CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. R2-2002-0059

ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS AND RESCISSION OF ORDER NO. 99-076 FOR:

SOLVENT SERVICES COMPANY, ARTHUR G. MAIONCHI, EDWARD A. MAIONCHI, THOMAS S. DINETTE, CHARLES J. KRAFT, JAMES R. DAVIS, PRISCILLA G. DAVIS, AND THE DAVIS REVOCABLE TRUST

for the property located at

1470 INDUSTRIAL AVENUE
SAN JOSE
SANTA CLARA COUNTY

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

1. **Site Location**: The site is located at 1470 Industrial Avenue near the intersection of Highways 101 and 880 in San Jose (Figure 1). Coyote Creek is approximately 1/3 mile to the northeast and the Guadalupe River is about 1 mile to the west. San Francisco Bay is about 10 miles to the north. The local area is used primarily for commercial and industrial purposes.

2. **Site History**: The site is currently vacant. There is one existing structure that was formerly used for offices and/or storage. The site is currently owned by Three Sisters Ranch Enterprises. However, a recently ruling from the United States District Court for the Northern District of California San Jose Division ordered that the 1986 sale of the property to Three Sisters Ranch by the previous owner, the Davis Revocable Trust, be rescinded. While the site is not presently being used, Three Sisters Ranch has leased the property to various businesses that used it primarily for storing trucks and construction equipment.

   The use of the property before 1970 is not known. From 1970 to 1986, the site was owned by James and Priscilla Davis, and/or the Davis Revocable Trust. The property was leased to Solvent Services Company, a partnership owned by Arthur Maionchi, Edward Maionchi, Thomas Dinette, and Charles Kraft, which operated a solvent recycling facility at the site from about 1971 to 1974. This facility was used primarily for recycling a kerosene-based "cutting" or "lapping" oil used in the manufacture of computer memory disks. The recycling was accomplished by settling out aluminum

fines from the used oil in a long rectangular-shaped above ground steel tank, and then by filtering the product after settlement in a small above ground tank. Other operations that may have occurred at the site include distilling of chlorinated solvents and neutralization of acid wastes. Evidence indicates that operations at the property included the use of underground storage vessels. All such vessels have now been removed.

3. **Named Dischargers**: James R. Davis, Priscilla G. Davis, and the Davis Revocable Trust are named as dischargers because they owned the property at the time of the activity that resulted in the discharge, had knowledge or should have had knowledge of the discharge or the activities that caused the discharge, and had the legal ability to prevent the discharge.

   Solvent Services Company, Arthur G. Maionchi, Edward A. Maionchi, Thomas S. Dinette, and Charles J. Kraft are named as a dischargers because of substantial evidence that they discharged pollutants to soil and groundwater at the site, including their use of chlorinated solvents in recycling operations, the presence of these same pollutants in soil in the immediate vicinity of operations, and the presence of degradation products in the groundwater.

   While Three Sisters Ranch Enterprises is the current property owner, it is **not** named as a discharger because of the impending rescission of the sale of the property as ordered by the US District Court.

   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 those parties' names to this order.

4. **Regulatory Status**: This site was subject to the following Board order:

   * Site Cleanup Requirements (Order No. 99-076) adopted September 15, 1999

5. **Site Hydrogeology**: The site is mostly covered with asphalt overlying about 0.5 foot of gravel fill. Shallow soils in the "A zone" (to about 40 feet bgs) are generally characterized by low permeability silty clay with discontinuous deposits of silt. Soils in the deeper "B/C zone" (40-100' bgs) are gravelly sands with higher permeability. Groundwater occurs at about 14-19 feet bgs and flows in a north to northwestern direction. Groundwater velocities were estimated from 5.6 ft/year in the A zone to 14.6 ft/year in the B/C zone. The deeper high-quality drinking water aquifer (greater than 300 feet bgs) in this area is separated by a thick low permeability regional aquitard.

6. **Remedial Investigation**: Soil and groundwater have been impacted with several petroleum related chemicals, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). Highly contaminated soils remain in the area of the former solvent recycling operation. Soils in this highly-impacted area (about 50' by 100') are probably acting as a source of contamination that continues to impact groundwater. Some of the primary chemicals of concern in the soil and their respective maximum concentrations are xylenes (1,522,000 micrograms per kilogram (µg/kg)), total petroleum hydrocarbons (TPH, 20,870,000 µg/kg), tetrachloroethylene (PCE, 107,000 µg/kg), trichloroethylene (TCE, 217,000 µg/kg), and isophrone (383,000 µg/kg). The primary chemicals of concern in the groundwater and their respective maximum concentrations are cis-1,2-dichloroethylene (102,000 micrograms per liter (µg/l)) and vinyl chloride (59,100 µg/l).

   The extent of the contamination has been defined both vertically and laterally. Contaminants are generally not found below 75 feet bgs. Contaminated groundwater has migrated approximately 250 feet from the source area in the direction of groundwater flow. Contaminated groundwater in the B/C zone has migrated slightly further than in the A zone, most likely as result of higher groundwater velocities. Figure 2 shows the approximate lateral extent of the groundwater contamination for the A zone. The groundwater contamination plume appears to be stable and is not expanding. It is likely that the degradation rate for contaminants at the leading edge of the plume is equal to or greater than the rate of groundwater migration.

7. **Adjacent Sites**: The Regional Board currently regulates the adjacent property at 1497 Berger Drive (Order No. R2-2002-0026) for discharges related to former activities on this property. Contaminated groundwater from the Berger Drive site is not commingled with contaminated groundwater from the Industrial Avenue site. No other properties adjacent to this site are regulated by the Regional Board or are known to have contaminated groundwater.

8. **Interim Remedial Measures**: Interim remedial measures were implemented between May and August 2001. These measures included excavating and removing two underground storage tanks (a 5,300 gallon tank and a 210 gallon tank) and metal debris. Approximately 172 tons of contaminated soil and sand backfill was also excavated and hauled off site for proper disposal. Additional groundwater monitoring wells were also installed and a quarterly monitoring program was initiated.

9. **Feasibility Study**: The feasibility study was developed by the dischargers in order to determine the most appropriate methods for site cleanup. Several methods were evaluated for both soil and groundwater. Soil remediation methods considered included construction of an engineered cap, excavation of vadose zone soils, excavation of saturated zone soils, and low-temperature thermal desorption. Groundwater remediation

methods considered included groundwater extraction and treatment, monitored natural attenuation, in-situ chemical oxidation, and in-situ chemical reduction. Ten alternatives, comprising of a combination of various soil and groundwater controls, were evaluated based on overall protection to human health and the environment, short-term effectiveness, long-term effectiveness, reduction of mobility, toxicity, or volume, implementability, cost, state acceptance, and community acceptance.

10. **Cleanup Plan**: Based on the results of the feasibility study, the dischargers developed a draft Remedial Action Plan (RAP) dated February 27, 2002, and a letter amendment to the draft RAP dated April 15, 2002, that proposes a combination of soil and groundwater remediation, and institutional controls. For soil, the draft RAP proposes to excavate approximately 710 cubic yards of contaminated soil (up to 20.1 mg/kg for PCE and 75.8 mg/kg for TCE). Contaminated soils will be hauled off-site for proper disposal. The bottom of the excavation pit will be treated with hydrogen-releasing compounds. This treatment should further reduce concentrations so that the residual contamination in the soil will not present a continuous source of contamination to the groundwater from leaching. For groundwater, the draft RAP proposes a combination of enhanced biological degradation and natural attenuation. There is strong evidence that contaminants have been degrading from the biological activity of naturally occurring bacteria in the soil and groundwater, so monitored natural attenuation will be the primary method of groundwater remediation. However, the time expected for some chemicals (particularly for vinyl chloride) to degrade to levels below cleanup goals by natural attenuation processes alone is unacceptably long. Therefore, the draft RAP also proposed to inject hydrogen-releasing compounds (or some other reducing agent) to accelerate VOC degradation. The draft RAP will become final upon the adoption of this Board Order.

11. **Risk Assessment**: The human health risk assessment did not find any significant health risks (excess cancer risks greater than $1x10^{-5}$ or a hazard index greater than 1.0 considering all chemicals of concern) to commercial workers, construction workers, landscape maintenance workers, or residents under current or likely future exposure scenarios. The risk assessment did not evaluate risks from direct exposure to shallow groundwater (drinking or bathing). The ingestion of shallow groundwater would present significant risks to human health. Therefore, institutional constraints are appropriate to limit on-site exposure to acceptable levels at the site pending full remediation. Institutional constraints include a deed restriction that notifies future owners of sub-surface conditions following remediation and prohibits the use of shallow groundwater beneath the site as a source of drinking water until cleanup standards are met.

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. This order and its requirements are consistent with Resolution No. 68-16.

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 Title 23, California Code of Regulations, Section 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

While the shallow aquifer is currently not used for any purpose, the deeper regional aquifer (below 300 feet bgs) in the general area is currently used as a major drinking water supply source.

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.

d. **Basis for Soil Cleanup Standards**: The soil cleanup standards are for soil are 20.1 mg/kg for PCE and 75.8 mg/kg for TCE. These standards are based on levels that will be protective to human health as developed in the risk assessment of the RAP. Cleanup standards were only developed for PCE and TCE because they are the chemicals with the highest human health risks. Cleanup standards were not developed for other VOCs and SVOCs because cleanup to the PCE and TCE standards would provide adequate protection for other VOCs and SVOCs. While the cleanup standards are based on risks to human health, cleanup to these standards will also prevent further leaching of VOCs from soil to groundwater since measures will be taken during soil remediation to accelerate bio-degradation of vadose-zone residual contamination (i.e. placement of hydrogen-releasing compounds in the proposed excavation prior to backfilling).

13. **Future Changes to Cleanup Standards**: The goal of this remedial action is to restore the beneficial uses of groundwater underlying and adjacent to the site. Results from other sites suggest that full restoration of beneficial uses to groundwater as a result of active remediation at this site may not be possible. If full restoration of beneficial uses is not technologically nor economically achievable within a reasonable period of time, then the discharger may request modification to the cleanup standards or establishment of a containment zone, a limited groundwater pollution zone where water quality objectives are exceeded. Conversely, if new technical information indicates that cleanup standards can be surpassed, the Board may decide that further cleanup actions should be taken.

14. **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.

15. **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.

16. **Cost Recovery**: Pursuant to California Water Code Section 13304, the discharger is 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.

17. **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.

18. **Notification**: The Board has notified the discharger 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.

19. **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 Cleanup Plan**: The discharger shall implement the cleanup plan described in finding 10.

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

Constituent	Standard (ug/l)	Basis
Petroleum Related Chemicals		
benzene	1	MCL[1]
toluene	150	MCL
ethylbenzene	700	MCL
total xylenes	1750	MCL
chlorobenzene	70	MCL
1,2-dichlorobenzene	600	MCL
1,4-dichlorobenzene	5	MCL
1,2,4-trichlorobenzene	70	MCL
VOCs		
tetrachloroethylene (PCE)	5	MCL
trichloroethylene (TCE)	5	MCL
cis-1,2-dichloroethlene	6	MCL
1,1-dichloroethane	5	MCL
1,1,1-trichloroethane	200	MCL
vinyl chloride	0.5	MCL
SVOCs		
isophorone	100	USEPA Suggested No Adverse Response Level (SNARL)
bis(2-ethylhexyl)phthalate	4	MCL
di-N-butylphthalate	700	USEPA IRIS reference dose as a drinking water level
napthalene	21	Taste and Odor Threshold

3. **Soil Cleanup Standards**: Soil cleanup standards of 20.1 mg/kg for PCE and 75.8 mg/kg for TCE shall be met in all on-site vadose zone soils. In addition, 1000 mg/kg for TPH-gas and TPH-diesel shall be met in all on-site vadose zone soils.

[1] USEPA Maximum Contaminant Level for drinking water.

C. **TASKS**

1. **SOIL EXCAVATION WORKPLAN**

COMPLIANCE DATE: **JULY 1, 2002**

Submit a technical report acceptable to the Executive Officer providing detailed procedures and a time schedule for excavating contaminated soils in the vadose zone as proposed in the draft RAP. The workplan shall also describe measures to accelerate biodegradation of vadose-zone residual contamination.

2. **SOIL EXCAVATION COMPLETION REPORT**

COMPLIANCE DATE: **NOVEMBER 1, 2002**

Submit a technical report acceptable to the Executive Officer providing documentation of the completion of soil excavation. The report should provide the volume of material that was removed. It should also provide the concentrations of contaminants left in the bottom of the excavation(s).

3. **PROPOSED INSTITUTIONAL CONSTRAINTS**

COMPLIANCE DATE: **JANUARY 1, 2003**

Submit a technical report acceptable to the Executive Officer documenting procedures to be used by the discharger to prevent or minimize human exposure to soil and groundwater contamination prior to meeting cleanup standards. Such procedures shall include a deed restriction prohibiting the use of shallow groundwater as a source of drinking water.

4. **IMPLEMENTATION OF INSTITUTIONAL CONSTRAINTS**

COMPLIANCE DATE: **MARCH 1, 2003**

Submit a technical report acceptable to the Executive Officer documenting that the proposed institutional constraints have been implemented.

5. **WORKPLAN FOR ENHANCED REDUCTIVE DECHLORINATION PILOT STUDY**

COMPLIANCE DATE: **OCTOBER 1, 2003**

Submit a technical report acceptable to the Executive Officer proposing strategy for implementing enhanced reductive dechlorination at the site. The report should describe the pilot study and provide a schedule for its implementation.

6. **WORKPLAN FOR FULL-SCALE APPLICATION OF REDUCTIVE DECHLORINATION**

COMPLIANCE DATE: **APRIL 1, 2004**

Submit a technical report acceptable to the Executive Officer providing the results of the pilot study and proposing strategy for full-scale implementation of enhanced reductive dechlorination at the site. If the results of the pilot study indicate that enhanced reductive dechlorination will not be effective, an alternate approach for remediating vinyl chloride should be proposed. A time schedule for implementation should be provided.

7. **FULL-SCALE STARTUP REPORT**

COMPLIANCE DATE: **APRIL 1, 2005**

Submit a technical report acceptable to the Executive Officer providing the completion (or status if multiple injections are proposed) of the full-scale application of reductive dechlorination. This report should provide an assessment of the effectiveness of the treatments and should propose any modifications that may improve the effectiveness.

8. **FIVE-YEAR STATUS REPORT**

COMPLIANCE DATE: **APRIL 1, 2006**

Submit a technical report acceptable to the Executive Officer evaluating the effectiveness of the approved cleanup plan. The report should include:

a. Summary of effectiveness in controlling contaminant migration and protecting human health and the environment
b. Comparison of contaminant concentration trends with cleanup standards
c. Comparison of anticipated versus actual costs of cleanup activities

d. Performance data (e.g. groundwater volume extracted, chemical mass removed, mass removed per million gallons extracted)
e. Cost effectiveness data (e.g. cost per pound of contaminant removed)
f. Summary of additional investigations (including results) and significant modifications to remediation systems
g. Additional remedial actions proposed to meet cleanup standards (if applicable) including time schedule

If cleanup standards have not been met and are not projected to be met within a reasonable time, the report should assess the technical practicability of meeting cleanup standards and may propose an alternative cleanup strategy.

9. **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.

10. **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.

11. **Delayed Compliance**: If the discharger is delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the discharger 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 discharger 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 discharger 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 discharger 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 discharger 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 agencies:

   a. City of San Jose
   b. County of Santa Clara
   c. Santa Clara Valley Water District

   The Executive Officer may modify this distribution list as needed.

9. **Reporting of Changed Owner or Operator**: The discharger 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 discharger shall report such discharge to the Regional Board by calling (510) 622-2300 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. **Rescission of Existing Order**: This Order supercedes and rescinds Order No. 99-076.

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 May 22, 2002.

Loretta K. Barsamian
Executive Officer

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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

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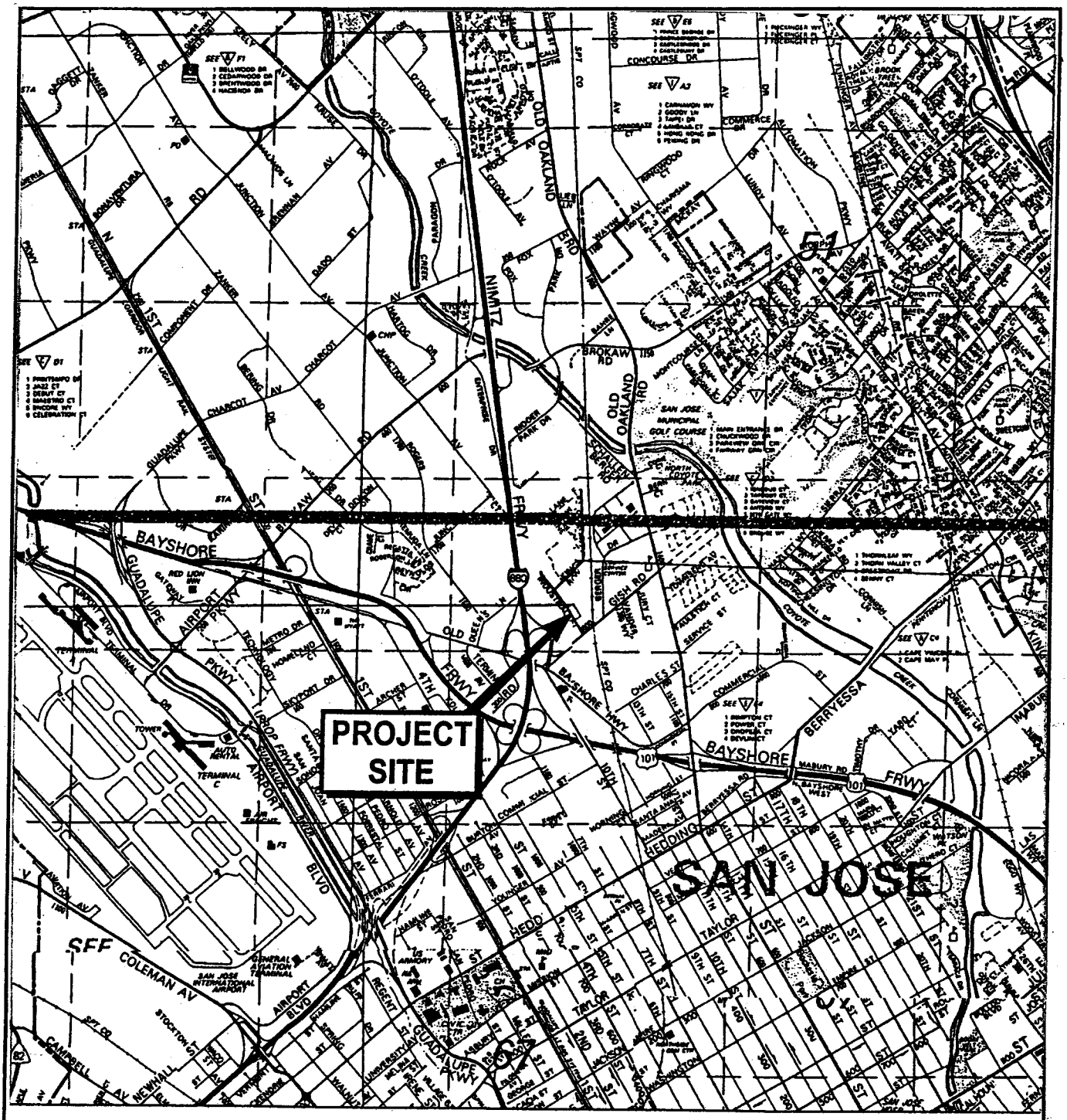
Attachments: Site Location Map
Site Map
Self-Monitoring Program



Ref: "The Thomas Guide- Santa Clara County Street Guide and Directory" 1997 Edition

Figure 1. Site Location Map

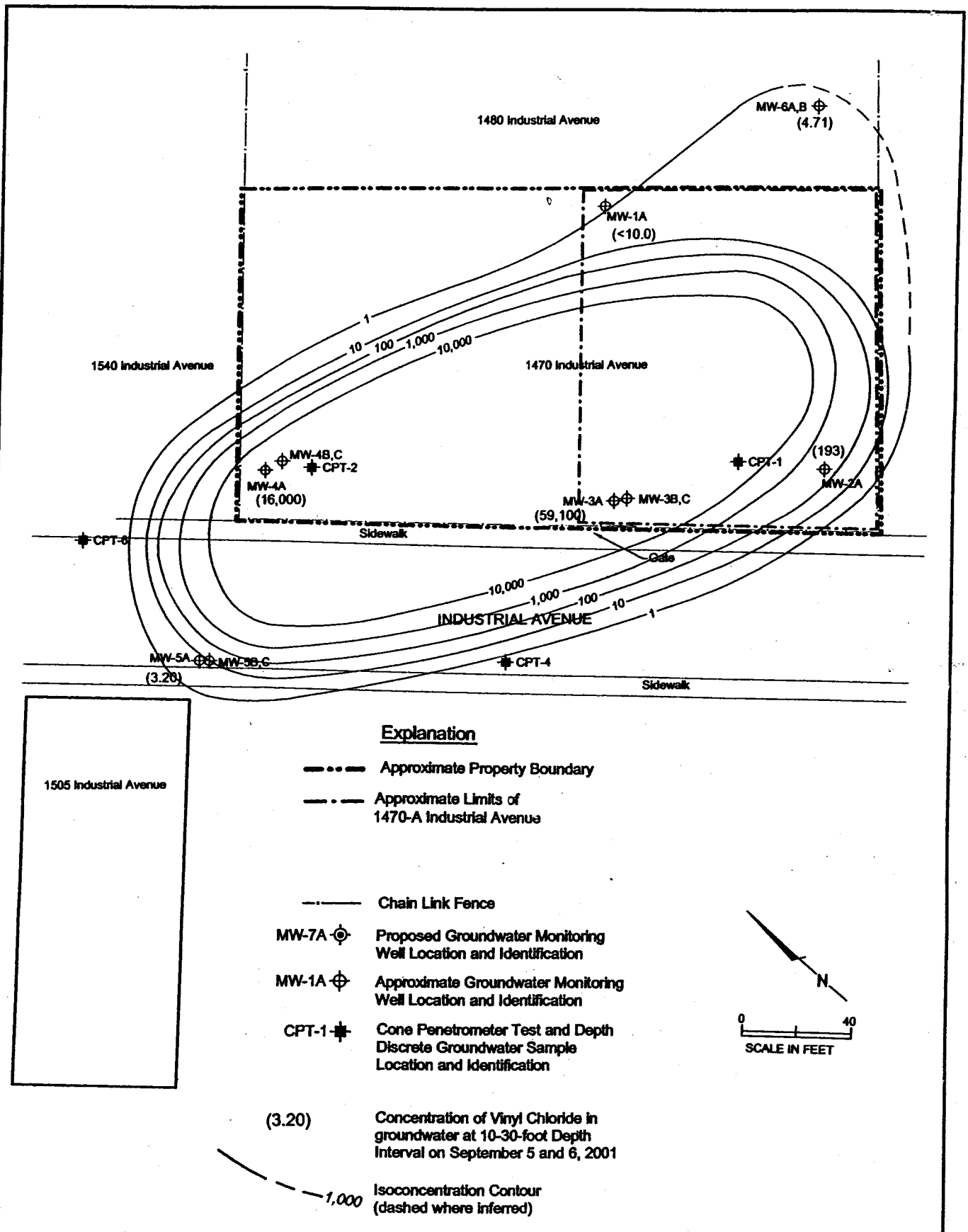


Figure 2. Vinyl Chloride Isoconcentration contours at 10-30 ft Depth Interval – Sept. 2001

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

SOLVENT SERVICES COMPANY, ARTHUR G. MAIONCHI, EDWARD A. MAIONCHI, THOMAS S. DINETTE, CHARLES J. KRAFT, JAMES R. DAVIS, PRISCILLA G. DAVIS, AND THE DAVIS REVOCABLE TRUST

for the property located at

1470 INDUSTRIAL AVENUE
SAN JOSE
SANTA CLARA 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. R2-2002-0059 (site cleanup requirements).

2. **Monitoring**: The discharger shall measure groundwater elevations quarterly in all on-site and off-site monitoring wells, and shall collect and analyze representative samples of groundwater for petroleum hydrocarbons constituents, VOCs (Method 8260), and natural attenuation parameters (dissolved oxygen, nitrate, ferrous iron, sulfate, methane, alkalinity, oxidation-reduction potential, pH, temperature, and chloride. Analysis of SVOCs (Method 8270 (c)) shall be conducted annually.

   The discharger shall sample any new monitoring or extraction wells quarterly and analyze groundwater samples for the constituents shown above. The discharger may propose changes in the above monitoring; any proposed changes are subject to Executive Officer approval.

3. **Quarterly Monitoring Reports**: The discharger 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 first quarterly monitoring report shall be due on July 1, 2002. 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 discharger's principal executive officer or his/her 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. 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. Groundwater Extraction: If applicable, the report shall include groundwater extraction results in tabular form, for each extraction well and for the site as a whole, expressed in gallons per minute and total groundwater volume for the quarter. The report shall also include contaminant removal results, from groundwater extraction wells and from other remediation systems (e.g. soil vapor extraction), expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the fourth quarterly report each year.

e. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following quarter.

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

6. **Other Reports**: The discharger 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.

7. **Record Keeping**: The discharger or his/her 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 discharger. 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 May 22, 2002.

Loretta K. Barsamian
Executive Officer