# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

TENTATIVE ORDER

ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS AND RESCISSION OF ORDER NO. 97-101 FOR:

LOMBARDO DIAMOND CORE DRILLING COMPANY, INC., AND GILLMORE SUPPLY COMPANY

for the property located at

585 ROBERT AVENUE SANTA CLARA SANTA CLARA COUNTY

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

- 1. **Site Location**: This two-acre site is located at 585 Robert Avenue in an industrial area in the City of Santa Clara, near the San Jose International Airport. It is bounded by Robert Avenue to the south, a Southern Pacific Railroad line to the west, and other industrial properties to the north, east, and southeast. The nearest surface water body is the Guadalupe River, about one mile to the northeast. San Francisco Bay is about eight miles to the northwest.
- 2. **Site History**: From 1960 to 1981, the site was owned by Gillmore Supply Company who leased the property to Metal Coating Company/Galvanizers, Inc., who operated a galvanizing facility. Operations included the use of zinc-rich plating solutions and other acidic process solutions. Releases likely occurred through accidental spills of process solutions, leaks from process tanks and piping, onsite disposal of spent solutions, and onsite discharges of wastewater. Lombardo Diamond Core Drilling Company, Inc. (Lombardo) purchased the property in 1985. Lombardo currently uses the property for parking and storage of vehicles, heavy equipment and supplies used in its concrete cutting business.
- 3. **Named Dischargers**: Gillmore Supply Company is named as a discharger because it 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.

Lombardo Diamond Core Drilling Company, Inc. is named as a discharger because it owned the property during or after the time of the activity that resulted in the discharge, has knowledge of the discharge or the activities that caused the discharge, and has the legal ability to prevent the discharge.

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. 97-101) adopted August 20, 1997
- 5. **Site Hydrogeology**: The geology of the site has been well characterized to about 56 feet below ground surface (bgs). Detailed geologic cross-sections of the site are available <sup>1</sup>. The top two feet of surface material is aggregate base fill. Fine-grained soils (sandy clay, clay and silt) exist 2-13 feet bgs. A sand to clayey sand stratum exists approximately 15-23 feet bgs. This is considered the A1 groundwater bearing zone. Fine-grained soils exist 24-28 feet bgs. A stratum comprised mostly of sand and gravel exists approximately 36-40 feet bgs. This is considered the A2 groundwater bearing zone. A continuous sand and gravel stratum exists from 40 feet bgs to at least 56 feet bgs. This is considered the B groundwater bearing zone. While the geology has not been characterized below this depth, there is a regional low-permeable aquitard known to exist 60-200 feet bgs. The depth to groundwater since 1985 has ranged from 4 to 17 feet bgs. Groundwater flows to the north with an average gradient of 0.006 ft./ft.
- 6. **Remedial Investigation**: Starting in 1983, several investigations have been performed which have completely defined the extent of soil and groundwater contamination. Contamination has not migrated off site. Elevated levels of metals, primarily zinc, were found in the shallow soils near the former galvanizing building. Zinc had the highest concentrations. Volatile organic compounds were not identified. Elevated lead concentrations were found only in the top five feet of soil, while zinc concentrations were found deeper. Zinc concentrations were highest where the soils were more acidic (low pH values). Most of the zinc impact was 10-25 feet bgs, and was confined to the vicinity near the former galvanizing building. Shallow groundwater was also contaminated with zinc. The maximum concentrations of zinc in 1990 were 34,000 milligrams per kilogram (mg/kg) in the soil and 10,000 milligrams per liter (mg/l) in groundwater. The most

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<sup>&</sup>lt;sup>1</sup> Revised Feasibility Study/Corrective Action Plan, December 30, 2005. Streamborn.

recent maximum groundwater concentration in November 2005 was 2,600 mg/l. For comparison, the maximum contaminant level considered safe for drinking water is 5 mg/l.

- 7. **Adjacent Sites**: There is no known contamination on any of the adjacent properties.
- 8. Interim Remedial Measures: Lombardo has performed extensive interim remedial actions that have significantly reduced soil and groundwater contamination. In 1983, approximately 630 cubic yards of contaminated soils was excavated to a depth of 5 feet. In 1987, the former galvanizing building was demolished and the debris was hauled off site. From June 1995 through September 1996, a pilot study was performed to determine the effectiveness of in-situ neutralization. Ferrous sulfate and sodium bicarbonate were injected into the groundwater to reduce the acidity (raise the pH) of groundwater, thereby precipitating dissolved zinc out of the groundwater. The pilot study indicated that in-situ neutralization would be effective in reducing dissolved zinc concentrations to cleanup goals. In April 1998, Lombardo began Phase 1 of full-scale treatment by injecting neutralization solution into eight dosing wells. While initially effective, rebound occurred in some of the monitoring wells. Phase 2 dosing occurred from November 1999 through April 2001. As with the Phase 1, significant rebound occurred. Some of the dosing wells exhibited significant reductions in the volume of dosing solution accepted, indicating that the treatment was reducing the permeability of the soil adjacent to the wells, probably due to the precipitation of zinc and iron. In an attempt to solve this problem, Lombardo constructed three dosing galleries (gravel-filled trenches). Phase 3 dosing through the galleries occurred from March 2003 through September 2004. This did not result in significant reductions of dissolved zinc concentrations.

## 9. Environmental Risk Assessment:

a. **Screening Levels:** A screening level environmental risk assessment was carried out to evaluate potential environmental concerns related to identified soil and groundwater impacts. Zinc is the only chemicals of concern at this site.

As part of the assessment, site data were compared to Environmental Screening Levels (ESLs) compiled by Board staff (February 2005). The presence of zinc at concentrations above the ESLs indicates that additional evaluation of potential threats to human health and the environment is warranted. Screening levels for groundwater address drinking water impacts (toxicity and taste and odor) and migration and impacts to aquatic habitats. Screening levels for soil address leaching to groundwater. Screening levels for drinking water are based on the lowest of toxicity-based standards (e.g., promulgated Primary Maximum Contaminant Levels (MCLs) or equivalent) and standards based on taste and odor concerns (e.g., Secondary MCLs or equivalent). Groundwater screening levels for the protection of

- aquatic habitats are based on promulgated surface water standards (or equivalent). Soil screening levels for potential leaching concerns are intended to prevent impacts to groundwater above target groundwater goals (e.g., drinking water standards).
- b. **Soil Assessment:** Shallow soils have been cleaned up to background levels, so direct exposure pathways are not a concern at this site. Zinc is not volatile, so exposure from soil gas to indoor air is not a concern. The only exposure pathway of concern is leaching to groundwater from the deeper contaminated soils.
- c. **Groundwater Assessment:** Exposure to drinking water and migration of contaminated groundwater to surface waters are the only exposure pathways of concern.

	Maximum	Results of Screening Assessment *		
	Reported	Potential	Potential	Potential
Chemicals of	Concentration	Drinking Water	Indoor-Air	Aquatic Habitat
Concern	(mg/L)	Concerns	Concerns	Concerns
zinc	2,600	X		X

- \* Note: an "X" indicates that respective Environmental Screening Level was exceeded
- d. Conclusions: Due to excessive risk that will be present at the site pending full remediation, institutional constraints have been implemented to limit on-site exposure to acceptable levels. A deed restriction has been recorded with the County of Santa Clara 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. In addition, a cap over the source area will be installed to prevent further leaching of zinc to the groundwater. Regular monitoring of down gradient wells will alert Board staff if zinc concentrations begin to rise so additional measures can be taken to prevent contamination from migrating off-site.
- 10. **Feasibility Study**: Lombardo submitted a revised feasibility study, dated December 30, 2005. The remedial actions considered were 1) complete stabilization of contaminated near-surface soil (shallow soil mixing), 2) complete stabilization of contaminated near-surface and deep soil (deep soil mixing), 3) partial stabilization of near-surface and deep soil (deep soil mixing), 4) site development cap (building, pavement, landscaping), 5) complete site capping, 6) institutional controls (deed restriction), 7) monitored natural attenuation with contingency measures, 8) permeable reactive barrier, 9) groundwater extraction and treatment, and 10) in-situ neutralization. The factors considered in the evaluation were 1) expected effectiveness, 2) relative cost, 3) relative time to complete remediation, and 4) relative difficulty for administrative and implemention issues. The

feasibility study selected a combination of site development capping, institutional controls, monitored natural attenuation, and contingency planning as the preferred remedial actions. These measures should reduce zinc concentrations within a reasonable timeframe to levels that do not pose a threat to human health or the environment.

11. Remedial Action Plan: In-situ neutralization was the approach used in the original Remedial Action Plan as described in Finding 8. This approach was not as effective as anticipated, likely due to pockets of acidic (low pH) soil and groundwater in the source area. Neutralization efforts had limited effectiveness because the silty-clay soils are relatively impermeable, thus preventing the dosing solutions from coming into contact with the acidic pockets. Therefore, Lombardo has proposed a new remedial strategy using a combination of monitored natural attenuation, site development capping, institutional controls, and contingency planning. While zinc does not biodegrade, natural attenuation should neutralize the acidic pockets over time as the groundwater flows through and buffers the source area. Site development capping will reduce rainwater, which has a lower pH than groundwater, from infiltrating into the source area and should prevent dissolved zinc from spreading. Contigency planning will assure that contamination does not spread off-site should dissolved zinc concentration begin to increase in the down gradient monitoring wells. Institutional controls have been implemented through a deed restriction prohibiting the extraction of groundwater (except for monitoring purposes) at the site. Details regarding site development capping and contingency planning have not yet been developed.

## 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. 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 purposes, 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 the shallow groundwater underlying the site for the above purposes.

- c. **Basis for Groundwater Cleanup Standards**: The groundwater cleanup standards, as shown in Section B.2 below, are based on applicable water quality objectives and EPA secondary maximum contaminant levels (MCLs). Cleanup to this level will protect beneficial use of groundwater and will result in acceptable residual risk to humans.
- d. **Basis for Soil Cleanup Standards**: The soil cleanup standards for the site are shown in section B.3 below. Cleanup to this level is intended to prevent leaching of contaminants to 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. **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.
- 15. **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.
- 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 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.
- 18. **Public Hearing**: The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

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

## A. PROHIBITIONS

- 1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
- 2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.
- 3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

## B. 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	Basis
Zinc	5,000 (µg/l)	EPA Secondary MCL
рН	6.5	Basin Plan

3. **Soil Cleanup Standards**: The following soil cleanup standards shall be met in all on-site vadose-zone soils.

Constituent	Standard (mg/kg)	Basis
Zinc	25,000	ESL <sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> Table C. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final - February 2005. San Francisco Bay Regional Water Quality Control Board

## C. TASKS

## 1. WORKPLAN FOR SITE DEVELOPMENT CAPPING

COMPLIANCE DATE: December 1, 2006

Submit a workplan acceptable to the Executive Officer proposing measures that will minimize rainwater infiltration into the areas with the highest zinc concentrations. The workplan should describe all significant implementation steps and should include an implementation schedule.

## 2. IMPLEMENTATION OF SITE DEVELOPMENT CAPPING

COMPLIANCE DATE: December 1, 2007

Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the Task 1 workplan.

#### 3. CONTINGENCY PLAN

COMPLIANCE DATE: December 1, 2006

Submit a contingency plan acceptable to the Executive Officer proposing measures that will be taken if monitoring indicate dissolve zinc is migrating. This plan must indicate the specific conditions that would trigger implementation of the contingency plan. It must also indicate the specific measures that will be taken should the above conditions be triggered, and the timeframe for implementing such measures.

#### 4. FIVE-YEAR STATUS REPORT

COMPLIANCE DATE: May 10, 2011

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 using natural attenuation as the remedial strategy. If natural attenuation is not practical, the dischargers must either 1) apply for a containment zone pursuant to State Board Resolution No. 92-049 as amended by Resolution 96-079, or 2) propose an alternative cleanup strategy that will achieve cleanup goals in a reasonable time period.

## 5. 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.

### 6. 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.

7. **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.
- 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 Boardmanaged 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
  - 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) 286-1255 during regular office hours (Monday through Friday, 8:00 to 5:00).

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

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

- 11. **Rescission of Existing Order**: This Order supercedes and rescinds Order No. 97-101.
- 12. **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

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: Site Map

**Self-Monitoring Program** 

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

## SELF-MONITORING PROGRAM FOR:

# LOMBARDO DIAMOND CORE DRILLING COMPANY, INC., AND GILLMORE SUPPLY COMPANY

for the property located at

585 ROBERT 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. *XX-XXX* (site cleanup requirements).
- 2. **Monitoring**: The discharger shall measure groundwater elevations semi-annually in all monitoring wells, and shall collect and analyze representative samples of groundwater according to the following table:

Well #	Sampling Frequency	Analyses
T-10, MW-22, MW-27, MW-29, MW-30, MW-31, MW-32, MW-34, MW-35,	Semi-annual	pH, Zinc, Iron

## EPA Method 6010B or equivalent

The discharger shall sample any new monitoring or extraction wells 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.

- 3. **Annual Monitoring Reports**: The discharger shall submit annual monitoring reports to the Board no later than 30 days following the end of the 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.
  - 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).
  - d. 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 year.
- 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, Bruce H. Wolfe, Executive Officer, he adopted by the Board on	ereby certify that this Self-Monitoring Program was
	Bruce H. Wolfe Executive Officer