CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. R9-2008-0071
WASTE DISCHARGE REQUIREMENTS
FOR
RESOURCE ENVIRONMENTAL LIMITED LIABILITY CORPORATION
IN-SITU CHEMICAL OXIDATION PROJECT
AT
105 AND 112 SOUTH RANCHO SANTA FE ROAD
SAN MARCOS, SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. URS Corporation, on behalf of Resource Environmental Limited Liability Corporation (hereinafter RELLC or Discharger), submitted a Report of Waste Discharge (ROWD) for the discharge of calcium peroxide and sodium persulfate (oxidants) into the groundwater in the vicinity of 105 and 112 South Rancho Santa Fe Road, San Marcos, San Diego County. RELLC was established by five major energy companies (ConocoPhillips Company, ExxonMobil Corporation, Chevron U.S.A. Inc., Marathon Petroleum Company LLC, Shell Oil Products US, and Motiva Enterprises LLC.) for the purpose of providing management of multi-party or comingled petroleum fuel spills and releases into the environment such as what occurred at the subject sites.

2. The Rancho Santa Fe Gas Service Station (formerly a Texaco Service Station) located at 105 South Rancho Santa Fe Road is currently owned and operated by Mr. Shawn Hindi and the Exxon Mobil Service Station (formerly a Shell Service Station) located at 112 South Rancho Santa Fe Road is currently owned and operated by New West Petroleum.

3. Chemical oxidation is one of the processes used to treat volatile organic chemicals (VOCs) including dichloroethene (DCE), trichloroethene (TCE), tetrachloroethene (PCE), and benzene, toluene, ethylbenzene, and xylene (BTEX) as well as semi-volatile organic chemicals (SVOCs), including pesticides, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs) as part of a groundwater, sediment, and soil remediation program.

4. The Discharger proposes to use calcium peroxide and sodium persulfate to enhance remediation of petroleum hydrocarbons, VOCs, and fuel oxygenates at the subject sites. These chemicals will be injected into the groundwater plume through wells and the effects monitored to verify the chemicals are effective and do not significantly impact water quality. The chemicals may produce some by-products including carbon dioxide, water, and sulfate. Persulfate anions dissociate in water and with an activator such as peroxide, increase oxidative strength through formation of sulfate radicals.

5. The application of treatment chemicals to groundwater may result in unintended adverse effects to groundwater quality and is considered, therefore, a discharge of waste subject to waste discharge requirements prescribed in accordance with the California Water Code (CWC). With proper management, however, the potential effects will be localized, of short term duration, and are not expected to unreasonably impair any existing or prospective use of groundwater.

6. In accordance with section 2200, Title 23 of the California Code of Regulations (CCR) , the threat to water quality and complexity of the discharge of the oxidants is category 3C.

7. State Water Resources Control Board (SWRCB) Resolution No. 68-16 requires the Regional Board, in regulating the discharge of waste, to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with the maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies. The impact on existing water quality will not be significant, and in-situ remediation systems will improve the quality of the affected groundwater. The permitted discharges are consistent with the provisions of Resolution No. 68-16.

8. This Regional Board, acting in accordance with section 13244 of the CWC, adopted the Water Quality Control Plan for the San Diego Basin (9), (hereinafter Basin Plan) on September 8, 1994. The Basin Plan was subsequently approved by the SWRCB on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Board and approved by the SWRCB. The Basin Plan contains beneficial uses and water quality objectives.

9. The Basin Plan (Chapter 2-54, Table 2-5) designates that beneficial uses do not apply to groundwater in an area between Highway 78 and El Camino Real. The subject sites are located within this area.

10. A discharge in compliance with this Order will be consistent with the standards, policies, and regulations established in the Basin Plan for the achievement of water quality objectives.

11. The Regional Board considered all environmental factors associated with the discharge of oxidants into groundwater. A draft Negative Declaration was circulated for public comment on May 13, 2008 as required by California Environmental Quality Act (CEQA). No significant environmental effects were identified and the Negative Declaration for the project was certified by the Regional Board on June 25, 2008.

12. The Regional Board has notified the Discharger and all known interested parties of its intent to adopt waste discharge requirements for the discharge of oxidants into groundwater.

13. The Regional Board in a public meeting heard and considered all comments pertaining to the discharge of oxidants into groundwater.

IT IS HEREBY ORDERED THAT the Resource Environmental Limited Liability Corporation (hereinafter Discharger) in order to meet the provisions contained in Division 7 of the CWC and CCR adopted thereunder, shall comply with the following requirements:

A. PROHIBITIONS

1. Discharge of wastes in a manner other than as described in the findings of this Order is prohibited unless the Discharger obtains revised waste discharge requirements (WDRs) that provide for the proposed change.
2. Discharge of treated or untreated solid or liquid waste to a navigable water or tributary of a navigable water is prohibited unless as authorized by an National Pollutant Discharge Elimination System (NPDES) permit issued by this Regional Board.
3. Discharge of wastes shall not cause a violation of the prohibitions contained in the Basin Plan, incorporated herein by reference.

B. DISCHARGE SPECIFICATIONS

1. Neither the treatment, storage nor disposal of waste shall create a pollution, contamination or nuisance, as defined by section 13050 of the CWC.
2. The discharge of wastes shall not cause the pH of the receiving groundwater at the point of compliance[1] beyond the range of 6.5 to 8.5.
3. The discharge of wastes shall not cause the constituents in groundwater at the point of compliance to exceed background concentrations.
4. The discharge of wastes shall not contain salts, heavy metals, or organic pollutants at levels that would cause groundwater at the point of compliance to exceed the water quality objectives for groundwater, or surface water that may be in hydraulic connection with groundwater.
5. The discharge of wastes shall not cause the groundwater to contain concentrations of chemical substances, or by-products, in amounts that adversely affect any designated beneficial uses.

C. STANDARD PROVISIONS

1. ENFORCEMENT: The Regional Board may initiate enforcement action against the Discharger should the discharge of waste be in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in CWC section 13050.

[1] A point of compliance is a monitoring point, located downgradient, outside the groundwater plume, and outside the treatment area used assess the impacts to water quality and the effectiveness of the chemicals.

2. DUTY TO COMPLY: The Discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the CWC and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a ROWD in application for new or revised WDRs.

3. ENTRY AND INSPECTION: The Discharger shall allow the Regional Board, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to do the following:

   a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Order,

   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order,

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Order, and

   d. Sample or monitor, at reasonable times for the purposes of assuring compliance with this Order or as otherwise authorized by the CWC, any substances or parameters at any location.

4. CIVIL MONETARY REMEDIES: The CWC provides that any person who intentionally or negligently violates any WDRs issued, reissued, or amended by this Regional Board shall be liable civilly in accordance with CWC section 13350 (d), (e), or (f).

5. PENALTIES FOR INVESTIGATION, MONITORING OR INSPECTION VIOLATIONS: The CWC provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor and is subject to a civil liability in accordance with CWC section 13268.

6. ENDANGERMENT OF HEALTH AND ENVIRONMENT: The Discharger shall report any noncompliance that may endanger health or the environment. Any such information shall be provided orally to the Regional Board within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and

steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Regional Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

7. PRIOR NOTICE OF BYPASS: If a need for a discharge bypass is known in advance, the Discharger shall submit prior notice (stating, at a minimum, the purpose, anticipated dates, duration, level of treatment, and volume of bypass) and, if at all possible, such notice shall be submitted at least 10 days prior to the date of the bypass. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility to other than a sewer system.

8. CORRECTIVE ACTION: The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

9. TREATMENT FAILURE: In an enforcement action, that halting or reducing the permitted activity would have been necessary in order to maintain compliance with this Order shall not be a defense for the Discharger. Upon reduction, loss, or failure of the treatment facility, the Discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility is failed, reduced, or lost.

10. HAZARDOUS RELEASES: Except for a discharge which is in compliance with these WDRs, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Director of Environmental Health Services, County of San Diego in accordance with California Health and Safety Code section 5411.5 and the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the SWRCB or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Discharger is in violation of a

prohibition in the applicable Water Quality Control Plan.

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

12. PERMIT REPOSITORY: A copy of this Order shall be maintained at the Discharger's facility and shall be available to operating personnel at all times.

13. RETENTION OF RECORDS: The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board.

14. GENERAL REPORTING REQUIREMENT: The Discharger shall furnish to the Regional Board, within a reasonable time, any information which the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

15. PERMIT REVISION: This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

    a. Violation of any terms or conditions of this Order.

    b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

16. CHANGE IN DISCHARGE: The Discharger shall file a new ROWD at least 120 days prior to the following:

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

b. Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste).

c. Change in the disposal area from that described in the findings of this Order.

d. Increase in flow beyond that specified in this Order.

e. Other circumstances that result in a material change in character, amount, or location of the waste discharge.

f. Any planned change in the regulated facility or activity which may result in noncompliance with this Order.

17. CHANGE IN OWNERSHIP: This Order is not transferable to any person except after notice to the Regional Board. The Discharger shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new owner containing a specific date for the transfer of this Order's responsibility and coverage between the current Discharger and the new owner. This agreement shall include an acknowledgement that the existing Discharger is liable for violations up to the transfer date and that the new Discharger is liable from the transfer date on. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWC.

18. INCOMPLETE REPORTS: Where the Discharger becomes aware that it failed to submit any relevant facts in a ROWD or submitted incorrect information in a ROWD or in any report to the Regional Board, it shall promptly submit such facts or information.

19. REPORT DECLARATION: All applications, reports, or information submitted to the Regional Board shall be signed and certified as follows:

    a. The ROWD shall be signed as follows by either a principal Executive Officer or ranking elected official.

    b. All other reports required by this Order and other information required by the Regional Board shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if all of the following are true:

        (1) The authorization is made in writing by a person described in paragraph (a) of this provision,

        (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, and

        (3) The written authorization is submitted to the Regional Board.

    c. Any person signing a document under this section shall make the following certification:

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

20. REGIONAL BOARD ADDRESS: The Discharger shall submit reports required under this Order or other information required by the Regional Board to the following address:

    California Regional Water Quality Control Board
    San Diego Region
    9174 Sky Park Court, Suite 100
    San Diego, California 92123

E. NOTIFICATIONS

1. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state or local laws, nor create a vested right for the Discharger to continue the waste discharge.

2. U.S. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REVIEW

These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to section 402 of the federal Clean Water Act.

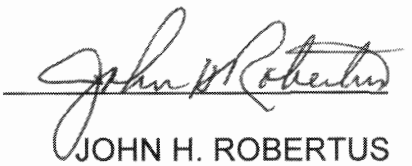
3. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

4. EFFECTIVE DATE

This Order becomes effective on the date of adoption by the Regional Board.

I, John H. Robertus, 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, San Diego Region, on August 13, 2008.



JOHN H. ROBERTUS
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. R9-2008-0071
FOR
RESOURCE ENVIRONMENTAL LIMITED LIABILITY CORPORATION
IN-SITU CHEMICAL OXIDATION PROJECT
AT
105 AND 112 SOUTH RANCHO SANTA FE ROAD
SAN MARCOS, SAN DIEGO COUNTY

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order. Monitoring points shall not be changed without the Discharger providing notification and justification for the change to the Regional Water Quality Control Board, San Diego Region (hereafter Regional Board).
2. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified in this Order.
3. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Regional Board.
4. Monitoring results must be reported on discharge monitoring report forms approved by the Regional Board.
5. If the Discharger monitors any pollutants more frequently than required by this order, using test procedures approved under 40 CFR, Part 136, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's monitoring report. The increased frequency of monitoring shall also be reported.
6. Records of monitoring information shall include:
   (a) The date, exact place, and time of sampling or measurements;
   (b) The individual(s) who performed the sampling or measurements;
   (c) The date(s) analyses were performed;
   (d) The individual(s) who performed the analyses;
   (e) The analytical techniques or method used; and
   (f) The results of such analyses.

7. All monitoring instruments and devices which are used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
8. The Discharger shall report all instances of noncompliance and submit a statement of actions undertaken or proposed that will bring the discharge into full compliance with requirements and submit a timetable for corrective action.
9. All reports, plans and documents required under this Order shall be prepared under the direction of appropriately qualified professionals. The lead professional performing engineering and geologic evaluations and judgments shall sign and affix their professional geologist or civil engineering registration stamp to all technical reports, plans or documents submitted to the Regional Board.
10. All information submitted to the Regional Board in compliance with this Order in paper copy format is also required to be submitted electronically via the Internet into the GeoTracker database. To comply with state regulations,[2] your update to the Geotracker database must include the following minimum information:

    a. Data generated after the effective date of the regulations by chemical analysis of soil, vapor, or water samples (including surface water, groundwater and influent/effluent water samples from remediation systems), shall be submitted in Electric Data File (EDF) format.

    b. The latitude and longitude of any permanent monitoring well for which data is reported in EDF format, accurate to within 1 meter and referenced to a minimum of two reference points from the California Spatial Reference System (CSRS-H), if available.

    c. The surveyed elevation relative to a geodetic datum of any permanent monitoring well.

    d. The elevation of groundwater in any permanent monitoring well relative to the surveyed elevation.

    e. A site map or maps showing the location of all sampling points referred to in the report.

    f. The depth to the screened interval and the length of screened interval for any permanent monitoring well.

    g. Boring logs, in PDF format.

    h. A complete copy of the report, in PDF format, which includes the signed transmittal letter and professional certification.

[2] 23 CCR 3893

The GeoTracker website address is http://www.geotracker.waterboards.ca.gov. Deadlines for electronic submittals coincide with deadlines for paper copy submittals.

B. GROUNDWATER MONITORING

1. The Discharger shall develop and implement a monitoring plan to assess the effectiveness of the project to remediate petroleum hydrocarbons, VOCs, and fuel oxygenates at the subject sites.
2. Prior to, during, and after the discharge of wastes into groundwater, samples of the point(s) of compliance[3] shall be analyzed for petroleum hydrocarbons, VOCs, fuel oxygenates, DO, ORP, pH, temparture, EC, chloride, sulfide, bicarbonate, carbonate, sulfate, phosphate, sodium, potassium, calcium, magnesium, ferrous, ferric iron, total dissolved solids, total organic carbon, and hexavalent chromium to assess the impacts to downgradient water quality.
3. The point of compliance for the discharge of waste into groundwater at 105 South Rancho Santa Fe Road is Monitoring Well 12 (MW-12). The Discharger shall propose the point(s) of compliance prior to discharge of wastes at 112 South Rancho Santa Fe Road for review by the Regional Board. The Discharger shall propose additional monitoring and compliance points, as necessary, to adequately monitor the impacts to water quality during the discharge of waste into groundwater.

C. REPORT SCHEDULE

1. Monitoring reports shall be submitted to the Regional Board in accordance with the following schedule:

REPORTING FREQUENCY	REPORT PERIOD	REPORT DUE
Annually	January – December	February 1st

Monitoring reports shall be submitted to:

California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Ordered by: _____
JOHN H. ROBERTUS
Executive Officer

Date: August 13, 2008

[3] A point of compliance is a monitoring point, located downgradient, outside the groundwater plume, and outside the treatment area used assess the impacts to water quality and the effectiveness of the chemicals.