Remedial Action Plan

301 Industrial Way
San Carlos, California

June 16, 2004

Prepared For:
301 Industrial LLC
3629 Grand Avenue
Oakland, California 94610

Prepared By:
Northgate Environmental Management, Inc.
3629 Grand Avenue
Oakland, California 94610

CERTIFICATION

All engineering information, conclusions, and recommendations in this Remedial Action Plan have been prepared under the supervision of and reviewed by a California Registered Professional Engineer.

Alan Leavitt
Certified Engineer (C-049319)

Date 6/16/2004

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 SITE BACKGROUND 2

2.1 SITE DESCRIPTION 2
2.2 SITE HISTORY 3
2.3 SITE GEOLOGY AND HYDROGEOLOGY 3

3.0 SUMMARY OF PREVIOUS INVESTIGATIONS 5

4.0 REMEDIATION ZONES 7

4.1 CRITERIA FOR REMEDIATION 7
4.1.1 Tier 2 Risk Assessment 7
4.1.2 Proposed Remedial Goals 8
4.2 KNOWN AREAS OF CONCERN 8
4.2.1 Former Ceramics Plating Shop/Sump Area 8
4.2.2 Former Chemical Kitchen Area 9
4.2.3 SWMU 11 Area 9
4.2.4 Former TCA Tank and Drum Storage Area 9
4.2.5 Former Gasoline UST Excavation Area 9
4.2.6 Transformer Area 10
4.2.7 Hazardous Waste Storage Area 10
4.2.8 Former Evaporation Ponds Area 10

5.0 PROPOSED REMEDIAL APPROACH 11

5.1 DESCRIPTION 11
5.1.1 Excavation, Treatment, and Disposal of Contaminated Soil 11
5.1.2 Dewatering of Excavation Areas and Treatment of Contaminated Groundwater 12
5.1.3 In Situ Treatment of Residual VOCs 12
5.2 SCHEDULE 13

6.0 REFERENCES 14

TABLES

1. Summary of AOCs and SWMUs
2. Proposed Remedial Goals for Soil
3. Proposed Remedial Goals for Groundwater
4. Proposed Remedial Goals for Soil Gas
5. Summary of Known Areas of Concern and Remedial Approach
6. Sampling Plan

FIGURES

1. Site Location
2. Site Plan
3. Proposed Remediation Zones
4. Former Ceramics Plating Shop Area
5. Former Chemical Kitchen Area
6. SWMU 11 Area
7. Former TCA Tank and Drum Storage Area
8. Former Gasoline UST Excavation Area
9. Transformer Area
10. Hazardous Materials Storage Area
11. Former Evaporation Pond Area
12. Typical Excavation and Backfill Cross-Section

APPENDICES

A. Regulatory Approval Letters
B. List of Reports

1.0 INTRODUCTION

Northgate Environmental Management, Inc. (Northgate) has prepared this remedial action plan (RAP) on behalf of 301 Industrial LLC (301) for the Communications and Power Industries (CPI) property located at 301 Industrial Way, in San Carlos, California (the "Site"; see Figure 1). CPI currently owns the Site, and operates a manufacturing facility at this location for the production of electrical components. Prior to CPI's ownership of the Site, Varian Associates, Inc. (Varian) also used the Site to manufacture electrical equipment.

Chemicals are known to be present in soil and groundwater at the Site, but at concentrations below the current approved cleanup goals for industrial use of the property. 301 proposes to acquire the Site for the construction and operation of a hospital and medical facility. Additional cleanup activities would be performed before this change in land use. The objective of this RAP is to describe the proposed remediation plan to be implemented prior to redevelopment of the Site for Unrestricted Uses. "Unrestricted Uses" refers to residential housing, child facilities (e.g., daycare, K-12 schools, preschools, playgrounds), elderly facilities (e.g., nursing homes, hospices, convalescent homes, senior centers, assisted living facilities), places of worship, hotels/motels, hospitals, skilled nursing and medical facilities, and similar sensitive receptors.

The California Regional Water Quality Control Board (RWQCB), California Department of Toxic Substances Control (DTSC), and San Mateo County Environmental Health Division (County) have previously overseen extensive environmental investigation, remediation, and facility closure activities at the Site. Northgate anticipates that the RWQCB will serve as lead agency to oversee implementation of this RAP, with review and concurrence by DTSC and the County.

2.0 SITE BACKGROUND

2.1 Site Description

The Site encompasses approximately 18.5 acres. The property is located between Highway 101 (to the east) and Industrial Way (to the west) as shown in Figure 1. Currently, the Site includes four main buildings (identified as Buildings 1, 2, 3, and 5), a wastewater treatment facility, hazardous waste storage area, other smaller structures, and parking lots (see Figure 2). The following description of CPI's facilities is based on information obtained from P&D Consultants (P&D) Phase I Site Assessment (2000). CPI will update the facility description when it performs a pre-closure facility audit to identify: (1) chemical, waste and equipment inventories; (2) the proposed disposition of those chemicals, waste, and equipment; (3) locations on the property where hazardous materials, substances, or wastes are known to have been stored, used, or generated at the facility by CPI, Varian, and others; and (4) a proposed sampling program.

Building 1 is or was used for manufacturing processes, including cutting and machining of metals, plating, degreasing, and winding of power tubes. Other portions of Building 1 include offices, laboratories, shipping and receiving area, clean rooms, and a cafeteria.

Building 2 contains or contained a machine shop, including cutting, machining, and degreasing of metals, parts department, and office space.

Building 3 is or was used for manufacturing operations similar to Building 1.

Building 4 was not constructed.

Building 5 is or was used for storage of supplies and maintenance equipment, and houses an electronic repair shop.

The Hazardous Materials Storage Area includes three sheds used to store chemicals, including products and wastes. These sheds include bermed and sloped floors that provide a secondary containment system for drummed materials stored within.

The industrial wastewater treatment facility is located northwest of Building 1. Historically, the system treated the following wastes containing dissolved metals: concentrated acids and cyanide solutions, as well as acid and cyanide solution rinse waters. The system is used to treat plating

process wastewater, including acid waste rinse water containing dissolved metals (e.g., primarily copper and nickel with trace concentrations of silver and gold) and cyanides. Treated wastewater is discharged to the municipal sewer system.

2.2 Site History

The site was first developed in the mid-to-late 1950s as an industrial facility for the manufacturing of electronic components, including ceramic/metal power grid tubes and cavities. The 1961 Sanborn map identifies the site occupant as Eitel-McCullough Inc. (EIMAC), a company reportedly acquired by Varian in 1965. Varian continued to manufacture electronic components at the Site.

In 1980, Varian submitted a Part A application to DTSC for a permit to store hazardous wastes, including solvents, acids, bases, cyanides, and polychlorinated biphenyl (PCB) wastes, and to treat wastewater generated at the Site. The DTSC granted interim status to Varian for these units in 1981, and issued a hazardous waste facility permit to Varian in 1983. Varian continued to operate these facilities at the Site, pursuant to permits issued by the DTSC until 1995. At that time, Varian sold the EIMAC division to CPI, and transferred its hazardous waste facility permit to CPI. CPI closed the hazardous waste facility permit and operated its waste management units pursuant to permit-by-rule requirements. DTSC's letters approving CPI's previous closure activities and rescinding the RCRA permit are included as Appendix A to this RAP. CPI has continued to manufacture vacuum tubes and related electrical components at this location. CPI's activities include manufacturing and testing power tubes, research and design of power tube equipment, and shipping/receiving activities. The manufacturing processes include cutting and machining metal components, plating, degreasing, and testing the power tubes.

In addition to DTSC's requirements for management of hazardous wastes, CPI's manufacturing activities are subject to regulation by the County, RWQCB, Bay Area Air Quality Management District (BAAQMD), and South Bayside System Authority (local sanitation district).

2.3 Site Geology and Hydrogeology

The Site is generally flat, with an elevation of approximately 5 feet above mean sea level. The ground surface slopes slightly towards the east. Based on Northgate's review of boring logs from the Site, the upper 5 to 6 feet of soil consist primarily of fill material, comprised of clayey sand to sandy clay with some gravel. This fill overlies the former marshland soils, commonly referred to as Younger Bay Mud.

The closest surface water body is Phelps Slough, located about 300 feet to the east of the Site. Phelps Slough drains to Steinberger Slough, which drains to San Francisco Bay. The depth to groundwater at the Site is typically about 6 to 10 feet below the ground surface (bgs). A shallow discontinuous water-bearing zone exists beneath the Site in the fill above the Bay Muds. Water gradients are relatively low with variable flow directions across the Site.

3.0 SUMMARY OF PREVIOUS INVESTIGATIONS

Northgate has assessed soil and groundwater contamination at the Site based on a review of previous environmental investigations, site assessments, closure reports, and recent soil and groundwater sampling programs for the Site. These activities and findings are summarized below.

From 1984 to the present, numerous environmental investigations have been performed to assess soil and groundwater quality at the known chemical handling areas of the Site. A partial list of these reports is included in Appendix B. Between 1984 and 1994, environmental investigations and monitoring activities were performed by Metcalf & Eddy, Kennedy/Jenks, Law Associates, Canonie Environmental, and Woodward-Clyde Consultants (see Appendix B).

In 1994, the DTSC completed a RCRA Facility Assessment (RFA) for the Site. The RFA identified 24 Solid Waste Management Units (SWMUs) and 18 Areas of Concern (AOC) at the Site. Varian subsequently completed extensive soil and groundwater investigations at the Site in response to the RFA. These activities were completed between 1994 and 1997, as described in the following documents:

- *RCRA Facility Assessment for Varian Power Grid Tube Products* (California Environmental Protection Agency, Department of Toxic Substances Control--Region 2, 1994)
- *Phase I Environmental Site Assessment of Varian Power Grid Tube Products DRAFT FINAL* (Montgomery Watson, 1995a)
- *RCRA Facility Investigation Final Report and Summary Report Varian Power Grid Tube Products* (Montgomery Watson, 1995b)
- *Final Report of Results Additional Field Investigation Former Varian Power Grid Tube Products* (Montgomery Watson, 1996a
- *Human Health Risk Assessment Former Bldg 2 Drum Storage Area* (Montgomery Watson, 1996b)

Following completion of the RFA work, CPI closed its hazardous waste facility permit, as described in a report entitled *Closure Report of Hazardous Waste Storage Area* (Aqua Science Engineers, 1997).

These investigations indicated that contamination was localized in soil and shallow groundwater, with limited potential for migration beyond the apparent source areas. Varian obtained regulatory approvals to close all AOCs and the inactive SWMUs without further action, providing that the site continued to be used for industrial purposes. No further action was required for active SWMUs, which were to be addressed during facility closure (including SWMU 20, the sludge bin area, hazardous waste storage sheds, and wastewater treatment area). A detailed summary of the history of the SWMUs and AOCs, along with their current regulatory status, is provided in Table 1. As noted in this table, eight areas of the site have been remediated under the oversight of the RWQCB, DTSC, and the County.

4.0 REMEDIATION ZONES

4.1 Criteria for Remediation

4.1.1 Tier 2 Risk Assessment

The proposed remedial goals for the Site are based on the Tier 2 Environmental Screening Levels (ESLs) established by the RWQCB (RWQCB, 2003a and b). The ESLs have been selected as these values would be health-protective for Unrestricted Uses, as previously defined. According to the RWQCB, the presence of a chemical in soil, soil gas, or groundwater at concentrations below the corresponding ESL can be assumed to not pose a significant, long-term threat to human health and the environment. A post-remediation risk assessment will be conducted following the remediation of soils and groundwater at the Site to assess potential health risks, if any, related to residual concentrations of chemicals detected at the Site.

In order to select the appropriate ESLs, the following steps have been completed:

- Identify the chemicals of potential concern and types of impacted media
- Determine the site-specific use of the land and the potential exposure pathways

The chemicals of potential concern identified at the Site include chlorinated hydrocarbons, petroleum hydrocarbons, and metals. These chemicals have been identified in soil and groundwater. Additionally, chlorinated hydrocarbons and petroleum hydrocarbons have been detected in soil gas at the Site.

Cleanup goals will be based on achieving the Unrestricted Uses standard. Based on planned response actions, it is anticipated that institutional controls (including deed restrictions) and/or engineering controls will not be necessary. Potential future exposure pathways may include inhalation via indoor air by occupants and direct exposure to soil by construction workers. No other potential exposure pathways have been identified for human or ecological receptors. No beneficial uses have been identified for groundwater as the total dissolved solids in groundwater is greater than 3,000 micrograms per liter (mg/l) and the shallow water-bearing unit (i.e., primarily young Bay Mud) is not sufficiently permeable to yield usable quantities of groundwater. No ecological receptors are present at the site, or in the vicinity of the site. Therefore, ESLs were considered only for direct exposure, inhalation via indoor air, and general resource degradation (ceiling values or leaching to groundwater).

4.1.2 Proposed Remedial Goals

The proposed remedial goals were selected to achieve Unrestricted Uses by using the most conservative ESL for each chemical of potential concern in each impacted media. Table 2 summarizes the ESLs and proposed remedial goals for volatile organic compounds (VOCs), metals, and other chemicals in soil. In the case of certain metals (arsenic, cadmium, chromium, and thallium), the proposed remedial goals are based on the estimated background concentrations for the Site vicinity. Table 3 summarizes the ESLs and proposed remedial goals for VOCs, metals, and other chemicals in groundwater. Table 4 summarizes the proposed remedial goals for VOCs in soil gas.

4.2 Known Areas of Concern

The proposed remedial goals were compared to the reported concentrations of chemicals detected in soil, soil gas, and groundwater from previous investigations, identifying areas of the Site requiring remediation, and defining the approximate extent of affected media. Although potential exposure point concentrations could be estimated using 95% upper confidence limits or other statistics, the proposed remediation areas have been defined by comparing the concentrations at individual sample locations to the proposed remedial goals. The actual excavation areas and depths will be determined based on additional field observations and laboratory analyses of samples collected during RAP implementation.

Northgate has identified eight areas of the Site where remediation is proposed, as shown on Figure 3. These areas are summarized below and described in detail in Table 5.

4.2.1 Former Ceramics Plating Shop/Sump Area

This portion of the Site was located in Building 1. The impacted area includes AOC 16, which represents the former ceramics plating shop, and SWMU 15, which refers to the former plating waste sump (see Figure 4). As summarized in Table 1, these areas were conditionally closed based on industrial cleanup goals, with no further action pending future changes in land use. Elevated levels of nickel are present in soil and groundwater in the vicinity of the former ceramics plating shop and sump.

4.2.2 Former Chemical Kitchen Area

This portion of the Site is located in Building 1. The impacted area includes AOC 14, which represents the former chemical kitchen (see Figure 5). As summarized in Table 1, this area was conditionally closed based on industrial cleanup goals, with no further action pending future changes in land use. Elevated levels of VOCs including TCE, PCE, vinyl chloride, cis-1,2-DCE, and 1,1-DCA are present in soil and groundwater in the vicinity of the former chemical kitchen.

4.2.3 SWMU 11 Area

This area is associated with a former 750-gallon concrete sump in Building 1 (see Figure 6). This sump was used to contain plating water. SWMU 11 was identified in the RFA and subsequently closed based on industrial cleanup goals, with no further action, pending future changes in land use. Metals and cyanide were detected in soil in this area. More recent sampling for VOCs indicated the presence of TCE in soil and groundwater, and vinyl chloride in shallow groundwater in the vicinity of this former SWMU.

4.2.4 Former TCA Tank and Drum Storage Area

This area is located along the east sidewall of Building 2. The impacted area includes AOC 11, which represents the 1,1,1-TCA storage tanks, and SWMU 15, which refers to the former drum storage area (see Figure 7). As summarized in Table 1, these areas were subject to previous remediation and conditionally closed based on industrial cleanup goals, with no further action pending future changes in land use. Elevated levels of VOCs, including TCE, PCE, vinyl chloride, 1,1-DCE , and 1,1-DCA are present in soil and groundwater in the vicinity of the 1,1,1-TCA storage tanks and former drum storage area.

4.2.5 Former Gasoline UST Excavation Area

This area is located outside the southwestern corner of Building 1. The impacted area includes AOC 1, which represents a former underground storage tank (UST) that was used to store gasoline (see Figure 8). Leakage from the UST was detected and remediated in the mid-1980s, as discussed in the DTSC's RFA (DTSC, 1994). As summarized in Table 1, this area was closed and the UST was removed. Elevated levels of VOCs, including benzene, toluene, ethylbenzene, and xylenes, and total petroleum hydrocarbons as gasoline (TPH-gasoline) are present in soil and groundwater in the vicinity of the former UST.

4.2.6 Transformer Area

This area is located on the northwest side of Building 3, in the vicinity of transformers and associated oil tanks and piping (see Figure 9). This area was never identified as an AOC or SWMU in the RFA. However, PCBs and TPH have been detected in shallow soil in a localized portion of this area.

4.2.7 Hazardous Waste Storage Area

This area consists of three storage sheds located north of Building 5 (see Figure 10). This portion of the Site was formerly permitted as a hazardous waste storage area. Although this facility was closed, it continues to be used for storing hazardous materials and wastes. VOCs, including TCE and PCE, have been detected in soil in and around storage sheds B and C.

4.2.8 Former Evaporation Ponds Area

This portion of the Site is located west of Building 2, and was temporarily used for an industrial wastewater treatment facility, including three sludge evaporation ponds (see Figure 11). Sludge generated by the wastewater treatment facility was temporarily stored in these evaporation ponds. As summarized in Table 1, this area (referred to as SWMU 4), was remediated and closed. Elevated levels of chromium remain in soil at this portion of the Site.

5.0 PROPOSED REMEDIAL APPROACH

5.1 Description

Remedial activities will be performed after CPI closes its hazardous material facilities, and the existing buildings and other Site improvements have been demolished and removed from the Site. Varian owns the existing monitoring wells at the Site, and will properly abandon its wells in accordance with state and local requirements, prior to 301 gaining title to or remediating the Site.

The proposed remedy includes three primary components, as follows:

- Excavation, treatment, or disposal of contaminated soil
- Dewatering/treatment of contaminated groundwater, as necessary
- In situ treatment of residual organic compounds, if necessary

These remedial components are proven technologies that can be readily implemented at the Site as summarized below. Table 5 describes where these technologies are proposed for specific remediation zones at the Site.

5.1.1 Excavation, Treatment, and Disposal of Contaminated Soil

Soil containing chemicals of concern above the remedial goals (or above background concentrations, in the case of metals) will be excavated. This remedial component will apply to both unsaturated- and saturated-zone soils. On average, the unsaturated-zone soils consist of fill that extend to 6 feet bgs; the saturated-zone soil generally consists of Bay Mud. Depending on the extent of contamination, excavations are planned to range from approximately 4 to 12 feet bgs. It is anticipated that excavation areas will be sloped approximately 2 to 1 (horizontal to vertical) to maintain stable slopes. The actual excavation areas and depths will be determined based on field observations (e.g., evidence of discolored or stained soil, PID measurements of soil samples, etc.) and laboratory analyses of soil samples from the sidewalls and bottom of excavation pits and groundwater re-entering excavation pits (as outlined in Table 6) for metals and VOCS. Laboratory analyses of soil samples from the sidewalls and bottom of excavation pits and groundwater re-entering excavation pits for metals and VOCs and post-excavation soil gas sampling (see Table 6) for VOCs will be used to confirm that the contaminated soil has been appropriately cleaned up. Excavated soil will be segregated and stockpiled for chemical analyses.

Soil containing chemicals at concentrations above the remedial goals will be disposed at an appropriate permitted off-site facility. Alternatively, soil may be treated onsite by aeration or biodegradation, in accordance with BAAQMD regulations. Each excavation pit will be sampled prior to backfilling to confirm that soil cleanup criteria have been achieved. Additional soil may be excavated, or other remedial measures will be performed if necessary, to achieve remedial goals as discussed below. Excavated soil that does not contain chemical concentrations above the remedial goals (e.g., overburden soils and cut slopes) will be reused to backfill excavation areas.

5.1.2 Dewatering of Excavation Areas and Treatment of Contaminated Groundwater

Remediation areas that extend into the saturated zone may be kept open for a period of several days to several weeks, to provide the opportunity for groundwater to seep into the excavations. The purpose of this step is to remove additional chemicals of concern that are potentially present in the discontinuous water-bearing zones adjacent to the excavation boundaries. Following the completion of excavation, water entering the excavations will be tested (as outlined in Table 6) for those chemicals exceeding remedial goals for the excavated soil and reviewed to determine if additional excavation is required. Water that is pumped out of the excavations will be treated, as necessary, prior to onsite discharge (i.e., to sanitary sewer or storm drain via discharge permits) or hauled to an approved offsite facility for treatment or disposal.

5.1.3 In Situ Treatment of Residual VOCs

In the event that remedial goals cannot be entirely achieved through the excavation and dewatering activities described above, remaining chemicals that are biodegradable may be treated in situ with enhanced bioremediation technologies. Hydrogen donors (e.g., lactate, cheese whey, or other readily degradable carbon sources) may be added to the saturated zone to stimulate the naturally-occurring soil microorganisms to break down chlorinated hydrocarbons to non-toxic substances. Oxidants could also be added to stimulate the rapid degradation of petroleum hydrocarbons. While the above technologies are well-established, a treatability study may be conducted to select the most effective chemicals for enhanced bioremediation of residual chemicals of concern.

As previously noted, most of the shallow saturated zone soil is composed of low permeable Bay Mud. If in situ treatment is selected as a remedial component for selected areas, an engineered permeable layer may be constructed in the excavation, prior to backfilling, to facilitate delivery of hydrogen donors and/or oxidants to the affected zones. The engineered permeable layer (e.g., Class II permeable fill) would be placed along the sides of the excavation pit and a horizontal layer placed at the Bay Mud/native fill interface (see Figure 12). The remaining excavation areas

will be backfilled with clean Bay Mud or other clean backfill. The engineered permeable layer will allow for subsequent additions of hydrogen donor and/or oxidants, if necessary to enhance the degradation of chemicals of concern in the saturated zone.

If an in situ technology is used to treat saturated zone soil or groundwater, then the confirmation sampling plan in Table 6 will be modified to include soil gas and groundwater monitoring. Such monitoring will be conducted following backfilling and will include sampling both from within the engineered permeable layer and laterally on all sides at an appropriate distance from the edge of the engineered permeable layer. All sampling and analytical methods used will have sufficient sensitivity to confirm whether or not remedial goals have been achieved.

5.2 Schedule

CPI will be re-locating its operation from the Site over the next 24 months, including the closure and decommissioning of its facilities. Following RWQCB approval of this RAP and the acquisition of local permits, Varian will abandon its existing monitoring wells at the Site. Remedial activities are expected to be completed within 12 to 18 months following demolition and removal of Site structures. Remedial activities may be phased in conjunction with CPI's closure and demolition schedule. After source areas are excavated and dewatered, residual chemicals may be treated in situ, if necessary, to achieve the remedial goals. 301 will provide a more detailed schedule to the RWQCB prior to commencement of remediation, and will update the RWQCB periodically on progress implementing the RAP.

6.0 REFERENCES

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TABLES

Table 1
Summary of AOCs and SWMUs

Area of Concern	History	Current Regulatory Status
SWMU 1: Former Drum Storage Area	• Installed in 1960s • Asphalt area with sandbag berms; sloped to the north • Located in an open area in the northeast corner of the facility • Potassium cyanide, silver cyanide, alcohols, acetone, PCE, TCE, acidic solutions w/metals, PCBs, waste oils, asbestos, nitrocellulose; majority of wastes in 55 gallon drums • Reported releases of waste xylene, waste acetone, and waste etching solution • Closed by the DTSC in 1985	• No further action recommended by DTSC (RFA 1994)
SWMU 2: Solvent Pit	• Installed in early 1960s • 10-inch augered, gravel-filled hole; unlined • Located south of the former wastewater treatment system • Reported releases of 500 to 600 gallons of waste acetone containing barium carbonate and a methanol-rhodamine dye • Abandoned shortly after installation due to poor percolation rates • Contaminated soil was excavated and disposed off-site by Varian • Closed by the DTSC in 1985	• No further action recommended by DTSC (RFA 1994)
SWMU 3: Acid Pits	• Installed in 1962 • (2) 6-foot diameter pits • Located at the southeast corner of the hazardous waste storage sheds • Reported releases of 500 gallons of acid waste metal plating solutions containing principally copper and nickel • Failed to percolate • Closed in 1963 and backfilled • Paved and hazardous waste storage shed built over location	• No further action recommended by DTSC (RFA 1994)
SWMU 4: Former Wastewater Treatment Area	• Installed in 1970s • System consisted of a neutralization tank, (2) settling pools, (2) concentrated acid storage tanks, and a 30% sodium hydroxide tank for neutralizing and removing metals from wastewater • From 1976 to 1982, sludge generated by the wastewater treatment facility was stored in (3) evaporation ponds; ponds were replaced in 1982 by a sludge thickening tanks and filter press • Located east of the existing wastewater treatment facility • Numerous releases reported • Contaminated soil in the evaporation pond area was excavated and disposed off-site by Varian in 1985 • Evaporation pond area closed in 1985 • System closed by the DTSC; date unknown	• No further action recommended by DTSC (RFA 1994) • **Additional remediation necessary to meet cleanup goals for unrestricted land use**
SWMU 5: Waste Methanol Tank	• see AOC 3	• No further action recommended by DTSC (RFA 1994)
SWMU 6: Chrome System	• Installed in 1985 • System consisted of an acid/chromate holding tank, a chrome reduction tank, and a sodium metabisulfite tank • Located in the existing wastewater treatment facility in the area currently occurpied by the deionization system • Closed by the DTSC in 1991	• No further action recommended by DTSC (RFA 1994)

Table 1
Summary of AOCs and SWMUs

Area of Concern	History	Current Regulatory Status
SWMU 7: 60-Gallon Concrete Waste Sump w/PVC Lining for Process Wastewater	• Installed in 1976 • Concrete vault with PVC liner north of Building 1 between Building 1 and 2 • Collected, treated, and transferred cyanide wastewaters (including copper and silver cyanides); sodium hypochlorite used to treat cyanides prior to pumping to the former wastewater treatment system • Closed in 1985 following the construction of the existing wastewater treatment system • Additional investigation recommended by DTSC per 1994 RFA • RCRA Facility Investigation conducted in 1995	• No further action recommended by DTSC (Response to RFI 1995)
SWMU 8: 800-Gallon Concrete Waste Sump for Acid Wastewater	• Installed in 1979 • Concrete vault with rubber/epoxy liner in Building 1 • Collected and transferred acidic wastewater containing metals (including hydrochloric, nitric, and sulfuric acids containing copper, nickel, iron, cobalt, tungsten, molybdenum, and aluminum • Closed in 1986 by the SMCDHS	• No further action recommended by DTSC (RFA 1994)
SWMU 9: 30-Gallon Concrete Waste Sump for Process Wastewater w/Acetone	• Installed around 1962 • Concrete vault with PP liner in the west end of Building 1 • Collected and transferred wastewater (including acetone and acidic solutions w/metals including copper, nickel, and chromium) • Closed in 1986 by the SMCDHS	• No further action recommended by DTSC (RFA 1994)
SWMU 10: 90-Gallon Concrete Waste Sump for Acidic Wastewater w/Metals	• Installed around 1964 • Concrete vault with PP liner in the northeast end of Building 1 • Collected and transferred wastewater (including hydrochloric, nitric, and sulfuric acid solutions containing primarily nickel) • Closed in 1985 the SMCDHS	• No further action recommended by DTSC (RFA 1994)
SWMU 11: 750-Gallon Concrete Waste Sump for Acidic Wastewater w/Metals	• Installed around 1960 • Concrete vault with PP liner in the center of Building 1 • Collected and transferred wastewater (including cyanide and acidic solutions w/metals including copper, nickel, silver, iron, and cobalt) • Closed in 1976 • Additional investigation recommended by DTSC per 1994 RFA • RCRA Facility Investigation conducted in 1995	• No further action recommended by DTSC (Response to RFI 1995) • **Additional remediation necessary to meet cleanup goals for unrestricted land use**
SWMU 12: 140-Gallon Concrete Waste Sump for Treated Process Wastewater	• Installed around 1960 • Concrete vault lined with tar adjacent to the outside north wall of Building 1 • Collected and transferred wastewater from a zirconium coating operation • Closed in 1985 • Additional investigation recommended by DTSC per 1994 RFA • RCRA Facility Investigation conducted in 1995	• No further action recommended by DTSC (Response to RFI 1995)
SWMU 13: 250-Gallon Dual Chamber Concrete Waste Sump for Dilute Acidic/Cyanide Wastewaters w/Metals	• Installed in 1960s • Concrete vault with PVC liner and transfer tanks adjacent to the outside north wall of Building 1 • Collects and transfers cyanide or acid wastes w/metals • Numerous releases reported • Replaced with existing sump system in the early 1980s • Currently in use • Additional investigation recommended by DTSC per 1994 RFA • RCRA Facility Investigation conducted in 1995	• No further action recommended by DTSC (Response to RFI 1995)

Table 1
Summary of AOCs and SWMUs

Area of Concern	History	Current Regulatory Status
SWMU 14: 800-Gallon Dual Chamber Concrete Waste Sump for Acidic/Cyanide Wastewaters w/Metals	• Installed in 1976 • Concrete vault with PVC liner and transfer tanks adjacent to the outside north wall of Building 1 • Collected and transferred acid and cyanide w/metals • Numerous releases reported • Additional investigation recommended by DTSC per 1994 RFA • RCRA Facility Investigation conducted in 1995	• No further action recommended by DTSC (Response to RFI 1995) • Closure letter from SMCDHS in 1995
SWMU 15: Epoxy Coated Concrete Waste Sump w/PVC Liner for Acidic Wastewaters w/Metals	• Installed around 1965 • Concrete vault and transfer tank located adjacent to the Former Ceramics Plating Shop • Collected and transferred acidic metal wastes including nickel, nickel alloys, copper, molybdenum, and chromium • Additional investigation recommended by DTSC per 1994 RFA; conducted in 1995	• Closure letter from SMCDHS in 1995
SWMU 16: Former Drum Storage Area	• see AOC 11 • Additional investigation recommended by DTSC per 1994 RFA	• No further action until land use changes per RWQCB (Closure letter in 1997) • **Additional remediation necessary to meet cleanup goals for unrestricted land use**
SWMU 17: Former Scrap Metal & Oil Coolant Storage Area	• Installed around 1960 • Fenced area for storing drums located west of Building 2 • Metal turnings, scrap metal, waste coolants and oil • Closed in 1982 • Varian excavated oily soil and disposed at a Class I landfill	• No further action recommended by DTSC (RFA 1994)
SWMU 18: Scrap Metal Bin Area	• Installed in 1960s • Area south of SWMU 1 • Scrap metals (may have contained some oil) • Closed in 1981 • Varian excavated all visibly contaminated soil and disposed at a Class I landfill	• No further action recommended by DTSC (RFA 1994)
SWMU 19: 1,000-Gallon Waste Concentrated Acid Storage Tank	• Installed in 1976 • PP tank located adjacent to SWMU 14 • Collected concentrated acidic metal wastes • Numerous releases reported • Remedial measures included flushing and collecting storm drain contents and excavation of contaminated soil • Closed in 1985	• No further action recommended by DTSC (RFA 1994)
SWMU 20: 300-Gallon Concrete Waste Sump for Process Wastewater w/Copper	• Installed in 1965 • Concrete vault • Collects and transfers wastewater w/metals • Currently in use	• To be closed under the SMCDHS when operation ceases (RFA 1994)
SWMU 21: Sludge Bin Area	• Installed in 1982 • Contains dumpster to store sludge removed from the WWTP • Sludge primarily contains copper, nickel, iron, and silver • Currently in use	• To be addressed during closure of the facility (RFA 1994)

Table 1
Summary of AOCs and SWMUs

Area of Concern	History	Current Regulatory Status
SWMU 22: Wastewater Transfer Sumps	• Installed in 1991 • Coated concrete vaults and tanks • Collection tanks for concentrated cyanide, dilute cyanide, and acidic metal wastes • Currently in use	• No further action (RFA 1994)
SWMU 23: Hazardous Waste Storage Sheds	• Installed in 1983 • Three sheds for chemical storage • Acids, bases, solvents, cyanides, oils, and more • Currently in use	• To be addressed during closure of the facility (RFA 1994) • **Additional remediation necessary to meet cleanup goals for unrestricted land use**
SWMU 24: Wastewater Treatment Facility	• Installed in 1984 • System consists of (14) tanks and (1) filter press including cyanide destruction tanks, pH adjustment tanks, a clarifier tank, a sand filter tank, chemical storage tanks, waste storage tanks, a diversion tank, a thickener tank, and a filtrate collection tank • Treats wastewaters such as concentrated and dilute acidic and caustic solutions that contain metals along with concentrated and dilute cyanide solutions w/metals • Currently in use	• To be addressed during closure of the facility (RFA 1994)
AOC 1: 1,000-Gallon Gasoline Tank	• Installed in 1976 • UST located outside the southwestern corner of Building 1 • Potential gasoline leak identified in 1985 • Closed and removed in 1985 under the SMCDHS • Aeration performed to reduce gasoline levels	• No further action recommended by DTSC (RFA 1994) • **Additional remediation necessary to meet cleanup goals for unrestricted land use**
AOC 2: 120-Gallon Gasoline Tank	• Installed in 1964 • UST located west of Building 1 near the western fence of the facility • Closed and removed in 1986 under the SMCDHS	• No further action recommended by DTSC (RFA 1994)
AOC 3: 3,000-Gallon Methanol Tank	• Installed in 1958 • UST located adjacent to SWMU 5 • Methanol in groundwater discovered in 1983 • Completed remediation of soil and groundwater contaminated with methanol under the RWQCB • Closed in place in 1987	• No further action recommended by DTSC (RFA 1994)
AOC 4: Concentrated Hydrochloric Acid Tank	• Installed in early 1960s • AST located adjacent to the western fence of the facility • Bulk storage for concentrated hydrochloric acid • Numerous releases reported • Closed and removed in 1985	• No further action recommended by DTSC (RFA 1994)
AOC 5: 1,1,1-TCA Storage Tank	• Installed around 1960 • AST located on the north wall of Building 1 • TCA after 1976; may have been used for TCE prior to 1976 • Closed and removed in 1992	• No further action recommended by DTSC (RFA 1994)
AOC 6: 1,1,1-TCA Storage Tank	• Installed around 1976 • AST located adjacent to the outside south wall of Building 3 • TCA storage plumbed to a degreaser • Removed in 1986	• No further action recommended by DTSC (RFA 1994)

Table 1
Summary of AOCs and SWMUs

Area of Concern	History	Current Regulatory Status
AOC 7: Sodium Hydroxide Storage Tank	• Installed in early 1960s • Supplied sodium hydroxide to fume scrubbers and deionization system; located on roof of Building 1 • (2) releases reported • Removed in 1992	• No further action recommended by DTSC (RFA 1994)
AOC 8: Sodium Hydroxide Storage Tank	• Installed in early 1960s • Supplied sodium hydroxide to fume scrubbers and deionization system; located on roof of Building 2 • Removed in 1992	• No further action recommended by DTSC (RFA 1994)
AOC 9: Nitric Acid Tank	• Installed around 1960 • Nitric acid plumbed to metal cleaning and plating operations; located on roof of building 1 • Closed and removed in 1985	• No further action recommended by DTSC (RFA 1994)
AOC 10: 1,1,1-TCA Storage Tank	• Installed in 1991 • AST located next to SWMU 22 between Buildings 1 and 5 • TCA plumbed to degreasers • (1) release and cleanup reported • Currently in use	• No further action recommended by DTSC (RFA 1994)
AOC 11: Two 1,1,1-TCA Storage Tanks	• Installed in 1960s • ASTs located adjacent to the outside east wall of Building 2 near SWMU 16 • TCA plumbed to degreasers; TCA after 1976; may have been used for TCE prior to 1976 • Chlorinated solvents detected in soil following remediation of soil after a diesel spill in 1991 • Currently in use • Additional investigation recommended by DTSC per 1994 RFA; conducted in 1995	• No further action until land use changes per RWQCB (Closure letter in 1997) • **Additional remediation necessary to meet cleanup goals for unrestricted land use**
AOC 12: Acetone Storage Tank	• Installed in early 1960s • AST located inside shed west of Building 5 • Removed in 1985	• No further action recommended by DTSC (RFA 1994)
AOC 13: Anhydrous Ammonia Storage Tank	• Installed in early 1960s • AST located at the southwestern portion of the facility just inside the fence • Emptied and backfilled with nitrogen prior to 1984 • Removed in 1992	• No further action recommended by DTSC (RFA 1994)
AOC 14: Former Chemical Kitchen	• Constructed around 1960 • Metal cleaning and plating operations located in the north end of Building 1 • Wastewater flowed to SWMU 13 • Additional investigation recommended by DTSC per 1994 RFA	• No further action until land use changes per RWQCB (Closure letter in 1996) • **Additional remediation necessary to meet cleanup goals for unrestricted land use**
AOC 15: Former Gold Room	• Constructed around 1970 • Gold plating operation located in the north end of Building 1 • Wastewater flowed to SWMU 13 • Closed in 1992	• No further action recommended by DTSC (RFA 1994)

Table 1
Summary of AOCs and SWMUs

Area of Concern	History	Current Regulatory Status
AOC 16: Former Ceramics Plate Shop	• Constructed around 1960 • Metal cleaning and plating operations in Building 1 • Wastewater flowed to SWMU 15 • Additional investigation recommended by DTSC per 1994 RFA • Additional Field Investigation conducted in 1996	• No further action until land use changes by SMCDHS and RWQCB (Closure letter in 1996) • **Additional remediation necessary to meet cleanup goals for unrestricted land use**
AOC 17: Former Building 3 Plate Shop	• Constructed around 1976 • Metal cleaning and plating operations in Building 3 • Wastewater flowed to SWMU 14 • Closed in 1992	• No further action recommended by DTSC (RFA 1994)
AOC 18: Sump in Basement of Building 3	• Constructed in 1961 • Located in basement of Building 3 • Several releases reported including to storm drains • Currently in use	• No further action recommended by DTSC (RFA 1994)

Table 2
Proposed Remedial Goals Soil

VOCs in Soil

RWQCB ESLs[1]	Chemical of Potential Concern (mg/kg)													
	TCE	PCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Tier 2 ESL, Residential Land Use, Direct Exposure[2], <10 ft bgs	2.9	0.48	0.18	130	8.7	54	0.025	43	0.7	2.8	24	0.35	8.5	14
Tier 2 ESL, Residential Land Use, Indoor Air[3]	0.26	0.088	0.18	180	4.7	45	0.0067	98	0.033	0.33	8.9	0.025	1.6	3.1
Tier 2 ESL, Residential Land Use, Ceiling Level[4], <10 ft bgs	500	370	500	500	230	210	500	500	100	500	500	500	100	500
Tier 2 ESL, Soil Leaching Screening Level[5]	33	17	2	9.3	32	1.5	0.68	7.8	4.9	1.9	4.3	1.8	18	39
Proposed Remedial Goal for VOCs in Soil	**0.26**	**0.088**	**0.18**	**9.3**	**4.7**	**1.5**	**0.0067**	**7.8**	**0.033**	**0.33**	**4.3**	**0.025**	**1.6**	**3.1**

Metals in Soil

RWQCB ESLs[1]	Chemical of Potential Concern (mg/kg)																
	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Tier 2 ESL, Residential Land Use, Direct Exposure[2], <10 ft bgs	6.3	0.39	1100	31	1.7	58	94	630	255	2.5	78	310	78	78	1	110	4700
Tier 2 ESL, Residential Land Use, Ceiling Level[4], <10 ft bgs	1000	1000	1000	1000	1000	1000	1000	1000	1000	500	1000	1000	1000	1000	1000	1000	1000
Proposed Remedial Goal for Metals in Soil	**6.3**	**19.1***	**1000**	**31**	**2.7***	**99.6***	**94**	**630**	**255**	**2.5**	**78**	**310**	**78**	**78**	**27.1***	**110**	**1000**

Others in Soil

RWQCB ESLs[1]	Chemical of Potential Concern (mg/kg)				
	Cyanide	PCBs	TPH-G	TPH-D	TPH-MO
Tier 2 ESL, Residential Land Use, Direct Exposure[2], <10 ft bgs	240	0.22	500	500	500
Tier 2 ESL, Residential Land Use, Ceiling Level[4], <10 ft bgs	100	500	100	500	500
Tier 2 ESL, Soil Leaching Screening Level[5]	12000	6.3	400	500	500
Proposed Remedial Goal for Others in Soil	**100**	**0.22**	**100**	**500**	**500**

1 RWQCB ESLs taken from *Screening from Environmental Concerns At Sites With Contaminated Soil and Groundwater, Volumes 1 and 2, Interim Final - July 2003* issued by the California Regional Water Quality Control Board - San Francisco Bay Region

2 Table K-1 Direct Exposure Screening Levels Residential Exposure Scenario; substitute direct exposure for total chromium with backgorund levels per Table B-1, PCBs include Aroclor 1254 and 1260

3 Table E-1b Soil Screening Levels For Evaluation Of Potential Indoor-Air Impacts, Residential Exposure

4 Table H-2 Components for Shallow Soil Ceiling Levels, Residential Ceiling Level

5 Table G. Soil Screening Levels For Leaching Concerns, Soil Leaching Screening Level (Non-Drinking Water Resource)

* proposed remedial goal is equivalent to Upper 95% Confidence Limit values for background soil concentrations, taken from Lawrence Berkeley National Laboratory Study, 1995

Table 3
Proposed Remedial Goals for Groundwater

VOCs in Groundwater

RWQCB ESLs[1]	Chemical of Potential Concern (ug/l)														
	TCE	PCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Tier 2 ESL, Residential Land Use, Indoor Air[2]	530	130	530	500000	14000	150000	4	130000	350	1000	6300	200	6200	6700
Tier 2 ESL, Residential Land Use, Ceiling Level[3]	50000	3000	20000	400	300	5300	34000	50000	50000	50000	15000	50000	50000	2600
Proposed Remedial Goal for VOCs in Groundwater	**530**	**130**	**530**	**400**	**300**	**5300**	**4**	**50000**	**350**	**1000**	**6300**	**200**	**6200**	**2600**

Metals in Groundwater

RWQCB ESLs[1]	Chemical of Potential Concern (ug/l)																
	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Tier 2 ESL, Residential Land Use, Ceiling Level[3]	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000
Proposed Remedial Goal for Metals in Groundwater	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**

Others in Groundwater

RWQCB ESLs[1]	Chemical of Potential Concern (ug/l)				
	Cyanide	PCBs	TPH-G	TPH-D	TPH-MO
Tier 2 ESL, Residential Land Use, Ceiling Level[3]	1700	16	5000	2500	2500
Proposed Remedial Goal for Others in Groundwater	**1700**	**16**	**5000**	**2500**	**2500**

1 RWQCB ESLs taken from *Screening from Environmental Concerns At Sites With Contaminated Soil and Groundwater, Volumes 1 and 2, Interim Final - July 2003* issued by the California Regional Water Quality Control Board - San Francisco Bay Region

2 Table E-1a Groundwater Screening Levels For Evaluation Of Potential Indoor-Air Impacts, Residential Land Use, High Permeability Vadose Zone Soil Type

3 Table I-2 Groundwater Ceiling Levels

Table 4
Proposed Remedial Goals for Soil Gas

VOCs in Soil Gas

RWQCB ESLs[1]	Chemical of Potential Concern (ug/m^3)													
	TCE	**PCE**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
Tier 2 ESL, Residential Land Use, Indoor Air[2]	1200	410	84	83000	2200	21000	31	46000	150	1500	42000	120	7300	15000
Proposed Remedial Goal for VOCs in Soil Gas	**1200**	**410**	**84**	**83000**	**2200**	**21000**	**31**	**46000**	**150**	**1500**	**42000**	**120**	**7300**	**15000**

1 RWQCB ESLs taken from *Screening from Environmental Concerns At Sites With Contaminated Soil and Groundwater, Volumes 1 and 2, Interim Final - July 2003* issued by the California Regional Water Quality Control Board - San Francisco Bay Region

2 Table E-2 Shallow Soil Gas Soil Screening Levels For Evaluation Of Potential Indoor-Air Impacts, Residential Exposure

Table 5
Summary of Known Areas of Concern and Remedial Approach

Name of Area	Chemicals of Potential Concern	Primary Risk Drivers	Proposed Mitigation Methods
Former Ceramic Plating Shop Area	• Nickel above proposed remedial goal in soil in numerous locations at least 4 to 6 ft bgs; very limited data below 6 ft bgs • Nickel above proposed remedial goal in groundwater at CP-3 at least 6 ft bgs • Elevated concentrations of nickel in groundwater at numerous locations at least 6 to 15 ft bgs	• Direct Exposure (Soil) • Ceiling Value (GW)	• Estimated excavation dimensions of 84’ (W) x 105’ (L) x 12’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Excavation of soil in saturated zone containing soil or groundwater above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (RCRA), Class I (Cal Haz), or Class II landfill • Groundwater extraction and ex-situ treatment of groundwater in open excavation pit • Backfill
Former Chemical Kitchen Area	• TCE above proposed remedial goal in soil at GP-11 at least 7.5 ft bgs • Vinyl chloride above proposed remedial goal in soil at NGB-10 at least 3 ft bgs; numerous locations with detection limits above the proposed remedial goal • TCE above proposed remedial goal in groundwater at GP-11 at least 6 to 15 ft bgs • PCE above proposed remedial goal in groundwater at W-3 at least 6 to 15 ft bgs • Vinyl chloride above proposed remedial goal in groundwater at W-2, W-3, and CK-4 at least 6 to 15 ft bgs; numerous locations with detection limits above the proposed remedial goal • 1,1-DCA above proposed remedial goal in groundwater at CK-3 at least 8 ft bgs • TCE above proposed remedial goal in soil gas at SG-1, SG-2, and SG-3 at 2 ft bgs • Cis-1,2-DCE above proposed remedial goal in soil gas at SG-3 at 2 ft bgs	• Indoor Air (Soil and GW) • Direct Exposure (Soil)	• Estimated excavation dimensions of 163’ (W) x 83’ (L) x 12’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Excavation of soil in saturated zone containing soil or groundwater above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (Cal Haz) or Class II landfill • Groundwater extraction and ex-situ treatment of groundwater in open excavation pit • If necessary, open pit application of a hydrogen donor in a Class II permeable backfill along with subsequent post-backfill injections. • Backfill
SWMU 11 Area	• TCE above proposed remedial goal in soil at B-22 and B-25 at least 9 ft bgs • PCE, vinyl chloride, and 1,2-DCA in soil at detection limits above the proposed remedial goals at B-22 and B-25 • TCE above proposed remedial goal in groundwater at B-14 at least 6 to 15 ft bgs • Vinyl chloride above proposed remedial goal in groundwater at B-14, B-22, and B-25 at least 6 to 15 ft bgs	• Indoor Air (Soil and GW) • Direct Exposure (Soil)	• Estimated excavation dimensions of 95’ (W) x 67’ (L) x 12’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Excavation of soil in saturated zone containing soil or groundwater above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (Cal Haz) or Class II landfill • Groundwater extraction and ex-situ treatment of groundwater in open excavation pit • If necessary, open pit application of a hydrogen donor in a Class II permeable backfill along with subsequent post-backfill injections. • Backfill
Former TCA Tank and Drum Storage Area	• TCE above proposed remedial goal in soil at OS-2, CW-1, B-7, and API1-B1 at least 8.5 feet bgs • PCE above proposed remedial goal in soil at OS-2, CW-1, B-2, B-3, and API-B1 at least 8.5 feet bgs • 1,1-DCE above proposed remedial goal in soil at B-7 at least 4 ft bgs • PCE above proposed remedial goal in groundwater at GP-2 at least 6 to 15 ft bgs; numerous detections of TCE and numerous samples with detection limits above the proposed remedial goal for vinyl chloride • TCE above proposed remedial goal in sol gas at SG-4 and SG-5 at 2 ft bgs • PCE above proposed remedial goal in soil gas at SG-4 and SG-5 at 2 ft bgs • Vinyl chloride above proposed remedial goal in soil gas at SG-4 at 2 ft bgs • 1,1-DCA above proposed remedial goal in soil gas at SG-4 at 2 ft bgs • 1,1-DCE above proposed remedial goal in soil gas at SG-4 at 2 ft bgs	• Indoor Air (Soil and GW) • Direct Exposure (Soil)	• Estimated excavation dimensions of 70’ (W) x 43’ (L) x 12’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Excavation of soil in saturated zone containing soil or groundwater above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (Cal Haz) or Class II landfill • Groundwater extraction and ex-situ treatment of groundwater in open excavation pit • If necessary, open pit application of a hydrogen donor in a Class II permeable backfill along with subsequent post-backfill injections. • Backfill

Table 5
Summary of Known Areas of Concern and Remedial Approach

Name of Area	Chemicals of Potential Concern	Primary Risk Drivers	Proposed Mitigation Methods
Former Gasoline UST Excavation Area	• Benzene above proposed remedial goal in soil at B-1, B-17, and B-20 at least 11.5 ft bgs; ethylbenzene and xylenes also above proposed remedial goals in soil at B-1 • Benzene above proposed remedial goal in groundwater at B-1 and B-17 at least 6 to 15 ft bgs; toluene, ethylbenzen, and xylenes also above proposed remedial goals in groundwater at B-1 and B-17 • TPH-gasoline above proposed remedial goal in soil	• Indoor Air (Soil and GW) • Direct Exposure (Soil)	• Estimated excavation dimensions of 54’ (W) x 60’ (L) x 12’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Excavation of soil in saturated zone containing soil or groundwater above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (Cal Haz) or Class II landfill • Groundwater extraction and ex-situ treatment of groundwater in open excavation pit • If necessary, open pit application of an oxidant in a Class II permeable backfill along with subsequent post-backfill injections. • Backfill
Electrical Transformer Area	• PCBs above proposed remedial goal in soil at B-5 at least 0.5 ft bgs • TPH-diesel and TPH-motor oil above proposed goal in soil at B-5 at least 0.5 ft bgs	• Direct Exposure (Soil)	• Estimated excavation dimensions of 17’ (W) x 23’ (L) x 6’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (Cal Haz) or Class II landfill • Backfill
Hazardous Waste Storage Area (Shed B)	• TCE above proposed remedial goal in soil at SWMU23-B4 at least 3.5 ft bgs • Chromium above proposed remedial goal in soil at B-5 at least 4 ft bgs	• Indoor Air (Soil) • Direct Exposure (Soil)	• Estimated excavation dimensions of 25’ (W) x 32’ (L) x 6’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (Cal Haz) or Class II landfill • Backfill
Hazardous Waste Storage Area (Shed C)	• TCE above proposed remedial goal in soil at C-1 and C-3 at least 6 ft bgs • PCE above proposed remedial goal in soil at SWMU23-B6, C-1, and C-3 at least 6 ft bgs	• Indoor Air (Soil) • Direct Exposure (Soil)	• Estimated excavation dimensions of 37’ (W) x 43’ (L) x 6’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (Cal Haz) or Class II landfill • Backfill
Former Evaporation Ponds Area	• Chromium above proposed remedial goal in soil at NGB-5 and NGB-6 at least 3.5 ft bgs • Nickel above proposed remedial goal in soil at NGB-5 and NGB-6 at least 3.5 ft bgs	• Direct Exposure (Soil)	• Estimated excavation dimensions of 50’ (W) x 80’ (L) x 4’ (D) • Excavation of soil in unsaturated zone above proposed remedial goals • Off-site disposal of soil as necessary at a Class I (Cal Haz) or Class II landfill

Table 6
Sampling Plan
301 Industrial Way, San Carlos, California

Sample Type	Frequency	Comments
Pre-excavation Soil	step-out samples 10 to 25 feet beyond known affected areas	samples will be collected at approximately 3-, 6-, and 9-foot intervals
Excavation Floors Soil	1 sample every 900 to 2,500 sq feet	
Excavation Sidewalls Soil	1 sample every 25 to 50 linear feet	samples will be collected approximately every 3 feet vertically
Water in Excavations	1 sample of water entering excavation per excavation area	sampling frequency may be adjusted based on seepage rate into excavation area.
	1 sample/10,000 gal for treatment/ disposal purposes	sampling frequency may be adjusted based on offsite disposal facility requirements.
Post Excavation VOC Soil Gas Sampling	samples every 10 to 20 feet along excavation sidewalls	Field screening using PID or FID at approximately 2- and 5-foot depth intervals.
Stockpiled Soil	1 sample/750 to 1500 cubic yards	sampling frequency will be based on offsite disposal facility criteria, as required.

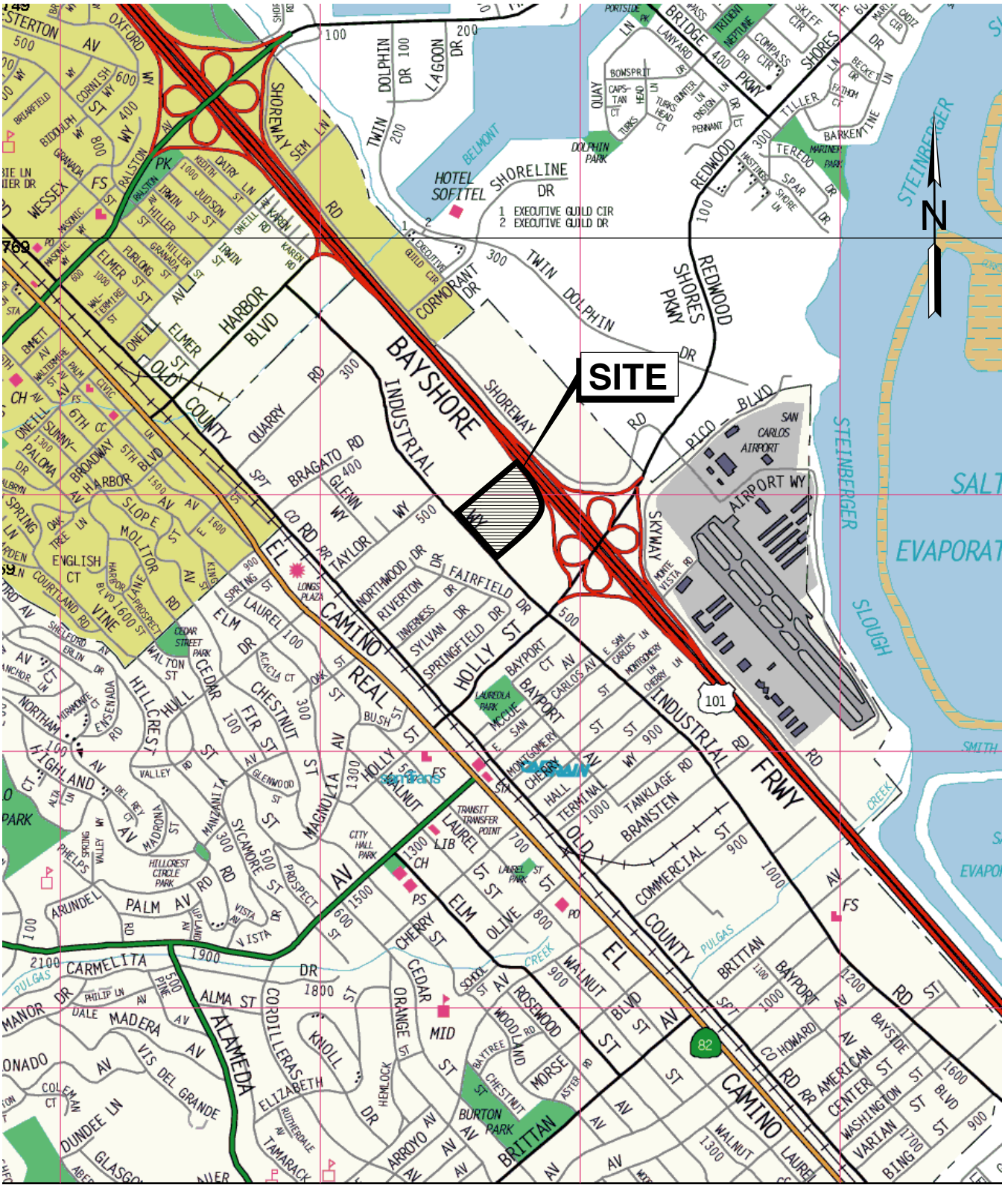
Notes:

(a) Chemical analyses may include VOCs, TPH (gas, diesel, and motor oil), metals, PCBs, and cyanide. Specific analyses will be selected based on the identified chemicals of concern for each excavation area. Sampling and analytical methods used for samples collected for laboratory analysis will have sufficient sensitivity to confirm whether or not remedial goals have been met.

(b) Sampling frequency will be based on the size and heterogeneity of excavation areas

(c) Soil samples may be screened for VOCs in field using PID or FID

FIGURES



Base map: The Thomas Guide, San Mateo County, 1999

0 1/4 1/2 Mile

Approximate scale

Figure 1
Site Location

301 Industrial Road
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc

BAYSHORE HIGHWAY (US 101)

XW-1

CW-3

CW-2

TRUCK LOADING RAMP

CW-1

Former Drum Storage Area (SWMU 16)

Former TCA Tank Area

BUILDING 2

SWMU11

Former Temporary Industrial Waste Treatment Facilities

W-2

Former Chemical Kitchen (AOC 14)

Transformer

BUILDING 3

W-3

Approximate Vicinity of Former Evaporation Ponds

MW-7A (Note: Well not observed in field)

Hazardous Waste Storage Shed A

W-1

W-4

Existing Wastewater Facility

Hazardous Waste Storage Shed B

Transformer Oil Tanks

Former Ceramics Plating Shop (AOC 16)

BUILDING 1

Hazardous Waste Storage Shed C

BUILDING 5

MW-7B

XW-2

MW-6

MW-2

MW-9

MW-7

MW-6A

MW-10

MW-8

Guard Shack

Electric Gate

MW-4

MW-3

MW-5

MW-11

Former Gasoline UST Excavation

INDUSTRIAL ROAD

EXPLANATION

CW-1 Existing monitoring well

0’ 50’ 100’

SCALE 1” : 50’

Figure 2
SITE PLAN

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc.

BAYSHORE HIGHWAY (US 101)

INDUSTRIAL ROAD

FORMER TCA TANK AREA

0 5 Feet
Scale

FORMER TCA TANK AND DRUM STORAGE AREA
(see figure 7)

Former Drum Storage Area (SWMU 16)

Former TCA Tank Area

APPROXIMATE VICINITY OF FORMER EVAPORATION PONDS (see figure 11)

FORMER CHEMICAL KITCHEN AREA
(see figure 5)

Former Chemical Kitchen (AOC 14)

SWMU11 AREA
(see figure 6)

SWMU11

FORMER CHEMICAL KITCHEN (AOC 14)

0 10 Feet
Scale

TRANSFORMER AREA
(see figure 9)

BUILDING 3

Transformer

BUILDING 2

Hazardous Waste Storage Shed A

Former Temporary Industrial Waste Treatment Facilities

Hazardous Waste Storage Shed B

Transformer Oil Tanks

Hazardous Waste Storage Shed C

Wastewater Facility

BUILDING 5

BUILDING 1

FORMER CERAMICS PLATING SHOP AREA
(see figure 4)

Former Ceramics Plating Shop (AOC 16)

FORMER CERAMICS PLATING SHOP (AOC 16)

0 10 Feet
Scale

FORMER GASOLINE UST EXCAVATION AREA
(see figure 8)

Guard Shack

Electric Gate

Former Gasoline UST Excavation

HAZARDOUS WASTE STORAGE AREAS
(see figure 10)

EXPLANATION

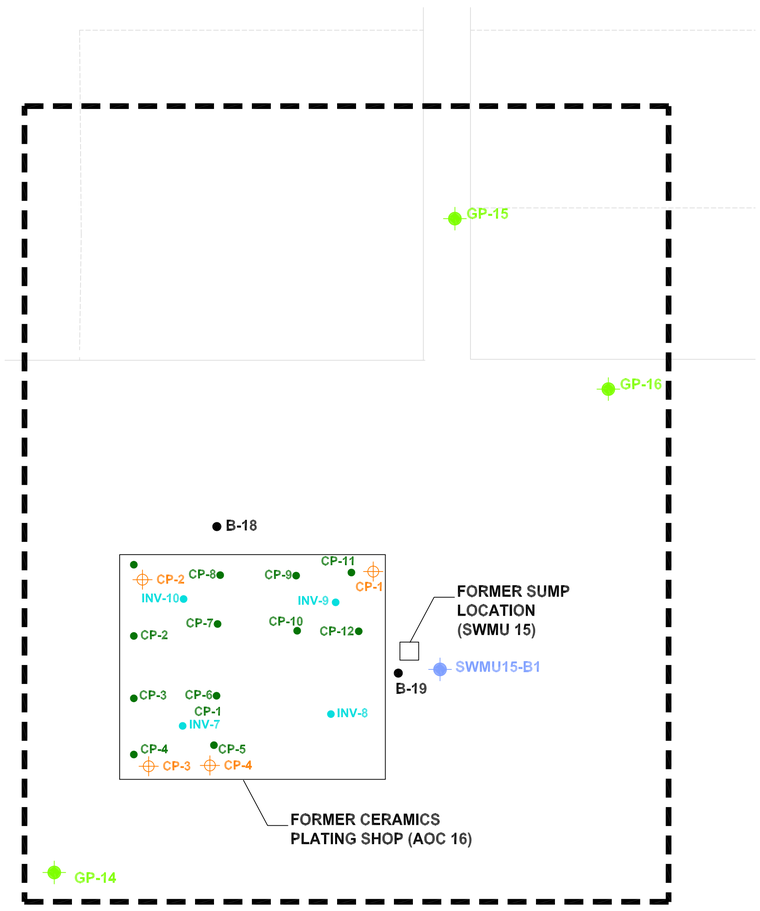
- CW-1 Existing monitoring well
- MW-7A Monitoring well not located
- Storm drain system
- Sewer LIne
- Fence
- B-2 Treadwell & Rollo groundwater sampling location 2002/2003
- B-10 Treadwell & Rollo soil sampling location 2002/2003
- B-5 Treadwell & Rollo soil and groundwater sampling location 2002/2003
- SG-4 Treadwell & Rollo soil gas sampling location (2-feet deep) 2002/2003
- Northgate Environmental soil sampling location 2003
- Northgate Environmental soil and groundwater sampling location 2003
- Northgate Environmental groundwater sampling location 2003
- Kennedy Jenks soil sampling location 1985
- Metcalf & Eddy soil sampling location 1982
- Woodward Clyde groundwater sampling location 1994
- Peregren soil samples location 1992
- Peregren/Radian soil samples location 1992
- Montgomery Watson groundwater sampling location 1994 and 1995
- Montgomery Watson soil and groundwater sampling location 1994 and 1995
- PES groundwater sampling location 1994
- Canonie soil sample location 1993
- Aqua Science soil sample location 1997
- Excavation by Canonie
- Excavation by Kennedy Jenks
- Proposed Remediation Zone (dimensions approximate)

0’ 50’ 100’
SCALE 1” : 50’

Figure 3
PROPOSED REMEDIATION ZONES

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc.



Soil Sampling Results:

				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Proposed Remedial Goal for Metals in Soil				**6.3**	**19.1***	**1000**	**31**	**2.7***	**99.6***	**94**	**630**	**255**	**2.5**	**78**	**310**	**78**	**78**	**27.1***	**110**	**1000**
Sample I.D.	**Date**	**Depth**	**Reference**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
Former Ceramics Plating Shop Area																				
GP-14-3	4/12/2003	3	NG3 03	ND (2.6)	4.2	170	0.46	2.7	42	19	34	12	0.035	ND (0.85)	73	ND (0.21)	ND (0.21)	0.44	34	51
GP-14-7.5	4/12/2003	7.5	NG3 03	ND (2.7)	0.7	290	0.52	**2.8**	22	11	85	5.6	ND (0.020)	ND (0.91)	39	ND (0.23)	ND (0.23)	0.89	53	23
GP-15-4	4/12/2003	4	NG3 03	ND (2.6)	0.74	300	0.72	**3.4**	41	26	110	7.6	0.028	ND (0.87)	**760**	ND (0.22)	ND (0.22)	0.93	50	57
GP-15-6	4/12/2003	6	NG3 03	ND (2.6)	1.9	350	0.65	**3.7**	75	27	89	9.3	0.033	ND (0.87)	140	ND (0.22)	ND (0.22)	0.78	56	56
GP-16-4	4/12/2003	4	NG3 03	ND (2.3)	2.3	230	0.54	2.6	27	22	74	9.6	0.11	ND (0.78)	**1300**	ND (0.19)	ND (0.19)	0.35	35	45
GP-16-6.5	4/12/2003	6.5	NG3 03	ND (2.6)	ND (0.22)	270	0.74	**4.1**	50	15	160	7.4	ND (0.017)	ND (0.87)	93	ND (0.22)	ND (0.22)	ND (0.22)	72	93
B18-3.0	12/20/2002	3	T&R 03	NT	NT	NT	NT	**ND (5)**	56	NT	47	15	NT	NT	**640**	NT	ND (5)	NT	NT	57
B19-3.0	12/20/2002	3	T&R 03	NT	NT	NT	NT	**ND (5)**	54	NT	15	7.4	NT	NT	**3400**	NT	ND (5)	NT	NT	43
SWMU15-B1	3/9/1995	7.5-8.0	MW RFI	NR	NR	NR	NR	ND (0.3)	71	NR	42	NR	NR	NR	81	NR	ND (0.1)	NR	NR	NR
SWMU15-B1	3/9/1995	8.5-9.0	MW RFI	NR	NR	NR	NR	ND (0.3)	95	NR	33	NR	NR	NR	68	NR	ND (0.2)	NR	NR	NR
SWMU15-B1	3/9/1995	9.5-10	MW RFI	NR	NR	NR	NR	ND (0.3)	82	NR	32	NR	NR	NR	66	NR	ND (0.2)	NR	NR	NR
SWMU15-B1	3/9/1995	10.5-11	MW RFI	NR	NR	NR	NR	ND (0.4)	91	NR	27	NR	NR	NR	53	NR	ND (0.2)	NR	NR	NR
SWMU15-B1	3/9/1995	11.5.-12	MW RFI	NR	NR	NR	NR	ND (0.4)	85	NR	32	NR	NR	NR	110	NR	ND (0.2)	NR	NR	NR
SWMU15-B1	3/9/1995	12.5-13	MW RFI	NR	NR	NR	NR	ND (0.4)	87	NR	32	NR	NR	NR	79	NR	ND (0.2)	NR	NR	NR
SWMU15-SOIL	5/1/1995	1	MW CR 95	NR	NR	NR	NR	0.25	43	NR	12	NR	NR	NR	**4300**	NR	ND (0.5)	NR	NR	NR
SWMU15-SOIL	5/1/1995	5	MW CR 95	NR	NR	NR	NR	ND (0.25)	38	NR	15	NR	NR	NR	65	NR	ND (0.5)	NR	NR	NR
CP-1	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**3300**	NR	NR	NR	NR	NR
CP-1	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**2100**	NR	NR	NR	NR	NR
CP-1	9/10/1992	4	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	94	NR	NR	NR	NR	NR
CP-2	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**4900**	NR	NR	NR	NR	NR
CP-2	9/10/1992	2	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	34	NR	NR	NR	NR	NR
CP-2	9/10/1992	4	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**640**	NR	NR	NR	NR	NR
CP-3	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**4800**	NR	NR	NR	NR	NR
CP-3	9/10/1992	2	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	51	NR	NR	NR	NR	NR
CP-3	9/10/1992	4	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**3000**	NR	NR	NR	NR	NR
CP-4	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	27	NR	NR	NR	NR	NR
CP-4	9/10/1992	2	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	88	NR	NR	NR	NR	NR
CP-4	9/10/1992	4	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	53	NR	NR	NR	NR	NR
CP-5	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	24	NR	NR	NR	NR	NR
CP-5	9/10/1992	2	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**4100**	NR	NR	NR	NR	NR
CP-5	9/10/1992	4	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	130	NR	NR	NR	NR	NR
CP-5	9/10/1992	6	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	72	NR	NR	NR	NR	NR
CP-6	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	49	NR	NR	NR	NR	NR
CP-6	9/10/1992	2	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**3800**	NR	NR	NR	NR	NR
CP-6	9/10/1992	4	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**8600**	NR	NR	NR	NR	NR
CP-7	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**5000**	NR	NR	NR	NR	NR
CP-7	9/10/1992	2	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**13000**	NR	NR	NR	NR	NR
CP-7	9/10/1992	4	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	200	NR	NR	NR	NR	NR
CP-8	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**960**	NR	NR	NR	NR	NR
CP-8	9/10/1992	2	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**1600**	NR	NR	NR	NR	NR
CP-9	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	62	NR	NR	NR	NR	NR
CP-9	9/10/1992	2	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**1900**	NR	NR	NR	NR	NR
CP-9	9/10/1992	4	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**2300**	NR	NR	NR	NR	NR
CP-10	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**5200**	NR	NR	NR	NR	NR
CP-11	9/10/1992	0	MW RFI 95	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**3700**	NR	NR	NR	NR	NR
INV-7	8/1/1992	0	MW RFI 95	NR	6	102	NR	NR	76	14	25	NR	NR	NR	**1680**	NR	NR	NR	51	51
INV-8	8/1/1992	0	MW RFI 95	NR	4	132	NR	NR	56	13	16	NR	NR	NR	60	NR	NR	NR	52	38
INV-9	8/1/1992	0	MW RFI 95	NR	4	155	NR	NR	40	8	31	NR	NR	NR	**2050**	NR	2	NR	25	32
INV-10	8/1/1992	0	MW RFI 95	NR	4	99	NR	NR	64	13	30	NR	NR	NR	**5610**	NR	NR	NR	58	59

* proposed remedial goal is equivalent to Upper 95% Confidence Limit values for background soil concentrations, taken from Lawrence Berkeley National Laboratory Study, 1995

Groundwater Sampling Results:

				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Proposed Remedial Goal for Metals in Groundwater				**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**
Sample I.D.	**Date**	**Depth**	**Reference**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
Former Ceramics Plating Shop Area																				
GP-14	4/12/2003		NG3 03	ND (60)	6.7	90	ND (2)	ND (5)	ND (10)	90	ND (10)	10	ND (0.2)	ND (20)	41000	ND (5)	ND (5)	17	ND (10)	ND (20)
GP-15	4/12/2003		NG3 03	ND (60)	5.7	110	2	5.3	ND (10)	150	ND (10)	11	ND (0.2)	24	22000	ND (5)	ND (5)	26	ND (10)	32
GP-16	4/12/2003		NG3 03	ND (60)	25	79	ND (2)	51	ND (10)	46	ND (10)	24	0.25	ND (20)	1100	ND (5)	ND (5)	25	ND (10)	140
CP-2	2/2/1994	5.27	W-C 94	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	29100	NR	NR	NR	NR	NR
CP-2	2/4/1994	5.27	W-C 94	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	20100	NR	NR	NR	NR	NR
CP-3	2/2/1994	6.24	W-C 94	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**280000**	NR	NR	NR	NR	NR
CP-3	2/2/1994	6.24	W-C 94	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	**330000**	NR	NR	NR	NR	NR
CP-4	2/2/1994	7.71	W-C 94	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	21200	NR	NR	NR	NR	NR
CP-4	2/4/1994	7.71	W-C 94	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	17040	NR	NR	NR	NR	NR
CP-5	2/4/1994		W-C 94	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	24000	NR	NR	NR	NR	NR
SWMU15-B1	1995	8-13	MW RFI 95	NR	NR	NR	NR	ND (5)	ND (10)	NR	ND (10)	NR	NR	NR	2500	NR	ND (5)	NR	NR	NR

EXPLANATION

- Treadwell & Rollo soil sampling location 2002/2003
- Woodward Clyde groundwater sampling location 1994
- Peregren/ Radian soil sampling location 1992
- Peregren soil sampling location 1992
- Montgomery Watson soil and groundwater sampling location 1994 and 1995
- Northgate Environmental soil and groundwater sampling location 2003
- Proposed Remediation Zone (dimensions approximate)

ABBREVIATIONS

ND(x)= reported below detection limit
NR= not reported
NT= not tested/ analyzed
T&R 03= Treadwell & Rollo in 2003
NG3 03= Third Northgate investigation in 2003
MW RFI 95= Montgomery Watson RFI in 1995
MW CR 95= Montgomery Watson closure report in 1994
W-C 94= Woodward Clyde investigation in 1994

Notes:
1. All ground water results reported in micrograms per liter (µg/l);
2. All soil sample results reported in milligrams per kilogram (mg/kg).

0’ 10’ 20’
SCALE 1” : 10’

Figure 4
FORMER CERAMICS PLATING SHOP AREA

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc.

Soil Sampling Results:

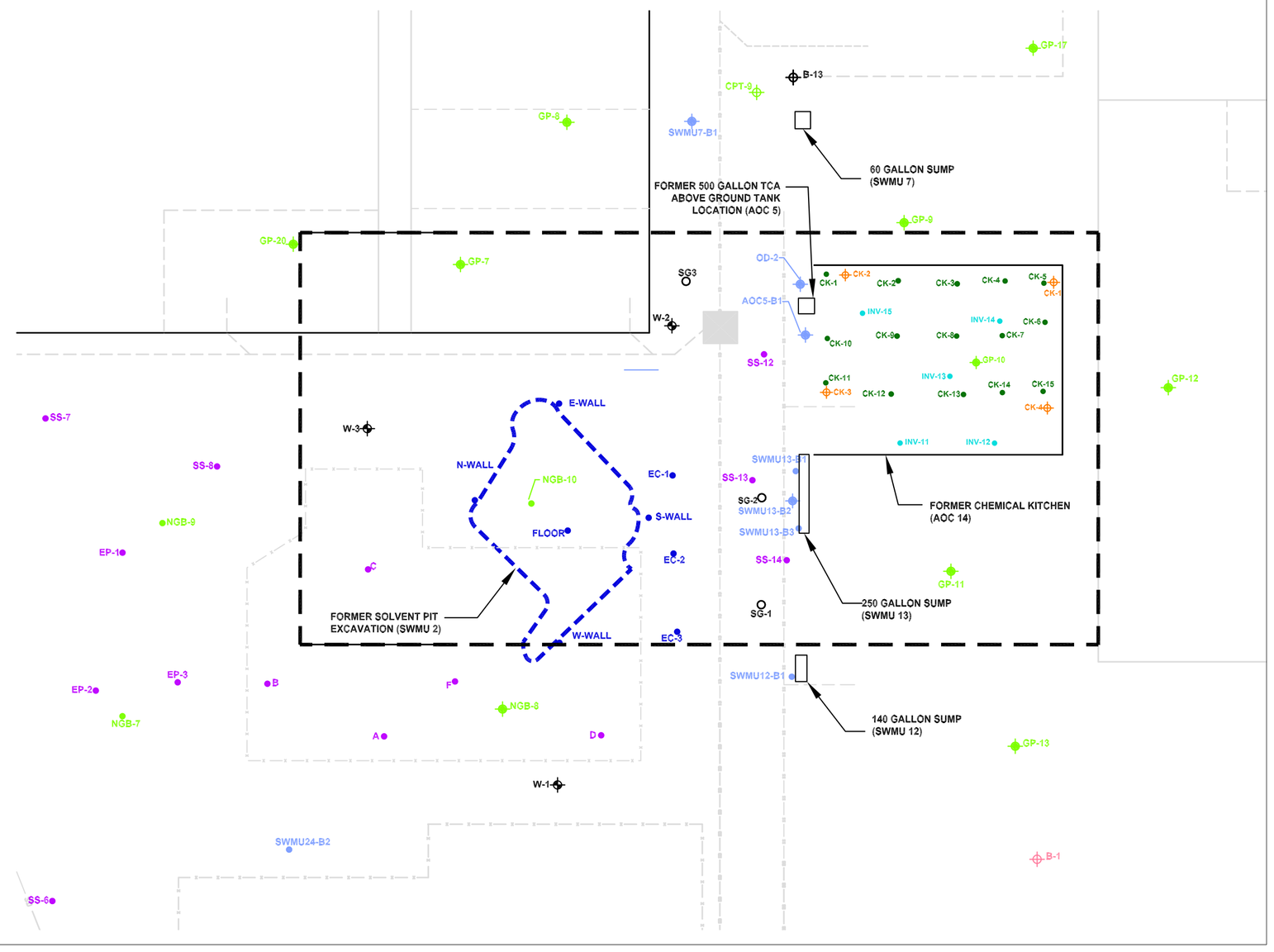
				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Soil				**0.26**	**0.088**	**0.0067**	**7.8**	**0.033**	**0.33**	**4.3**	**0.025**	**1.6**	**3.1**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
Chemical Kitchen/Corridor													
GP-7-2	4/14/2003	2	NG3 03	ND (0.005)	ND (0.005)	**ND (0.009)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-7-7.5	4/14/2003	7.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.011)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-8-2.5	4/14/2003	2.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.009)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-8-6	4/14/2003	6	NG3 03	ND (0.005)	ND (0.005)	**ND (0.011)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-9-3.5	4/13/2003	3.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-9-7	4/13/2003	7	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-10-3.5	4/12/2003	3.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-10-7.5	4/12/2003	7.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-11-3	4/12/2003	3	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-11-7.5	4/12/2003	7.5	NG3 03	**1**	ND (0.023)	**ND (0.045)**	ND (0.023)	ND (0.023)	ND (0.023)	ND (0.023)	ND (0.023)	0.081	ND (0.023)
GP-12-4	4/13/2003	4	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-12-7	4/13/2003	7	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.054	ND (0.005)
GP-17-4	4/13/2003	4	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-17-6.5	4/13/2003	6.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-19-3.5	4/12/2003	3.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-19-6	4/12/2003	6	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-20-2	4/14/2003	2	NG3 03	0.007	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-20-4	4/14/2003	4	NG3 03	ND (0.005)	ND (0.005)	**ND (0.009)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-20-7.5	4/14/2003	7.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.009)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.023	ND (0.005)
NGB-7-1.5, NGB-9-2	3/10/2003	1.5-2	NG2 03	ND (0.005)	0.024	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-7-3.5, NGB-9-3.5	3/10/2003	3.5	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-7-6, NGB-9-7.5	3/10/2003	6-7.5	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-8-7.5, NGB-10-7.5	3/10/2003	7.5	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-8-6.5	3/10/2003	6.5	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-10-3	3/10/2003	3	NG2 03	0.18	ND (0.005)	**0.026**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.1	0.041
OD-2 @ 30'	11/8/1995	30	MW AFI	ND (0.006)	ND (0.006)	**ND (0.007)**	ND (0.006)	ND (0.007)	NR	NR	NR	NR	NR
OD-2 @ 41'	11/8/1995	41	MW AFI	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	NR	NR	NR	NR	NR
AOC5-B1	1995	5	MW RFI	0.011	NR	NR	NR	NR	0.063	NR	NR	ND (0.066)	NR
AOC5-B1	1995	6	MW RFI	0.156	NR	NR	NR	NR	0.053	NR	NR	0.12	NR
AOC5-B1	1995	12.5	MW RFI	ND (0.010)	NR	NR	NR	NR	ND (0.010)	NR	NR	ND (0.010)	NR
IS-1-8.0'	11/4/1995	8	MW AFI	NT	NT	NR	NT	NR	NT	NT	NR	NT	NR

Groundwater Sampling Results:

				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Groundwater				**530**	**130**	**4**	**50000**	**350**	**1000**	**6300**	**200**	**6200**	**2600**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
Former Chemical Kitchen/Corridor Area													
GP-7	4/14/2003	6-12	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-8	4/14/2003	6-15	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-9	4/14/2003	6-15	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-10	4/13/2003	6-15	NG3 03	98	ND (25)	**ND (50)**	ND (25)	ND (25)	ND (25)	28	ND (25)	920	ND (25)
GP-11	4/13/2003	6-15	NG3 03	**660**	ND (20)	**ND (40)**	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	110	ND (20)
GP-12	4/13/2003	6-15	NG3 03	9.4	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-13	4/13/2003	6-15	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-19	4/13/2003	6-15	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-20	4/14/2003	6-15	NG3 03	9.7	38	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
NGB-8	3/10/2003	6-15	NG2 03	26	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-17	4/14/2003	6-15	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
CPT-9	2/12/2003	53	NG 03	ND ()	ND (5.0)	**ND (10)**	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
W-2	11/8/2002	6-15	T&R 03	330	ND (50)	**220**	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1200	NR
W-3	11/8/2002	6-15	T&R 03	26	**130**	**ND (5)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	NR
B13-GW	11/22/2002	6-15	T&R 03	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NR
OD-2-shallow	11/6/1995	24	MW AFI 96	18	ND (0.5)	1.7	ND (0.5)	ND (0.5)	1.9	4.1	ND (0.5)	3.4	ND (0.5)
OD-2-deep	11/8/1995	38.5-40.0	MW AFI 96	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
W-2	11/10/1995		MW AFI 96	9.2	ND (0.5)	**37**	ND (0.5)	ND (0.5)	ND (0.5)	1.1	ND (0.5)	130	2
W-3	11/14/1995		MW AFI 96	20	35	0.61	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	23	1.3
CK-1	2/2/1994	6.56	W-C 94	32	NR	ND	ND	NR	ND	ND	ND	34	NR
CK-1	2/4/1994	6.56	W-C 94	41	NR	ND	ND	NR	ND	ND	ND	34	NR
CK-2	2/2/1994	5.19	W-C 94	ND	NR	ND	ND	NR	47	ND	6	8	NR
CK-2	2/4/1994	5.19	W-C 94	ND	NR	ND	ND	NR	15	ND	ND	ND	NR
CK-3	2/2/1994	7.56	W-C 94	ND	NR	ND	22000	NR	**3700**	3600	ND	ND	NR
CK-3	2/4/1994	7.56	W-C 94	ND	NR	ND	28000	NR	**4000**	3100	ND	ND	NR
CK-5	2/4/1994		W-C 94	ND	NR	ND	26000	NR	**3900**	3200	ND	ND	NR
CK-4	2/2/1994	5.68	W-C 94	94	NR	**19**	ND	NR	11	ND	ND	120	NR
CK-4	2/4/1994	5.68	W-C 94	110	NR	**20**	ND	NR	11	ND	ND	130	NR

Soil Gas Sampling Results:

				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Soil Gas				**1200**	**410**	**31**	**46000**	**1500**	**42000**	**7300**	**15000**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1-DCA**	**1,1-DCE**	**cis-1,2-DCE**	**trans-1,2-DCE**
Former Chemical Kitchen/Corridor											
SG-1	12/19/2002	2	T&R 03	**2739**	88	ND	4583	1093	833	30	ND
SG-2	12/19/2002	2	T&R 03	**2255**	41	ND	125	259	95	476	ND
SG-3	12/19/2002	2	T&R 03	**17720**	149	**164**	115	34	5154	**9516**	ND



EXPLANATION

- CW-1 — Existing monitoring well
- MW-7A — Monitoring well not located
- Storm drain system
- Sewer LIne
- Fence
- B-2 — Treadwell & Rollo groundwater sampling location 2002/2003
- B-10 — Treadwell & Rollo soil sampling location 2002/2003
- B-5 — Treadwell & Rollo soil and groundwater sampling location 2002/2003
- SG-4 — Treadwell & Rollo soil gas sampling location (2-feet deep) 2002/2003
- Northgate Environmental soil sampling location 2003
- Northgate Environmental soil and groundwater sampling location 2003
- Kennedy Jenks soil sampling location 1985
- Metcalf & Eddy soil sampling location 1982
- Woodward Clyde groundwater sampling location 1994
- Peregren soil samples location 1992
- Peregren/Radian soil samples location 1992
- Montgomery Watson groundwater sampling location 1994 and 1995
- Montgomery Watson soil and groundwater sampling location 1994 and 1995
- PES groundwater sampling location 1994
- Excavation by Kennedy Jenks
- Proposed Remediation Zone (dimensions approximate)

ABBREVIATIONS

ND(x)= reported below detection limit
NR= not reported
NT= not tested/ analyzed
T&R 03= Treadwell & Rollo in 2003
NG2 03= Second Northgate investigation in 2003
NG3 03= Third Northgate investigation in 2003
MW RFI 95 = Montgomery Watson RFI in 1995
MW AFI 96 = Montgomery Watson Additional Field Investigation in 1996
Canonie 93 = Canonie investigation in 1993
W-C 94 = Woodward Clyde investigation in 1994
MW AFI = Montgomery Watson Additional Field Investigation in 1995
MW RFI = Montgomery Watson RCRA Facility Investigation in 1995

Notes:
1. All ground water results reported in micrograms per liter (µg/l);
2. All soil sample results reported in milligrams per kilogram (mg/kg).

0’ 20’ 40’
SCALE 1” : 20’

Figure 5
FORMER CHEMICAL KITCHEN AREA

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

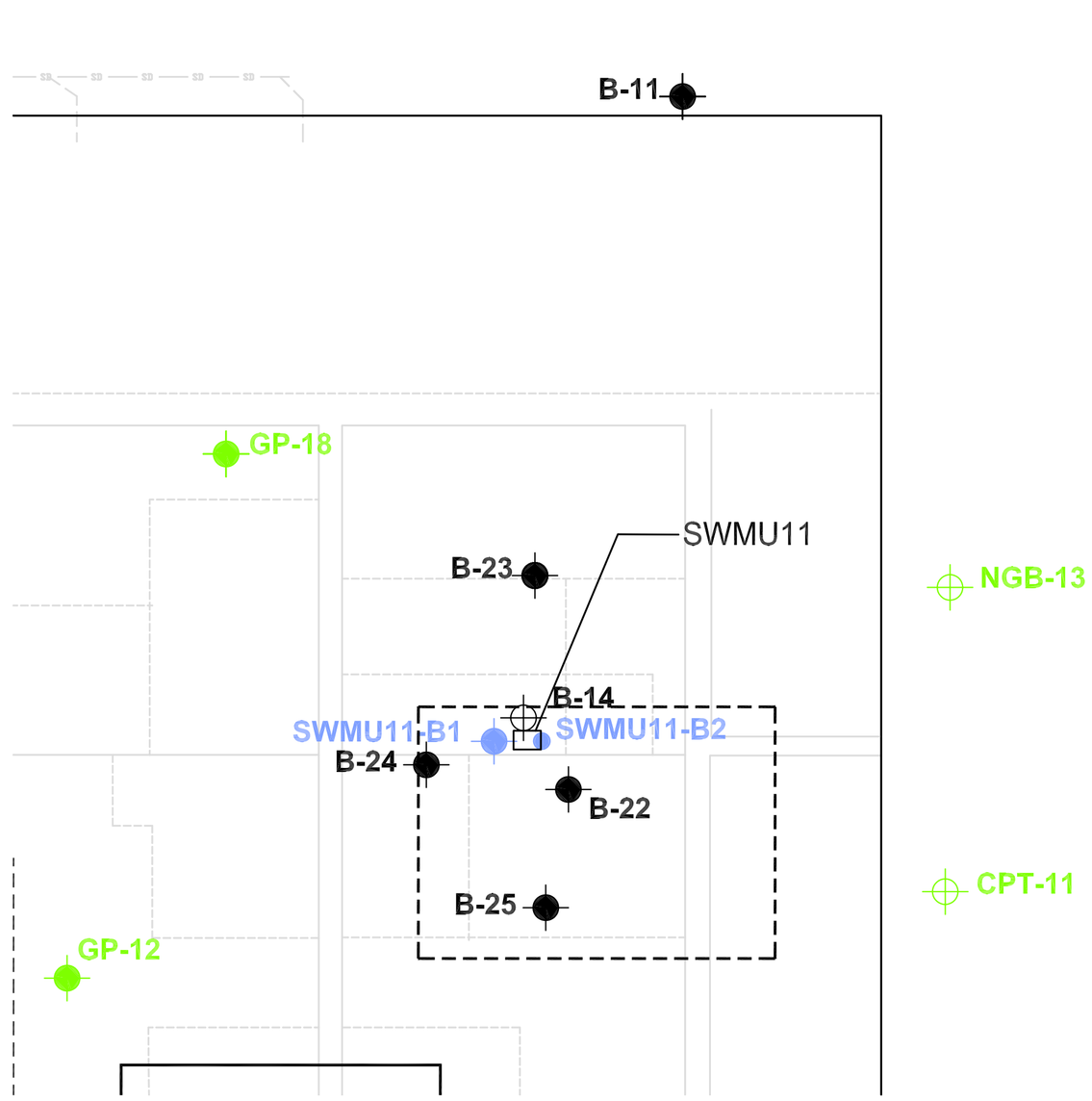
northgate environmental management, inc.

Soil Sampling Results:

				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Soil				**0.26**	**0.088**	**0.0067**	**7.8**	**0.033**	**0.33**	**4.3**	**0.025**	**1.6**	**3.1**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
SWMU 11													
GP-18-4	4/12/2003	4	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-18-7.5	4/12/2003	7.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B11-2.0	11/21/2002	2	T&R 03	ND (0.005)	ND (0.005)	ND (0.005)	NR	NR	NR	NR	ND (0.005)	ND (0.005)	NR
B22-6.0	4/12/2003	6	T&R 03	0.21	ND (0.025)	**<0.025**	NR	NR	NR	NR	**ND (0.025)**	ND (0.025)	NR
B22-7.5	4/12/2003	7.5	T&R 03	**2.8**	**<0.25**	**<0.25**	NR	NR	NR	NR	**ND (0.25)**	ND (0.25)	NR
B22-9.0	4/12/2003	9	T&R 03	**0.97**	ND (0.025)	**<0.025**	NR	NR	NR	NR	**ND (0.025)**	0.37	NR
B23-7.5	4/12/2003	7.5	T&R 03	ND (0.005)	ND (0.005)	ND (0.005)	NR	NR	NR	NR	ND (0.005)	ND (0.005)	NR
B23-9.5	4/12/2003	9.5	T&R 03	ND (0.005)	ND (0.005)	ND (0.005)	NR	NR	NR	NR	ND (0.005)	ND (0.005)	NR
B24-7.5	4/12/2003	7.5	T&R 03	ND (0.005)	ND (0.005)	ND (0.005)	NR	NR	NR	NR	ND (0.005)	ND (0.005)	NR
B24-9.0	4/12/2003	9	T&R 03	ND (0.005)	ND (0.005)	ND (0.005)	NR	NR	NR	NR	ND (0.005)	ND (0.005)	NR
B25-7.5	4/12/2003	7.5	T&R 03	ND (0.025)	ND (0.025)	**<0.025**	NR	NR	NR	NR	**ND (0.025)**	0.16	NR
B25-8.5	4/12/2003	8.5	T&R 03	**0.36**	ND (0.025)	**<0.025**	NR	NR	NR	NR	**<25**	0.52	NR

Groundwater Sampling Results:

				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Groundwater				**530**	**130**	**4**	**50000**	**350**	**1000**	**6300**	**200**	**6200**	**2600**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
SWMU 11													
GP-18	4/12/2003	6-12	NG3 03	5.5	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
NGB-13	3/11/2003	6-15	NG2 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
CPT-11	2/12/2003	51	NG1 03	ND ()	ND (5.0)	**ND (10)**	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
B11-GW	11/22/2002	6-15	T&R 03	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NR
B14-GW	12/19/2002	6-15	T&R 03	**1000**	ND (25)	**670**	ND (25)	ND (25)	ND (25)	ND (25)	ND (25)	2500	NR
B22-GW	4/13/2003	6-15	T&R 03	350	ND (10)	**26**	ND (10)	ND (10)	ND (10)	ND (5)	ND (10)	750	16
B23-GW	4/13/2003	6-15	T&R 03	2	ND (0.5)	ND (0.5)	ND (1)	ND (1)	ND (1)	ND (0.5)	ND (0.5)	1.8	ND (1)
B24-GW	4/13/2003	6-15	T&R 03	ND (1)	ND (0.5)	ND (0.5)	ND (1)	ND (1)	ND (1)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
B25-GW	4/13/2003	6-15	T&R 03	31	ND (0.5)	**33**	ND (1)	ND (1)	ND (1)	0.54	ND (0.5)	66	ND (1)
SWMU11-B1	1995	9-16	MW RFI 95	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT



EXPLANATION

- Treadwell & Rollo groundwater sampling location 2002/2003
- Treadwell & Rollo soil sampling location 2002/2003
- Treadwell & Rollo soil and groundwater sampling location 2002/2003
- Northgate Environmental soil and groundwater sampling location 2003
- Northgate Environmental groundwater sampling location 2003 1994 and 1995
- Montgomery Watson groundwater sampling location 1994 and 1995
- Proposed Remediation Zone (dimensions approximate)

ABBREVIATIONS

ND(x)= reported below detection limit
NR= not reported
NT= not tested/ analyzed
T&R 03= Treadwell & Rollo in 2003
NG1 03= First Northgate investigation in 2003
NG2 03= Second Northgate investigation in 2003
NG3 03= Third Northgate investigation in 2003
MW RFI 95= Montgomery Watson RFI in 1995

Notes:
1. All ground water results reported in micrograms per liter (µg/l);
2. All soil sample results reported in milligrams per kilogram (mg/kg);
3. SWMU11-B1 was only tested for metals; all metals were reported below detection limits.

0' 30' 60'
SCALE 1" : 30'

Figure 6
SWMU 11 AREA

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

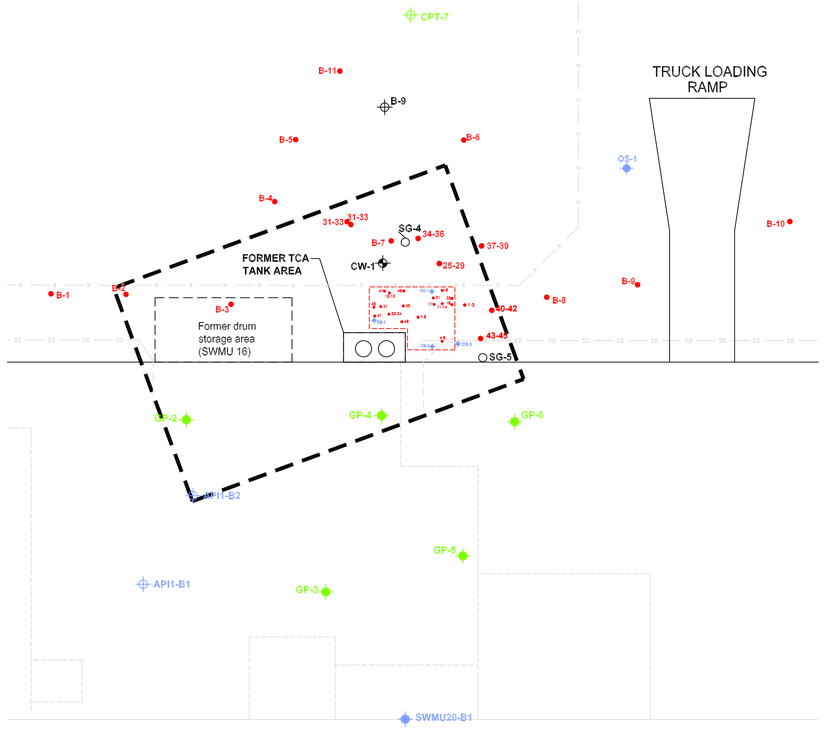
northgate environmental management, inc.

Groundwater Sampling Results:

				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Groundwater				530	130	4	50000	350	1000	6300	200	6200	2600
Sample I.D.	Date	Depth	Reference	TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Former TCA Tank and Drum Storage Area													
GP-1	4/11/2003	6-15	NG3 03	17	5.6	**ND (10)**	8.7	ND (5)	7.4	ND (5)	ND (5)	ND (5)	ND (5)
GP-2	4/13/2003	6-15	NG3 03	380	**470**	**ND (10)**	130	ND (5)	32	59	ND (5)	6.2	ND (5)
GP-3	4/13/2003	6-15	NG3 03	30	ND (5)	**ND (10)**	180	ND (5)	5.9	40	ND (5)	ND (5)	ND (5)
GP-4	4/14/2003	6-15	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-5	4/14/2003	6-15	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
GP-6	4/14/2003	6-15	NG3 03	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
CPT-7	2/11/2003	42	NG 03	ND ()	ND (5.0)	**ND (10)**	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
CW-1	11/8/2002	6-15	T&R 03	470	ND (50)	**ND (50)**	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NR
CW-2	11/8/2002	6-15	T&R 03	ND (5)	ND (5)	**ND (5)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	NR
CW-3	11/8/2002	6-15	T&R 03	ND (50)	ND (50)	**ND (50)**	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NR
B9-GW	11/22/2002	6-15	T&R 03	250	1.9	ND (0.5)	15	1.2	69	62	2.2	44	NR
CW-1	11/16/1992		Canonie 93	150	21	ND (2.5)	17	ND (1.3)	25	18	3	15	ND (1.3)
OD-1-shallow	11/6/1995	24	MW AFI 96	9.5	ND (0.5)	ND (0.5)	1.6	ND (0.5)	0.81	2.5	ND (0.5)	ND (0.5)	ND (0.5)
DUP#1	11/6/1995	24	MW AFI 96	11	ND (0.5)	ND (0.5)	1.9	ND (0.5)	0.91	2.9	ND (0.5)	ND (0.5)	ND (0.5)
OD-1-deep	11/8/1995	37-38	MW AFI 96	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
DUP-2	11/8/1995	37-38	MW AFI 96	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
SWMU20-B1	1995	8.5-18.5	MW RFI 95	28	NR	NR	0.9	NR	4	NR	NR	100	NR
API1-B1	1995	8-16	MW RFI 95	3	0.9	NR	4	NR	1	9	NR	1	NR
API1-B2	1995	8-13	MW RFI 95	130	110	NR	58	NR	20	34	NR	6	NR

Soil Gas Sampling Results:

				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE
Prposed Remedial Goal for VOCs in Soil Gas				1200	410	31	46000	1500	42000	7300	15000
Sample I.D.	Date	Depth	Reference	TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE
Former TCA Tank Area											
SG-4	12/19/2002	2	T&R 03	**182572**	**8817**	**148**	12550	**18214**	**63438**	3965	753
SG-5	12/19/2002	2	T&R 03	**7518**	**678**	ND	453	360	872	115	ND
SG-5 Duplicate	12/19/2002	2	T&R 03	**7518**	**678**	ND	453	352	872	111	ND



Soil Sampling Results:

				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Soil				0.26	0.088	0.0067	7.8	0.033	0.33	4.3	0.025	1.6	3.1
Sample I.D.	Date	Depth	Reference	TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Former TCA Tank and Drum Storage Area													
GP-1-4	4/11/2003	4	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-1-7	4/11/2003	7	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-2-4	4/13/2003	4	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-2-7	4/13/2003	7	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-3-3.5	4/13/2003	3.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-3-7.5	4/13/2003	7.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-4-4	4/11/2003	4	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-4-7.5	4/11/2003	7.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-5-3	4/14/2003	3	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-5-6.5	4/14/2003	6.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.009)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-6-4	4/14/2003	4	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
GP-6-7.5	4/14/2003	7.5	NG3 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
OS-1 @ 1'	11/3/1995	1	MW AFI	ND (0.006)	0.014	**ND (0.011)**	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
OS-1 @ 4'	11/3/1995	4	MW AFI	ND (0.006)	ND (0.006)	**ND (0.011)**	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
OS -2 @ 5'	11/3/1995	5	MW AFI	**4.1**	**0.14**	**ND (0.011)**	0.027	ND (0.006)	ND (0.006)	0.007	ND (0.006)	0.086	ND (0.006)
OS -2 @ 11'	11/3/1995	11	MW AFI	ND (0.009)	ND (.009)	**ND (0.019)**	ND (0.009)	ND (0.009)	ND (0.009)	ND (0.009)	ND (0.009)	ND (0.009)	ND (0.009)
OS-3 @ 5'	11/3/1995	5	MW AFI	0.18	0.054	**ND (0.011)**	0.034	ND (0.006)	ND (0.005)	0.013	ND (0.006)	ND (0.005)	ND (0.006)
OS-3 @ 9'	11/3/1995	9	MW AFI	0.009	ND (0.009)	**ND (0.018)**	ND (0.009)	ND (0.009)	0.042	ND (0.009)	ND (0.009)	0.36	ND (0.009)
OD-1 @ 5'	11/6/1995	5	MW AFI	0.11	ND (0.006)	ND (0.006)	0.01	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
OD-1 @ 30'	11/8/1995	30	MW AFI	ND (0.007)	ND (0.007)	**ND (0.007)**	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)
OD-1 @ 39'	11/8/1995	39	MW AFI	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
CW-1	1992	0.5-1.0	Canonie 93	**4.2**	ND	NR	ND	NR	ND	ND	NR	ND	NR
CW-1	1992	2.0-2.5	Canonie 93	**3.7**	ND	NR	0.13	NR	ND	ND	NR	ND	NR
CW-1	1992	4.0-4.5	Canonie 93	**1.4**	**0.18**	NR	0.36	NR	ND	ND	NR	ND	NR
CW-1	1992	8.0-8.5	Canonie 93	**2.9**	**0.57**	NR	0.14	NR	ND	ND	NR	ND	NR
CW-2	1992	0.5-1.0	Canonie 93	ND	ND	NR	ND	NR	ND	ND	NR	ND	NR
CW-2	1992	2.0-2.5	Canonie 93	ND	ND	NR	ND	NR	ND	ND	NR	ND	NR
CW-2	1992	4.0-4.5	Canonie 93	ND	ND	NR	ND	NR	ND	ND	NR	ND	NR
CW-3	1992	0.5-1.0	Canonie 93	ND	ND	NR	ND	NR	ND	ND	NR	ND	NR
CW-3	1992	2.0-2.5	Canonie 93	ND	ND	NR	ND	NR	ND	ND	NR	ND	NR
CW-3	1992	4.0-4.5	Canonie 93	ND	ND	NR	ND	NR	ND	ND	NR	ND	NR
CW-4	11/10/1992	5.0-5.5	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-1	11/10/1992	0.5-1.0	Canonie 93	0.0071	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-1	11/10/1992	2.0-2.5	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-1	11/10/1992	3.5-4.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-2	11/10/1992	0.5-1.0	Canonie 93	ND (0.1)	**0.99**	**ND (0.2)**	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)
B-2	11/10/1992	1.5-2.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-2	11/10/1992	3.5-4.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-3	11/10/1992	0.5-1.0	Canonie 93	0.12	**0.091**	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.026	ND (0.005)
B-3	11/10/1992	2.0-2.5	Canonie 93	0.066	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.052	ND (0.005)
B-3	11/10/1992	4.0-4.5	Canonie 93	0.014	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.011	ND (0.005)
B-4	11/10/1992	0.5-1.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-4	11/10/1992	1.5-2.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-4	11/10/1992	3.5-4.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	0.0082	ND (0.005)
B-5	11/10/1992	0.5-1.0	Canonie 93	0.0088	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-5	11/10/1992	1.5-2.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-5	11/10/1992	4.0-4.5	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-6	11/10/1992	0.5-1.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	0.079	ND (0.005)	ND (0.005)	0.044	ND (0.005)	ND (0.005)	ND (0.005)
B-6	11/10/1992	2.0-2.5	Canonie 93	0.021	ND (0.005)	**ND (0.01)**	0.081	ND (0.005)	0.039	ND (0.005)	ND (0.005)	0.0057	ND (0.005)
B-6	11/10/1992	3.5-4.0	Canonie 93	0.0066	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	0.006	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-7	11/10/1992	0.5-1.0	Canonie 93	0.23	ND	NR	ND	NR	ND	ND	NR	ND	
B-7	11/10/1992	2.0-2.5	Canonie 93	**2**	ND (0.025)	**ND (0.05)**	0.49	ND (0.025)	0.055	0.34	**ND (0.025)**	ND (0.025)	ND (0.025)
B-7	11/10/1992	3.5-4.0	Canonie 93	**2.1**	ND (0.05)	**ND (0.1)**	0.25	**ND (0.05)**	ND (0.05)	0.18	**ND (0.05)**	ND (0.05)	ND (0.05)
B-8	11/10/1992	0.5-1.0	Canonie 93	0.077	ND (0.02)	**ND (0.04)**	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	0.023	ND (0.02)
B-8	11/10/1992	2.5-3.0	Canonie 93	0.12	ND (0.005)	**ND (0.01)**	0.034	ND (0.005)	0.01	ND (0.005)	ND (0.005)	0.01	ND (0.005)
B-8	11/10/1992	4.0-4.5	Canonie 93	0.16	ND (0.005)	**ND (0.01)**	0.032	ND (0.005)	0.0085	0.008	ND (0.005)	0.011	ND (0.005)
B-9	11/10/1992	0.5-1.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-9	11/10/1992	2.5-3.0	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-9	11/10/1992	4.0-4.5	Canonie 93	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-10	11/10/1992	0.5-1.0	Canonie 93	ND (0.005)	ND (0.005)	NT	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-10	11/10/1992	2.5-3.0	Canonie 93	ND (0.005)	ND (0.005)	NT	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-10	11/10/1992	3.5-4.0	Canonie 93	ND (0.005)	ND (0.005)	NT	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-11	11/10/1992	2.0-2.5	Canonie 93	ND (0.005)	ND (0.005)	NT	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-11	11/10/1992	4.0-4.5	Canonie 93	ND (0.005)	ND (0.005)	NT	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
API1-B1	1995	6	MW RFI 95	0.035	0.017	NR	NR	NR	NR	0.03	NR	ND (0.006)	NR
API1-B1	1995	6.5	MW RFI 95	**0.27**	**0.46**	NR	NR	NR	NR	0.088	NR	0.019	NR
API1-B1	1995	8	MW RFI 95	0.017	0.007	NR	NR	NR	NR	ND (0.006)	NR	ND (0.006)	NR
API1-B1	1995	15	MW RFI 95	ND (0.010)	ND (0.010)	NR	NR	NR	NR	ND (0.010)	NR	ND (0.010)	NR
API1-B2	1995	5.5	MW RFI 95	0.22	0.042	NR	NR	NR	NR	0.046	NR	NR	NR
API1-B2	1995	6.5	MW RFI 95	0.006	ND (0.006)	NR	NR	NR	NR	ND (0.006)	NR	NR	NR
API1-B2	1995	9.5	MW RFI 95	ND (0.009)	ND (0.009)	NR	NR	NR	NR	ND (0.009)	NR	NR	NR
SWMU20-B1	1995	6	MW RFI 95	ND (0.006)	NR	NR	NR	NR	NR	NR	NR	ND (0.006)	NR
SWMU20-B1	1995	6.5	MW RFI 95	ND (0.006)	NR	NR	NR	NR	NR	NR	NR	ND (0.006)	NR
SWMU20-B1	1995	6.5	MW RFI 95	0.14	NR	NR	NR	NR	NR	NR	NR	0.065	NR
SWMU20-B1	1995	8.5	MW RFI 95	0.048	NR	NR	NR	NR	NR	NR	NR	0.062	NR

EXPLANATION

- CW-1 — Existing monitoring well
- Storm drain system
- Sewer LIne
- Fence
- B-2 — Treadwell & Rollo groundwater sampling location 2002/2003
- SG-4 — Treadwell & Rollo soil gas sampling location (2-feet deep) 2002/2003
- Northgate Environmental soil and groundwater sampling location 2003
- Northgate Environmental groundwater sampling location 2003 1994 and 1995
- Montgomery Watson soil and groundwater sampling location 1994 and 1995
- Canonie soil sample location 1993
- Excavation by Canonie
- Proposed Remediation Zone (dimensions approximate)

ABBREVIATIONS

ND(x)= reported below detection limit
NR= not reported
NT= not tested/ analyzed
T&R 03= Treadwell & Rollo in 2003
NG1 03= First Northgate investigation in 2003
NG2 03= Second Northgate investigation in 2003
NG3 03= Third Northgate investigation in 2003
MW RFI 95= Montgomery Watson RFI in 1995
MW AFI 96= Montgomery Watson RFI in 1996
MW AFI = Montgomery Watson Additional Field Investigation in 1995
Canonie 93 = Canonie investigation in 1993

Notes:
1. All ground water results reported in micrograms per liter (µg/l);
2. All soil sample results reported in milligrams per kilogram (mg/kg).
3. All soil gas results reported in micrograms per cubic meter (µg/m3).

0’ 15’ 30’
SCALE 1” : 15’

Figure 7
FORMER TCA TANK AND DRUM STORAGE AREA

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc.

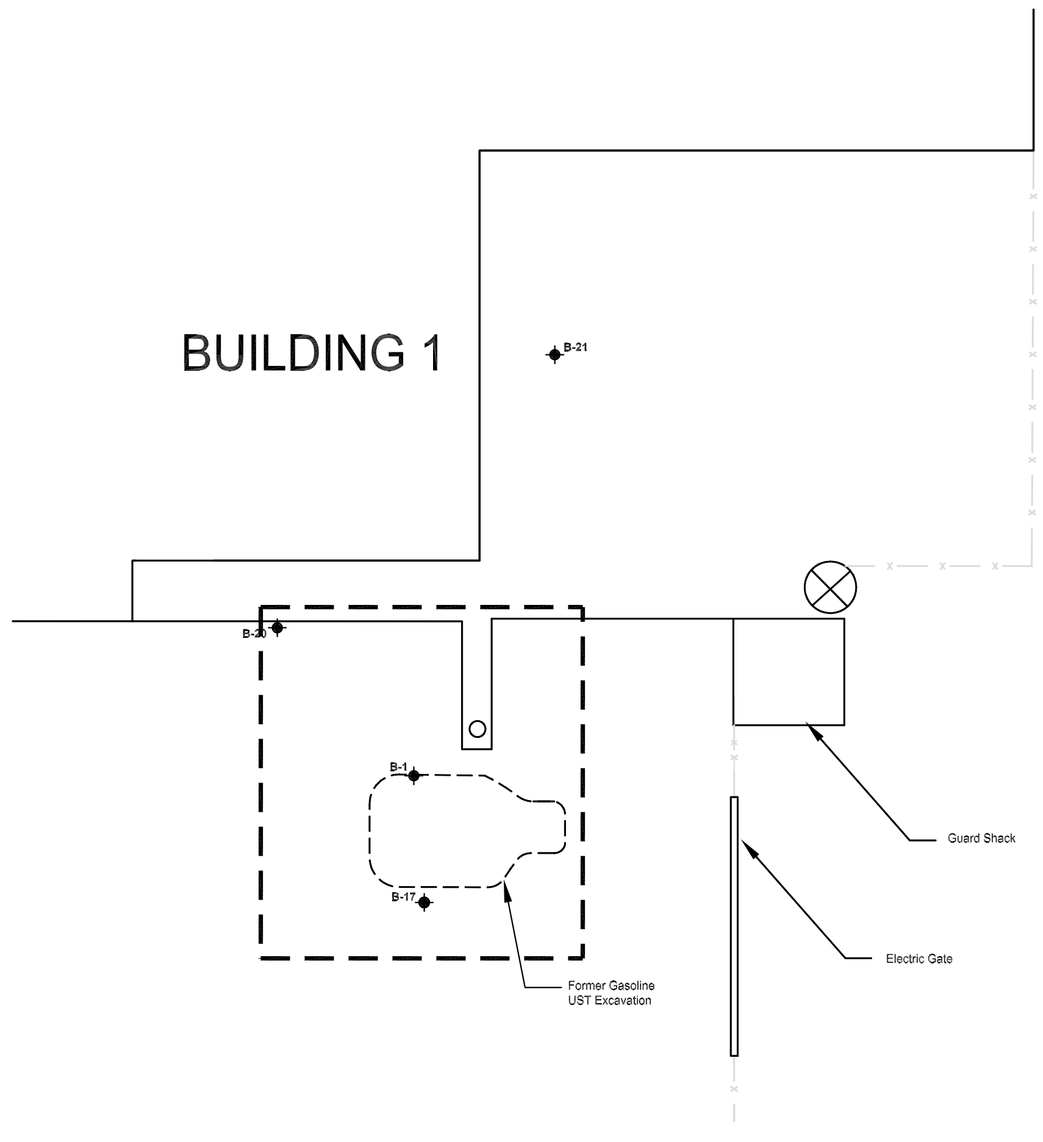
Soil Sampling Results:

				TCE	PCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Soil				**0.26**	**0.088**	**0.18**	**9.3**	**4.7**	**1.5**	**2**	**0.0067**	**7.8**	**0.033**	**0.33**	**4.3**	**0.025**	**1.6**	**3.1**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
UST																		
B1-2.0	11/22/2002	2	T&R 03	NT	NT	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	NT	NT	NT	NT	NT	NT	NT	NT
B1-5.5	11/22/2002	5.5	T&R 03	**ND (0.5)**	**ND (0.5)**	**ND (1.25)**	2.9	**12**	**82**	ND (1.25)	**ND (0.5)**	NR	NR	NR	NR	**ND (0.5)**	ND (0.5)	NR
B1-7.5	11/22/2002	7.5	T&R 03	**ND (0.5)**	**ND (0.5)**	**3.9**	**10**	4.1	**28**	ND (0.5)	**ND (0.5)**	NR	NR	NR	NR	**ND (0.5)**	ND (0.5)	NR
B1-11.5	11/22/2002	11.5	T&R 03	**ND (2.5)**	**ND (2.5)**	**6.8**	**46**	**14**	**45**	**ND (2.5)**	**ND (2.5)**	NR	NR	NR	NR	**ND (2.5)**	ND (2.5)	NR
B1-13.5	11/22/2002	13.5	T&R 03	NT	NT	ND (0.005)	0.021	0.006	0.028	ND (0.005)	NT	NT	NT	NT	NT	NT	NT	NT
B17-3.5	12/18/2002	3.5	T&R 03	NT	NT	**ND (0.25)**	ND (0.25)	ND (0.25)	ND (0.5)	NT	NT	NT	NT	NT	NT	NT	NT	NT
B17-5.0	12/18/2002	5	T&R 03	NT	NT	**ND (0.25)**	ND (0.25)	ND (0.25)	ND (0.5)	NT	NT	NT	NT	NT	NT	NT	NT	NT
B17-7.0	12/18/2002	7	T&R 03	NT	NT	**5.1**	**14**	2.7	**13**	NT	NT	NT	NT	NT	NT	NT	NT	NT
B17-11	12/18/2002	11	T&R 03	NT	NT	**0.96**	0.21	0.34	0.66	NT	NT	NT	NT	NT	NT	NT	NT	NT
B20-7.5	12/18/2002	7.5	T&R 03	NT	NT	**0.51**	0.044	ND (0.25)	0.057	NT	NT	NT	NT	NT	NT	NT	NT	NT
B21-11	12/18/2002	11	T&R 03	NT	NT	**ND (0.25)**	ND (0.25)	ND (0.25)	ND (0.5)	NT	NT	NT	NT	NT	NT	NT	NT	NT
B21-7.5	12/18/2002	7.5	T&R 03	NT	NT	**ND (0.25)**	ND (0.25)	ND (0.25)	ND (0.5)	NT	NT	NT	NT	NT	NT	NT	NT	NT
B21-9.5	12/18/2002	9.5	T&R 03	NT	NT	**ND (0.25)**	ND (0.25)	ND (0.25)	ND (0.5)	NT	NT	NT	NT	NT	NT	NT	NT	NT
B21-11.5	12/18/2002	11.5	T&R 03	NT	NT	**ND (0.25)**	ND (0.25)	ND (0.25)	ND (0.5)	NT	NT	NT	NT	NT	NT	NT	NT	NT

				Aroclor 1254	Aroclor 1260	PCBs	TPH-G	TPH-D	TPH-MO
Proposed Remedial Goal for Others in Soil				**0.22**	**0.22**	**0.22**	**100**	**500**	**500**
Sample I.D.	**Date**	**Depth**	**Reference**	**Aroclor 1254**	**Aroclor 1260**	**PCBs**	**TPH-G**	**TPH-D**	**TPH-MO**
UST									
B1-2.0	11/22/2002	2	T&R 03	NT	NT	NT	ND (2.5)	NT	NT
B1-5.5	11/22/2002	5.5	T&R 03	NT	NT	NT	**1800**	170	ND (65)
B1-7.5	11/22/2002	7.5	T&R 03	NT	NT	NT	**130**	7.2	ND (13)
B1-11.5	11/22/2002	11.5	T&R 03	NT	NT	NT	**1100**	45	ND (13)
B1-13.5	11/22/2002	13.5	T&R 03	NT	NT	NT	ND (2.5)	NT	NT
B17-3.5	12/18/2002	3.5	T&R 03	NT	NT	NT	ND (2.5)	NT	NT
B17-5.0	12/18/2002	5	T&R 03	NT	NT	NT	ND (2.5)	NT	NT
B17-7.0	12/18/2002	7	T&R 03	NT	NT	NT	**140**	NT	NT
B17-11	12/18/2002	11	T&R 03	NT	NT	NT	28	NT	NT
B20-7.5	12/18/2002	7.5	T&R 03	NT	NT	NT	ND (2.5)	NT	NT
B21-11	12/18/2002	11	T&R 03	NT	NT	NT	ND (2.5)	NT	NT
B21-7.5	12/18/2002	7.5	T&R 03	NT	NT	NT	ND (2.5)	NT	NT
B21-9.5	12/18/2002	9.5	T&R 03	NT	NT	NT	ND (2.5)	NT	NT
B21-11.5	12/18/2002	11.5	T&R 03	NT	NT	NT	ND (2.5)	NT	NT

Groundwater Sampling Results:

				Benzene	Toluene	Ethylbenzene	Total Xylenes
Proposed Remedial Goal for VOCs in Groundwater				**530**	**400**	**300**	**5300**
Sample I.D.	**Date**	**Depth**	**Reference**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**
UST							
B1-GW	11/23/2002	6-15	T&R 03	**4600**	**8700 E**	**1800**	**5500**
B17-GW	12/19/2002	6-15	T&R 03	**1600**	**1300**	**310**	1200
B20-GW	12/19/2002	6-15	T&R 03	34	2.2	ND (0.5)	3.3
B21-GW	12/19/2002	6-15	T&R 03	ND (0.5)	0.62	ND (0.5)	ND (1.0)



EXPLANATION

- B-5 — Treadwell & Rollo soil and groundwater sampling location 2002/2003
- Montgomery Watson soil and groundwater sampling location 1994 and 1995
- Proposed Remediation Zone (dimensions approximate)

ABBREVIATIONS

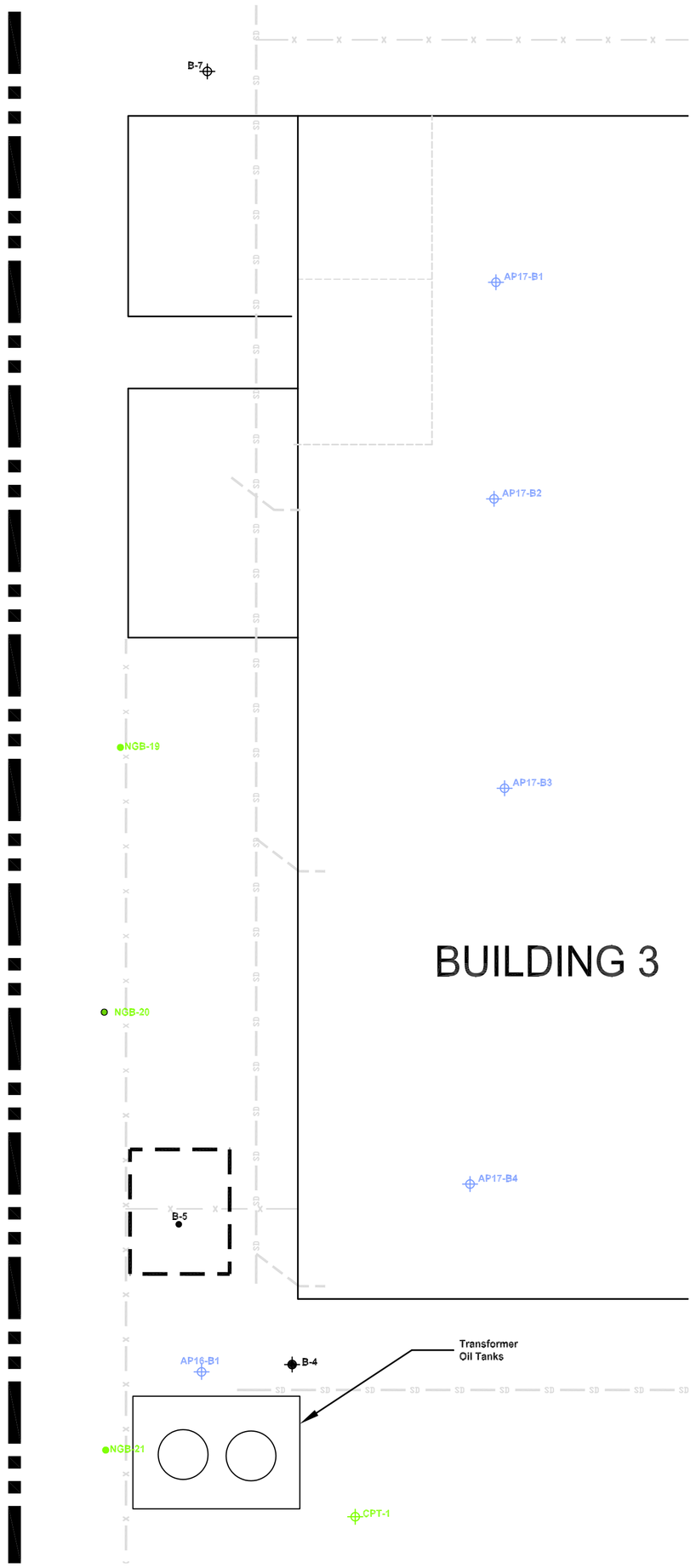
ND(x)= reported below detection limit
NR= not reported
NT= not tested/ analyzed
T&R 03= Treadwell & Rollo in 2003

Notes:
1. All ground water results reported in micrograms per liter (µg/l);
2. All soil sample results reported in milligrams per kilogram (mg/kg).

0' 20' 40'
SCALE 1" : 20'

Figure 8
FORMER GASOLINE UST EXCAVATION AREA
301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc.



Soil Sampling Results:

				Aroclor 1254	Aroclor 1260	Other PCBs	TPH-G	TPH-D	TPH-MO
Proposed Remedial Goal for Others in Soil				**0.22**	**0.22**	**0.22**	**100**	**500**	**500**
Sample I.D.	**Date**	**Depth**	**Reference**	**Aroclor 1254**	**Aroclor 1260**	**PCBs**	**TPH-G**	**TPH-D**	**TPH-MO**
Transformer Area									
NGB-19-2	3/11/2003	2	NG2 03	NR	NR	ND	NR	7.2	NR
NGB-19-4.5	3/11/2003	4.5	NG2 03	NR	NR	ND	NR	2.8	NR
NGB-20-2.5	3/11/2003	2.5	NG2 03	NR	NR	ND	NR	ND (0.99)	NR
NGB-20-5.5	3/11/2003	5.5	NG2 03	NR	NR	ND	NR	17	NR
NGB-21-1.5	3/11/2003	1.5	NG2 03	NR	NR	ND	NR	1.5	NR
NGB-21-5	3/11/2003	5	NG2 03	NR	NR	ND	NR	12	NR
B4-3.0	11/21/2002	3	T&R 03	ND (0.1)	ND (0.1)	ND (0.1)	NT	1.2	ND (13)
B5-0.5	11/22/2002	0.5	T&R 03	**3.2**	**1.3**	ND (0.5)	NT	**6800**	**5600**
NGB-1-1, NGB-2-1	3/10/2003	1	NG2 03	NR	NR	ND (0.012)	ND (1)	65	NR
NGB-1-3, NGB-2-3	3/10/2003	3	NG2 03	NR	NR	ND (0.012)	ND (1.1)	3.4	NR
NGB-3-1, NGB-4-1	3/10/2003	1	NG2 03	NR	0.014	NR	ND (1)	27	NR
NGB-3-1	3/10/2003	1	NG2 03	ND (0.012)	ND (0.012)	NR	NR	NR	NR
NGB-4-1	3/10/2003	1	NG2 03	ND (0.012)	ND (0.012)	NR	NR	NR	NR
NGB-3-3, NGB-4-3	3/10/2003	3	NG2 03	NR	NR	ND (0.012)	ND (0.97)	6.8	NR
API4-B1	1995	3.5-8.5	MW RFI	NR	NR	ND	NR	NR	NR
API4-B2	1995	3.5-8.5	MW RFI	NR	NR	ND	NR	NR	NR
API4-B3	1995	3.5-8.5	MW RFI	NR	NR	ND	NR	NR	NR
API6-B1	1995	4-8.5	MW RFI	NR	NR	ND	NR	NR	NR
API7-B1	1995	3.0-7.0	MW RFI	NR	NR	ND	NR	NR	NR
API7-B2	1995	3.5-7.0	MW RFI	NR	NR	ND	NR	NR	NR
API7-B3	1995	3.5-7.5	MW RFI	NR	NR	ND	NR	NR	NR
API7-B4	1995	3.5-7.5	MW RFI	NR	NR	ND	NR	NR	NR

Groundwater Sampling Results:

				TCE	PCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Groundwater				**530**	**130**	**530**	**400**	**300**	**5300**	**4**	**50000**	**350**	**1000**	**6300**	**200**	**6200**	**2600**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
Transformer Area																	
B4-GW	11/22/2002	6-15	T&R 03	ND (0.5)	ND (0.5)	NT	NT	NT	NT	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NR
B7-GW	11/22/2002	6-15	T&R 03	0.55	ND (0.5)	NT	NT	NT	NT	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NR
CPT-1	2/10/2003	48	NG 03	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	**ND (10)**	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)

EXPLANATION

- Storm drain system
- Sewer LIne
- Fence
- B-10 — Treadwell & Rollo soil sampling location 2002/2003
- B-5 — Treadwell & Rollo soil and groundwater sampling location 2002/2003
- Northgate Environmental soil sampling location 2003
- Northgate Environmental groundwater sampling location 2003 1994 and 1995
- Metcalf & Eddy soil sampling location 1982
- Montgomery Watson groundwater sampling location 1994 and 1995
- Aqua Science soil sample location 1997
- Proposed Remediation Zone (dimensions approximate)

ABBREVIATIONS

ND(x)= reported below detection limit
NR= not reported
NT= not tested/ analyzed
T&R 03= Treadwell & Rollo in 2003
NG2 03= Second Northgate investigation in 2003
MW RFI = Montgomery Watson RCRA Facility Investigation in 1995

Notes:
1. All ground water results reported in micrograms per liter (µg/l);
2. All soil sample results reported in milligrams per kilogram (mg/kg).

0’ 20’ 40’
SCALE 1” : 20’

Figure 9
TRANSFORMER AREA

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc.

Soil Sampling Results:

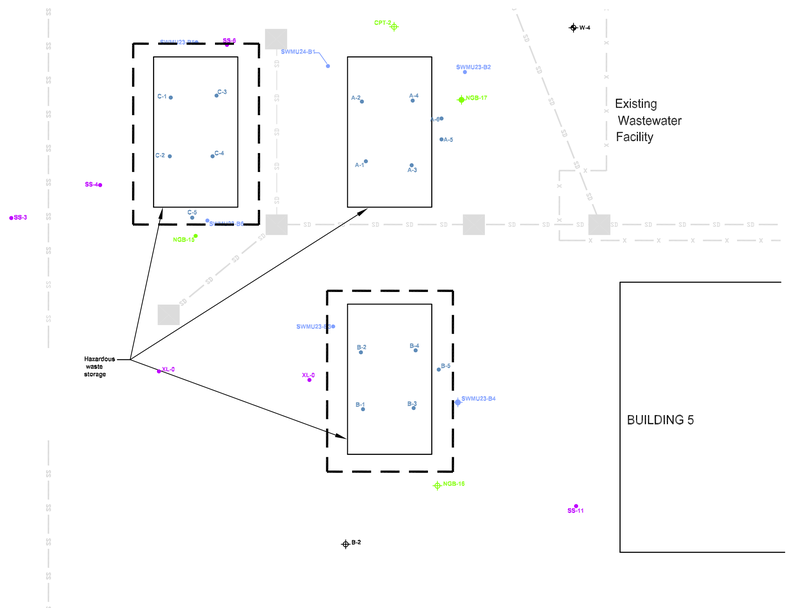
				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Soil				**0.26**	**0.088**	**0.0067**	**7.8**	**0.033**	**0.33**	**4.3**	**0.025**	**1.6**	**3.1**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
Hazardous Waste Storage Sheds													
NGB-15-3	3/11/2003	3	NGB 03	0.0085	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-16-5	3/11/2003	5	NGB 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-17-5	3/11/2003	5	NGB 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
SWMU23-B3	1995	3.5	MW RFI 95	0.12	NR	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B3	1995	6	MW RFI 95	ND (0.006)	NR	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B3	1995	7.5	MW RFI 95	0.13	NR	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B4	1995	3.5	MW RFI 95	**0.95**	NR	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B4	1995	6.5	MW RFI 95	0.039	NR	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B4	1995	9	MW RFI 95	ND (0.008)	NR	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B4	1995	9	MW RFI 95	ND (0.009)	NR	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B5	1995	3.5	MW RFI 95	NR	0.013	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B5	1995	4.5	MW RFI 95	NR	ND (0.006)	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B5	1995	8	MW RFI 95	NR	ND (0.006)	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B6	1995	3.5	MW RFI 95	0.098	**0.2**	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B6	1995	6	MW RFI 95	ND (0.006)	ND (0.009)	NR	NR	NR	NR	NR	NR	NR	NR
SWMU23-B6	1995	8.5	MW RFI 95	ND (0.009)	ND (0.009)	NR	NR	NR	NR	NR	NR	NR	NR
B-1	12/16/1997	1.5*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-1	12/16/1997	2.5*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-1	12/16/1997	3*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-1	12/16/1997	6*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-2	12/16/1997	1*	ASE 97	0.034	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-2	12/16/1997	3*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-2	12/16/1997	6*	ASE 97	0.011	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-3	12/16/1997	1.5*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-3	12/16/1997	3*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-3	12/16/1997	6*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-4	12/16/1997	1.5*	ASE 97	0.18	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-4	12/16/1997	3*	ASE 97	0.11	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-4	12/16/1997	6*	ASE 97	0.035	ND (0.01)	**ND (0.01)**	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	0.33	ND (0.01)
B-5	12/16/1997	1*	ASE 97	0.008	0.023	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-5	123/16/97	4*	ASE 97	0.014	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
B-5	12/16/1997	7*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-1	12/16/1997	1*	ASE 97	ND (0.1)	**ND (0.1)**	**ND (0.1)**	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)
C-1	12/16/1997	3*	ASE 97	**0.49**	**0.74**	**ND (0.1)**	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)
C-1	12/16/1997	6*	ASE 97	ND (0.1)	**ND (0.1)**	**ND (0.1)**	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)
C-2	12/16/1997	1.5*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-2	12/16/1997	3*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-2	12/16/1997	6*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-3	12/16/1997	1*	ASE 97	ND (0.1)	**0.16**	**ND (0.1)**	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)
C-3	12/16/1997	3*	ASE 97	ND (0.1)	**0.18**	**ND (0.1)**	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)
C-3	12/16/1997	3.5*	ASE 97	0.13	**1.3**	**ND (0.1)**	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)
C-3	12/16/1997	6*	ASE 97	**0.43**	**4.2**	**ND (0.1)**	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)	**ND (0.1)**	ND (0.1)	ND (0.1)
C-4	12/16/1997	1*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-4	12/16/1997	1.5*	ASE 97	ND (0.005)	0.024	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-4	12/16/1997	3*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-4	12/16/1997	6*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-5	12/16/1997	1*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-5	12/16/1997	4*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-5	12/16/1997	7*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
C-5	12/16/1997	7.5*	ASE 97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)

				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Proposed Remedial Goal for Metals in Soil				**6.3**	**19.1***	**1000**	**31**	**2.7***	**99.6***	**94**	**630**	**255**	**2.5**	**78**	**310**	**78**	**78**	**27.1***	**110**	**1000**
Sample I.D.	**Date**	**Depth**	**Reference**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
Hazardous Waste Storage Sheds																				
NGB-15-3	3/11/2003	3	NGB 03	ND (2.6)	4.9	NR	0.72	2.7	43	NR	33	13	0.048	NR	61	ND (0.21)	ND (0.21)	0.68	NR	44
NGB-16-5	3/11/2003	5	NGB 03	ND (2.3)	1.1	NR	0.41	**2.8**	32	NR	60	6.2	0.034	NR	87	ND (0.19)	ND (0.19)	1.2	NR	49
NGB-17-5	3/11/2003	5	NGB 03	ND (2.9)	0.62	NR	0.69	**5.1**	58	NR	200	9.8	0.059	NR	150	ND (0.24)	ND (0.24)	ND (0.24)	NR	140
SWMU23-B1	1995	3.5	MW RFI 95	NR	NR	NR	NR	ND (0.2)	90	NR	38	NR	NR	NR	140	NR	ND (0.1)	NR	NR	NR
SWMU23-B1	1995	4.5	MW RFI 95	NR	NR	NR	NR	ND (0.2)	77	NR	270	NR	NR	NR	160	NR	0.2	NR	NR	NR
SWMU23-B1	1995	7.5	MW RFI 95	NR	NR	NR	NR	ND (0.3)	66	NR	39	NR	NR	NR	64	NR	0.2	NR	NR	NR
SWMU23-B2	1995	3.5	MW RFI 95	NR	NR	NR	NR	ND (0.2)	28	NR	49	NR	NR	NR	47	NR	ND	NR	NR	NR
SWMU23-B2	1995	6.5	MW RFI 95	NR	NR	NR	NR	ND (0.2)	36	NR	46	NR	NR	NR	48	NR	0.1	NR	NR	NR
SWMU23-B2	1995	8.5	MW RFI 95	NR	NR	NR	NR	ND (0.3)	94	NR	44	NR	NR	NR	65	NR	0.2	NR	NR	NR
SWMU23-B2	1995	8.5	MW RFI 95	NR	NR	NR	NR	ND (0.3)	89	NR	35	NR	NR	NR	78	NR	ND (0.2)	NR	NR	NR
A-1	12/16/1997	1*	ASE 97	NR	NR	NR	NR	ND (0.5)	**100**	NR	44	NR	NR	NR	140	NR	ND (0.5)	NR	NR	NR
A-1	12/16/1997	3*	ASE 97	NR	NR	NR	NR	ND (0.5)	20	NR	31	NR	NR	NR	30	NR	ND (0.5)	NR	NR	NR
A-1	12/16/1997	6*	ASE 97	NR	NR	NR	NR	ND (0.5)	37	NR	32	NR	NR	NR	50	NR	ND (0.5)	NR	NR	NR
A-2	12/16/1997	1.3*	ASE 97	NR	NR	NR	NR	ND (0.5)	42	NR	39	NR	NR	NR	60	NR	1.9	NR	NR	NR
A-2	12/16/1997	3*	ASE 97	NR	NR	NR	NR	ND (0.5)	90	NR	56	NR	NR	NR	140	NR	ND (0.5)	NR	NR	NR
A-2	12/16/1997	6*	ASE 97	NR	NR	NR	NR	ND (0.5)	93	NR	40	NR	NR	NR	150	NR	ND (0.5)	NR	NR	NR
A-3	12/16/1997	1*	ASE 97	NR	NR	NR	NR	ND (0.5)	42	NR	33	NR	NR	NR	59	NR	0.65	NR	NR	NR
A-3	12/16/1997	3*	ASE 97	NR	NR	NR	NR	ND (0.5)	39	NR	38	NR	NR	NR	68	NR	ND (0.5)	NR	NR	NR
A-3	12/16/1997	6*	ASE 97	NR	NR	NR	NR	ND (0.5)	25	NR	36	NR	NR	NR	27	NR	ND (0.5)	NR	NR	NR
A-4	12/16/1997	1.5*	ASE 97	NR	NR	NR	NR	ND (0.5)	52	NR	140	NR	NR	NR	85	NR	15	NR	NR	NR
A-4	12/16/1997	3*	ASE 97	NR	NR	NR	NR	ND (0.5)	52	NR	36	NR	NR	NR	67	NR	ND (0.5)	NR	NR	NR
A-4	12/16/1997	6*	ASE 97	NR	NR	NR	NR	ND (0.5)	**44**	NR	40	NR	NR	NR	68	NR	ND (0.5)	NR	NR	NR
A-5	12/16/1997	0.5*	ASE 97	NR	NR	NR	NR	1.5	69	NR	290	NR	NR	NR	90	NR	12	NR	NR	NR
A-5	12/16/1997	3.5*	ASE 97	NR	NR	NR	NR	ND (0.5)	19	NR	37	NR	NR	NR	34	NR	ND (0.5)	NR	NR	NR
A-5	12/16/1997	6.5*	ASE 97	NR	NR	NR	NR	ND (0.5)	**140**	NR	47	NR	NR	NR	210	NR	ND (0.5)	NR	NR	NR
A-5	12/16/1997	7*	ASE 97	NR	NR	NR	NR	ND (0.5)	48	NR	75	NR	NR	NR	81	NR	ND (0.5)	NR	NR	NR
A-6	12/16/1997	1*	ASE 97	NR	NR	NR	NR	**3.2**	60	NR	97	NR	NR	NR	80	NR	5.6	NR	NR	NR
A-6	12/16/1997	3.5*	ASE 97	NR	NR	NR	NR	ND (0.5)	42	NR	40	NR	NR	NR	80	NR	1.2	NR	NR	NR
A-6	12/16/1997	7*	ASE 97	NR	NR	NR	NR	ND (0.5)	42	NR	40	NR	NR	NR	80	NR	ND (0.5)	NR	NR	NR
B-1	12/16/1997	1.5*	ASE 97	NR	NR	NR	NR	0.52	56	NR	140	NR	NR	NR	94	NR	15	NR	NR	NR
B-1	12/16/1997	2.5*	ASE 97	NR	NR	NR	NR	ND (0.5)	16	NR	32	NR	NR	NR	26	NR	ND (1.0)	NR	NR	NR
B-1	12/16/1997	3*	ASE 97	NR	NR	NR	NR	ND (0.5)	14	NR	41	NR	NR	NR	28	NR	ND (1.0)	NR	NR	NR
B-1	12/16/1997	6*	ASE 97	NR	NR	NR	NR	ND (0.5)	20	NR	26	NR	NR	NR	34	NR	ND (1.0)	NR	NR	NR
B-2	12/16/1997	1*	ASE 97	NR	NR	NR	NR	ND (0.5)	22	NR	44	NR	NR	NR	34	NR	ND (1.0)	NR	NR	NR
B-2	12/16/1997	3*	ASE 97	NR	NR	NR	NR	ND (0.5)	41	NR	61	NR	NR	NR	66	NR	ND (1.0)	NR	NR	NR
B-2	12/16/1997	6*	ASE 97	NR	NR	NR	NR	ND (0.5)	48	NR	32	NR	NR	NR	56	NR	ND (1.0)	NR	NR	NR
B-3	12/16/1997	1.5*	ASE 97	NR	NR	NR	NR	ND (0.5)	32	NR	77	NR	NR	NR	61	NR	ND (1.0)	NR	NR	NR
B-3	12/16/1997	3*	ASE 97	NR	NR	NR	NR	ND (0.5)	40	NR	32	NR	NR	NR	46	NR	ND (1.0)	NR	NR	NR
B-3	12/16/1997	6*	ASE 97	NR	NR	NR	NR	ND (0.5)	34	NR	29	NR	NR	NR	43	NR	ND (1.0)	NR	NR	NR
B-4	12/16/1997	1.5*	ASE 97	NR	NR	NR	NR	ND (0.5)	39	NR	35	NR	NR	NR	52	NR	ND (1.0)	NR	NR	NR
B-4	12/16/1997	3*	ASE 97	NR	NR	NR	NR	ND (0.5)	31	NR	58	NR	NR	NR	58	NR	ND (1.0)	NR	NR	NR
B-4	12/16/1997	6*	ASE 97	NR	NR	NR	NR	ND (0.5)	40	NR	30	NR	NR	NR	46	NR	ND (1.0)	NR	NR	NR
B-5	12/16/1997	1*	ASE 97	NR	NR	NR	NR	0.94	**100**	NR	250	NR	NR	NR	110	NR	70	NR	NR	NR
B-5	123/16/97	4*	ASE 97	NR	NR	NR	NR	ND (0.5)	**100**	NR	70	NR	NR	NR	180	NR	ND (1.0)	NR	NR	NR
B-5	12/16/1997	7*	ASE 97	NR	NR	NR	NR	ND (0.5)	41	NR	37	NR	NR	NR	31	NR	ND (1.0)	NR	NR	NR

* proposed remedial goal is equivalent to Upper 95% Confidence Limit values for background soil concentrations, taken from Lawrence Berkeley National Laboratory Study, 1995

Groundwater Sampling Results:

				TCE	PCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Groundwater				**530**	**130**	**530**	**400**	**300**	**5300**	**4**	**50000**	**350**	**1000**	**6300**	**200**	**6200**	**2600**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
Hazardous Waste Storage Sheds Area																	
NGB-16	3/11/2003	6-15	NG2 03	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
NGB-17	3/11/2003	6-15	NG2 03	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	**ND (10)**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
B2-GW	11/22/2002	6-15	T&R 03	ND (0.5)	ND (0.5)	NT	NT	NT	NT	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NR



EXPLANATION

- Storm drain system
- Sewer LIne
- Fence
- B-2 — Treadwell & Rollo groundwater sampling location 2002/2003
- CW-1 — Existing monitoring well
- Northgate Environmental soil and groundwater sampling location 2003
- Northgate Environmental soil sampling location 2003
- Northgate Environmental groundwater sampling location 2003 1994 and 1995
- Metcalf & Eddy soil sampling location 1982
- Montgomery Watson soil and groundwater sampling location 1994 and 1995
- Aqua Science soil sample location 1997
- Proposed Remediation Zone (dimensions approximate)

ABBREVIATIONS

ND(x)= reported below detection limit
NR= not reported
NT= not tested/ analyzed
T&R 03= Treadwell & Rollo in 2003
NG2 03= Second Northgate investigation in 2003
NG3 03= Third Northgate investigation in 2003
MW RFI 95 = Montgomery Watson RFI in 1995
ASE 97 = Aqua Sciences investigation in 1997

Notes:
1. All ground water results reported in micrograms per liter (µg/l);
2. All soil sample results reported in milligrams per kilogram (mg/kg).

0' 25' 50'
SCALE 1" : 25'

Figure 10
HAZARDOUS MATERIAL STORAGE AREA
301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc.

Groundwater Sampling Results:

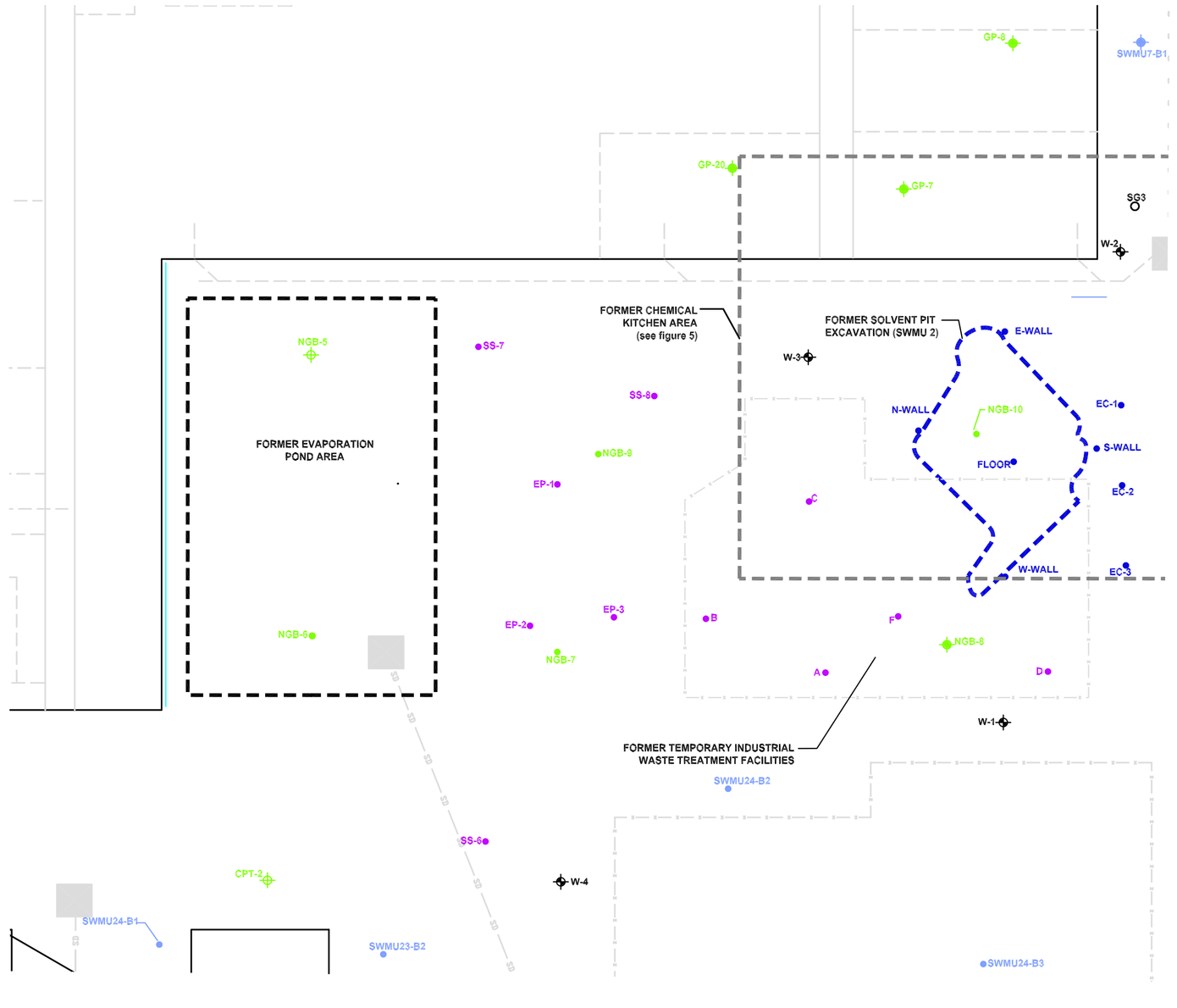
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Proposed Remedial Goal for Metals in Groundwater				**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**	**50000**
Sample I.D.	**Date**	**Depth**	**Reference**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
Former Ceramics Plating Shop Area																				
NGB-5	3/10/2003		NG2 03	ND (60)	15	270	ND (2)	ND (5)	ND (10)	**27**	ND (10)	3.3	ND (0.20)	34	41	6.3	ND (5)	ND (5)	ND (10)	64
NGB-8	3/10/2003		NG2 03	ND (60)	8.7	76	ND (2)	ND (5)	ND (10)	ND (20)	ND (10)	ND (3)	ND (0.20)	53	ND (20)	9	ND (5)	ND (5)	ND (10)	ND (20)

Soil Sampling Results:

				TCE	PCE	Vinyl Chloride	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE
Proposed Remedial Goal for VOCs in Soil				**0.26**	**0.088**	**0.0067**	**7.8**	**0.033**	**0.33**	**4.3**	**0.025**	**1.6**	**3.1**
Sample I.D.	**Date**	**Depth**	**Reference**	**TCE**	**PCE**	**Vinyl Chloride**	**1,1,1-TCA**	**1,1,2-TCA**	**1,1-DCA**	**1,1-DCE**	**1,2-DCA**	**cis-1,2-DCE**	**trans-1,2-DCE**
NGB-5-1, NBG-6-1	3/10/2003	1	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-5-3.5, NGB-6-3	3/10/2003	3-3.5	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-5-7, NGB-6-7	3/10/2003	7	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-7-1.5, NGB-9-2	3/10/2003	1.5-2	NG2 03	ND (0.005)	0.024	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-7-3.5, NGB-9-3.5	3/10/2003	3.5	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
NGB-7-6, NGB-9-7.5	3/10/2003	6-7.5	NG2 03	ND (0.005)	ND (0.005)	**ND (0.01)**	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)

				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Proposed Remedial Goal for Metals in Soil				**6.3**	**19.1***	**1000**	**31**	**2.7***	**99.6***	**94**	**630**	**255**	**2.5**	**78**	**310**	**78**	**78**	**27.1***	**110**	**1000**
Sample I.D.	**Date**	**Depth**	**Reference**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
NGB-5-1, NBG-6-1	3/10/2003	1	NG2 03	ND (2.8)	1.5	NR	0.75	**2.9**	43	NR	53	11	0.026	NR	93	ND (0.23)	ND (0.23)	0.54	NR	44
NGB-5-3.5, NGB-6-3	3/10/2003	3-3.5	NG2 03	ND (2.7)	2.2	NR	0.72	**2.8**	**210**	NR	43	12	0.026	NR	**330**	ND (0.23)	ND (0.23)	ND (0.23)	NR	54
NGB-5-3.5	3/10/2003	3.5	NG2 03	ND (2.9)	3.8	320	0.61	2.7	**180**	28	71	13	0.054	ND (0.96)	260	ND (0.24)	ND (0.24)	1.7	55	56
NGB-6-3	3/10/2003	3	NG2 03	ND (2.7)	3.1	790	0.54	2.5	**250**	27	32	11	0.039	ND (0.90)	**380**	ND (0.23)	ND (0.23)	1.6	57	45
NGB-5-7, NGB-6-7	3/10/2003	7	NG2 03	ND (2.4)	3.1	NR	0.62	2.2	96	NR	36	11	0.051	NR	150	ND (0.2)	ND (0.2)	0.29	NR	41
NGB-7-1.5, NGB-9-2	3/10/2003	1.5-2	NG2 03	ND (2.5)	1.9	NR	0.48	1.5	35	NR	30	7.4	0.058	NR	58	ND (0.21)	1.5	0.57	NR	31
NGB-7-3.5, NGB-9-3.5	3/10/2003	3.5	NG2 03	ND (2.9)	4.4	NR	0.61	2	17	NR	36	14	0.051	NR	39	ND (0.25)	ND (0.25)	ND (0.25)	NR	57
NGB-7-6, NGB-9-7.5	3/10/2003	6-7.5	NG2 03	ND (2.2)	1.5	NR	0.42	2	**120**	NR	35	8.6	0.062	NR	150	ND (0.19)	ND (0.19)	ND (0.19)	NR	35

* proposed remedial goal is equivalent to Upper 95% Confidence Limit values for background soil concentrations, taken from Lawrence Berkeley National Laboratory Study, 1995



EXPLANATION

- CW-1 — Existing monitoring well
- MW-7A — Monitoring well not located
- Storm drain system
- Sewer LIne
- Fence
- B-2 — Treadwell & Rollo groundwater sampling location 2002/2003
- B-10 — Treadwell & Rollo soil sampling location 2002/2003
- B-5 — Treadwell & Rollo soil and groundwater sampling location 2002/2003
- SG-4 — Treadwell & Rollo soil gas sampling location (2-feet deep) 2002/2003
- Northgate Environmental soil sampling location 2003
- Northgate Environmental soil and groundwater sampling location 2003
- Kennedy Jenks soil sampling location 1985
- Metcalf & Eddy soil sampling location 1982
- Woodward Clyde groundwater sampling location 1994
- Peregren soil samples location 1992
- Peregren/Radian soil samples location 1992
- Montgomery Watson groundwater sampling location 1994 and 1995
- Montgomery Watson soil and groundwater sampling location 1994 and 1995
- PES groundwater sampling location 1994
- Excavation by Kennedy Jenks
- Proposed Remediation Zone (dimensions approximate)

Notes:
1. All ground water results reported in micrograms per liter (µg/l);
2. All soil sample results reported in milligrams per kilogram (mg/kg).

ABBREVIATIONS

ND(x)= reported below detection limit
NR = not reported
NT = not tested/analyzed
NG2 03= Second Northgate investigation in 2003

0’ 20’ 40’
SCALE 1” : 20’

Figure 11
FORMER EVAPORATION POND AREA

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

northgate environmental management, inc.

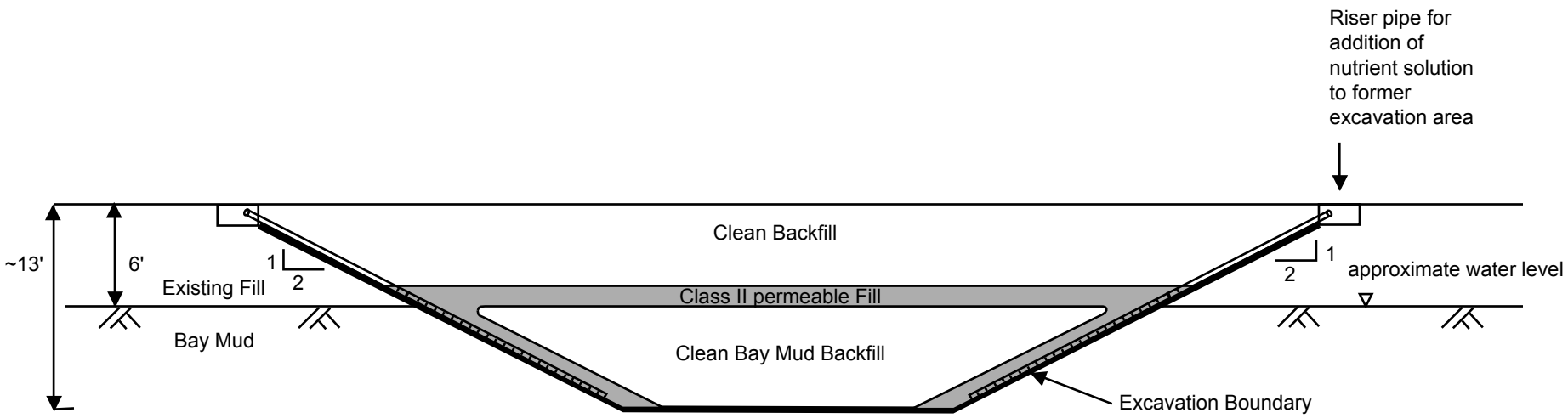


FIGURE 12

Typical Excavation and Backfill Cross-Section

northgate environmental management, inc

301 Industrial Road,
San Carlos, California
June 16, 2004
Proj. No. 1100.01

APPENDIX A

REGULATORY APPROVAL LETTERS

1) **Recommendation for No Further Action (DTSC, 7/21/1998)**

2) **Closure Certification Approval for CPI (DTSC, 12/31/1997)**

3) **Former Varian Power Grid Tube Products Facility, Closure of Former Chemical Kitchen (Cal-EPA/RWQCB, 12/24/1996)**

4) **Closure of Sumps SWMU 14 and SWMU 15, Former Varian Power Grid Tube Products (San Mateo County Health Services Agency, 1/16/1996)**

5) **Approval of RCRA Facility Investigation Report for Varian Power Grid Tube Products (DTSC, 7/31/1995)**

6) **Closure of Former Drum Storage Area and Cleanup of Former Solvent Pit and Former Evaporation Ponds (DTSC, 8/14/1985)**

Recommendation for No Further Action

Communications and Power Industries
301 Industrial Way
San Carlos, CA 94070
CUPA: San Mateo County
Contact: Tom Huynh, Safety Representative

MEDIUM PRIORITY FURTHER INVESTIGATION NEEDED

Date Assigned:	July 7, 1998
File Review:	July 8, 1998
Site Visit:	July 15, 1998
Meetings/Misc:	July 8, 1998 call
FIS OK date:	July 15, 1998
Case Closure:	July 15, 1998

TYPE OF OPERATION/POTENTIAL CONTAMINANTS

A manufacturer of cathode ray tubes used in radar and other equipment. Metals from plating operations are produced as hazardous waste.

Phone Call 7/8/98

I talked with Mr. Jim Millie, a consultant for Communications and Power Industries about a date that I would be able to do a walkthrough inspection of this facility. He also told me that an RCRA Facility Assessment had been done at this site with cleanup action completed and approved.

Chronology of Events/History of Site

The first buildings at this site were constructed in 1956-57. In 1965 Varian bought the site and started production. Communications and Power Industries (CPI) bought the Varian production operation of cathode ray tubes in 1995.

A phase one was submitted in June 1998 indicating one area of concern (AOC). The one area of concern was where a large industrial oven stood. When the oven was removed, three concrete lined holes were found that allowed room for three hydraulic arms to move vertically.

Notes (from visits/calls/meetings):

7/15/98 Site Visit
I met with Tom Huynh, Safety Representative of (CPI) and Jim Mille, consultant of Chemical Solutions. In the main production building taped off with yellow warning tape was located the AOC. On the floor were three holes covered with metal grates. I looked into the hole and observed standing water in all three holes and a cement bottom and metal lined sides. Mr. Mille and Mr. Huynh explained to me that the standing water was still present from a leak test that was

done. They also showed me where a boring of cement had been done next to one of the holes to find out the thickness of the cement structure around the holes. From the boring it appeared that at least one foot of concrete surrounded these holes. I asked if very much hydraulic fluid was found inside any of the holes and Mr. Millie told me that some residual amounts were found that were cleaned out.

We next went outside the building to the PBR treatment unit which treats metals from the plating that is done in the production process. The treatment unit had secondary containment that was P.E. certified.

I asked if I could review the submittals and work that was done for the cleanup. In a file room I looked at the RCRA Facility Assessment for CPI that was done June 1994. This assessment was done by DTSC Region 2 office and identified 24 solid waste management units (SWMU) and 10 areas of concern (AOC). Of this Total, 7 SWMU's and 3 AOC's were deemed to need further investigation. Samples were taken and a June 1995 Montgomery Watson report recommended closure of the 7 SWMU's and 3 AOC's. Mr. Mille said that all the SWMU's and AOC's were approved for closure by the County of San Mateo or DTSC.

RECOMMENDATIONS/REASONS FOR NO FURTHER INVESTIGATION OR CORRECTIVE ACTION

I talked with Sal Ciriello of Department of Toxic Substances Control Permitting Division and verified that DTSC had approved the RFI report and CPI is now considered closed. All oversite for cleanup was done by DTSC or the County of San Mateo, Environmental Health. The three concrete lined holes appeared to be clean and leak testing did not reveal any breakthrough in containment. Based on information provided by CPI and DTSC, I recommend that no further investigation or corrective action be done at this time.

7/21/98
Date

Leo Valdez
Hazardous Substances Scientist
Dept. of Toxic Substances Control

Closure Certification Approval for CPI

December 31, 1997

Cal/EPA

Department of Toxic Substances Control

700 Heinz Avenue Suite 200 Berkeley, CA 94710-2737

Mr. Tom Huynh
Environmental & Safety Engineer
CPI-Eimac
301 Industrial Way
San Carlos, CA 94070-2682

Pete Wilson Governor

~~James M. Strock~~ *Secretary for Environmental Protection*

Dear Tom Huynh:

CLOSURE CERTIFICATION APPROVAL FOR COMMUNICATIONS & POWER INDUSTRIES, INC., EIMAC DIVISION, 301 INDUSTRIAL WAY, SAN CARLOS, EPA ID NO. CAD 009 438 300

The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), has received the closure certification report dated December 23, 1997 for Communications and Power Industries, Inc., Eimac Division (CPI-Eimac). This report certifies that the closure of the permitted hazardous waste storage areas, Sheds A, B and C, were performed in accordance with the approved closure plan.

We hereby approve your closure certification report and now consider these storage areas at CPI-Eimac officially closed. We understand that the permitted treatment units are now regulated under Permit-By-Rule authorization. The permit for this facility is no longer in effect

This acknowledgment of facility closure does not remove any liabilities associated with past hazardous waste management practices which may have occurred at the site.

If you have any questions, please contact Alfred Wong of my staff at (510) 540-3946.

Sincerely,

for James M. Pappas, P.E., Chief
Northern California Permitting Branch

cc: See next page

cc: Mr. John McCarroll
U.S. EPA, Region IX, H-3
75 Hawthorne Street
San Francisco, California 94105

Mr. Alfred Wong
Northern California Branch
Permitting Division
700 Heinz Avenue, Suite 200
Berkeley, California 94710

Ms. Charlene Williams, Chief
Northern California Branch
Statewide Compliance Division
700 Heinz Avenue, Suite 200
Berkeley, California 94710

Former Varian Power Grid Tube Products Facility,
Closure of Former Chemical Kitchen

CalEPA

San Francisco Bay
Regional Water
Quality Control
Board

2101 Webster Street
Suite 500
Oakland, CA 94612
(510) 286-1255
FAX (510) 286-1380

Date: December 24, 1996
File No: 2189.8291 (RAD)

Pete Wilson
Governor

Mr. John Buchanan
Varian Associates
3120 Hansen Way
Palo Alto, CA 94304

SUBJECT: Former Varian Power Grid Tube Products Facility
301 Industrial Way
San Carlos, San Mateo County
Closure of Former Chemical Kitchen

Dear Mr. Buchanan:

Board staff has reviewed your report, dated August 22, 1996 for the above site. The report evaluates the remaining chemicals and associated risks in the former chemical kitchen, and recommends closure for this part of the site. As explained below, I concur that additional investigations in the chemical kitchen area are not needed until the land use changes and/or the building is demolished. The chemical kitchen area may be remodeled to fit the current occupant's (CPI) uses.

Soil contamination includes TCA up to 130 ppm and DCE up to 15 ppm. Groundwater contamination includes TCA up to 22,000 ppb and DCE up to 3,600 ppb. The groundwater table is approximately 6 to 10 feet below ground surface (bgs). Bay Muds predominate from 4 to 20 feet bgs. Stiff, sandy to silty clay extend from below the Bay Muds to at least 80 feet bgs.

Soil contamination is localized within the chemical kitchen and is limited to a depth of less than 30 feet. All possible VOC sources have been removed. VOCs in soil are degrading naturally and are not present directly beneath the concrete floor.

Groundwater beneath the site is not considered a source of drinking water and remaining VOC concentrations in the soil and groundwater are not a significant treat to water quality. The groundwater is brackish (TDS greater than 3,000 mg/l) and more than 200 gallons per day cannot be extracted. Monitoring shows that groundwater contamination is limited to a depth of less than 30 feet and has not migrated beyond the chemical kitchen. Clay-rich soils limit groundwater movement and little migration is expected.

Remaining VOCs in soil and groundwater do not pose an unacceptable risk to current and future workers as long as CPI continues to use the area as an industrial manufacturing facility, and if the concrete floor or its equivalent remains. Varian will address potential remediation of the remaining soil and groundwater contamination when the building is removed and/or when there is a change in the actual use of the site.

Please contact Rico Duazo at (510) 286-0837 if you have any questions.

Sincerely,

Loretta K. Barsamian
Executive Officer

Stephen I. Morse for
Chief, Toxics Cleanup Division

cc: Sabrina Mih, San Mateo County DHS
Leilani Nieves, CPI, Inc.
Al Wilunowski, CPI, Inc.

Closure of Sumps SWMU 14 and SWMU 15
Former Varian Power Grid Tube Products

HEALTH SERVICES AGENCY

ENVIRONMENTAL HEALTH SERVICES DIVISION

January 16, 1996

Mr. Michael D. Basel, Ph.D., P.E.
Montgomery Watson
365 Lennon Lane
Walnut Creek, CA 94598-2427

SUBJECT: Closure of sumps SWMU 14 and SWMU 15, Former Varian Power Grid Tube Products, San Carlos, CA

This letter confirms the closure of two concrete lined sumps under the direction of San Mateo County Environmental Health Services at the subject site. Provided that the information submitted to this agency was accurate and representative of existing conditions, it is our position that no further action is required at this time.

Please be advised that this letter does not relieve you of any liability under the California Health and Safety Code or Water Code for past, present, or future operations at the site. Nor does it relieve you of the responsibility to clean up existing, additional, or previously unidentified conditions at the site which cause or threaten to cause pollution or nuisance or otherwise pose a threat to water quality or public health.

Additionally, be advised that changes in the present or proposed use of the site may require further site characterization and mitigation activity. It is the property owner's responsibility to notify this agency of any changes in report content, future contamination findings, or site usage.

Thank you for your cooperation in this matter. I may be reached at (415) 363-4565.

Sincerely,

Teresa Belasco

Teresa Belasco, REHS, MPH
Hazardous Materials Specialist IV

cc: Bill Lent, Hazardous Materials Program Manager
Sabrina Mih, Hazardous Materials Specialist, County Remedial Oversight Program

590 HAMILTON STREET, REDWOOD CITY, CALIFORNIA 94063
PHONE (415) 363-4305 • TDD (415) 573-3206 • FAX (415) 363-7882

Approval of RCRA Facility Investigation Report for
Varian Power Grid Tube Products

STATE OF CALIFORNIA — ENVIRONMENTAL PROTECTI .. AGENCY

PETE WILSON, Governor

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

ION 2
HEINZ AVE . SUITE 200
BERKELEY, CA 94710-2737

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH

JUL 17 1995

RECEIVED

July 13, 1995

Mr. Gregory Hall
Environmental Engineer
Varian Power Grid Tube Products
301 Industrial Way
San Carlos, California 94070

Dear Mr. Hall:

APPROVAL OF RCRA FACILITY INVESTIGATION REPORT (RFI) FOR VARIAN POWER GRID TUBE PRODUCTS, EPA ID No.: CAD 009438300

The Department of Toxic Substances Control (DTSC) has reviewed the RCRA Facility Investigation Final Report (Report), submitted June 19, 1995, for Varian Power Grid Tube Products (Varian) at 301 Industrial Way in San Carlos. DTSC issued a Hazardous Waste Facility Permit to Varian on February 16, 1995. This permit required Varian to investigate five Solid Waste Management Units (SWMUs) at the site. The RFI Workplan was approved April 5, 1995. The SWMUs required to be investigated were SWMUs 7, 11, 12, 13, and 14. The Report discussed the results of the investigation conducted at Varian and concluded that no further action is needed for SWMUs 7, 11, 12, 13, and 14. DTSC hereby approves the Report and concurs that no further action is needed for SWMUs 7, 11, 12, 13, and 14. Therefore, there is no requirement to proceed onto the next step of the corrective action process which is normally a corrective measures study.

DTSC acknowledges that Varian also is investigating SWMUs 15 and 16 and AOCs 11, 14, and 16 under the supervision of the San Mateo County Department of Health Services. A copy of the final report on these SWMUs and AOCs shall also be submitted to DTSC. DTSC reserves the right to require further investigation of these SWMUs and AOCs if, at any time, DTSC determines that any investigation being conducted does not meet State or federal standards.

Sincerely,

Lester Kaufman

Lester Kaufman, Chief
Facility Permitting Branch

cc: (See next page)

Closure of Former Drum Storage Area and Cleanup of Former Solvent Pit and Former Evaporation Ponds

STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY

GEORGE DEUKMEJIAN, Governor

DEPARTMENT OF HEALTH SERVICES
2151 BERKELEY WAY
BERKELEY, CA 94704
(415) 540-2043

August 14, 1985

Mr. Tom Novack
Varian Eimac Division
301 Industrial Way
San Carlos, CA 94070

Dear Mr. Novack:

This letter confirms the discussion and observations of the June 21, 1985 inspection of the Varian - Eimac facility by Elyse Heilshorn of my staff.

The closure of the former drum storage area is approved and considered complete by the Toxic Substances Control Division of the California Department of Health Services (DHS). You may use this area for other facility activities.

The clean-up of the former solvent pit and former evaporation ponds is approved by DHS. Varian may use these areas as deemed apropriate.

The sampling plan for the former wastewater treatment area is approved Please proceed with the work. Please notify DHS 48 hours prior to sampling.

The expansion of the wastewater treatment facility to include chrome reduction is approved. Please submit any necessary changes in the Operation Plan to reflect changes in operations, clean ups, training, and closure procedures and costs. This information shall be submitted to DHS prior to operating the new treatment system.

Please submit: Photographs of the solvent pit excavation, photos of the closed drum storage area, and copies of the manifests from the excavation as requested during the June 21, 1985 inspection.

If you have any questions, please call Ms. Heilshorn at 540-3052.

Sincerely,

Dwight R. Hoenig, Chief
North Coast California Section
Toxic Substances Control Division

EH:rvh

VA-200-030178

APPENDIX B

LIST OF REPORTS

APPENDIX B
List of Reports

TITLE	AUTHOR	DATE
Geotechnical Investigation Report Varian EIMAC San Carlos	Kleinfelder & Associates	February 1, 1984
Report of Field Investigations-Metal Concentrations in Soils EIMAC Division of Varian Associates	Metcalf & Eddy Engineers	May 5, 1984
Report of Field Investigations-Volatile Organic Chemicals EIMAC Division of Varian Associates	Metcalf & Eddy Engineers	May 5, 1984
Report of Field Investigations-Methanol EIMAC Division of Varian Associates	Metcalf & Eddy Engineers	May 5, 1984
Environmental Investigation Report Varian EIMAC San Carlos	Kleinfelder & Associates	November 1, 1984
Final Report on Soil and Groundwater Contamination Assessment at Varian-EIMAC's Former Methanol Storage Area	Kennedy/Jenks Engineers	March 13, 1985
Final Report on the Assessment of Inorganic and Organic Chemicals in the Soil and Grounwater at Varian-EIMAC's Former Hazardous Waste Drum Storage Yard	Kennedy/Jenks Engineers	April 1, 1985
Remedial Action Activities at the Former Evaporation Ponds and Rormer Solvent Dry Well Varian-EIMAC	Kennedy/Jenks Engineers	April 22, 1985
Assessment of Chemicals in Soil at the Former Temporary Wastewater Treatment Plant Site	Kennedy/Jenks Engineers	October 1, 1985
Geotechnical Consultant Approval-County of San Mateo	County of San Mateo Dept of Public Works Geotechnical Section	June 26, 1989
Report of Building Survey for Asbestos Containing Materials	Law Associates	June 15, 1990
Revised Partial Closure Certification Report Chrome Reduction Wastewater Treatment Varian EIMAC San Carlos Division	PES Environmental Engineering & Environmental Services	February 12, 1991
Closure Report, Four Plating Areas, Vaian Associates	Peregren Environmental Group	August 13, 1992
Phase II Soil Investigation, Former Plating Areas at Varian Associates	Peregren Environmental Group	September 10, 1992
Final Report, Soil Sampling and Analysis, Varian Associates	Peregren Environmental Group	December 12, 1992
Soils and Groundwater Site Assessment Varian-San Carlos	Canonie Environmental	January 8, 1993
Varian Assocs San Carlos Facility Feb 1994 Groundwater Monitoring Event	Woodward-Clyde Consultants	May 19, 1994
RCRA Facility Assessment for Varian Power Grid Tube Products	CA EPA, Dept of Toxic Substances Control Region 2	June 1, 1994
Groundwater Sampling Activities Varian Assocs Power Grid Tube Products Facility	PES Environmental Engineering & Environmental Services	January 13, 1995
Final Area of Potential Interest Investigation Work Plan Varian Power Grid Tube Products	Montgomery Watson	March 1, 1995
Phase I Environmental Site Assessment of Varian Power Grid Tube Products DRAFT FINAL	Montgomery Watson	April 1, 1995

APPENDIX B
List of Reports

TITLE	AUTHOR	DATE
Letter to Daniel Peixoto: Environmental Complianace Analysis of Power Grid Tube	Montgomery Watson	April 21, 1995
Final Report of Results RCRA Facility and Phase II Investigations Vol. 1 of 2	Montgomery Watson	April 28, 1995
RCRA Facility Investigation Final Report and Summary Report Varian Power Grid Tube Products	Montgomery Watson	June 1, 1995
RCRA Facility Investigation Final Report and Summary Report Varian Power Grid Tube Products	Montgomery Watson	June 1, 1995
Closure Report for Former Drum Storage Area, Former Chemical Kitchen, Former Ceramics Painting Shop, etc.	Montgomery Watson	June 1, 1995
Due Diligence Assessments Varian EDB Facilities	ICF Kaiser Engineers	August 10, 1995
Compliance Assessment Communications & Power Industries	ICF Kaiser Engineers	January 11, 1996
Final Report of Results Additional Field Investigation Former Varian Power Grid Tube Products	Montgomery Watson	February 1, 1996
Human Health Risk Assessment Former Bldg 2 Drum Storage Area	Montgomery Watson	August 1, 1996
Closure Report of Hazardous Waste Storage Area	Aqua Science Engineers	December 23, 1997
Expanded Phase I Environmental Site Assessment	P & D Consultants	October 6, 2000
Updated Human Health Risk/Remedial Alternatives Evaluation (Letter to Michael Cheng: Updated Human Health Risk)	Montgomery Watson Harza	February 27, 2002
Final Report Asbestos-Containing Materials and Lead Coatings Survey Buildings 1, 2, 3 and 5	Pinnacle Environmental	December 3, 2002
Memo to D. Dixon, Treadwell & Rollo, Data Transmittal for Northgate Investigations at 301 Industrial Rd	Northgate	June 2, 2003