens to cause pollution, including contamination, and nuisance.
34. Section 13050(1)(1) of the CWC defines pollution as:

“an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses. (B) Facilities which serve these beneficial uses.”

35. Section 13050(m) of the CWC defines “nuisance” as:

“anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (3) Occurs during, or as a result of, the treatment or disposal of wastes.”

36. Title 23 California Code of Regulations Sections 2729 and 2729.1, require submittal of analytical data electronically via the Internet, using approved electronically deliverable formats (EDF), to the State Water Board Geographic Environmental Information Management System database (GeoTracker).

DISCHARGER LIABILITY

37. As described in Finding 22, 31, and 32, the Discharger is subject to an order pursuant to Water Code Section 13304 because the Discharger has caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has created, and continues to threaten to create, a condition of pollution or nuisance. The condition of pollution is a priority violation and issuance or adoption of a cleanup or abatement order pursuant to Water Code Section 13304 is appropriate and consistent with policies of the Water Board.

38. This Order requires investigation and cleanup of the site in compliance with the Water Code, the applicable Basin Plan, Resolution 92-49, and other applicable plans, policies, and regulations.

39. As described in Finding 24, the Discharger is subject to an order pursuant to Water Code section 13267 to submit technical reports because existing data and information about the site indicate that waste has been discharged, is discharging, or is suspected of discharging, at the property, which is or was owned and/or operated by the Discharger named in this Order, Nicoletti Oil, Inc. and ExxonMobil Corporation, their agents, successors, and assigns. The technical reports required by this Order are necessary to assure compliance with Section 13304 of the California Water Code, including to adequately investigate and cleanup the site to protect the beneficial uses of waters of the state, to protect against nuisance, and to protect human health and the environment.

40. If the Discharger fails to comply with this Order, the Executive Officer may request the Attorney General to petition the superior court for the issuance of an injunction.
41. If the Discharger violates this Order, then the Discharger may be liable civilly in a monetary amount provided by the Water Code.
42. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), pursuant to Title 14 CCR Section 15321(a)(2). The implementation of this Order is also an action to assure the restoration of the environment and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), in accordance with Title 14 CCR, Sections 15308 and 15330.
43. Any person affected by this action of the Water Board may petition the State Board to review the action in accordance with Title 23 CCR Sections 2050-2068. The regulations may be provided upon request and are available at www.swrcb.ca.gov. The State Board must receive the petition within 30 days of the date of this Order.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that Cleanup and Abatement Order No. R5-2005-0701 is rescinded and that, pursuant to CWC Sections 13267 and 13304 and Resolution 92-49 *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*, and with the Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV), Nicoletti Oil, Inc. and ExxonMobil Corporation, their agents, successors, and assigns, shall clean up the waste and abate forthwith the existing and threatened effects of waste discharged to groundwater from the facility at 2801 Blossom Street, Dos Palos, California. "Forthwith" means as soon as reasonably possible, but in any event no later than the compliance dates below. More specifically, the Discharger shall:

REMEDIATION

1. Continue operation of the GWP&T and SVE remediation systems in accordance with the RAP, including monitoring and reporting in accordance with the attached Monitoring and Reporting Program, which is hereby incorporated by reference into this Cleanup and Abatement Order, and as specified below.
2. Maintain, operate, and modify the remediation systems to capture, cleanup the pollutants, and prevent the further migration of pollutants from the Site, and to provide continuous capture of vapors from the contaminant plume.

3. Continue operation of the remediation system until the Water Board approves, in writing, the cessation of operation.

GROUNDWATER MONITORING

4. Submit quarterly groundwater monitoring reports, including remediation system operation and monitoring (O&M) reports, in accordance with attached Monitoring and Reporting Program (MRP) No. R5-2006-0057 **by the 15th day of the second month following the end of each calendar quarter**, with the next report (covering O&M from startup through the end of June 2006) due **15 August 2006**.
5. Discharger shall evaluate the availability of analytical methods for groundwater samples to measure for the presence of tetraethyl lead and determine the lowest achievable practical quantitation limit. Discharger shall within 90 days of the issuance of this Order provide the Water Board with this evaluation and a proposed method for Water Board approval. The approved analytical method shall be used until such time that the Water Board approves another method. The Water Board may request that the Discharger update the evaluation as described above.

Electronic copies of all reports and analytical results are to be submitted over the Internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at <http://geotracker.swrcb.ca.gov>. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Board's web site.

HUMAN HEALTH RISK/PUBLIC PARTICIPATION

6. Continue to renew, on an annual basis, existing advisory against the consumption of homegrown produce by residents. The advisory shall be included with a fact sheet provided to nearby residents, businesses and property owners that describes the operations and progress of the remedial activities at the site. The requirement for the advisory shall remain in effect until alternative recommendations submitted by the Discharger are implemented following concurrence by the Water Board.

GENERAL REQUIREMENTS

7. Conduct work only after Water Board staff concurs with work plans.
8. Submit all reports with a cover letter signed by the Discharger.
9. Fourteen days prior to conducting any new or non-routine fieldwork, not already covered by or subject to an existing Health and Safety Plan for the site, submit a Health and Safety Plan that is adequate to ensure worker and public safety during the field activities in accordance with CCR Title 8, Section 5192.
10. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, have appropriate reports prepared by, or under the supervision of, a registered professional engineer or geologist and signed by the registered professional. All technical reports submitted by the Discharger shall include a statement signed by the authorized representative certifying under penalty of law that

the representative has examined and is familiar with the report and that to his knowledge, the report is true, complete, and accurate.

11. Upon startup of any remediation system(s), operate the remediation system(s) continuously, except for periodic and required maintenance or unpreventable equipment failure. The Discharger shall notify the Water Board (by e-mail or telephone) within 48 hours of any unscheduled shutdown of the remediation system(s) that lasts longer than 96 hours. This notification shall include the cause of the shutdown and the corrective action taken (or proposed to be taken) to restart the system. Any interruptions in the operation of the remediation system(s), other than for maintenance, emergencies, or equipment failure, without prior approval from Water Board staff or without notifying the Water Board within the specified time is a violation of this Order.
12. Optimize remedial systems as needed to improve system efficiency, operating time, and/or pollutant removal rates, and report on the effectiveness of the optimization in the Annual Report.
13. Notify Water Board staff at least three working days prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation and is not routine monitoring, maintenance, or inspection.
14. Obtain all local and state permits and access agreements necessary to fulfill the requirements of this Order prior to beginning the work.
15. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order and this Order has been rescinded.
16. Any person affected by this action of the Water Board may petition the State Water Board to review the action in accordance with Title 23, CCR Sections 2050-2068. Copies of the applicable regulations will be provided on request and are available on the Internet at: http://www.waterboards.ca.gov/water_laws/index.html. The State Water Board must receive the petition within 30 days of the date of this Order.
17. Failure to comply with the provisions of this order may result in further enforcement action including, but not limited to, the imposition of Administrative Civil Liability pursuant to CWC Sections 13268 and/or 13350.
18. Continue to reimburse the Water Board for reasonable costs associated with oversight of the cleanup of this facility.
19. Based on the findings of the reports submitted as directed by this Order, conduct activities and submit monitoring and technical reports, as subsequently directed by the Executive Officer pursuant to California Water Code Sections 13304 and 13267, to expedite cleanup and closure of the Site.

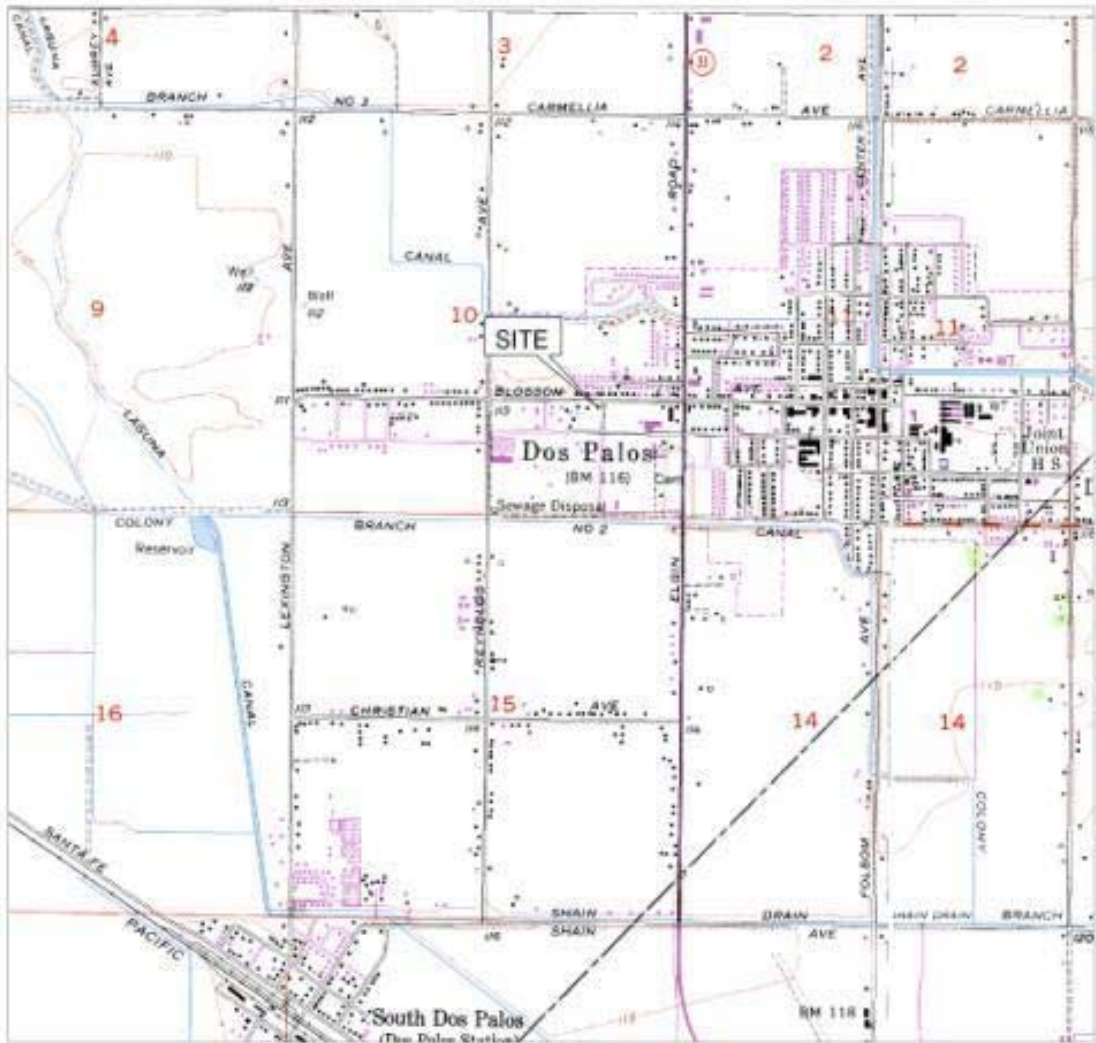
20. In the event compliance cannot be achieved within the terms of this Order, the Discharger has the opportunity to request, in writing, an extension of the time specified. The extension request shall include an explanation why the specified date could not or will not be met and justification for the requested period of extension. Any extension request shall be submitted as soon as the situation is recognized and no later than the compliance date. Extension requests not approved in writing with reference to this order are denied.
21. Reference herein to determinations and considerations to be made by the Water Board regarding the terms of the Order shall be made by the Executive Officer. Decisions and directives made by the Executive Officer in regards to this Order shall be as if made by the Water Board.
22. If, in the opinion of the Executive Officer, the Discharger fails to comply with this Order, the Executive Officer may pursue further enforcement, including making a referral to the Attorney General for judicial enforcement or issuing a complaint for administrative civil liability. The Water Board reserves its right to take any enforcement actions authorized by law.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region on 23 June 2006.

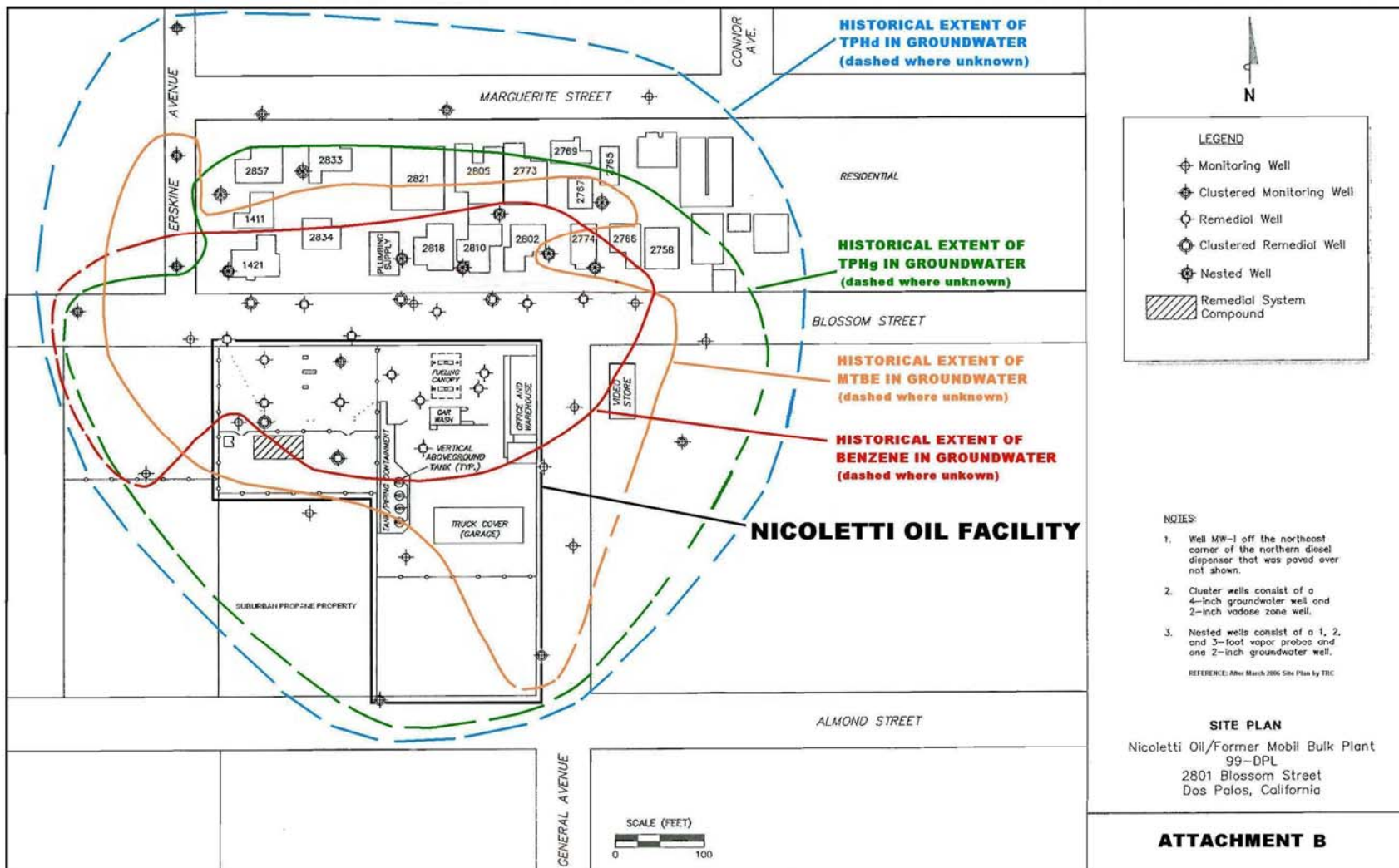
PAMELA C. CREEDON, Executive Officer

23 June 2006

(Date)



ATTACHMENT A



NOTE: The map contours represent an interpretation of the possible extent of groundwater contamination for the purposes of the proposed CAO and are not representative of site risks or potential exposures at the Site.

ATTACHMENT B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2006-0057
CALIFORNIA WATER CODE SECTION 13267

FOR

NICOLETTI OIL, INC.
AND
EXXONMOBIL CORPORATION
NICOLETTI OIL DISTRIBUTION FACILITY
MERCED COUNTY

Nicoletti Oil, Inc. and ExxonMobil Corporation (hereafter jointly referred to as the Discharger) currently and/or previously owned and operated a bulk fuel and retail fuel distribution facility at 2801 Blossom Street in Dos Palos (the facility). The facility consists of five aboveground fuel storage tanks, fuel dispensers, associated aboveground and underground piping, an office building and warehouse, and car wash. Petroleum hydrocarbon releases from the fuel storage system have resulted in pollution of soil and groundwater beneath the facility, Blossom Street, and property along the north side of Blossom Street. This pollution impaired the beneficial use of this water resource as municipal and domestic water supply. Groundwater in this area is not currently used as a municipal or domestic water supply. Depth to groundwater is approximately 5 feet below ground surface. The Discharger operates a soil vapor extraction system to remove pollutants from the vadose zone and a groundwater extraction and treatment system to remediate polluted groundwater and separate phase hydrocarbons (SPH) floating on the water table.

This Monitoring and Reporting Program (MRP) is issued pursuant to Section 13267 of the California Water Code and is necessary to delineate groundwater pollutant plumes and determine whether remediation efforts are effective. Existing data and information about the site show the presence of various chemicals, including Total Petroleum Hydrocarbons as gasoline and diesel (TPHg and TPHd); benzene, toluene, ethylbenzene, and xylenes (BTEX); methyl tertiary butyl ether (MTBE); and tetraethyl lead emanating from the property and resulting from the Discharger's current or past operation. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Discharger shall submit plans and specifications to the Board for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

REMEDIATION SYSTEM MONITORING

Groundwater Pump and Treat System Monitoring

Influent samples shall be collected from two locations, one sample upstream of the stripper and a second sample downstream of the stripper and upstream of the first carbon vessel. System effluent samples shall be collected from the exiting sample port of the final treatment vessel prior to discharge. Influent and effluent samples shall be analyzed according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Petroleum Hydrocarbons as Gasoline ¹	µg/L	Grab	Monthly	Quarterly
Total Petroleum Hydrocarbons as Diesel ¹	µg/L	Grab	Monthly	Quarterly
Volatile Organic Compounds ²	µg/L	Grab	Monthly	Quarterly
Electrical Conductivity	µmhos/cm	Grab	Monthly	Quarterly
Total Dissolved Solids	mg/l	Grab	Monthly	Quarterly
pH (Field)	pH units	Grab	Monthly	Quarterly
Temperature (Field)	°Celsius	Grab	Monthly	Quarterly
Total Volume of Water Treated	Gallons	Continuous	Monthly	Quarterly
Flow Rate at Time of Sampling	gpm	Grab	Monthly	Quarterly
Average Flow Rate (since last sampling)	gpm	Continuous	Monthly	Quarterly

¹Required analytical method shall be USEPA Method 8015M or 8260B.

²Required analytical method shall be either USEPA Method 8260B or 624. Analysis shall include benzene, toluene, ethylbenzene, and xylene (BTEX) and seven fuel oxygenates (di-isopropyl ether [DIPE], ethanol, ethyl tertiary butyl ether [ETBE], methanol, methyl tertiary butyl ether [MTBE], tertiary amyl methyl ether [TAME], and tertiary butyl alcohol [TBA]). The maximum detection limits must meet those specified in the Groundwater Monitoring section of the MRP.

Soil Vapor Extraction System Monitoring

A soil vapor extraction system (SVE) is being operated to remediate petroleum hydrocarbon vapors emanating from polluted soil and groundwater. Soil vapor is being extracted from 19 wells and treated via thermal destruction. Performance monitoring of the SVE system shall comply with the requirements of the SJVAPCD and include the parameters listed below. Chemical testing shall be performed on both influent and effluent vapor streams.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Organic Vapors (using PID or FID)	ppm	Grab	Bi-weekly	Quarterly
Total Petroleum Hydrocarbons as Gasoline ^{1*}	µg/L	Grab	Bi-weekly	Quarterly
Total Petroleum Hydrocarbons as Diesel ¹	µg/L	Grab	Bi-weekly	Quarterly
BTEX ²	µg/L	Grab	Bi-weekly	Quarterly
Temperature (Field)	°Celsius	Grab	Bi-weekly	Quarterly
System Vacuum (Field)	inches H ₂ O	Grab	Bi-weekly	Quarterly
Flow Rate at Time of Sampling	scfm	Grab	Bi-weekly	Quarterly
Average Flow Rate (since last sampling)	scfm	Continuous	Bi-weekly	Quarterly

¹Required analytical method shall be USEPA Method TO-3.

²Required analytical method shall be USEPA Method TO-15. Analysis shall include benzene, toluene, ethylbenzene, and xylene (BTEX). The maximum detection limits must meet those specified under USEPA Method TO-15.

For monitoring of SVE system operation, the Discharger shall perform the following:

- a. For each regularly scheduled O&M inspection of the system, monitor individual SVE well vapor flow rates (measured or estimated – as available) and vacuum measurements from monitoring wells and vapor wells not connected to the SVE system or paired with an SVE system well.
- b. Laboratory analytical reports indicating the concentration of petroleum hydrocarbon constituents in the gasoline range, naphthalene, and benzene in total SVE effluent.
- c. An estimate of the mass of total petroleum hydrocarbons removed from the ground during the quarter and cumulatively by the SVE system.

Soil Vapor Probe Monitoring

For all Site residential areas not within the influence of the SVE system (influence as determined by the presence of a measurable or predictable soil vacuum due to SVE system operation), implement a soil vapor monitoring program to assess whether volatile organic hydrocarbon concentrations in soil exceed acceptable concentrations. Until modification is approved in accordance with the terms of this MRP, the minimum scope of the soil vapor monitoring shall consist of quarterly sampling of the existing 3-foot soil vapor probes (NW-#-3) for which vacuum influence from the SVE system cannot be demonstrated. Samples shall be analyzed for benzene by USEPA Method TO-15 and for tetraethyl lead (TEL) by the modified NIOSH Method (2533 MOD) previously utilized for all such testing at the Site. Soil vapor probe monitoring reports shall be submitted along with groundwater monitoring reports.

*The proposed MRP required analysis of Total Petroleum Hydrocarbons as diesel, Total Petroleum Hydrocarbons as gasoline, and BTEX on a bi-weekly basis. Analysis for Total Petroleum Hydrocarbons as diesel has been deleted from this final MRP and the testing frequency for Total Petroleum Hydrocarbons as gasoline and BTEX has been changed to monthly to be consistent with the requirements of the Permit to Construct issued by the Air Pollution Control District.

NICOLETTI OIL, INC.

DOS PALOS / MERCED COUNTY

In the event that an exceedance of the acceptable concentration of benzene or TEL is confirmed by subsequent sampling in a soil vapor probe in a given area, then a technical report shall be submitted containing a workplan which proposes a response, which may include modification or expansion of the remedial system. If the initial detection of benzene or TEL in a soil vapor sample exceeds ten times the acceptable concentration, then the confirmation sampling and analyses shall be completed within one month of the initial sampling and analysis and the results transmitted to the Regional Water Board forthwith. Upon Regional Water Board concurrence with the work plan, the approved work plan including any remediation system modification, shall be implemented forthwith.

In the event that vapor monitoring results for all measured constituents are at or below acceptable concentrations as determined by the Water Board for 8 consecutive quarters or sooner if the Water Board determines that such monitoring is not needed, then soil vapor monitoring shall be terminated.

GROUNDWATER MONITORING

As shown on Figure 1, there are 50 groundwater monitoring wells (tabulated below) and 32 vapor monitoring wells at the site. The groundwater monitoring program for monitoring wells not connected to the remediation system and any wells installed subsequent to the issuance of this MRP shall follow the test schedule below. Monitoring wells with SPH or visible sheen shall be monitored, at a minimum, for SPH thickness and depth to water. The volume of extracted groundwater and separate phase hydrocarbons also shall be provided in quarterly monitoring reports. The wells listed in the table below shall be monitored and sampled on a quarterly basis, if they are not connected to the groundwater remediation system. Sample collection and analysis shall follow standard EPA protocol.

Wells	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-A	MW-B
	MW-C	MW-D	MW-E	MW-F	MW-G	MW-H	MW-J	MW-K	MW-L
	MW-M	MW-N	MW-O	MW-P	MW-Q	MW-R	MW-S	MW-T	MW-U
	MW-V	MW-W	MW-X	MW-Y	MW-Z	NW-1-GW	NW-2-GW		
	NW-3-GW		NW-4-GW		NW-5-GW		NW-6-GW		
	NW-7-GW		NW-8-GW		NW-9-GW				

Constituents	EPA Analytical Method	Maximum Practical Quantitation Limit (µg/l) ¹	Sampling Frequency
Depth to Groundwater	---	---	Quarterly
SPH Layer Thickness	---	---	Quarterly
Volatile Organic Compounds	8260B	0.5	Quarterly
Total Petroleum Hydrocarbons as Gasoline and Diesel	8015M	50	Quarterly
Benzene	8020 or 8260B	0.5	Quarterly
Toluene	8020 or 8260B	0.5	Quarterly
Ethylbenzene	8020 or 8260B	0.5	Quarterly
Xylene	8020 or 8260B	0.5	Quarterly
Tetraethyl lead ²	---	²	Quarterly
MTBE	8260B	0.5	Quarterly
TBA	8260B	5.0	Quarterly
TAME	8260B	0.5	Quarterly
DIPE	8260B	0.5	Quarterly
ETBE	8260B	0.5	Quarterly
Ethanol	8260B	50	Quarterly
Methanol	8260B	100	Quarterly

¹ For nondetectable results, all concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

² The Discharger shall analyze groundwater samples using a test method with the lowest commercially available practical quantitation limit, as approved by the Water Board. The approved test method shall be utilized until such a time that the Discharger proposes a different method that is approved by the Water Board. If tetraethyl lead is detected, the Discharger shall perform verification sampling within 30 days of submittal of the monitoring report.

REPORTING

When reporting the data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this Order.

The Discharger shall notify Regional Water Board staff via e-mail or facsimile within 48 hours following (or, if planned, in advance of) any interruption of remediation system operation (either the groundwater pump & treat or SVE components, or both) of more than 96 hours or of aggregate interruptions of operation totaling more than 72 hours within any 2-week period. Such notification shall describe the reason for non-operation, the steps being taken to return to operational mode, and estimate the time of resumption of operation. In such instances, all necessary efforts shall be made to return the remediation system to full operation forthwith and any additional delays in restoring the remediation system to full operation shall be similarly reported with explanation.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.

Quarterly groundwater monitoring reports, including remediation system operations and maintenance and soil vapor probe monitoring data, shall be submitted to the Board by the **15th day of the second month following the end of each calendar quarter (i.e., by 15 February, 15 May, 15 August, and 15 November)** until such time as the Executive Officer determines that the reports are no longer necessary. Each quarterly report shall include the following minimum information:

- (a) a description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated;
- (b) field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.;
- (c) groundwater elevation contour maps for all groundwater zones, if applicable;
- (d) isocontour pollutant concentration maps for all groundwater zones, if applicable;
- (e) a table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom;
- (f) a table showing historical lateral and vertical (if applicable) flow directions and gradients;
- (g) cumulative data tables containing the water quality analytical results, depth to groundwater, and a summary of SPH layer thickness data;
- (h) a copy of the laboratory analytical data report;
- (i) if applicable, the status of any ongoing remediation, including:
 - 1) documentation that each well pump is performing extraction functions as designed;
 - 2) quarterly and cumulative information on the mass of pollutant removed from the subsurface by both systems;
 - 3) system operating times;
 - 4) a description of steps being taken to maximize the mass extraction rate of petroleum hydrocarbons;
 - 5) the effectiveness of the remediation system; and

^o The report due date in the proposed MRP has been changed from the 1st to the 15th day of the second month following the end of each quarter to be consistent with the requirements of Cleanup and Abatement Order No. R5-2006-0057.

- 6) any field notes pertaining to the operation and maintenance of the system.
- (j) if applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions; and
- (k) copies of any correspondence with other regulatory agencies during the quarter pertaining to remediation system operation.

An Annual Report shall be submitted to the Regional Water Board by **15^o February** of each year. This report shall contain an evaluation of the effectiveness and progress of the investigation and remediation, and may be substituted for the fourth quarter monitoring report. The Annual Report shall contain the following minimum information:

- (a) both tabular and graphical summaries of all data obtained during the year;
- (b) groundwater contour maps and pollutant concentration maps containing all data obtained during the previous year;
- (c) a discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells;
- (d) an analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread;
- (e) a description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness;
- (f) the anticipated date for completion of cleanup activities;
- (g) an identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;
- (h) if desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.

The results of any monitoring done more frequently than required at the locations specified in the MRP also shall be reported to the Regional Water Board. The Discharger shall implement the above monitoring program as of the date of the Order.

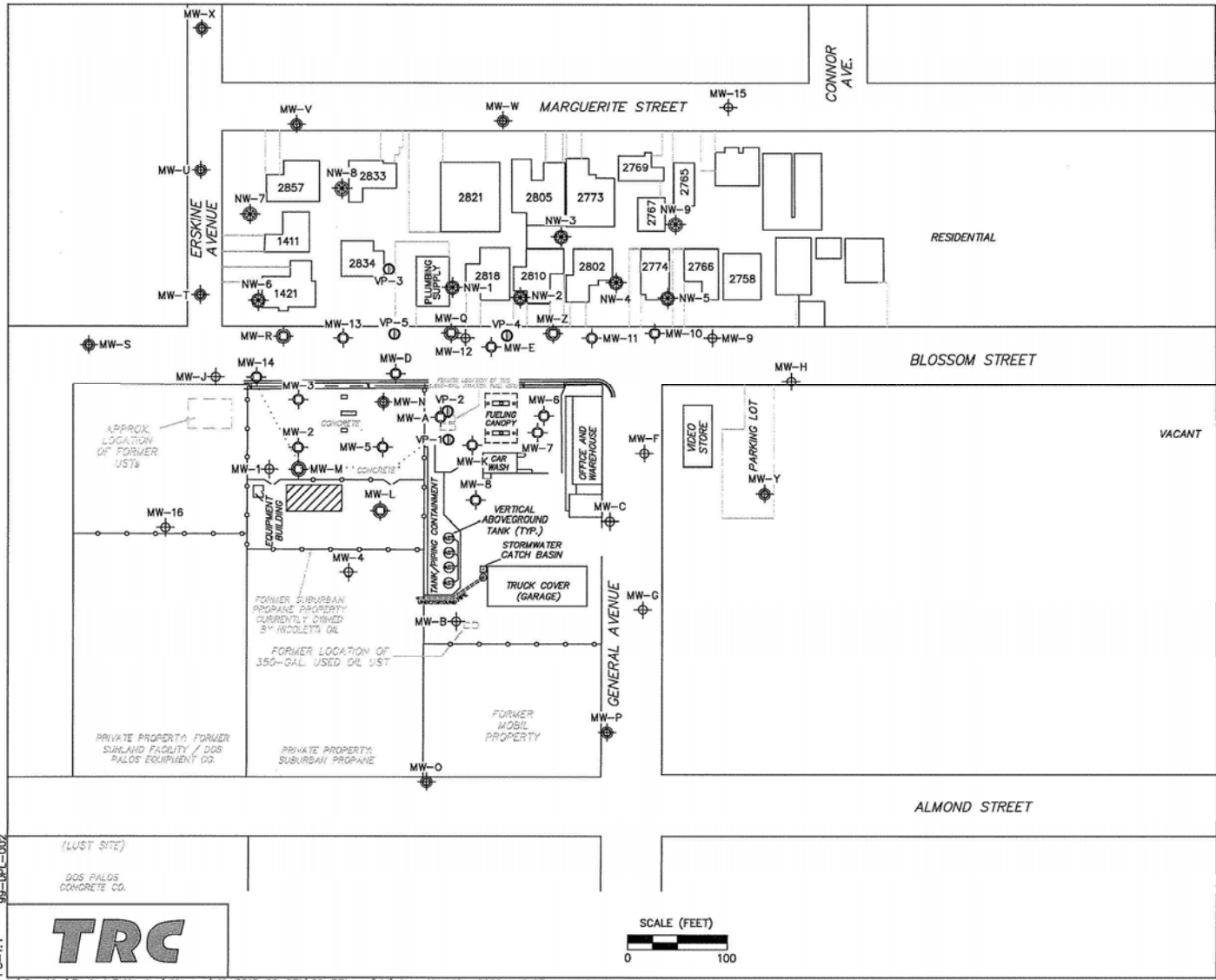
^o The report due date in the proposed MRP has been changed from the 1st to the 15th day of the second month following the end of each quarter to be consistent with the requirements of Cleanup and Abatement Order No. R5-2006-0057.

Ordered by:

PAMELA C. CREEDON, Executive Officer

23 June 2006

(Date)



LEGEND

MW-16 Monitoring Well

MW-T Clustered Monitoring Well

MW-14 Remedial Well

MW-Z Clustered Remedial Well

VP-5 Vapor Well

NW-9 Nested Well

Remedial System Compound

SOURCE:
 June 1997 site plan, Krazen Engineers, July 1998 "As-Built" site plan by Nicoletti Oil Inc., and well surveys completed by Doble-Thomas Associates from 2003 to 2006.

- NOTES:**
1. Well MW-1 off the northeast corner of the northern diesel dispenser that was paved over not shown.
 2. Cluster wells consist of a 4-inch groundwater well and 2-inch vadose zone well.
 3. Nested wells consist of a 1, 2, and 3-foot vapor probes and one 2-inch groundwater well.

SITE PLAN

Nicoletti Oil/Former Mobil Bulk Plant
 99-DPL
 2801 Blossom Street
 Dos Palos, California

TRC

FIGURE 1

PS=1:1
 99-DPL-002

TRC

