

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. R2-2004-0005

ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS AND RESCISSION OF
ORDER NO. R2-2002-0042 FOR:

SANTA CLARA COUNTY

for the property located at

CENTRAL EXPRESSWAY NEAR OAKMEAD VILLAGE DRIVE
SANTA CLARA
SANTA CLARA COUNTY

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

1. **Site Location:** Santa Clara County is the owner of Central Expressway, a major thoroughfare running through the City of Santa Clara. The site is not a specific property but rather a portion of Central Expressway. A groundwater pollutant plume originates on the shoulder of Central Expressway near the intersection of Central Expressway with Oakmead Village Drive. The plume crosses Central Expressway and extends downgradient onto the Koll Oakmead Center located at 3350 Scott Boulevard. The Koll Oakmead Center is a 30 acre condominium business park containing 65 individually owned buildings. The site is located in a commercial/industrial area of Santa Clara.
2. **Site History:** The area was relatively undeveloped until the 1970s. Central Expressway was built in the mid-1960s as a 4-lane roadway with a wide central median divider. The Koll Oakmead Center site was undeveloped until the Center was built in 1978. The origin of the groundwater pollution is unknown.
3. **Named Dischargers:** Santa Clara County is named as a discharger for the sole reason that the County owns Central Expressway where the source area of the groundwater pollutant plume is located. There is, however, no evidence to indicate that the County caused or allowed any contaminant to be discharged at the site.

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:
 - o Site Cleanup Requirements (Order No. R2-2002-0042) adopted March 20, 2002
5. **Site Hydrogeology:** The site is located in the Santa Clara Valley, a structural basin filled with marine and alluvial sediments. The coarser deposits are probably the result of deposition in or near stream channels that drain the highlands that surround the basin. Finer grain deposits result from a variety of conditions with the eventual result of a heterogeneous sequence of interbedded sands, silts, and clays. Municipal water supply wells tap an extensive deep regional confined aquifer that lies generally greater than 200 to 300 feet below ground surface (BGS). A thick, relatively impermeable aquitard separates this deep confined aquifer from a complex series of discontinuous aquifers and aquitards that may extend up to within a few feet of the ground surface. The first two water bearing zones encountered BGS have been investigated at the site. These are the A zone, found from about 8 to 16 feet BGS, and the B zone, found from about 24 to 34 feet BGS. The direction of groundwater flow in the A-zone is to the northwest, towards San Francisco Bay. It is estimated that the average groundwater velocity is about 25 feet per year.
6. **Remedial Investigation:** Soil and groundwater investigation began in the site vicinity in 1986 when three groundwater monitoring wells were installed on the Koll Oakmead Center Business Park which is adjacent to Central Expressway. Volatile Organic Compounds (VOCs) were detected in all three wells. The highest concentration of VOCs, 800 ug/l, was detected in the most southerly well which is in the upgradient direction of groundwater flow and is closest to Central Expressway. In 1988 a soil gas survey was performed and grab groundwater samples were collected. Additional sampling was performed through 1990. These investigations showed that 1,2-dichloroethene (1,2-DCE) to be the VOC present in the highest concentrations. The highest concentrations of VOCs in groundwater were detected in samples adjacent to Central Expressway. Based on the results of the investigation it was concluded that the source of VOC contamination was possibly a spill along Central Expressway or from the sanitary or storm lines that run alongside Central Expressway.

In 1991 the investigation continued with the focus being the Central Expressway and upgradient sites as the potential source of contamination. Two monitoring wells were installed along Central Expressway, one in the median of the road and one on the south shoulder of the road. The well on the south shoulder of Central Expressway showed the highest concentration of VOCs, 13,000 ug/l of DCE. This well is adjacent to the sanitary and sewer lines which run beneath a landscaped area adjacent to the roadway. Additional investigation was completed in 1992 with sampling of the sanitary sewer and the addition of two more monitoring wells. The two new monitoring wells were installed on the property immediately upgradient of Central Expressway. VOCs were found in one of

these wells, but at much lower concentrations than were found in the well on the shoulder of Central Expressway. Sampling of the sanitary sewer showed low concentrations of VOCs.

An additional round of investigations was completed in 1994. The investigation included a video survey of the sanitary sewer and storm drain, collecting soil and grab groundwater samples in the vicinity of the storm drain, installing another monitoring well upgradient of the sanitary sewer and storm drain, and excavating soil surrounding the sanitary sewer and storm drain and collecting soil and groundwater samples. No definite source for the VOC pollution was found. An additional investigation was completed in 1995. This investigation included evaluating soil conditions, and collection of groundwater grab samples along the sanitary sewer and up gradient. No definite source of the groundwater contamination was identified.

In 1997, a study was performed that analyzed all of the data collected thus far and looked at groundwater conditions at the site. It was determined that the Santa Clara County's road construction and maintenance activities are not likely to be the source of the VOC contamination and that no definite source of the VOC contamination is likely to be found. Additional grab groundwater sampling and monitoring well installation has defined the boundaries of the pollutant plume.

7. **Adjacent Sites:** There are a number of groundwater contamination sites in the area. The Intel Magnetics/Micro Storage Superfund Site is upgradient about 600 feet. The former Metropolitan Corporate Center is also located about 600 feet upgradient. Neither of these contaminant plumes appear to reach the Central Expressway plume.
8. **Interim Remedial Measures:** No active remediation has been done at this Site. No ongoing pollutant sources were found.
9. **Environmental Risk Assessment:** A risk assessment has been performed for this Site as part of the Discharger's Remedial Investigation and Feasibility Study. TCE, Cis-1,2-DCE, trans-1,2-DCE, trichlorotrifluoroethane, and vinyl chloride are the chemicals that have been detected in monitoring wells at the Site and which were addressed in the risk assessment. Trichlorotrifluoroethane has not been associated with the source at the Site, but has been detected at low levels in some of the monitoring wells and was therefore included in the risk assessment. Inhalation of vapors that could potentially volatilize from groundwater and migrate into overlying buildings was the only identified exposure route. Risk based screening levels were developed for the Site for the chemicals of concern. The current levels of the chemicals of concern at the Site fall below the 10^{-6} screening level for carcinogens and the hazard index of 1.0 for non-carcinogens for a commercial/industrial scenario.

For comparison, the Board considers the following risks to be acceptable at remediation sites: a cumulative hazard index of 1.0 or less for non-carcinogens and, for carcinogens, a cumulative excess cancer risk of 10^{-6} or less (residential scenario) or 10^{-5} or less (commercial/industrial scenario).

10. **Feasibility Study:** The Discharger submitted a July 2003 report titled, "Remedial Investigation and Feasibility Study" for the Site. Four remedial options were considered for contaminated groundwater at the Site. The options considered were: Groundwater extraction and treatment; Enhanced in-situ biological degradation; In-situ chemical oxidation, and; Monitored natural attenuation. These options were evaluated for feasibility with respect to site-specific conditions and for attainment of water quality objectives to protect human health and the environment.
11. **Remedial Action Plan:** The Discharger has selected Monitored Natural Attenuation as the most appropriate remedial option for the Site. Natural attenuation has already significantly reduced the contaminant concentrations at the Site. Currently, DCE is found at up to 800 ug/l and TCE at up to 70 ug/l in monitoring wells at the site. The other VOCs are found at much lower levels. It is expected that natural attenuation will continue to degrade the VOC contamination and that eventually water quality objectives will be achieved. Monitoring of selected monitoring wells will be performed to verify the pollutant plume is remaining stable and continuing to degrade.
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. The previously-cited remedial action plan confirms the Board's initial conclusion that background levels of water quality cannot be restored. Contaminant levels have declined significantly and remaining contamination cannot be completely removed with existing technology. 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
- o Freshwater replenishment to surface waters

At present, there is no known use of shallow 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 protect beneficial uses of groundwater and will result in acceptable residual risk to humans.
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:** California Water Code Section 13304 authorizes the Board to issue orders requiring a discharger to cleanup and abate waste where the discharger has 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 discharger (or its 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. REMEDIAL ACTION PLAN AND CLEANUP STANDARDS

1. **Implement Remedial Action Plan:** The discharger shall implement the remedial action plan described in finding 11.
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
Trans-1,2-Dichlorethene	10	MCL
Cis-1,2-Dichloroethene	6	MCL
Trichloroethene	5	MCL
Vinyl Chloride	0.5	MCL
Trichlorotrifluoroethane	1,200	MCL

C. TASKS

1. **FIVE-YEAR STATUS REPORT**

COMPLIANCE DATE: March 1, 2009

Submit a technical report acceptable to the Executive Officer evaluating the effectiveness of the approved remedial action 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.

2. **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 extraction but wells retained), and significant system modification (e.g. major reduction in extraction rates, closure of individual extraction wells within extraction network). The report should include the rationale for curtailment. Proposals for final closure should demonstrate that cleanup standards have been met, contaminant concentrations are stable, and contaminant migration potential is minimal.

3. **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 2.

4. **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 remedial action plan of revising one or more cleanup

standards in response to revision of drinking water standards, maximum contaminant levels, or other health-based criteria.

5. **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 remedial action 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 remedial action plan or cleanup standards.

6. **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 Santa Clara Water Dept.
 - b. Santa Clara County Department of Environmental Health Services
 - 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) 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.

- 12. **Rescission of Existing Order:** This Order supercedes and rescinds Order No. R2-2002-0042.
- 13. **Periodic SCR Review:** The Board will review this Order periodically and may revise it when necessary.

I, Bruce H. Wolfe, 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 February 18, 2004.



 Bruce H. Wolfe
 Executive Officer

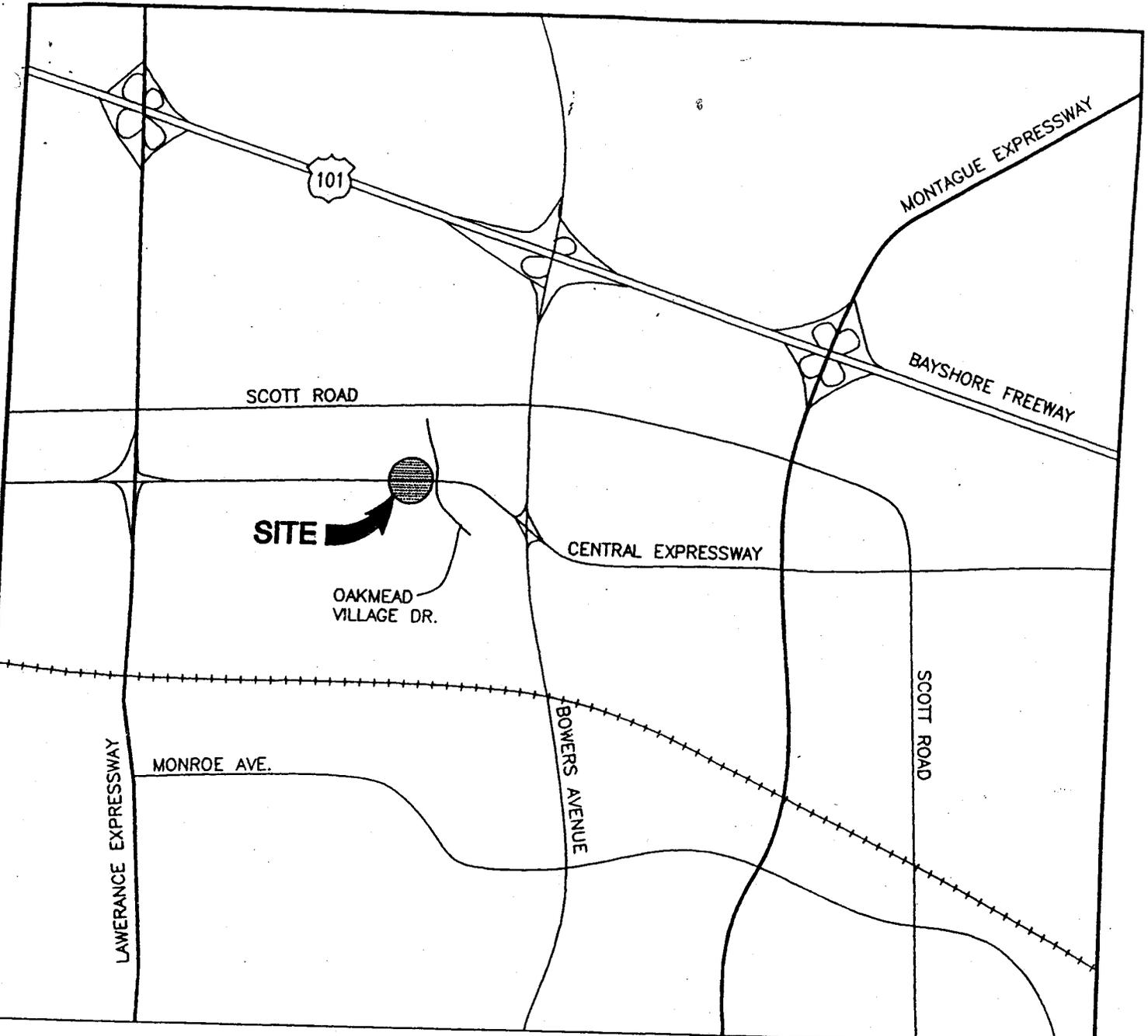
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FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO:

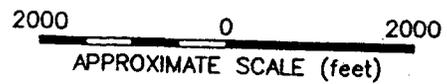
IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE
SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR
INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

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Attachments: Vicinity Map
Site Map
Self-Monitoring Program



BASE MAP FROM USGS 7.5' QUAD. MAPS:
MILPITAS AND SAN JOSE WEST, CALIFORNIA.
PHOTOREVISED 1980.



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VICINITY MAP

SANTA CLARA COUNTY ROAD AND
AIRPORTS DEPARTMENT
CENTRAL EXPRESSWAY SITE
GROUNDWATER INVESTIGATION
SANTA CLARA, CALIFORNIA

PLATE

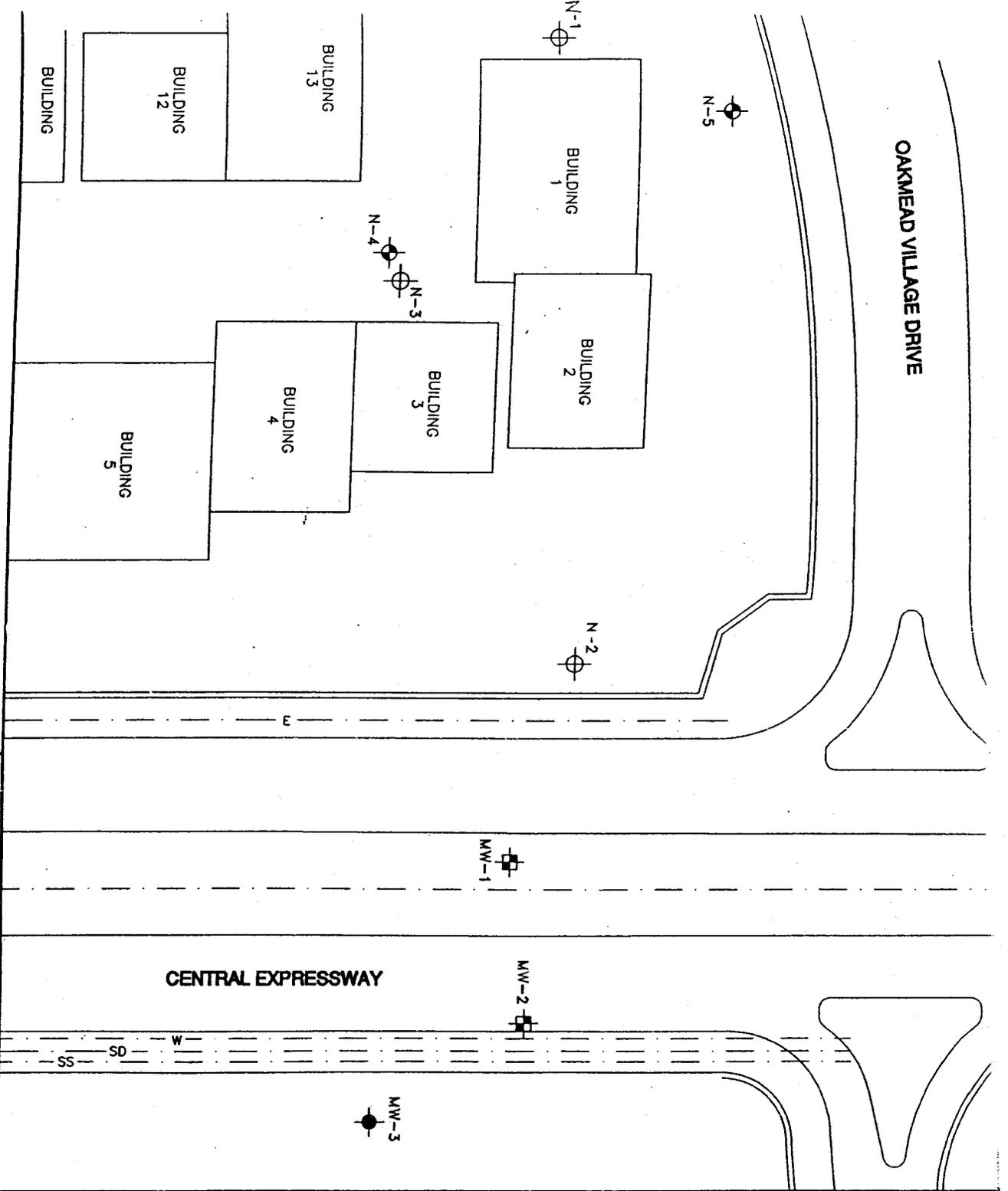
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DRAFTED BY: M. Murphy DATE: 8/29/97

CHECKED BY: C. Kennedy DATE:

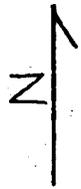
PROJECT NO. 12-302780-001

OAKMEAD VILLAGE DRIVE



LEGEND:

- MW-3  MONITORING WELL INSTALLED BY WOODWARD-CLYDE CONSULTANTS, AUGUST 1992
- MW-2  MONITORING WELL INSTALLED BY WCC, NOVEMBER 1993
- N-4  MONITORING WELL BY ENVIRON CORP. 1990
- N-2  MONITORING WELL BY WEISS ASSOCIATES, 1988
- SD - STORM DRAIN
- SS - SANITARY SEWER
- E - ELECTRIC
- W - WATER



KLEINFELDER

SITE PLAN

PLATE

DRAFTED BY: M. MURPHY DATE: 8/29/97
 CHECKED BY: CHRIS KENNEDY DATE:

SANTA CLARA COUNTY ROADS AND AIRPORT DEPARTMENT
 CENTRAL EXPRESSWAY SITE
 GROUNDWATER INVESTIGATION
 SANTA CLARA, CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

SANTA CLARA COUNTY

for the property located at

CENTRAL EXPRESSWAY NEAR OAKMEAD VILLAGE DRIVE
SANTA CLARA
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. R2-2004-0005 (site cleanup requirements).
2. **Monitoring:** The discharger shall measure groundwater elevations annually in all monitoring wells, and shall collect and analyze representative samples of groundwater according to the following table:

Well #	Sampling Frequency	Analyses	Well #	Sampling Frequency	Analyses
MW-1	A	WL	N-5	A	8010, MNA
MW-2	A	8010, MNA	N-6	A	WL
MW-3	A	WL	MW-21	SA	8010, MNA
N-1	A	WL	MW-22	SA	8010, MNA
N-2	SA	8010, MNA*	MW-23	SA	8010, MNA
N-3	A	8010	MW-24	SA	8010, MNA
N-4	A	WL			

Key: 8010 = EPA Method 8010 or equivalent WL = Water Level Only
SA = Semi-Annually
A = Annually

MNA = Monitored natural attenuation parameters (as specified in the July 2003 Remedial Investigation and Feasibility Study)

* MNA annually

The discharger shall sample any new monitoring or extraction wells semi-annually and analyze groundwater samples for the same constituents as shown in the above table. The discharger may propose changes in the above table; any proposed changes are subject to Executive Officer approval. The wells for which only water level measurement is required are designated.

3. **Monitoring Reports:** The discharger shall submit annual monitoring reports to the Board no later than 30 days following the end of the last quarter. 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 annual 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 annual 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

reporting period. Historical mass removal results shall be included in the annual report each year.

- e. **Status Report:** The annual report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following reporting period.
4. **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.
5. **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.
6. **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.
7. **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, Bruce H. Wolfe, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on February 18, 2004.



Bruce H. Wolfe
Executive Officer