CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 98-093

ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS FOR:

LAURENCE AND DIANE WEBSTER AND
EKOTEK, INC.

for the property located at

4200 ALAMEDA AVENUE
OAKLAND
ALAMEDA COUNTY

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

1. **Site Location:** The former Ekotek Lube site (the "Site") is located at 4200 Alameda Avenue in Oakland, Alameda County. The Site is about 0.8 acres in size. It is bordered on the west by Alameda Avenue, on the east-southeast by East 8th Street. The former American National Can Company site, now the location for a Super K-Mart, lies to the north. The distance to the Bay is more than 1500 feet.

2. **Site History:** The Site was used for oil recycling from 1925 to 1981. It has been known by various names including "Bonus International, Inc.", "Bayside Oil Company", "Fabian Oil Refining Company", "Economy Refining & Service Company", "Economy Byproducts & Economy Service Company", and "Ekotek Lube, Inc." Waste oil received by the facility primarily consisted of oils from automobiles, railroad locomotives, aircraft, and electrical transformers. Stoddard solvent was also reportedly recycled at the facility until approximately 1978.

   Ekotek bears no relationship to any of the previous operators/owners of the Site. At this time, none of the parties previously associated with the Site could be located.

   Laurence and Diane Webster purchased the Site from Ekotek, Inc. in 1983 but have never operated on-site.

3. **Named Dischargers:** Laurence and Diane Webster are named as dischargers because they have owned the Site since 1983 and intend to develop it and implement the necessary actions specified in this Order. Ekotek, Inc., formerly known as Ekotek Lube, Inc., is named as a discharger because it owned the Site from 1978 to 1983 and operated an oil-recycling facility on-site for three years.

Ekotek, Inc. will be responsible for compliance only if the Board or Executive Officer finds that other named dischargers have failed to comply with the requirements of this order.

If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the Site where it entered or could have entered waters of the state, the Board will consider adding that party's name to this order.

4. **Regulatory Status:** This site is currently not subject to Board order.

5. **Site Hydrogeology:** The Site is located in the East Bay Plain Basin. Soils immediately underlying pavement on- and off-site consist of artificial fill extending to approximately 1.5 to 4 feet below ground surface (bgs). This artificial fill overlays a silty clay that extends to a depth of 6 to 15 feet bgs. Contained within this silty clay are 1 to 2 feet thick discontinuous lenses of clayey gravel and silty sand.

   Located beneath the silty clay is the first water-bearing unit. This first water-bearing unit ranges in thickness from approximately 1 to 5 feet and consists of clayey sands, sandy gravel, and gravely sand. Below this first water-bearing unit are clays and silty clays that extend to the maximum depth explored (i.e. 50 feet bgs). Interbedded in these clays and silts are thin discontinuous sand lenses. The thickest of these discontinuous sand lenses was encountered between 38 and 40 feet bgs and are 1 to 1.5 feet thick. These discontinuous sand lenses are considered the next deeper permeable unit.

   Local groundwater flow direction is to the south, towards the San Leandro Bay. The depth to groundwater on-site has generally been between 7 and 12 feet bgs.

6. **Remedial Investigation:** The former processing area was located on the eastern part of the Site. It consisted of an oily water sump and some underground storage tanks. There was also an above-grade tank farm on the western part of the Site.

   The preliminary investigation conducted in July 1995 consisted of 10 soil borings. Five of the borings were converted into groundwater monitoring wells, MW-1 to MW-5. The main pollutants discovered were petroleum hydrocarbons and associated VOCs, chlorinated solvents, and PCBs. TPH-gasoline up to 4100 ppm, TPH-diesel up to 11,000 ppm, TPH-motor oil up to 15,000 ppm, and PCBs up to 27 ppm have been detected in the soil. The historic maximum concentrations detected in groundwater are 160,000 ppb of TPH-gasoline, 850,000 ppb of TPH-diesel, 800,000 ppb of TPH-motor oil, 630 ppb of benzene, and 5200 ppb of vinyl chloride.

   Off-site soil and groundwater investigations were conducted in February 1996 and June 1997. Waste oil as separate phase hydrocarbons was found in the upper

layer of groundwater as far as 50 feet from the Site. The petroleum hydrocarbons discovered were predominantly high molecular weight, with carbon chain lengths between C_{16} and C_{36}, and should therefore be rather immobile. TPH was detected in two of the soil samples taken and most likely represented TPH in the saturated zone that had sorbed to soils. BTEX, other VOCs, and metals were either not detected or below applicable California Maximum Contaminant Levels.

In the absence of any identified source for the off-site pollution and in light of its proximity to the Site, the off-site pollution is subject to the same cleanup plans as specified in this Order for the on-site pollution.

7. **Interim Remedial Measures:** Demolition of the majority of the aboveground tanks was performed in October and November 1995. Demolition of the remaining above-grade structures and removal of underground tanks and appurtenances (e.g., pipelines, sumps, catch basin, utilities) were conducted between March and July 1996. The Site was then graded and covered with two inches of asphalt and sloped to drain to gutters along Alameda Avenue and East 8th Street.

   Oil liquids, debris, and other materials which were visually distinct from on-site soils were tested and determined to be non-RCRA hazardous wastes, prior to disposal at an approved facility. Some of the soils excavated were allowed to be worked back into the Site as part of the grading process.

   Shallow soil samples were taken in the areas of the former under- and above-ground tanks. The results contribute to some of the historic maximum pollutant concentrations found on-site, as shown above.

8. **Adjacent Sites:** The American National Can Company (ANCC) site at 3801 East 8th Street in Oakland is adjacent to the Site. The ANCC site formerly housed a can manufacturing facility and is now the location of a K-Mart store. Residual VOCs, SVOCs, and floating product remain on this site after completion of extensive remediation. "No Further Action" letters were issued by the Board on January 5 and December 23, 1997.

   ANCC and K-Mart have formally agreed with Ekotek and the Websters that ANCC/K-Mart and Websters/Ekotek should each be responsible for any further investigatory and/or remediation work required on their respective sites, regardless of any possible off-site migration complications. However, the Board is not bound by this private agreement.

9. **Feasibility Study:** Four remediation strategies for the subsurface hydrocarbons were examined for environmental and economic feasibility in the "Risk Management Plan" (RMP) of July 2, 1998, submitted by ARO, L.L.C., for the Websters. They included excavation, groundwater pump and treat, enhanced bioremediation, and long-term passive recovery.

Excavation was shown to be an economically infeasible means of remediation. According to the study, a large percentage of the Site would need to be excavated to address the full scope of the problem. In addition, due to the proximity of the former tank farm and processing area to the adjacent road ways, extensive shoring would be required. ARO estimated that the entire project, including excavation, shoring, and waste disposal, would cost in the range of $1,800,000. Such costs are substantially in excess of the market value of the property.

A pump-and-treat system is not cost-effective either. The tight soils on-site would require an extensive network of low capacity extraction wells. The slow mass transfer of these relatively insoluble chemicals means that the system would have to be operated and maintained for a lengthy period of time at a substantial cost.

Enhanced in-situ bioremediation would require the introduction of microorganism, trace nutrients, and, usually, oxygen to the subsurface. Unfortunately, due to the tight soils and magnitude of the pollution, this option would prove to be just as inefficient as pump-and-treat. Due to the limited space on-site, ex-situ bioremediation would not be a viable remediation option either.

The feasibility study showed that passive hydrocarbon removal, combined with natural attenuation, is the most cost-effective means of reducing and containing the subsurface pollution. With placement of passive recovery wells on the property boundary and in the former release areas, on-site pollution is expected to stay put and abate in time.

The subsurface of the Site is mostly impacted by heavy-end petroleum hydrocarbons. With their tendency to adsorb to the tight soils such as those present at the Site, extensive migration off-site, if at all, is not expected. The installation of recovery wells on the perimeters should effectively reduce the presence of floating product on the property boundary and minimize spread of the pollution. Moreover, reduction of floating product renders the portion that remains more susceptible to biodegradation, and, in turn, accelerates the entire process of remediation.

The feasibility study did not examine remediation strategies for chlorinated solvents in the groundwater. One particular contaminant of concern is vinyl chloride due to its relatively mobile characteristic.

10. **Remediation and Risk Management Plan:** The July 2, 1998, RMP describes a passive hydrocarbon recovery system, coupled by risk management for the Site before, during, and after redevelopment. It also proposes the recordation of an Environmental Restriction and Covenant (ERC) with the deed of the Site. The ERC will limit future use of the Site and identify certain restrictions that will apply even to approved uses for the Site.

a. **Proposed Groundwater Remediation Approach:** The proposed remediation approach consists of a series of dual purpose groundwater monitoring/separate phase hydrocarbons recovery wells spaced around the perimeter. Seven on-site and two off-site wells will be constructed. Three of them will be between existing wells MW-1 and MW-4 to cover the former processing area, and three more between MW-4 and MW-3 to address the tank farm area. One new well will be located between MW-1 and MW-2 to monitor upgradient conditions. All five existing wells will be retrofitted for product recovery as well. Nonetheless, if MW-5 is in the way of site improvements, it will be abandoned and replaced with a new well as close to the former location as practical. This well is important because it has historically shown the greatest depth of product on the groundwater table.

Two off-site wells on the corner of East 8th Street and Alameda Avenue will also be installed. These wells are intended to remediate and monitor the off-site subsurface conditions.

All wells will be fitted with a passive product recovery device consisting of a hydrocarbon absorbent polymer. The spent absorbents will be replaced with fresh ones periodically. Groundwater samples will also be taken and monitored on a regular schedule as specified in the Self Monitoring Program. Closure of these wells will be contingent upon a consistent absence of floating product, favorable results from a sound fate and transport study of the Site's pollutants, and confirmation of these results with additional sampling. For the purposes of the Self Monitoring Program, the word "consistent" shall mean two or more consecutive sampling events not less than one year apart. The words "absence of floating product" shall refer to the lack of a visible sheen and no evidence of capture on the passive product recovery device. The premise is that a stable or diminishing plume of dissolved hydrocarbons will be achieved at the point when there is no longer any evidence of free product in the monitoring wells and water quality parameters show evidence of natural attenuation. The existence of a sufficient amount of dissolved oxygen and other inorganic indicators in the groundwater could be used as such evidential support.

b. **Proposed Risk Management Plan:** Pre-redevelopment risk management plan calls for maintaining the integrity of the pavement cover and present fencing to minimize unauthorized access to the Site.

Risk management during redevelopment includes implementation of site specific health and safety worker planning requirements and safety plans (HASP), construction impact mitigation measures, minimization of groundwater conduit creation, and soil management protocols.

The HASPs will be submitted to Alameda County Environmental Health Department prior to commencement of work. The construction impact mitigation measures consist of site security, dust control, storm water runoff control, and decontamination procedures. The RMP also lists precautions to be taken during construction to prevent the creation of groundwater conduits. Lastly, soil management protocols provide guidance for the excavating and handling of soil remaining at the Site.

Risk management after redevelopment includes maintaining a cap on the Site, establishing protocols for future subsurface development, preventing the use of groundwater under the Site, and establishing a notification procedure to ensure long term compliance with the RMP.

c. **Proposed Environmental Restriction and Covenant:** The proposed engineering controls include maintenance of a cover or cap over the Site, installation of vapor barriers in the foundations of all improvements constructed on the Site, and such other measures as may be specified in the RMP, as it may be amended from time to time.

The proposed institutional restrictions would preclude use of the Site as a residence, hospital for humans, and school for persons under 21 years of age or a day care center for children. Use of the groundwater for drinking, irrigation, industrial water supply, or any other purpose without the prior written consent of the Regional Board is prohibited.

11. **Risk Assessment:** Waterstone Environmental, L.L.C. prepared a Human Health Risk Assessment Report (HHRA) in April 1998 for the Site. The Site is currently fenced and completely covered with asphalt paving. It is assumed that the Site will be redeveloped for commercial uses. Such uses may include but are not limited to restaurants, convenience stores or retail outlets. It is further assumed that the entire Site will be covered with buildings, asphalt parking lots, or planter strips with imported soil.

The two future potential receptors considered are commercial building occupants and maintenance personnel. The exposure pathways evaluated include inhalation of vapors from soil or groundwater to indoor air for commercial building occupants, and soil ingestion, dermal contact with soil and groundwater, dust inhalation of non-volatiles from soil, and inhalation of vapors from soil or groundwater to outdoor air for maintenance personnel.

The estimated risks for these populations are within the acceptable risk range. The total non-carcinogenic hazard index for exposure to COCs in soil and groundwater is 0.04 for future commercial building occupants and 0.06 for future maintenance workers. The total estimated lifetime incremental carcinogenic risk for exposure to COCs is 9.6×10^{-6} for future commercial building occupants and 5.4×10^{-6} for future maintenance workers.

For comparison, the Board considers the following risks to be acceptable at remediation sites: a hazard index of 1.0 or less for non-carcinogens, and an excess cancer risk of 10^{-4} or less for carcinogens.
The implementation of institutional and engineering controls such as those listed in the proposed ERC would further minimize the potential of exposure through pathways not considered in the assessment.

Risk management prior to, during, and after redevelopment is necessary in order to ensure the health and safety for construction workers, maintenance personnel, and others that might come into contact with the Site. Appropriate risk management would also prevent the further deterioration of both above- and sub-surface environmental conditions.

12. **Basis for Cleanup Standards**

a. **General:** State Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives.

State Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

b. **Beneficial Uses:** The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or

naturally-high contaminant levels. Groundwater underlying and adjacent to the site qualifies as a potential source of drinking water.

The Basin Plan designates the following potential beneficial uses of groundwater underlying and adjacent to the Site:

o Municipal and domestic water supply
o Industrial process water supply
o Industrial service water supply
o Agricultural water supply

At present, there is no known use of groundwater underlying the Site for the above purposes.

c. **Basis for Groundwater Cleanup Standards:** The groundwater cleanup standards for the Site are based on applicable water quality objectives and are the more stringent of EPA and California primary maximum contaminant levels (MCLs). Cleanup to this level will result in acceptable residual risk to humans.

13. **Reuse or Disposal of Extracted Groundwater:** Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.

14. **Basis for 13304 Order:** The dischargers have caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.

15. **Cost Recovery:** Pursuant to California Water Code Section 13304, the dischargers are hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order.

16. **CEQA:** This action is an order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.

17. **Notification:** The Board has notified the dischargers and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.

18. **Public Hearing:** The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers (or their agents, successors, or assigns) shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.

2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. CLEANUP PLAN AND CLEANUP STANDARDS

1. **Implement Remediation and Risk Management Plan**: The dischargers shall implement the Remediation and Risk Management Plan described in finding 10, as augmented by Tasks C.3 through C.4.

2. **Groundwater Cleanup Standards**: The following groundwater cleanup standards shall be met in all wells identified in the Self-Monitoring Program:

Constituent	Cleanup Standard (ug/l)	Basis
Benzene	1	California MCL
Toluene	150	California MCL
Ethylbenzene	700	California MCL
Xylene	1,750	California MCL
Vinyl Chloride	0.5	California MCL

C. TASKS

1. SUBMITTAL OF A FEASIBILITY STUDY ADDENDUM

COMPLIANCE DATE: October 15, 1998

Submit an addendum examining available remediation strategies for chlorinated solvents in the groundwater on-site. A detailed explanation supported by sufficient evidence shall be provided if remedial actions for the existing contaminants are concluded to be inappropriate.

2. **IMPLEMENTATION OF INSTITUTIONAL CONSTRAINTS**

COMPLIANCE DATE: 60 days after Executive Officer approval but no sooner than November 15, 1998

Submit a technical report acceptable to the Executive Officer documenting that the July 2, 1998 proposed Environmental Restriction and Covenant has been implemented.

3. **IMPLEMENTATION OF PASSIVE HYDROCARBON RECOVERY**

COMPLIANCE DATE: Within 120 days of completion of site construction but no later than September 15, 1999

Submit a technical report acceptable to the Executive Officer documenting installation of the hydrocarbons recovery wells. This report should also present results of groundwater elevation, floating product recovery, and groundwater analyses for the first quarter.

4. **WORKPLAN FOR SOIL SAMPLING**

COMPLIANCE DATE: 45 days prior to proposed site improvements/construction

Submit a workplan acceptable to the Executive Officer for sampling of soils intended for excavation during site improvements. The workplan should delineate the soil to be excavated. Sampling method(s) and frequency should be described and justified. The plan should also specify any expected treatment, reuse, and/or disposal of the soils to be removed.

5. **COMPLETION OF SOIL SAMPLING AND SITE IMPROVEMENTS**

COMPLIANCE DATE: 45 days after the completion of soil sampling/site improvements

Submit a technical report acceptable to the Executive Officer documenting completion of tasks identified in Task 4.

6. **PROPOSED CURTAILMENT**

COMPLIANCE DATE: 60 days prior to proposed curtailment

Submit a technical report acceptable to the Executive Officer containing a proposal to curtail remediation. Curtailment includes system closure (e.g. well abandonment), system suspension (e.g. cease passive recovery but wells retained for monitoring only), and significant system modification (e.g. closure of individual recovery wells within the network). The report should include the rationale for curtailment.

7. **IMPLEMENTATION OF CURTAILMENT**

COMPLIANCE DATE: 60 days after Executive Officer approval

Submit a technical report acceptable to the Executive Officer documenting completion of the tasks identified in Task 6.

8. **EVALUATION OF NEW HEALTH CRITERIA**

COMPLIANCE DATE: 90 days after requested by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating the effect on the approved cleanup plan of revising one or more cleanup standards in response to revision of drinking water standards, maximum contaminant levels, or other health-based criteria.

9. **EVALUATION OF NEW TECHNICAL INFORMATION**

COMPLIANCE DATE: 90 days after requested by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating new technical information which bears on the approved cleanup plan and cleanup standards for this site. In the case of a new cleanup technology, the report should evaluate the technology using the same criteria used in the feasibility study. Such technical reports shall not be requested unless the Executive Officer determines that the new information is reasonably likely to warrant a revision in the approved cleanup plan or cleanup standards.

10. **Delayed Compliance:** If the dischargers are delayed, interrupted, or prevented from meting one or more of the completion dates specified for the above tasks, the dischargers shall promptly notify the Executive Officer and the Board may consider revision to this Order.

D. PROVISIONS

1. **No Nuisance**: The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).

2. **Good O&M**: The dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.

3. **Cost Recovery**: The dischargers shall be liable, pursuant to California Water Code Section 13304, to the Board for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the site addressed by this Order is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.

4. **Access to Site and Records**: In accordance with California Water Code Section 13267(c), the dischargers shall permit the Board or its authorized representative:

    a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.

    b. Access to copy any records required to be kept under the requirements of this Order.

    c. Inspection of any monitoring or remediation facilities installed in response to this Order.

    d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.

5. **Self-Monitoring Program**: The dischargers shall comply with the Self-Monitoring Program as attached to this Order and as may be amended by the Executive Officer.

6. **Contractor / Consultant Qualifications**: All technical documents shall be signed by and stamped with the seal of a California registered

geologist, a California certified engineering geologist, or a California registered civil engineer.

7. **Lab Qualifications**: All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).

8. **Document Distribution**: Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agency:

   a. Alameda County Environmental Health Department

   The Executive Officer may modify this distribution list as needed.

9. **Reporting of Changed Owner or Operator**: Laurence and Diane Webster shall file a technical report on any changes in site occupancy or ownership associated with the property described in this Order.

10. **Reporting of Hazardous Substance Release**: If any hazardous substance is 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, the dischargers shall report such discharge to the Regional Board by calling (510) 286-1255 during regular office hours (Monday through Friday, 8:00 to 5:00).

    A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

    This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

11. **Secondarily-Responsible Discharger**: Within 60 days after being notified by the Executive Officer that other named dischargers have failed to comply with this order, Ekotek, Inc., as the secondarily-responsible discharger, shall then be responsible for complying with this order.

12. **Periodic SCR Review**: The Board will review this Order periodically and may revise it when necessary.

I, Loretta K. Barsamian, 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, San Francisco Bay Region, on Sept 16, 1998.

Lawrence P. Kolb
for
Loretta K. Barsamian
Executive Officer

==========

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

==========

Attachments: Site Map
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

LAURENCE AND DIANE WEBSTER AND
EKOTEK, INC.

for the property located at

4200 ALAMEDA AVENUE
OAKLAND
ALAMEDA COUNTY

1. **Authority and Purpose**: The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 98-093 (site cleanup requirements).

2. **Monitoring**: The dischargers shall measure groundwater elevations in all monitoring wells and collect and analyze representative samples of groundwater according to the following table:

Well #	Sampling Frequency	Analyses	Well #	Sampling Frequency	Analyses
MW-1	Q*	8015/8240	MW-8**	Q*	8015/8240
MW-2	Q*	8015/8240	MW-9**	Q*	8015/8240
MW-3	Q*	8015/8240	MW-10**	Q*	8015/8240
MW-4	Q*	8015/8240	MW-11**	Q*	8015/8240
MW-5	Q*	8015/8240	MW-12**	Q*	8015/8240
MW-6**	Q*	8015/8240	MW-13***	Q*	8015/8240
MW-7**	Q*	8015/8240	MW-14***	Q*	8015/8240

Key: Q = Quarterly 8015/8240 = Modified EPA Method 8015 or equivalent and EPA Method 8240

* The sampling frequency will be quarterly for the first year and semi-annually (March and October) for the second and third years. The dischargers may propose a further reduction to annual monitoring for the fourth and following years, assuming that the data remain stable. Any proposed changes, however, are subject to Executive Officer approval.
** New on-site recovery/monitoring wells.
*** New off-site recovery/monitoring wells.

3. **Quarterly Monitoring Reports**: The dischargers shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. report for first quarter of the year due April 30). The due date of the first quarterly monitoring report, however, shall be the time specified in Task C.3 of this Order. The reports shall include:

   a. Transmittal Letter: The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the dischargers' principal executive officer or their duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

   b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.

   c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year as well as free product thickness and historical and annual mass removal. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping - below).

   d. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g. free product recovery) and work planned for the following quarter.

4. **Semi-Annual Monitoring Reports**: The dischargers shall submit semi-annual monitoring reports to the Board no later than April 30 for the first report and November 30 for the second. These reports should follow the same requirements

specified for the quarterly reports. Moreover, the second semi-annual report is equivalent to the fourth quarterly report in terms of additional conditions to be fulfilled.

5. **Violation Reports**: If the dischargers violate requirements in the Site Cleanup Requirements, then the dischargers shall notify the Board office by telephone as soon as practicable once the dischargers have knowledge of the violation. Board staff may, depending on violation severity, require the dischargers to submit a separate technical report on the violation within five working days of telephone notification.

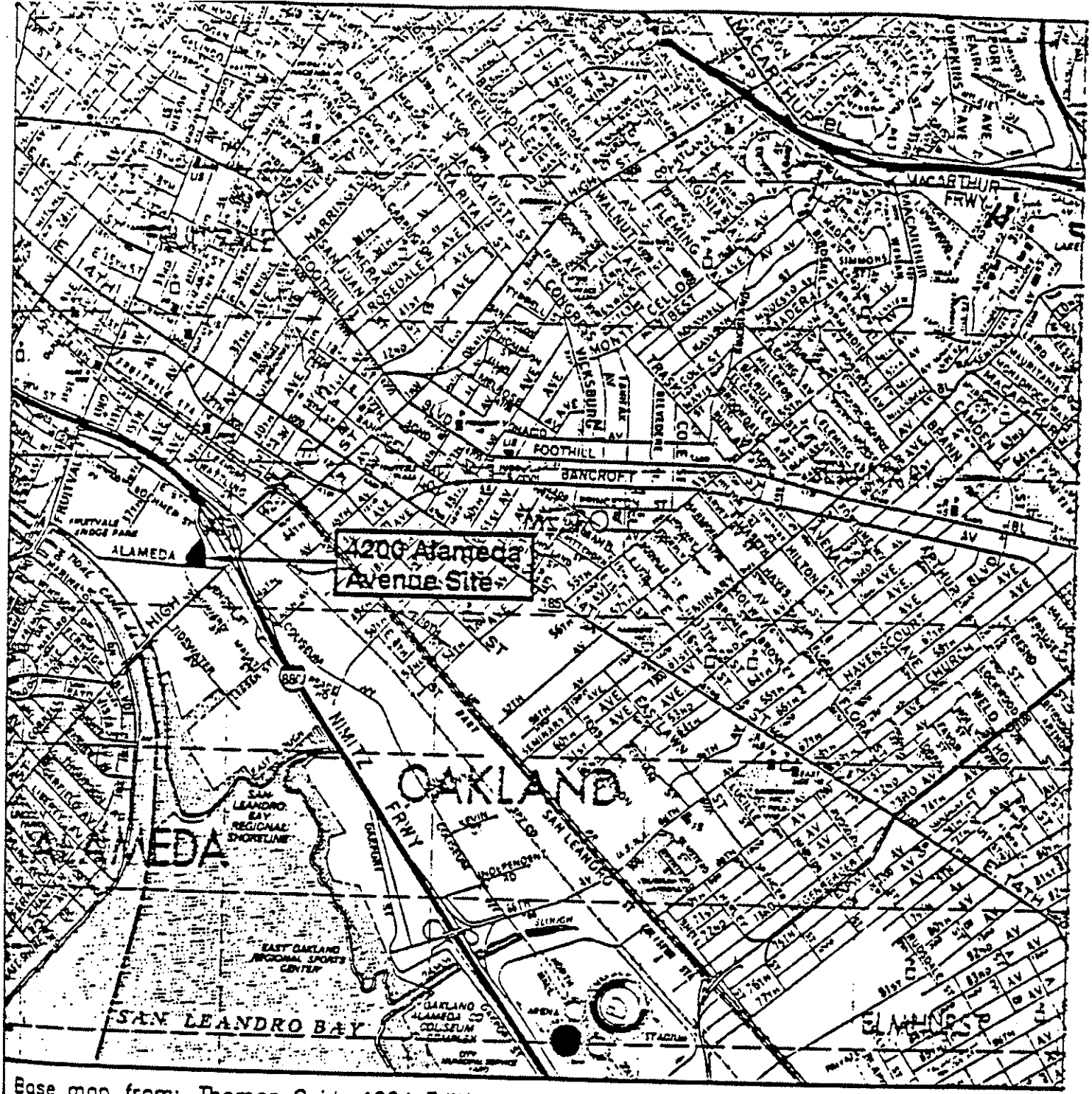
6. **Other Reports**: The dischargers shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation. Please see Tasks 3 and 4 of the Site Cleanup Requirements for additional information.

7. **Record Keeping**: The dischargers or their agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Board upon request.

8. **SMP Revisions**: Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the dischargers. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Loretta K. Barsamian, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on Sept 16, 1998.

Lawrence P. Kolb
for
Loretta K. Barsamian
Executive Officer



Base map from: Thomas Guide 1994 Edition.

N

0 1540 3080

(Approximate Scale in Feet)

Vicinity Map

4200 Alameda Avenue
Oakland, CA

Figure 1