

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

ORDER NO. R2-2002-0104

ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS AND RESCISSION OF
ORDER NO. 92-137 FOR:

BENJAMIN MOORE & CO., TECHNICAL COATINGS CO., AND THE HERTZ
CORPORATION

for the property located at

1000 WALSH AVENUE
SANTA CLARA
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 1000 Walsh Avenue, near the San Jose International Airport, in the City of Santa Clara as shown in Figure 1. The land use in this area is commercial/industrial. There is no residential use in the immediate vicinity of the site. The Guadalupe River is located about one mile northeast of the site.
2. **Site History:** Technical Coatings Co. owned the site since about 1950 and operated a paint production facility at the site since about 1953. Benjamin Moore & Co. (Benjamin Moore) purchased Technical Coatings as a wholly owned subsidiary in 1963. Primary products of the facility included industrial paints and resins. Several Underground Storage Tanks (USTs) were used to store solvents and other chemicals until about 1983. The USTs were removed along with surrounding contaminated soil during the summer of 1985, and were replaced by four new double-walled USTs in 1985. These new tanks were removed in 2000 in association with the closure of the facility. The Hertz Corporation purchased the property from Benjamin Moore in December 2000.
3. **Named Dischargers:** Technical Coatings Co. and Benjamin Moore are named as dischargers because of substantial evidence that they discharged pollutants to soil and groundwater at the site, including their use of solvents in paint manufacturing operations, the former use of on-site USTs to store solvents, and the presence of these same pollutants in the soil and groundwater in the immediate vicinity of the USTs, and because they owned the property during or after the time of the activity that resulted in the discharge, had knowledge of the discharge or the activities that caused the discharge, and had the legal ability to prevent the discharge. Benjamin Moore discovered the discharge, reported the discharge to the Regional Board, and took steps to remediate the discharge.

The Hertz Corporation is named as a secondarily responsible party because they currently own the property. The Hertz Corporation will be responsible for compliance only if the Board or Executive Officer finds that named discharger has 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 those parties' names to this order.

4. **Regulatory Status:** This site was subject to the following Board orders:
 - Revised Site Cleanup Requirements (Order No. 92-137) adopted November 18, 1992
 - Amended Site Cleanup Requirements (Order No. 91-123) adopted August 21, 1991
 - Site Cleanup Requirements (Order No. 89-160) adopted September 20, 1989

5. **Site Hydrogeology:** Soil borings taken at the site have identified a thick sequence of interbedded clays, silts, sands, and gravels. The layers typically range from 3 to 10 feet in thickness and are sometimes difficult to correlate from location to location. The more permeable layers have been identified from the ground surface downward as the A, B, and C zones. The A zone occurs from approximately 10-20 feet below ground surface (bgs), the B zone is from 25-50 feet bgs (and is subdividing into B1, B2, and B3 zones), and the C zone (deeper than 90 feet bgs). While groundwater levels fluctuate dramatically between wet and drought conditions, they are currently about 4 to 9 feet bgs in the uppermost aquifer. Groundwater elevations have risen about 5-10 feet from levels present in the late 1980s. The release of contaminants probably occurred when groundwater elevations were lower than they currently are now. Groundwater flows approximately towards the east-northeast at about 20-200 feet per year, depending on the subsurface geology at the location of interest. Hydrographs indicate an upward hydraulic gradient between the C and B zones, and between the B and A zones.

6. **Remedial Investigation:** Organic solvents were first detected in the soil and groundwater in March 1983. The organic solvents were determined to be from leaking underground storage tanks used to store methyl isobutyl ketone (MIBK), methyl ethyl ketone (MEK), toluene, xylene, petroleum naphtha, fish oil, alkyd resin, gasoline, and diesel fuel. All of these chemicals are LNAPLs (light, non-aqueous phase liquids), which are lighter than water in their pure phase. Over 50 soil borings were drilled and approximately 20 groundwater monitoring wells were installed in order to determine the extent of the soil and groundwater contamination. Contaminated groundwater has migrated approximately 200 feet from the former source area, but it is generally contained on-site. Contaminants of concern in the groundwater are as follows:

| Constituent | Max. Conc. ¹ (ug/l) | Cleanup Standard (ug/l) |
|------------------------------|-----------------------------------|-------------------------|
| benzene | 39 | 1 |
| ethylbenzene | 21000 | 700 |
| total xylenes | 44200 | 1750 |
| MIBK | 560000 | 120 |
| 1,2-dichloroethane (1,2-DCA) | 3.4 | 0.5 |

7. **Adjacent Sites:** Properties adjacent to the site include the former Felton Aluminum Company site, located immediately to the west, and the Equity Office Properties (formerly Spieker property), located immediately to the north across from Walsh Avenue. Chemical releases to the soil and groundwater unrelated to Technical Coatings activities have occurred in the past at both the former Felton and Equity Office properties. The Felton property was demolished in about 1996 and replaced with a new commercial/industrial facility.
8. **Interim Remedial Measures:** Four low-flow groundwater extraction wells were installed in the source area in about 1987. Two groundwater interception trenches were also installed at the down gradient edge of the property boundary in about 1990. The trenches had a total length of about 550 feet and an average depth of about 33 feet. The trenches were designed primarily to provide hydraulic control and to prevent contaminated groundwater from migrating off site. Although the trench wells accounted for approximately 90 percent of the extracted groundwater, they only accounted for a small percentage of the extracted chemical mass. The majority of the chemical mass was removed by the low-flow wells located in the source area. The rate of chemical mass removed through groundwater extraction in the late 1980s and early 1990s was as high as 1500 pounds per year. However, this fell off to about 300 to 400 pounds per year after 1995. The total mass of chemicals removed through 1998 was about 8800 pounds of total Volatile Organic Compounds (VOCs). The groundwater extraction system was terminated on a trial basis in 1998 with Regional Board staff approval in order to determine if a more passive remedial approach would be effective

¹ Maximum concentrations were provided in Table 7-4 of the Alternatives Evaluation and Risk Assessment report, dated March 9, 2001, from Golder Associates, except for MIBK. Maximum concentration for MIBK was from monitoring well T35EB on 11-14-1997, as reported in the 2000 annual report.

in reducing residual contaminant concentrations in groundwater. Contaminant concentrations in groundwater have generally continued to decline in most wells since groundwater extraction was terminated. In June 2002, Benjamin Moore removed about 338 tons of contaminated soils from the former source area. Residual contaminant concentrations in the soil are now below levels that would present a threat to human health or the environment.

9. **Feasibility Study:** Benjamin Moore performed a feasibility study in a document titled "Alternatives Evaluation and Risk Assessment" dated March 9, 2001. The alternatives considered were 1) continued groundwater extraction and treatment, 2) reduced groundwater extraction and treatment, 3) monitored natural attenuation (MNA), 4) in-situ treatment of the B1 zone using diffusive oxygen emitters with MNA, 5) reduced groundwater extraction and treatment with in-situ treatment of the B1 zone using diffusive oxygen emitters, and 6) in-situ chemical oxidation of the B1 zone with MNA. MNA was chosen as the preferred alternative based on protectiveness, effectiveness, long-term reliability, implementability, and cost.
10. **Cleanup Plan:** Benjamin Moore proposes to use monitored natural attenuation (MNA) as the method to remediate residual contamination in the groundwater. MNA uses naturally occurring bacteria in the soil and groundwater to degrade contaminants over time. Benjamin Moore has been monitoring groundwater on a quarterly basis since groundwater extraction was terminated in 1998. The results of this monitoring indicate that MNA will be an effective method to remediate residual contamination in the groundwater. Remediation of contaminated soils is not necessary at this site because the soil has been effectively remediated, and residual concentrations left in place are low enough that they will not present a threat to human health or the environment, or pose a threat to groundwater through leaching.
11. **Risk Assessment:** Benjamin Moore performed a risk assessment in a document titled "Alternatives Evaluation and Risk Assessment" dated March 9, 2001. This assessment did not identify any significant potential health risks to humans from groundwater, except for use as a drinking water source. Due to risk that will be present at the site pending full remediation, institutional constraints are appropriate to limit on-site exposure to acceptable levels. Institutional constraints include a deed restriction that notifies future owners of sub-surface contamination and prohibits the use of shallow groundwater beneath the site as a source of drinking water until cleanup standards are met or until the Board approves termination of the restrictions as provided in the deed restriction or approves the use of shallow groundwater as a source of drinking water. The Hertz Corporation, the current owner of the property, has recorded such a deed restriction with the County of Santa Clara.

The risk assessment also identified a potential health risk from soil to indoor air exposure. As a result of this assessment, in June 2002, Benjamin Moore excavated contaminated soils to levels that will not present a significant risk to human health from soil to indoor air exposure, or will not cause a significant threat to groundwater from leaching.

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 cleanup plan confirms the Board's initial conclusion that background levels of water quality cannot be restored. 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:

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

While the shallow aquifer is currently not used for any purpose, the deeper regional aquifer (below 200 feet) in the general area is currently used as a major drinking water supply source. 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 result in acceptable residual risk to humans.
 - d. **Basis for Soil Cleanup Standards:** A soil cleanup standard is not necessary because contaminated soils have been remediated to levels that will not present a threat to human health or the environment, or will cause a threat to groundwater from leaching.
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 or secondarily responsible party 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. **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 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. CLEANUP PLAN AND CLEANUP STANDARDS

1. **Implement Cleanup Plan:** The dischargers 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 |
|---------------|-----------------|----------------------|
| benzene | 1 | Cal primary MCL |
| ethylbenzene | 700 | EPA primary MCL |
| total xylenes | 1750 | Cal primary MCL |
| MIBK | 120 | Cal DHS action level |
| 1,2-DCA | 0.5 | Cal DHS primary MCL |

C. TASKS

1. FIVE-YEAR STATUS REPORT

COMPLIANCE DATE: October 16, 2007

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. Summary of additional investigations (including results) and significant modifications to remediation systems
- e. 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. **Delayed Compliance:** If the dischargers are delayed, interrupted, or prevented from meeting 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. In the event that Hertz Corporation is required to comply with this order pursuant to provision D.11 below, it shall be responsible for payment of any such investigation and oversight costs incurred after the date of notification by the Board under provision D.11 of the Hertz Corporations obligation to comply. Benjamin Moore shall remain liable for such costs incurred prior to that date and jointly liable to the Board for such costs incurred after that date.
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 during normal working hours 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 during normal working hours.

- 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 agencies:
 - a. City of Santa Clara
 - 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 site owner 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 site owner 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).

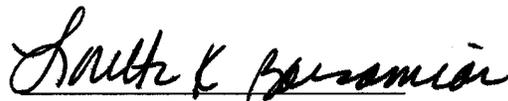
A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity

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. **Secondarily-Responsible Discharger:** Within 60 days after being notified by the Executive Officer that other named dischargers have failed to comply with this order, The Hertz Corporation as property owner shall then be responsible for complying with this order. Task deadlines above will be automatically adjusted to add 60 days. The earliest deadline shall be adjusted to occur no sooner than 60 days after the date of such notification, and subsequent deadlines shall be adjusted by addition of the same number of days.
12. **Rescission of Existing Order:** This Order supercedes and rescinds Order No. 92-137.
13. **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 October 16, 2002.


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

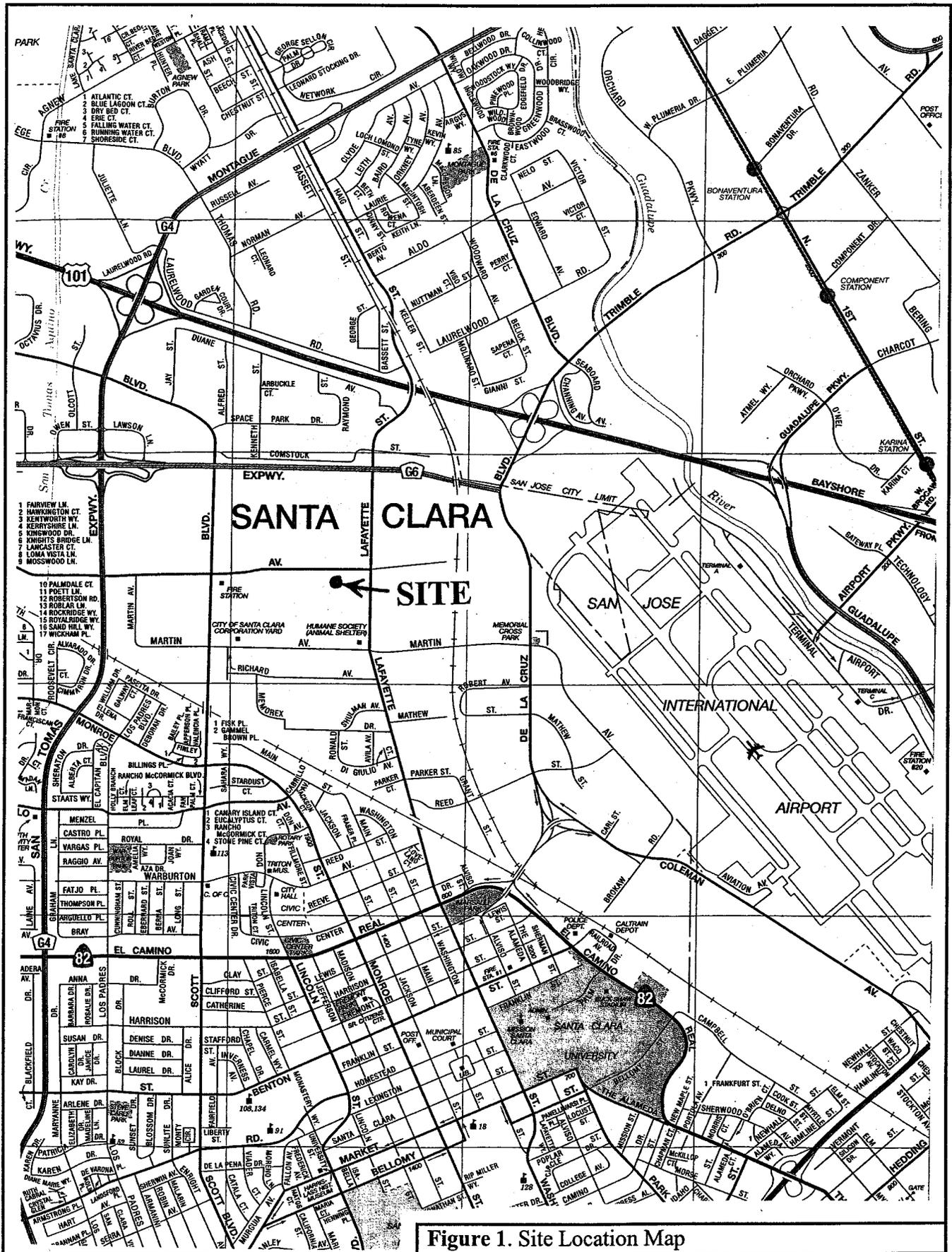


Figure 1. Site Location Map

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

BENJAMIN MOORE & CO. AND TECHNICAL COATINGS CO.

for the property located at

1000 WALSH AVENUE
SANTA CLARA
SANTA CLARA COUNTY

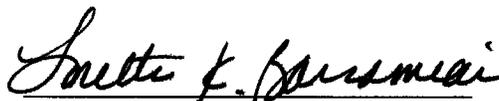
1. **Authority and Purpose:** The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. R2-2002-0104 (site cleanup requirements).
2. **Monitoring:** The dischargers shall measure groundwater elevations and collect representative groundwater samples from wells 5EB, 6EB, 8EB, T35EB, T20A, T21B, T56B, T49EAB, T50EAB, T51EAB, T52EAB, T39EB, T46EB, T47EB, 4EA, T33B, T37B, T34B, 7EB, T57A, T58B, T59B and OW-02 shall be sampled on an annual basis. Samples shall be analyzed for volatile organic compounds (Method 8260) and natural attenuation parameters (dissolved oxygen, pH, oxidation-reduction potential, nitrate and sulfate).

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

3. **Annual Monitoring Reports:** The dischargers shall submit annual monitoring reports by February 1 following the each calendar year. 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.
 - 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. 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).
 - 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.
5. **Violation Reports:** If there is a significant departure from historic contaminant levels in any of the monitoring wells, then the dischargers shall notify the Board office by telephone as soon as practicable once the discharger has knowledge of this departure. 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 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.
7. **Record Keeping:** The dischargers 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 October 16, 2002.

A handwritten signature in cursive script that reads "Loretta K. Barsamian". The signature is written in black ink and is positioned above the printed name and title.

Loretta K. Barsamian
Executive Officer