

**COMPLETION REPORT
SOIL INSPECTION/SAMPLING PLAN
ATTACHMENT VI – FORMER ORCHARD AREAS**

**HITACHI GLOBAL STORAGE TECHNOLOGIES, INC.
REDEVELOPMENT PROPERTY
5600 COTTLE ROAD, SAN JOSE, CALIFORNIA**

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ACRONYMS

1,1-DCE	1,1-Dichloroethene
4,4'-DDE	4,4'-Dichlorodiphenyldichloroethylene
4,4'-DDT	4,4'-Dichlorodiphenyltrichloroethane
bgs	below ground surface
CalEPA	California Environmental Protection Agency
CCR	Current Conditions Report
CHHSL	California Human Health Screening Level
CMS	Corrective Measures Study
COC	Chain-of-Custody
DJPA	David J. Powers & Associates
DTSC	Department of Toxic Substance Control
EIR	Environmental Impact Report
GPA	General Plan Amendment
GST	Global Storage Technologies
HHRA	Human Health Risk Assessment
IBM	International Business Machines
IDW	Investigation Derived Waste
LQG	Large Quantity Generator
OCF	Organochlorine Pesticide
NOA	Naturally-Occurring Asbestos
PD	Planned Development
PG&E	Pacific Gas and Electric
PRG	Preliminary Remediation Goal
R&D	Research and Development
RBTC	Risk-Based Target Concentration
RCRA	Resource Conservation and Recovery Act
RG	Remedial Goal
RO/DI	Reverse Osmosis/Deionized Water
RWQCB-SF	Regional Water Quality Control Board, San Francisco Bay Region
SI/SP	Soil Inspection/Sampling Plan
STL	Severn Trent Laboratories
TCA	1,1,1-Trichloroethane
TCE	Trichloroethene
TTLC	Total Threshold Limit Concentration
UCL	Upper Confidence Limit
US	United States
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

kV	kilovolt
mg/kg	milligrams per kilogram
MW	megawatt
μg/kg	micrograms per kilogram

1.0 INTRODUCTION

ENVIRON International Corporation (ENVIRON), an environmental consulting firm, has prepared this Completion Report on behalf of Hitachi Global Storage Technologies, Inc. (Hitachi GST) for a portion of their property located at 5600 Cottle Road, San Jose, California (“the Site”). Hitachi GST is planning redevelopment activities for this portion of the Site. This Completion Report presents the results of the implementation of the Soil Inspection/Sampling Plan (SI/SP), Attachment VI – Former Orchard Areas (ENVIRON 2005a), and focuses on organochlorine pesticides (OCPs) and arsenic in soil in the former orchard areas of the Site.

1.1 Site Overview

In June 2005, David J. Powers & Associates (DJPA) prepared an Environmental Impact Report (EIR) for the proposed General Plan Amendment (GPA) and Planned Development (PD) Zoning on the approximately 321-acre Hitachi GST Site. The City of San Jose Planning Commission certified the Final EIR on June 6, 2005 (City of San Jose 2005a, 2005b). The Site, which is currently owned by Hitachi GST, was formerly owned and operated by International Business Machines Corporation (IBM). The location of the Site is shown on Figures 1.1 and 1.2. The Site layout prior to redevelopment is shown on Figure 1.3.

Hitachi GST has moved its research and development (R&D) and administrative office operations to a different location in San Jose (3403 Yerba Buena Road). A portion of land has been rezoned and will be sold and redeveloped into a mixed residential, commercial, and recreational open space area. The area to be redeveloped is divided into five Parcels (Parcel O-1 through O-5), as shown on Figure 1.4. In addition, Hitachi GST will be transferring ownership of Endicott Boulevard/Tucson Way, which borders the Site to the north, to the City of San Jose. For the purposes of this report, Parcels O-1 through O-5 and Endicott Boulevard/Tucson Way are hereafter referred to as “the Redevelopment Property”. The Redevelopment Property is approximately 143 acres.

Hitachi GST plans to continue industrial operations (developing and manufacturing of computer storage devices) on the remaining portion of the Site, termed the Core Area. All manufacturing-related activities currently located on Parcels O-1 through O-5 have been moved to the Core Area under the redevelopment plan. The Core Area is also shown on Figure 1.4.

The Hitachi GST Site is a large quantity generator (LQG) of hazardous waste and also maintains a Resource, Conservation and Recovery Act (RCRA) Permit for on-site storage and treatment of hazardous waste. The RCRA Permit encompasses the full 321 acres of the Site. Hitachi GST is working with the California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) to remove the Redevelopment Property from the RCRA Permit.

1.2 Environmental Investigation Objectives

As part of the EIR, ENVIRON prepared a screening human health risk assessment (Screening HHRA) to evaluate the potential impacts on human health for Parcels O-1 through O-5. The overall objective of the Screening HHRA was to identify potential areas within these parcels needing

further investigation and/or mitigation prior to redevelopment. To accomplish this objective, the following steps were completed in the Screening HHRA for Parcels O-1 through O-5: 1) determine the nature of historical operations and chemical use; 2) compile and collect data regarding groundwater, soil gas, and soil conditions; 3) develop risk-based target concentrations (RBTCs) for comparison to groundwater, soil gas and soil data; and 4) compare the RBTCs to the data collected from each parcel to determine areas requiring further investigation or mitigation measures. The RBTCs correspond to the level that would pose a *de minimis* health risk to future on-site populations.

The Screening HHRA was followed by a Draft Current Conditions Report (CCR) (ENVIRON 2005b), which addressed Parcels O-1 through O-5 and Endicott Boulevard/Tucson Way. The Draft CCR plus the letter response to comments received from DTSC on the report (DTSC 2006) constitute the final CCR.

Additional inspection/investigation needed to fill data gaps identified in the Screening HHRA/CCR were addressed in the SI/SP and its associated attachments. The areas to be inspected/investigated were divided into the following nine categories:

Attachment I	Roads/Parking Lots
Attachment II	Aboveground Storage Tanks Associated with Emergency Generators
Attachment III	Buried Concrete Trenches, Building 028J, and Former Waste Vaults 02-04
Attachment IV	Hydraulic Elevators
Attachment V	Former Petroleum Underground Storage Tanks
Attachment VI	Former Orchard Areas
Attachment VII	Endicott Boulevard/Tucson Way
Attachment VIII	Other Remaining Areas
Attachment IX	Soil Gas Evaluation for Parcels O-1 and O-2

This Completion Report presents the results of implementation of Attachment VI – Former Orchard Areas. The results of the SI/SP inspections/investigations will be used to determine if any mitigation/remediation measures are needed on the Redevelopment Property.

The SI/SP was followed by the Corrective Measures Study (CMS) Report (ENVIRON 2006a). The CMS was prepared to address the presence of potential contamination in soil that may be encountered during building demolition and/or earthwork activities within the Redevelopment Property and/or discovered during implementation of the SI/SP. The CMS Report included residential remedial goals (RGs) for soil which were either the minimum residential RBTC or background concentrations.

1.3 Report Organization

This Completion Report is divided into six sections as follows:

Section 1.0 – Introduction: provides an overview of the Site and Redevelopment Property and outlines the report organization.

Section 2.0 – Site Overview: presents an overview of the Site history and surrounding area and summarizes proposed land uses.

Section 3.0 – Areas Recommended for Further Evaluation: summarizes the areas recommended for further inspection/investigation as related to this Completion Report.

Section 4.0 – Soil Inspection/Sampling Plan Implementation: provides an overview of the sampling activities/methodology and describes in detail the inspections/investigations completed as part of this Completion Report.

Section 5.0 – Conclusions: summarizes inspections/investigations conducted and provides recommendations, if needed, for any follow-up actions.

Section 6.0 – References: includes all references cited in this report.

Supporting data are presented in the attachments to this report. Appendices A through D contain laboratory analytical reports. Appendix E includes correspondence between DTSC and Hitachi GST. Appendix F includes hazardous waste manifests and Straight Bills of Lading for the pesticide-impacted soil, and Appendix G includes the truck log. Appendix H includes photos of the excavation activities.

2.0 SITE OVERVIEW

2.1 Site History and Operations

The Site is located at 5600 Cottle Road in San Jose, Santa Clara County, California and is approximately 321 acres in size. Prior to 1955, the Site was agricultural land, primarily tree orchards, with associated residences. In 1955, IBM purchased the Site. The Storage Technology Division of IBM owned and operated the Site from 1955 through 2002. IBM designed, developed, and manufactured computer storage devices, including hard disk drives, read/write heads, and disk storage media at the Site. On or about January 1, 2003, Hitachi GST, a new company formed as a result of a strategic combination of IBM and Hitachi's storage technology businesses, bought the Site.

As shown on Figure 1.3, approximately 30 buildings were present on the Site prior to commencement of redevelopment activities in August 2006. On-site buildings were used for a range of activities, including manufacturing, testing, assembly, research, development, wastewater treatment, reverse osmosis/deionized water (RO/DI) production, utilities, chemical storage, other storage, security, offices, and cafeteria. Exterior areas of the Site primarily consisted of landscaped areas, orchards, sidewalks, water fountains, asphalt parking lots, and paved private roads. As discussed below, Hitachi GST plans to continue industrial operations (developing and manufacturing of computer storage devices) on the Core Area.

Two electrical substations located in the central-southeastern portion of the Site provide electricity to the Site. One 115-kilovolt (kV) substation, which contains a 50 megawatt (MW) electrical generator, is owned and operated by Hitachi GST; the other 115-kV substation is owned and operated by Pacific Gas & Electric (PG&E). Facility personnel reported that electricity for the Site is provided by PG&E, and Hitachi GST's generator is only operated for testing, when there is a major Site power outage or when PG&E requests that Hitachi GST provide electrical back up during peak demand periods. As discussed below, both electrical substations will remain.

In the early 1980s, chlorinated hydrocarbons were detected in soil beneath an on-site underground tank farm. Site-wide investigations showed that volatile organic compounds (VOCs), primarily Freon 113, trichloroethene (TCE), 1,1,1-trichloroethane (TCA) and 1,1-dichloroethene (1,1-DCE) were present in groundwater beneath and downgradient of the Site. Subsequently, the Site has undergone extensive remedial action including the remediation of solvent-impacted soil and extraction and treatment of on-site and off-site groundwater. Under an order from the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB-SF) (Order No. R2-2002-0082 – Final Site Cleanup Requirements, as amended by Order No. R2-2007-0004), IBM is obligated to remediate the groundwater (RWQCB-SF 2002, 2007). According to Hitachi GST, on-site groundwater remedial actions are expected to continue for at least 10 years.

2.2 Surrounding Area

The Site is located in a mixed industrial, commercial and residential area near the intersections of Monterey Highway, Blossom Hill Road, and United States (US) Route 101, approximately seven

miles southeast of downtown San Jose. Figure 1.2 shows the immediate Site vicinity, which includes the following:

- Cottle Road is located to the west, with a shopping center, other commercial buildings, a hospital/medical center, and a medium-high density residential area beyond.
- IBM Building 025 (formerly part of the Site), which is still owned by IBM, is located to the northwest. This parcel is the proposed location of a future Lowe's Store.
- Parcel O-6 (formerly part of the Site) is located to the northeast. Hitachi GST transferred ownership of Parcel O-6, which is approximately 11 acres, to the City of San Jose in November 2005. The planned land use for this parcel is a future City of San Jose Police Substation.
- Southern Pacific Railroad and Caltrain right-of-way, the Blossom Hill Caltrain Station, and Monterey Highway are located to the north, with medium to medium-low density residential, a commercial shopping area, and US Route 101 beyond.
- Highway 85 and the Cottle Road Light Rail Station are located to the south, with a hospital/medical center, library, and single-family residential area beyond.

2.3 Future Land Use

As previously discussed, Hitachi GST has moved its R&D and administrative office operations to a different location in San Jose (3403 Yerba Buena Road). In turn, most of the R&D and administrative office buildings at the Site (Buildings 010, 012, 018, 026, 028, 028J, and 051) have been demolished. Two buildings, Buildings 009 (office) and 011 (cafeteria), on the Redevelopment Property are considered historically significant and will remain intact.

The Redevelopment Property, which covers approximately 143 acres, has been divided into five "outer" parcels (Parcels O-1 through O-5) and includes Endicott Boulevard/Tucson Way, as shown on Figure 1.4. Following building demolition, rough grading and main utility/roadway installation by Hitachi GST, Parcels O-1 through O-5 will be sold and redeveloped into a mixed residential, commercial, and recreational open space area. In addition, Hitachi GST will be transferring ownership of Endicott Boulevard/Tucson Way and newly constructed public roadways on Parcels O-1 through O-5 to the City of San Jose. Prior to property transfer, Hitachi GST is working with DTSC to remove the Redevelopment Property from the RCRA Permit.

Hitachi GST plans to continue industrial operations (developing and manufacturing of computer storage devices) on the Core Area. The Core Area contains all of the current manufacturing, chemical storage, waste storage, and wastewater treatment buildings/areas on the Site. All activities located on Parcels O-1 through O-5 have been moved to the Core Area under the redevelopment plan. There are no current RCRA-permitted sources in the Redevelopment Property. The existing PG&E substation will remain.

3.0 AREAS RECOMMENDED FOR FURTHER EVALUATION

In 2004, ENVIRON conducted sampling of the existing orchard areas on Parcels O-1 through O-5 (ENVIRON 2005b). The soil sample locations are shown on Figure 3.1. Based upon the results of the 2004 sampling, no additional investigation or remediation of the current orchard areas was recommended.

As shown on Figure 3.1, much of the Redevelopment Property used to be orchards. The Screening HHRA/CCR identified former orchard areas as requiring further evaluation/investigation. Because many of the historical orchard areas were covered by roads or parking lots, the SI/SP recommended native soil sampling beneath the fill in the roads and parking lots to determine if residual concentrations of organochlorine pesticides (OCP) or arsenic were present.

4.0 SOIL INSPECTION/SAMPLING PLAN IMPLEMENTATION

4.1 Soil Sampling in Former Orchard Areas

ENVIRON conducted four sampling events for OCPs and arsenic in the native soil below asphalt on the Redevelopment Property. The first sampling event occurred in October 2005. Based upon the results of that event, a second sampling event was conducted in December 2005 where ENVIRON identified a localized area of OCP concentrations in soil which were present above the residential soil RGs, defined in the CMS for the Redevelopment Property (ENVIRON 2006a). To address the elevated concentrations of OCPs, ENVIRON performed additional step-out sampling to further define the boundary of the area exceeding residential RGs in April 2006. Once the boundary was defined, ENVIRON removed OCP-impacted soils for off-site disposal in November 2006. Confirmation samples were collected from beneath excavated areas to assess the condition of any remaining soil, following soil removal activities. Sampling locations and methods for all of these sampling events are summarized in Tables 4.1 and 4.2.

4.1.1 General Sampling Methodology

Soil samples were collected in accordance with Attachment VI of the SI/SP. Prior to initiating any field activities, ENVIRON subcontracted Subdynamic Locating Services (Subdynamic) of San Jose, California to conduct a survey of underground utilities at proposed sampling locations. Drilling activities were performed by Precision Sampling, Inc. (Precision) of Richmond, California using a track-mounted Vibra Push XD Series direct push drilling rig.

At the end of each sampling day, sample information was written on chain-of-custody (COC) forms. Information entered onto the form included the sample identification number, sample matrix, date of sample collection, location and depth of sample, and requested analyses. Each COC form consisted of three carbon copy sheets, two of which were placed in the appropriate sample shipping cooler for laboratory use, with the third sheet being retained by the Field Manager. If samples were shipped, COC forms were placed in adhesive plastic windows and affixed to the inside of the shipping cooler lid.

4.1.2 Investigation Derived Waste

Investigation derived waste (IDW) generated during the October and December 2005 sampling events was collected in 55-gallon drums and labeled and sealed following completion of field activities. Management and disposal of IDW was conducted by Hitachi GST. ENVIRON provided Hitachi GST with the relevant analytical results to assist Hitachi GST with appropriate management and disposal of IDW.

4.1.3 October 2005 Sampling Event

On October 10 through October 17, 2005, ENVIRON was on-site to collect samples of the shallow native soil for OCPs and arsenic in accordance with the SI/SP. Samples of the shallow native soil (zero to six inches) were collected by first coring through the asphalt and roadbase material and then collecting a sample of the shallow native soil located immediately below using a macrocore sampler. The samples were sent to Severn Trent Laboratories (STL) of Pleasanton, California for analysis of OCPs using the United States Environmental Protection Agency (USEPA) Method 8081A and for analysis of arsenic using USEPA Method 6010.

In accordance with the SI/SP, a total of 80 samples were collected across Parcels O-1 through O-5 and beneath Endicott Boulevard/Tucson Way. The sampling locations (B1 through B80) are depicted on Figure 4.1. Following collection of the native soil sample, the hole was grouted and patched with asphalt.

Sample results from the October 2005 sampling event are summarized in Table 4.3. The laboratory analytical report is included in Appendix A. Results were compared to the soil RGs, defined in the CMS for the Redevelopment Property (ENVIRON 2006a). For OCPs that were not detected in any of the soil samples, the detection limit for the OCP was compared to the California Human Health Screening Levels (CHHSLs) for residential land use (CalEPA 2005). If a CHHSL was not available for an OCP, then the detection limit for the OCP was compared to the USEPA Region 9 Preliminary Remediation Goals (PRGs) (USEPA Region 9 2004).

Only one boring (B44) identified OCPs above their respective RGs. OCPs exceeding the RGs in B44 included dieldrin, 4,4'-dichlorodiphenyltrichloroethane (4,4'-DDT), and 4,4'-dichlorodiphenyldichloroethylene (4,4'-DDE). Arsenic concentrations were below the site-specific background concentration (a mean concentration of 8 milligrams per kilogram [mg/kg]) with a maximum concentration of 12 mg/kg).

As shown on Figure 4.1, location B44 is located adjacent to an orchard area in Parcel O-2. This orchard area was sampled for OCPs in October 2004. OCP constituents were detected in this orchard area, however at levels below the RGs (dieldrin concentrations ranged from 6.9 to 11 micrograms per kilogram [$\mu\text{g}/\text{kg}$] [RG = 30 $\mu\text{g}/\text{kg}$], 4,4'-DDT concentrations ranged from 2.9 to 17 $\mu\text{g}/\text{kg}$ [RG = 1,700 $\mu\text{g}/\text{kg}$], and 4,4'-DDE concentrations ranged from 16 to 54 $\mu\text{g}/\text{kg}$ [RG = 1,700 $\mu\text{g}/\text{kg}$]). Based on the October 2005 results, step-out sampling was recommended in the area of boring B44 (ENVIRON 2005c).

4.1.4 December 2005 Sampling Event

Step-out sampling was conducted on December 12 through December 15, 2005. As part of this investigation, ENVIRON collected a deeper sample in the same location as B44 (approximately 2.5 to 3 feet below the native soil surface) and then moved out 25 and 50 feet to the north, east, south, and west of B44 and collected a shallow sample (from the top six inches of the native soil) and a deeper sample (approximately two to three feet below

native soil surface) from each boring. The samples were sent to STL for analysis of OCPs by USEPA Method 8081A and arsenic by USEPA Method 6010. Sampling locations are depicted in Figure 4.2. The locations are identified as B108 through B115. The laboratory analytical report is included in Appendix B.

Sample results from the December 2005 sampling event are summarized Table 4.4 and Figure 4.2. Concentrations of dieldrin were above the RG in the shallow samples of borings B109, B110, B112, and B113, and in the deeper sample of B109. Concentrations of aldrin were also above the RG in the shallow samples of borings B112 and B113.

Based on these results, additional step-out sampling was recommended beyond boring B44 to further define the boundary of the area exceeding RGs (ENVIRON 2006b).

4.1.5 April 2006 Sampling Event

The second round of step-out sampling was conducted on April 25, 2006. Several borings were advanced in order to form a grid at 25-foot increments surrounding boring B44, as shown in Figure 4.3. Locations B108 through B115 were renamed according to their placement within the new grid system (e.g., B108 became B1 in the grid, as shown on Table 4.2 and Figure 4.3).

A shallow sample (the top six inches of native material located below the asphalt) and a deeper sample (approximately 2.5 to 3 feet below native soil surface) were collected from each boring and sent to STL for analysis. The shallow samples immediately adjacent to locations where OCPs had previously been detected above the RGs were submitted for analysis of OCPs using USEPA Method 8081A. The remaining samples were analyzed based on the following criteria:

- If OCPs were not detected or were present at levels below the RGs in the shallow sample, the deeper sample was not analyzed.
- If OCPs were detected in the shallow sample above the RGs, the deeper sample was analyzed. In addition, the shallow samples collected from the next adjacent boring were then analyzed for OCPs. The process was continued along the step-out grid until OCPs were not detected above the RGs or all applicable samples were analyzed.

Sampling results are summarized in Table 4.5. Laboratory data reports are included in Appendix C. During this sampling event, only dieldrin was detected above the RG.

During the April 2006 sampling event, borings were backfilled with the excess soil generated during advancing of the boring following the collection of each soil sample.

4.1.6 Soil Sampling Summary

In summary, four OCPs were detected during the three soil sampling events above their RGs as follows:

- Aldrin was detected at a maximum concentration of 240 µg/kg compared to its RG of 29 µg/kg.
- Dieldrin was detected at a maximum concentration of 2,600 µg/kg compared to its RG of 30 µg/kg.
- 4,4'-DDT was detected at a maximum concentration of 2,300 µg/kg compared to its RG of 1,700 µg/kg.
- 4,4'-DDE was detected at a maximum concentration of 1,800 µg/kg compared to its RG of 1,700 µg/kg.

Based upon the sampling results, ENVIRON recommended performing limited removal of the soil exhibiting concentrations of OCPs above the RGs identified during the soil investigation events. Soil removal was conducted in accordance with the guidelines outlined in the “Pesticide Investigation Results and Soil Removal Plan – Former Orchard Areas Beneath Roads/Parking Lots” (ENVIRON 2006c).

4.2 Removal Action Implementation

Soil removal activities were implemented at the former orchard area between November 8 and November 27, 2006. Work was conducted in accordance with all applicable federal, state, and local laws, regulations, and ordinances, Hitachi GST’s corporate environmental policies, and the soil removal plan.

Soil removal activities were performed by Ferma Corporation (Ferma), a California certified contractor, and were supervised by ENVIRON. Prior to soil excavation, the asphalt and the asphalt road base present in the delineated area were removed and stockpiled separately.

4.2.1 Soil Excavation

Figure 4.4 shows the approximate extent of the soil excavation. The 25-foot sampling grid established during the April 2006 sampling event was used and extended for excavation purposes. In general, excavation in each grid was conducted in one-foot lifts. Excavation at node B2 was extended to a depth of three feet below the native soil surface during the first lift, as previous sampling had indicated OCPs were present at depths of 2.5-3 feet below native soil surface. After each lift, confirmation samples were collected from the grid nodes at the base of the excavation. Confirmation samples were also collected from the southern sidewalls of nodes C6 and D6 (EXC-C6-SWSOUTH, EXC-D6-SW, and EXC-D6-SWSOUTH) as the horizontal extent of OCP in soil in these directions had not been

previously defined. All confirmation samples were analyzed for OCPs using USEPA Method 8081A.

4.2.2 Confirmation Sampling Results

Confirmation sampling results are summarized in Table 4.6. The laboratory analytical reports are included in Appendix D. During the confirmation sampling and excavation procedures, dieldrin was the only chemical detected above its RG. Dieldrin was detected at node B4 during the first and second confirmation sampling events at concentrations of 62 $\mu\text{g}/\text{kg}$ and 38 $\mu\text{g}/\text{kg}$, respectively, compared to its RG of 30 $\mu\text{g}/\text{kg}$. Dieldrin was also detected at 60 $\mu\text{g}/\text{kg}$ in the sample collected from the southern sidewall of node C6.

Results from all samples that were not excavated are summarized in Table 4.7 and shown in Figure 4.4. As shown in Table 4.7, dieldrin results ranged from nondetect to 60 micrograms per kilogram ($\mu\text{g}/\text{kg}$). It should be noted that excavation did not extend to the east past node D6 due to use of this area as a truck haul route during on-site demolition activities. After excavation, a sidewall sample was collected in this location. The original sample, D6-0-0.5, was left in Table 4.7 as a conservative estimate of the non-excavated area.

As discussed in the CMS (ENVIRON 2006a), comparison of sampling results directly to the RGs is a conservative screen. According to the USEPA, the exposure concentration term in the intake equation is the arithmetic average of the concentration that is contacted over the exposure period (USEPA 1989). Although this concentration does not reflect the maximum concentration that could be contacted at any one time, it is regarded as a reasonable estimate of the concentration likely to be contacted over time, since assuming long-term contact with the maximum concentration is not reasonable. Because of the uncertainty associated with any estimate of exposure concentration, USEPA recommends that the 95 percent upper confidence limit (UCL) on the arithmetic average be used for this variable. The 95 percent UCL provides reasonable confidence that the true Site average will not be underestimated (USEPA 1992).

The 95 percent UCL for dieldrin in the excavation area was calculated using ProUCL 3.0 (USEPA 2004). The results of this calculation are presented in Table 4.8. Based on the summary statistics, the mean concentration of dieldrin is 5 $\mu\text{g}/\text{kg}$ and the 95 percent UCL on the mean is 18 $\mu\text{g}/\text{kg}$. This concentration is well below the dieldrin RG of 30 $\mu\text{g}/\text{kg}$.

ENVIRON presented the results of soil excavation and confirmation soil sampling in the pesticide excavation area in a letter to Hitachi GST, dated January 25, 2007. Based on the sample results, ENVIRON recommended no further excavation or sampling in the excavation area. The DTSC concurred with this recommendation in a letter dated February 2, 2007. Copies of these correspondence letters are included in Appendix E.

4.2.3 Soil Disposal

Truck loading and soil transportation of the OCP-impacted soil began on November 8, 2006 and continued through November 11, 2006. A second round of excavation (to remove the

soil that remained at B4 after the first excavation round) occurred on November 28, 2006. Previous sampling results of shallow soil (0-6 inches below native soil surface) in locations B2 and B3 were above the total threshold limit concentrations (TTLCs) of 1.0 mg/kg for both 4,4'-DDT and 4,4'-DDE. Therefore, the top one foot of soil from these nodes (82.79 tons) was transported to the Kettleman Hills Landfill, in Kettleman City, California for disposal as California hazardous waste. The remainder of the soil (414.25 tons) was classified as non-hazardous and transported to the Altamont Landfill, in Livermore, California.

A total of 32 truckloads of OCP-impacted soil were transported off-site for disposal. Excavated soils were direct-loaded onto trucks and transported under hazardous waste manifests or Straight Bills of Lading, in accordance with the soil removal plan. Copies of the hazardous waste manifests and Straight Bills of Lading are provided in Appendix F. Daily logs of truck loading activities are provided in Appendix G and a photolog is provided in Appendix H.

5.0 CONCLUSIONS

No further investigation is recommended for former orchard areas on the Redevelopment Property.

6.0 REFERENCES

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T A B L E S

Table 4.1
Summary of Soil Sample Locations/Methods
Former Orchard Areas in Roads and Parking Lots
Hitachi GST
San Jose, California

Boring ID	Sample Date	Parcel	Area	Location	Sample Depth (feet below native soil surface)	Sampling Constituent	USEPA Analysis Method Number
B1	10/13/2005	O-2	Parking Lot	Building 010 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B2	10/13/2005	O-2	Parking Lot	Building 010 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B3	10/13/2005	O-1	Parking Lot	Building 010 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B4	10/14/2005	O-2	Roadway	Boulder Boulevard	0 - 0.5	Arsenic	6010
						OCPs	8081A
B5	10/10/2005	O-5	Parking Lot	Building 051 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B6	10/10/2005	O-5	Parking Lot	Building 051 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B7	10/10/2005	O-5	Parking Lot	Building 051 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B8	10/10/2005	O-5	Parking Lot	Building 051 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B9	10/10/2005	O-5	Parking Lot	Building 051 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B10	10/10/2005	O-5	Parking Lot	Building 051 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B11	10/10/2005	O-5	Parking Lot	Building 051 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B12	10/10/2005	O-5	Parking Lot	Building 051 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B13	10/11/2005	O-5	Roadway	White Plains Road	0 - 0.5	Arsenic	6010
						OCPs	8081A

Table 4.1
Summary of Soil Sample Locations/Methods
Former Orchard Areas in Roads and Parking Lots
Hitachi GST
San Jose, California

Boring ID	Sample Date	Parcel	Area	Location	Sample Depth (feet below native soil surface)	Sampling Constituent	USEPA Analysis Method Number
B14	10/11/2005	O-5	Roadway	White Plains Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B15	10/11/2005	O-5	Roadway	White Plains Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B16	10/11/2005	O-4	Roadway	White Plains Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B17	10/10/2005	O-4	Roadway	Homestead Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B18	10/10/2005	O-5	Roadway	Homestead Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B19	10/10/2005	O-5	Parking Lot	Parking Lot near Building 018 (Homestead)	0 - 0.5	Arsenic	6010
						OCPs	8081A
B20	10/11/2005	O-4	Roadway	White Plains Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B21	10/11/2005	O-4	Roadway	Charlotte Drive	0 - 0.5	Arsenic	6010
						OCPs	8081A
B22	10/11/2005	O-4	Roadway	Charlotte Drive	0 - 0.5	Arsenic	6010
						OCPs	8081A
B23	10/12/2005	O-4	Parking Lot	Building 028 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B24	10/11/2005	O-4	Parking Lot	Building 028 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B25	10/12/2005	O-4	Roadway	Building 028 Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B26	10/11/2005	O-4	Parking Lot	Building 028 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B27	10/12/2005	O-4	Parking Lot	Building 028 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B28	10/12/2005	O-4	Roadway	Building 028 Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A

Table 4.1
Summary of Soil Sample Locations/Methods
Former Orchard Areas in Roads and Parking Lots
Hitachi GST
San Jose, California

Boring ID	Sample Date	Parcel	Area	Location	Sample Depth (feet below native soil surface)	Sampling Constituent	USEPA Analysis Method Number
B29	10/12/2005	O-4	Parking Lot	Building 028 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B30	10/12/2005	O-4	Roadway	Building 028J Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B31	10/11/2005	O-4	Roadway	Raleigh Road, East	0 - 0.5	Arsenic	6010
						OCPs	8081A
B32	10/11/2005	O-4	Roadway	Raleigh Road, East	0 - 0.5	Arsenic	6010
						OCPs	8081A
B33	10/11/2005	O-3	Roadway	Poughkeepsie Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B34	10/11/2005	O-5	Roadway	Raleigh Road, East	0 - 0.5	Arsenic	6010
						OCPs	8081A
B35	10/12/2005	O-4	Roadway	Raleigh Road, West Near Gate	0 - 0.5	Arsenic	6010
						OCPs	8081A
B36	10/12/2005	O-4	Roadway	Raleigh Road, West Near Gate	0 - 0.5	Arsenic	6010
						OCPs	8081A
B37	10/12/2005	O-3	Parking Lot	Building 026 South Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B38	10/12/2005	O-3	Parking Lot	Building 026 South Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B39	10/12/2005	O-3	Roadway	Lexington Ave	0 - 0.5	Arsenic	6010
						OCPs	8081A
B40	10/12/2005	O-3	Parking Lot	Building 026 Southwest Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B41	10/12/2005	O-3	Roadway	Building 026 Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B42	10/12/2005	O-2	Parking Lot	Building 026 West Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B43	10/12/2005	O-2	Parking Lot	Building 026 West Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A

Table 4.1
Summary of Soil Sample Locations/Methods
Former Orchard Areas in Roads and Parking Lots
Hitachi GST
San Jose, California

Boring ID	Sample Date	Parcel	Area	Location	Sample Depth (feet below native soil surface)	Sampling Constituent	USEPA Analysis Method Number
B44	10/12/2005	O-2	Roadway	Lexington Ave	0 - 0.5	Arsenic	6010
						OCPs	8081A
B45	10/12/2005	O-2	Roadway	Building 026 Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B46	10/12/2005	O-2	Parking Lot	Building 026 West Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B47	10/13/2005	O-2	Parking Lot	Building 026 West Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B48	10/13/2005	O-2	Parking Lot	Building 026 West Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B49	10/13/2005	O-2	Roadway	Lexington Ave	0 - 0.5	Arsenic	6010
						OCPs	8081A
B50	10/13/2005	O-2	Parking Lot	Building 026 West Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B51	10/13/2005	O-2	Roadway	Building 026 Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B52	10/13/2005	O-2	Parking Lot	Building 026 West Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B53	10/13/2005	O-2	Parking Lot	Building 012 Parking Lot, Parking Lot North of Building 026	0 - 0.5	Arsenic	6010
						OCPs	8081A
B54	10/13/2005	O-2	Parking Lot	Building 012 Parking Lot, Parking Lot North of Building 026	0 - 0.5	Arsenic	6010
						OCPs	8081A
B55	10/13/2005	O-2	Parking Lot	Building 012 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B56	10/13/2005	O-2	Roadway	Building 012 Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B57	10/11/2005	O-2	Roadway	Poughkeepsie Road (behind Building 026)	0 - 0.5	Arsenic	6010
						OCPs	8081A

Table 4.1
Summary of Soil Sample Locations/Methods
Former Orchard Areas in Roads and Parking Lots
Hitachi GST
San Jose, California

Boring ID	Sample Date	Parcel	Area	Location	Sample Depth (feet below native soil surface)	Sampling Constituent	USEPA Analysis Method Number
B58	10/11/2005	O-2	Roadway	Building 012 Loading Dock	0 - 0.5	Arsenic	6010
						OCPs	8081A
B59	10/14/2005	Endicott Blvd/	Roadway	Tucson Way	0 - 0.5	Arsenic	6010
						OCPs	8081A
B60	10/14/2005	Endicott Blvd/	Roadway	Tucson Way	0 - 0.5	Arsenic	6010
						OCPs	8081A
B61	10/14/2005	Endicott Blvd/	Roadway	Tucson Way	0 - 0.5	Arsenic	6010
						OCPs	8081A
B62	10/14/2005	Endicott Blvd/	Roadway	Tucson Way	0 - 0.5	Arsenic	6010
						OCPs	8081A
B63	10/14/2005	Endicott Blvd/	Roadway	Tucson Way	0 - 0.5	Arsenic	6010
						OCPs	8081A
B64	10/14/2005	Endicott Blvd/	Roadway	Tucson Way	0 - 0.5	Arsenic	6010
						OCPs	8081A
B65	10/14/2005	Endicott Blvd/	Roadway	Endicott Boulevard	0 - 0.5	Arsenic	6010
						OCPs	8081A
B66	10/14/2005	Endicott Blvd/	Roadway	Endicott Boulevard	0 - 0.5	Arsenic	6010
						OCPs	8081A
B67	10/13/2005	Endicott Blvd/	Roadway	Endicott Boulevard	0 - 0.5	Arsenic	6010
						OCPs	8081A
B68	10/14/2005	O-1	Roadway	Building 011/009 Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B69	10/14/2005	O-1	Roadway	Building 011/009 Access Road	0 - 0.5	Arsenic	6010
						OCPs	8081A
B70	10/14/2005	O-1	Parking Lot	Building 005 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B71	10/14/2005	O-1	Parking Lot	Building 005 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B72	10/14/2005	O-1	Parking Lot	Building 005 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B73	10/14/2005	O-1	Parking Lot	Building 005 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A

Table 4.1
Summary of Soil Sample Locations/Methods
Former Orchard Areas in Roads and Parking Lots
Hitachi GST
San Jose, California

Boring ID	Sample Date	Parcel	Area	Location	Sample Depth (feet below native soil surface)	Sampling Constituent	USEPA Analysis Method Number
B74	10/14/2005	O-1	Parking Lot	Building 005 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B75	10/14/2005	O-1	Parking Lot	Building 005 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B76	10/14/2005	O-1	Parking Lot	Building 005 Parking Lot	0 - 0.5	Arsenic	6010
						OCPs	8081A
B77	10/13/2005	O-2	Roadway	Lexington Ave	0 - 0.5	Arsenic	6010
						OCPs	8081A
B78	10/13/2005	O-2	Roadway	Poughkeepsie Road (near main entrance gate)	0 - 0.5	Arsenic	6010
						OCPs	8081A
B79	10/13/2005	O-2	Roadway	Poughkeepsie Road (near main entrance gate)	0 - 0.5	Arsenic	6010
						OCPs	8081A
B80	10/14/2005	Endicott Blvd/	Roadway	Tucson Way	0 - 0.5	Arsenic	6010
						OCPs	8081A

Notes:

OCP = Organochlorine Pesticide.

USEPA = United States Environmental Protection Agency.

Actual depth of the top of native soil from ground surface varied due to varying asphalt and roadbase thickness.

Table 4.2
Summary of Soil Sample Locations/Methods
Former Orchard Areas - Step-out Sampling Around Boring B44
Hitachi GST
San Jose, California

Sample Location/ Sample Node	Sample ID	Parcel	Area	Location	Sample Date	Sample Depth (feet below native soil surface)	Sampling Constituent	USEPA Analysis Method Number
B44/B3	B44-2.5-3	O-2	Roadway	Lexington Avenue	12/13/2005	2.5 - 3.0	OCPs	8081A
	B44-4.5-5				4/25/2006	4.5 - 5.0	OCPs	8081A
	EXC-B3-1.0				11/9/2006	1.0 - 1.5	OCPs	8081A
B108/B1	B108-0-0.5	O-2	Roadway	Lexington Avenue	12/13/2005	0 - 0.5	OCPs	8081A
	B108-2.5-3					2.5 - 3.0	OCPs	8081A
B109/B2	B109-0-0.5	O-2	Roadway	Lexington Avenue	12/13/2005	0 - 0.5	OCPs	8081A
	B109-2.5-3					2.5 - 3.0	OCPs	8081A
	B109-4.5-5.0				4/25/2006	4.5 - 5.0	OCPs	8081A
	EXC-B2-3.0				11/9/2006	3.0 - 3.5	OCPs	8081A
B110/C3	B110-0-0.5	O-2	Roadway	Building 026 Parking Lot	12/13/2005	0 - 0.5	OCPs	8081A
	B110-2.5-3					2.5 - 3.0	OCPs	8081A
	EXC-C3-1.0				11/10/2006	1.0 - 1.5	OCPs	8081A
B111/D3	B111-0-0.5	O-2	Roadway	Building 026 Parking Lot	12/13/2005	0 - 0.5	OCPs	8081A
	B111-2.5-3					2.5 - 3.0	OCPs	8081A
B112/B4	B112-0-0.5	O-2	Roadway	Lexington Avenue	12/13/2005	0 - 0.5	OCPs	8081A
	B112-2.5-3					2.5 - 3.0	OCPs	8081A
	EXC-B4-1.0				11/10/2006	1.0 - 1.5	OCPs	8081A
	EXC-B4-2.0				11/28/2006	2.0 - 2.5	OCPs	8081A
B113/B5	B113-0-0.5	O-2	Roadway	Lexington Avenue	12/13/2005	0 - 0.5	OCPs	8081A
	B113-2.5-3					2.5 - 3.0	OCPs	8081A
	EXC-B5-1.0				11/10/2006	1.0 - 1.5	OCPs	8081A
B114/A3	B114-0-0.5	O-2	Orchard	Orchard West of Building 026	12/13/2005	0 - 0.5	OCPs	8081A
	B114-2.5-3					2.5 - 3.0	OCPs	8081A
B115	B115-0-0.5	O-2	Orchard	Orchard West of Building 026	12/13/2005	0 - 0.5	OCPs	8081A
	B115-2.5-3					2.5 - 3.0	OCPs	8081A
A2	A2-0-0.5	O-2	Orchard	Orchard West of Building 026	4/25/2006	0 - 0.5	OCPs	8081A
A4	A4-0-0.5	O-2	Orchard	Orchard West of Building 026	4/25/2006	0 - 0.5	OCPs	8081A
A5	A5-0-0.5	O-2	Orchard	Orchard West of Building 026	4/25/2006	0 - 0.5	OCPs	8081A
B6	B6-0-0.5	O-2	Roadway	Lexington Avenue	4/25/2006	0 - 0.5	OCPs	8081A
C1	C1-0-0.5	O-2	Roadway	Lexington Avenue	4/25/2006	0 - 0.5	OCPs	8081A
	C1-2.5-3					2.5 - 3.0	OCPs	8081A

Table 4.2
Summary of Soil Sample Locations/Methods
Former Orchard Areas - Step-out Sampling Around Boring B44
Hitachi GST
San Jose, California

Sample Location/ Sample Node	Sample ID	Parcel	Area	Location	Sample Date	Sample Depth (feet below native soil surface)	Sampling Constituent	USEPA Analysis Method Number
C2	C2-0-0.5	O-2	Roadway	Lexington Avenue	4/25/2006	0 - 0.5	OCPs	8081A
	C2-2.5-3					2.5 - 3.0	OCPs	8081A
	EXC-C2-1.0				11/9/2006	1.0 - 1.5	OCPs	8081A
C4	C4-0-0.5	O-2	Roadway	Lexington Avenue	4/25/2006	0 - 0.5	OCPs	8081A
C5	C5-0-0.5	O-2	Roadway	Lexington Avenue	4/25/2006	0 - 0.5	OCPs	8081A
	C5-2.5-3					2.5 - 3.0	OCPs	8081A
	EXC-C5-1.0				11/9/2006	1.0 - 1.5	OCPs	8081A
C6	C6-0-0.5	O-2	Roadway	Lexington Avenue	4/25/2006	0 - 0.5	OCPs	8081A
	C6-2.5-3					2.5 - 3.0	OCPs	8081A
	EXC-C6-1.0				11/9/2006	1.0 - 1.5	OCPs	8081A
	EXC-C6-SWSOUTH				1/10/2007	0.5 (SW)	OCPs	8081A
D1	D1-0-0.5	O-2	Parking Lot	Building 026 Parking Lot	4/25/2006	0 - 0.5	OCPs	8081A
	D1-2.5-3					2.5 - 3.0	OCPs	8081A
D2	D2-0-0.5	O-2	Parking Lot	Building 026 Parking Lot	4/25/2006	0 - 0.5	OCPs	8081A
	D2-2.5-3					2.5 - 3.0	OCPs	8081A
D4	D4-0-0.5	O-2	Parking Lot	Building 026 Parking Lot	4/25/2006	0 - 0.5	OCPs	8081A
	D4-2.5-3					2.5 - 3.0	OCPs	8081A
D5	D5-0-0.5	O-2	Parking Lot	Building 026 Parking Lot	4/25/2006	0 - 0.5	OCPs	8081A
	D5-2.5-3					2.5 - 3.0	OCPs	8081A
D6	D6-0-0.5	O-2	Parking Lot	Building 026 Parking Lot	4/25/2006	0 - 0.5	OCPs	8081A
	D6-2.5-3					2.5 - 3.0	OCPs	8081A
	EXC-D6-1.0	O-2	Building 026		11/9/2006	1.0 - 1.5	OCPs	8081A
	EXC-D6-SW	O-2	Building 026		11/9/2006	0.5 (SW)	OCPs	8081A
	EXC-D6-SWSOUTH	O-2	Building 026		1/10/2007	0.5 (SW)	OCPs	8081A

Notes:

OCP = Organochlorine Pesticide

USEPA = United States Environmental Protection Agency

SW = Sidewall sample

Actual depth of the top of native soil from ground surface varied due to varying asphalt and roadbase thickness.

TABLE 4.3
Summary of Soil Sampling Results - October 2005
Hitachi GST
San Jose, California

Boring ID	Sample ID	Sample Date	Arsenic (mg/kg)	Aldrin (ug/kg)	Dieldrin (ug/kg)	Endrin Aldehyde (ug/kg)	Endrin (ug/kg)	Endrin ketone (ug/kg)	Heptachlor (ug/kg)	Heptachlor epoxide (ug/kg)	4,4'-DDT (ug/kg)	4,4'-DDE (ug/kg)	4,4'-DDD (ug/kg)	Endosulfan I (ug/kg)	Endosulfan II (ug/kg)	alpha-BHC (ug/kg)	beta-BHC (ug/kg)	gamma-BHC (ug/kg)	delta BHC (ug/kg)	Endosulfan sulfate (ug/kg)	4,4'-Methoxychlor (ug/kg)	Toxaphene (ug/kg)	Chlordane (ug/kg)	alpha-chlordane (ug/kg)	gamma-chlordane (ug/kg)
		<i>RG (a)</i>	12	29	30	18,000 (c)	18,000	18,000 (c)	130 (b)	53 (c)	1,700	1,700	2,400	370,000	370,000 (c)	90 (c)	320 (c)	440 (c)	320 (c)	370,000 (c)	340,000 (b)	400	440	440	440
B1	B01-13Oct05	10/13/2005	6.4	<10	<10	<10	<10	<10	<10	<10	18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B2	B02-13Oct05	10/13/2005	8.8	<10	<10	<10	<10	<10	<10	<10	7.6	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B3	B03-13Oct05	10/13/2005	7.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<49	<2.0	<2.0
B4	B04-14Oct05	10/14/2005	7.5	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<490	<250	<9.8	<9.8
B5	B05-10Oct05	10/10/2005	6.1	<10	<10	<10	<10	<10	<10	<10	26	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B6	B06-10Oct05	10/10/2005	7.6	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B7	B07-10Oct05	10/10/2005	8.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	130	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<990	<500	<20	<20
B8	B08-10Oct05	10/10/2005	7.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B9	B09-10Oct05	10/10/2005	7.9	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B10	B10-10Oct05	10/10/2005	11	<10	<10	<10	<10	<10	<10	<10	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B11	B11-10Oct05	10/10/2005	7.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B12	B12-10Oct05	10/10/2005	4.7	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	17	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B13	B13-11Oct05	10/11/2005	6.4	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B14	B14-11Oct05	10/11/2005	4.8	<10	<10	<10	<10	<10	<10	<10	29	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B15	B15-11Oct05	10/11/2005	9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	29	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<490	<250	<9.9	<9.9
B16	B16-11Oct05	10/11/2005	7.5	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	36	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B17	B17-10Oct05	10/10/2005	7.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B18	B18-10Oct05	10/10/2005	7.6	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B19	B19-10Oct05	10/10/2005	7.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B20	B20-11Oct05	10/11/2005	8.0	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	19	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<490	<250	<9.9	<9.9
B21	B21-11Oct05	10/11/2005	7.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B22	B22-11Oct05	10/11/2005	4.2	<10	<10	<10	<10	<10	<10	<10	23	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B23	B23-12Oct05	10/12/2005	6.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	19	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B24	B24-11Oct05	10/11/2005	7.7	<20	<20	<20	<20	<20	<20	<20	27	190	<20	<20	<20	<20	<20	<20	<20	<20	<20	<990	<500	<20	<20
B25	B25-12Oct05	10/12/2005	4.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	13	63	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<98	<49	<2.0	<2.0
B26	B26-11Oct05	10/11/2005	7.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.8	2.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B27	B27-12Oct05	10/12/2005	6.6	<20	<20	<20	<20	<20	<20	<20	43	290	<20	<20	<20	<20	<20	<20	<20	<20	<20	<990	<500	<20	<20
B28	B28-12Oct05	10/12/2005	6.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.6	43	3.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B29	B29-12Oct05	10/12/2005	6.8	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	49	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<490	<250	<9.9	<9.9
B30	B30-12Oct05	10/12/2005	7.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B31	B31-11Oct05	10/11/2005	5.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B32	B32-11Oct05	10/11/2005	7.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B33	B33-11Oct05	10/11/2005	<0.99	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B34	B34-11Oct05	10/11/2005	10	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	18	22	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<490	<250	<9.9	<9.9
B35	B35-12Oct05	10/12/2005	7.3	<20	<20	<20	<20	<20	<20	<20	110	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<1000	<500	<20	<20
B36	B36-12Oct05	10/12/2005	7.8	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	25	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B37	B37-12Oct05	10/12/2005	8.3	<20	<20	<20	<20	<20	<20	<20	120	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<990	<500	<20	<20
B38	B38-12Oct05	10/12/2005	7.4	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B39	B39-12Oct05	10/12/2005	7.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B40	B40-12Oct05	10/12/2005	7.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B41	B41-12Oct05	10/12/2005	6.3	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	32	<9.9	<9.9	<9.9	<9										

TABLE 4.3
Summary of Soil Sampling Results - October 2005
Hitachi GST
San Jose, California

Boring ID	Sample ID	Sample Date	Arsenic (mg/kg)	Aldrin (ug/kg)	Dieldrin (ug/kg)	Endrin Aldehyde (ug/kg)	Endrin (ug/kg)	Endrin ketone (ug/kg)	Heptachlor (ug/kg)	Heptachlor epoxide (ug/kg)	4,4'-DDT (ug/kg)	4,4'-DDE (ug/kg)	4,4'-DDD (ug/kg)	Endosulfan I (ug/kg)	Endosulfan II (ug/kg)	alpha-BHC (ug/kg)	beta-BHC (ug/kg)	gamma-BHC (ug/kg)	delta BHC (ug/kg)	Endosulfan sulfate (ug/kg)	4,4'-Methoxychlor (ug/kg)	Toxaphene (ug/kg)	Chlordane (ug/kg)	alpha-chlordane (ug/kg)	gamma-chlordane (ug/kg)
		<i>RG (a)</i>	12	29	30	<i>18,000 (c)</i>	<i>18,000</i>	<i>18,000 (c)</i>	<i>130 (b)</i>	<i>53 (c)</i>	<i>1,700</i>	<i>1,700</i>	<i>2,400</i>	<i>370,000</i>	<i>370,000 (c)</i>	<i>90 (c)</i>	<i>320 (c)</i>	<i>440 (c)</i>	<i>320 (c)</i>	<i>370,000 (c)</i>	<i>340,000 (b)</i>	<i>400</i>	<i>440</i>	<i>440</i>	<i>440</i>
B61	B61-14Oct05	10/14/2005	6.4	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B62	B62-14Oct05	10/14/2005	5.4	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<490	<250	<9.9	<9.9
B63	B63-14Oct05	10/14/2005	6.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<49	<2.0	<2.0
B64	B64-14Oct05	10/14/2005	5.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B65	B65-14Oct05	10/14/2005	6.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B66	B66-14Oct05	10/14/2005	6.9	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B67	B67-13Oct05	10/13/2005	4.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5	4.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<99	<50	<2.0	<2.0
B68	B68-14Oct05	10/14/2005	6.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B69	B69-14Oct05	10/14/2005	5.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B70	B70-14Oct05	10/14/2005	7.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B71	B71-14Oct05	10/14/2005	5.9	<10	<10	<10	<10	<10	<10	<10	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B72	B72-14Oct05	10/14/2005	4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B73	B73-14Oct05	10/14/2005	4.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B74	B74-14Oct05	10/14/2005	6.4	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B75	B75-14Oct05	10/14/2005	11	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<1000	<500	<20	<20
B76	B76-14Oct05	10/14/2005	6.7	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	13	71	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<500	<250	<9.9	<9.9
B77	B77-13Oct05	10/13/2005	4.6	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<1000	<500	<20	<20
B78	B78-13Oct05	10/13/2005	6.3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10
B79	B79-13Oct05	10/13/2005	7.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<100	<50	<2.0	<2.0
B80	B80-14Oct05	10/14/2005	6.5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500	<250	<10	<10

Notes:

mg/kg = milligram per kilogram.

ug/kg = microgram per kilogram.

Results detected above the reporting limit are shown in **bold**.

Shaded values indicate the constituent was detected above the RG.

< = the analyte was not detected above the detection limit.

All samples were collected from the top six inches of native soil (Actual depth of the top of native soil from ground surface varied due to varying asphalt and roadbase thickness.)

(a) Remedial Goals (RGs) as presented in the Corrective Measures Study (CMS) for the Redevelopment Property *Source: CMS Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, June 28, 2006; revised August 31, 2006*

(b) California Human Health Screening Level (CHHSL) for residential land use *Source: Use of California Human Health Screening Levels in Evaluation of Contaminated Properties, California Environmental Protection Agency, January 2005*

(c) Preliminary Remediation Goal (PRG) *Source: USEPA Region 9 PRG Table, USEPA Region 9 2004*

TABLE 4.4
 Summary of Soil Sampling Results - December 2005
 Hitachi GST
 San Jose, California

Boring ID	Sample ID	Date Collected	Sample Depth (feet below native soil surface)	Aldrin (µg/kg)	Dieldrin (µg/kg)	Endrin aldehyde (µg/kg)	Endrin (µg/kg)	Endrin ketone (µg/kg)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	4,4'-DDT (µg/kg)	4,4'-DDE (µg/kg)	4,4'-DDD (µg/kg)	Endosulfan I (µg/kg)	Endosulfan II (µg/kg)	alpha-BHC (µg/kg)	beta-BHC (µg/kg)	gamma-BHC (Lindane) (µg/kg)	delta-BHC (µg/kg)	Endosulfan sulfate (µg/kg)	Methoxychlor (µg/kg)	Toxaphene (µg/kg)	Chlordane (technical) (µg/kg)	alpha-Chlordane (µg/kg)	gamma-Chlordane (µg/kg)
RG (a)				29	30	18,000 (c)	18,000	18,000 (c)	130 (b)	53 (c)	1,700	1,700	2,400	370,000	370,000 (c)	90 (c)	320 (c)	440 (c)	320 (c)	370,000 (c)	340,000 (b)	400	440	440	440
B108	B108-0-0.5	12/13/05	0 - 0.5	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
	B108-2.5-3	12/13/05	2.5 - 3.0	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
B109	B109-0-0.5	12/13/05	0 - 0.5	<98	2600	<98	<98	<98	<98	<98	1100	1700	<98	<98	<98	<98	<98	<98	<98	<98	<98	<98	<98	<98	<98
	B109-2.5-3	12/13/05	2.5 - 3.0	<9.9	44	<9.9	<9.9	<9.9	<9.9	<9.9	14	48	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
B110	B110-0-0.5	12/13/05	0 - 0.5	<10	170	<10	<10	<10	<10	<10	22	130	25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	B110-2.5-3	12/13/05	2.5 - 3.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B111	B111-0-0.5	12/13/05	0 - 0.5	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	10	120	10	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
	B111-2.5-3	12/13/05	2.5 - 3.0	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
B112	B112-0-0.5	12/13/05	0 - 0.5	130	1000	<99	<99	<99	<99	<99	160	460	<99	<99	<99	<99	<99	<99	<99	<99	<99	<99	<99	<99	<99
	B112-2.5-3	12/13/05	2.5 - 3.0	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
B113	B113-0-0.5	12/13/05	0 - 0.5	240	210	<20	<20	<20	<20	<20	210	210	66	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	B113-2.5-3	12/13/05	2.5 - 3.0	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
B114	B114-0-0.5	12/13/05	0 - 0.5	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	30	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
	B114-2.5-3	12/13/05	2.5 - 3.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
B115	B115-0-0.5	12/13/05	0 - 0.5	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	12	84	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
	B115-2.5-3	12/13/05	2.5 - 3.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
B44	B44-2.5-3	12/13/05	2.5 - 3.0	<98	<98	<98	<98	<98	<98	<98	170	600	<98	<98	<98	<98	<98	<98	<98	<98	<98	<98	<98	<98	<98

Notes:

ug/kg = microgram per kilogram.

Results detected above the reporting limit are shown in bold.

Shaded values indicate the constituent was detected above the RG.

< = the analyte was not detected above the detection limit.

Sample depths were measured from the top of native soil surface. Actual depth of the top of native soil from ground surface varied due to varying asphalt and roadbase thickness.

(a) Remedial Goals (RGs) as presented in the Corrective Measures Study (CMS) for the Redevelopment Property (Source: CMS Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, June 28, 2006; revised August 31, 2006)

(b) California Human Health Screening Level (CHHSL) for residential land use (Source: Use of California Human Health Screening Levels in Evaluation of Contaminated Properties, California Environmental Protection Agency, January 2005)

(c) Preliminary Remediation Goal (PRG) (Source: USEPA Region 9 PRG Table, USEPA Region 9 2004)

TABLE 4.5
Summary of Soil Sampling Results - April 2006
Hitachi GST
San Jose, California

Sample Node	Sample ID	Date Collected	Sample Depth (feet below native soil surface)	Dieldrin (ug/kg)	4,4'-DDT (ug/kg)	4,4'-DDE (ug/kg)	4,4'-DDD (ug/kg)
<i>RG (a)</i>				30	1,700	1,700	2,400
A2	A2-0-0.5	4/25/2006	0 - 0.5	< 9.9	< 9.9	26	< 9.9
A4	A4-0-0.5	4/25/2006	0 - 0.5	< 9.9	< 9.9	11	< 9.9
A5	A5-0-0.5	4/25/2006	0 - 0.5	< 9.9	< 9.9	16	< 9.9
B6	B6-0-0.5	4/25/2006	0 - 0.5	< 20	< 20	< 20	< 20
B44	B44-4.5-5	4/25/2006	4.5 - 5.0	< 20	< 20	< 20	< 20
B109	B109-4.5-5	4/25/2006	4.5 - 5.0	< 9.9	< 9.9	< 9.9	< 9.9
C1	C1-0-0.5	4/25/2006	0 - 0.5	< 10	< 10	< 10	< 10
C1	C1-2.5-3	4/25/2006	2.5 -3.0	< 4	< 4	69	4.5
C2	C2-0-0.5	4/25/2006	0 - 0.5	110	22	74	< 20
C2	C2-2.5-3	4/25/2006	2.5 -3.0	< 9.8	< 9.8	230	35
C4	C4-0-0.5	4/25/2006	0 - 0.5	< 9.9	< 9.9	240	21
C5	C5-0-0.5	4/25/2006	0 - 0.5	1900	< 99	790	100
C5	C5-2.5-3	4/25/2006	2.5 -3.0	< 20	< 20	71	< 20
C6	C6-0-0.5	4/25/2006	0 - 0.5	76	20	60	< 10
C6	C6-2.5-3	4/25/2006	2.5 -3.0	< 20	< 20	< 20	< 20
D1	D1-0-0.5	4/25/2006	0 - 0.5	11	< 10	14	< 10
D1	D1-2.5-3	4/25/2006	2.5 -3.0	< 9.9	< 9.9	< 9.9	< 9.9
D2	D2-0-0.5	4/25/2006	0 - 0.5	< 2	< 2	< 2	< 2
D2	D2-2.5-3	4/25/2006	2.5 -3.0	< 2	< 2	< 2	< 2
D4	D4-0-0.5	4/25/2006	0 - 0.5	< 9.9	< 9.9	80	11
D4	D4-2.5-3	4/25/2006	2.5 -3.0	< 10	< 10	< 10	< 10
D5	D5-0-0.5	4/25/2006	0 - 0.5	23	< 9.8	15	< 9.8
D5	D5-2.5-3	4/25/2006	2.5 -3.0	< 20	45	170	< 20
D6	D6-0-0.5	4/25/2006	0 - 0.5	32	< 9.9	170	21
D6	D6-2.5-3	4/25/2006	2.5 - 3.0	< 10	< 10	< 10	< 10

Notes:

Organochlorine Pesticide compounds were analyzed by the USEPA Method 8081.

Only detected constituents are shown in the table above.

ug/kg = microgram per kilogram.

Results detected above the reporting limit are shown in **bold**.

Shaded values indicate the constituent was detected above the RG.

< = the analyte was not detected above the detection limit.

Sample depths were measured from the top of native soil surface. Actual depth of the top of native soil from ground surface varied due to varying asphalt and roadbase thickness.

(a) Remedial Goals (RGs) as presented in the Corrective Measures Study (CMS) for the Redevelopment Property (Source: CMS Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, June 28, 2006; revised August 31, 2006)

TABLE 4.6
Pesticide Excavation Area - Confirmation Soil Sampling Results
Hitachi GST
San Jose, California

Node	Sample ID	Sample Date	Sample Depth (feet below native soil surface)	Dieldrin (ug/kg)	Endrin (ug/kg)	4,4'-DDT (ug/kg)	4,4'-DDE (ug/kg)	4,4'-DDD (ug/kg)
<i>RG (a)</i>				<i>30</i>	<i>18,000</i>	<i>1,700</i>	<i>1,700</i>	<i>2,400</i>
B2	EXC-B2-3.0	11/9/2006	3.0	< 2	< 2	< 2	< 2	< 2
B3	EXC-B3-1.0	11/9/2006	1.0	< 20	40	120	480	< 20
B4	EXC-B4-1.0	11/10/2006	1.0	62	2	3	50	< 2
B4	EXC-B4-2.0	11/28/2006	2.0	38	< 20	39	360	25
B5	EXC-B5-1.0	11/10/2006	1.0	< 2	< 2	< 2	32	< 2
C2	EXC-C2-1.0	11/9/2006	1.0	< 20	< 20	< 20	160	22
C3	EXC-C3-1.0	11/10/2006	1.0	< 9.9	< 9.9	< 9.9	110	23
C5	EXC-C5-1.0	11/9/2006	1.0	< 20	< 20	< 20	130	< 20
C6	EXC-C6-1.0	11/9/2006	1.0	< 20	< 20	< 20	120	30
D6	EXC-D6-1.0	11/9/2006	1.0	< 9.9	< 9.9	30	190	12
D6	EXC-D6-SW	11/9/2006	Sidewall	< 2	< 2	< 2	< 2	< 2
C6	EXC-C6-SWSOUTH	1/10/2007	Sidewall	60	3	5	44	5.5
D6	EXC-D6-SWSOUTH	1/10/2007	Sidewall	29	<20	38	39	<20

Notes:

Organochlorine Pesticide compounds were analyzed by the USEPA Method 8081.

Only detected constituents are shown in the table above.

ug/kg = microgram per kilogram.

Results detected above the reporting limit are shown in **bold**.

Shaded values indicate the constituent was detected above the RG.

< = the analyte was not detected above the detection limit.

Sample depths were measured from the top of native soil surface. Actual depth of the top of native soil from ground surface varied due to varying asphalt and roadbase thickness.

(a) Remedial Goals (RGs) as presented in the Corrective Measures Study (CMS) for the Redevelopment Property (Source: CMS Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, June 28, 2006; revised August 31, 2006)

TABLE 4.7
Pesticide Excavation Area - Final Soil Results
Hitachi GST
San Jose, California

Node	Sample ID	Sample Date	Sample Depth (feet below native soil surface)	Dieldrin (ug/kg)	Endrin (ug/kg)	4,4'-DDT (ug/kg)	4,4'-DDE (ug/kg)	4,4'-DDD (ug/kg)
<i>RG (a)</i>				<i>30</i>	<i>18,000</i>	<i>1,700</i>	<i>1,700</i>	<i>2,400</i>
A2	A2-0-0.5	4/25/2006	0-0.5	<9.9	<9.9	<9.9	26	<9.9
A3	B114-0-0.5	12/13/2005	0-0.5	<9.9	<9.9	<9.9	30	<9.9
A3	B114-2.5-3	12/13/2005	2.5-3	<10	<10	<10	<10	<10
A4	A4-0-0.5	4/25/2006	0-0.5	<9.9	<9.9	<9.9	11	<9.9
A5	A5-0-0.5	4/25/2006	0-0.5	<9.9	<9.9	<9.9	16	<9.9
B1	B108-0-0.5	12/13/2005	0-0.5	<9.9	<9.9	<9.9	<9.9	<9.9
B1	B108-2.5-3	12/13/2005	2.5-3	<20	<20	<20	<20	<20
B2	EXC-B2-3.0	11/9/2006	3.0	<2	<2	<2	<2	<2
B2	B109-4.5-5.0	4/25/2006	4.5-5.0	<9.9	<9.9	<9.9	<9.9	<9.9
B3	EXC-B3-1.0	11/9/2006	1.0	<20	40	120	480	<20
B3	B44-2.5-3	12/13/2005	2.5-3	<98	<98	170	600	<98
B3	B44-4.5-5	4/25/2006	4.5-5.0	<20	<20	<20	<20	<20
B4	EXC-B4-2.0	11/28/2006	2.0	38	<20	39	360	25
B4	B112-2.5-3	12/13/2005	2.5-3	<9.9	<9.9	<9.9	<9.9	<9.9
B5	EXC-B5-1.0	11/10/2006	1.0	<2	<2	<2	32	<2
B5	B113-2.5-3	12/13/2005	2.5-3	<9.9	<9.9	<9.9	<9.9	<9.9
B6	B6-0-0.5	4/25/2006	0-0.5	<20	<20	<20	<20	<20
C1	C1-0-0.5	4/25/2006	0-0.5	<10	<10	<10	<10	<10
C1	C1-2.5-3	4/25/2006	2.5-3	<4	<4	<4	69	4.5
C2	EXC-C2-1.0	11/9/2006	1.0	<20	<20	<20	160	22
C2	C2-2.5-3	4/25/2006	2.5-3	<9.8	<9.8	<9.8	230	35
C3	EXC-C3-1.0	11/10/2006	1.0	<9.9	<9.9	<9.9	110	23
C3	B110-2.5-3	12/13/2005	2.5-3	<2.0	<2.0	<2.0	<2.0	<2.0
C4	C4-0-0.5	4/25/2006	0-0.5	<9.9	<9.9	<9.9	240	21
C5	EXC-C5-1.0	11/9/2006	1.0	<20	<20	<20	130	<20
C5	C5-2.5-3	4/25/2006	2.5-3	<20	<20	<20	71	<20
C6	EXC-C6-1.0	11/9/2006	1.0	<20	<20	<20	120	30
C6	C6-2.5-3	4/25/2006	2.5-3	<20	<20	<20	<20	<20
D1	D1-0-0.5	4/25/2006	0-0.5	11	<10	<10	14	<10
D1	D1-2.5-3	4/25/2006	2.5-3	<9.9	<9.9	<9.9	<9.9	<9.9
D2	D2-0-0.5	4/25/2006	0-0.5	<2	<2	<2	<2	<2
D2	D2-2.5-3	4/25/2006	2.5-3	<2	<2	<2	<2	<2
D3	B111-0-0.5	12/13/2005	0-0.5	<9.9	<9.9	10	120	10
D3	B111-2.5-3	12/13/2005	2.5-3	<20	<20	<20	<20	<20
D4	D4-0-0.5	4/25/2006	0-0.5	<9.9	<9.9	<9.9	80	11
D4	D4-2.5-3	4/25/2006	2.5-3	<10	<10	<10	<10	<10
D5	D5-0-0.5	4/25/2006	0-0.5	23	<9.8	<9.8	15	<9.8
D5	D5-2.5-3	4/25/2006	2.5-3	<20	<20	45	170	<20
D6	D6-0-0.5	4/25/2006	0-0.5	32	<9.8	<9.8	170	21
D6	EXC-D6-1.0	11/9/2006	1.0	<9.9	<9.9	30	190	12
D6	EXC-D6-SW	11/9/2006	0.5 (Sidewall)	<2	<2	<2	<2	<2
D6	D6-2.5-3	4/25/2006	2.5-3	<10	<10	<10	<10	<10
----	B115-0-0.5	12/13/2005	0-0.5	<9.9	<9.9	12	84	<9.9
----	B115-2.5-3	12/13/2005	2.5-3	<10	<10	<10	<10	<10
C6	EXC-C6-SWSOUTH	1/10/2007	0.5 (Sidewall)	60	3	5	44	5.5
D6	EXC-D6-SWSOUTH	1/10/2007	0.5 (Sidewall)	29	<20	38	39	<20
<i>Number of samples</i>					<i>46</i>	<i>46</i>	<i>46</i>	<i>46</i>
<i>Number detected</i>					<i>6</i>	<i>9</i>	<i>26</i>	<i>12</i>
<i>Minimum detected</i>					<i>11</i>	<i>3</i>	<i>5</i>	<i>11</i>
<i>Maximum detected</i>					<i>60</i>	<i>40</i>	<i>170</i>	<i>600</i>

Notes:

Organochlorine Pesticide compounds were analyzed by the USEPA Method 8081.

Only detected constituents are shown in the table above.

ug/kg = microgram per kilogram.

Results detected above the reporting limit are shown in **bold**.

Shaded values indicate the constituent was detected above the RG.

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Sample depths were measured from the top of native soil surface. Actual depth of the top of native soil from ground surface varied due to varying asphalt and roadbase thickness.

(a) Remedial Goals (RGs) as presented in the Corrective Measures Study (CMS) for the Redevelopment Property (Source: CMS Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, June 28, 2006; revised August 31, 2006)

TABLE 4.8
Pesticide Excavation Area - ProUCL Dieldrin Statistics
Hitachi GST
San Jose, California

Data File			Variable:	Dieldrin	
Raw Statistics		Normal Distribution Test			
Number of Valid Samples	46	Shapiro-Wilk Test Statistic		0.6208499	
Number of Unique Samples	13	Shapiro-Wilk 5% Critical Value		0.945	
Minimum	1	Data not normal at 5% significance level			
Maximum	60				
Mean	10.090217	95% UCL (Assuming Normal Distribution)			
Median	4.975	Student's-t UCL		13.157123	
Standard Deviation	12.385631				
Variance	153.40385	Gamma Distribution Test			
Coefficient of Variation	1.227489	A-D Test Statistic		3.045079	
Skewness	2.6476504	A-D 5% Critical Value		0.7745306	
		K-S Test Statistic		0.2444143	
Gamma Statistics		K-S 5% Critical Value		0.1338461	
k hat	1.1516017	Data do not follow gamma distribution			
k star (bias corrected)	1.09099	at 5% significance level			
Theta hat	8.7618988				
Theta star	9.2486802	95% UCLs (Assuming Gamma Distribution)			
nu hat	105.94735	Approximate Gamma UCL		12.942192	
nu star	100.37108	Adjusted Gamma UCL		13.047554	
Approx. Chi Square Value (.05)	78.253047				
Adjusted Level of Significance	0.0447826	Lognormal Distribution Test			
Adjusted Chi Square Value	77.621136	Shapiro-Wilk Test Statistic		0.8782794	
		Shapiro-Wilk 5% Critical Value		0.945	
Log-transformed Statistics		Data not lognormal at 5% significance level			
Minimum of log data	0				
Maximum of log data	4.0943446	95% UCLs (Assuming Lognormal Distribution)			
Mean of log data	1.818239	95% H-UCL		14.302601	
Standard Deviation of log data	0.9960653	95% Chebyshev (MVUE) UCL		17.429579	
Variance of log data	0.992146	97.5% Chebyshev (MVUE) UCL		20.661379	
		99% Chebyshev (MVUE) UCL		27.009626	
		95% Non-parametric UCLs			
		CLT UCL		13.093986	
		Adj-CLT UCL (Adjusted for skewness)		13.855716	
		Mod-t UCL (Adjusted for skewness)		13.275937	
		Jackknife UCL		13.157123	
		Standard Bootstrap UCL		13.081088	
		Bootstrap-t UCL		14.480509	
		Hall's Bootstrap UCL		14.297047	
		Percentile Bootstrap UCL		13.28587	
		BCA Bootstrap UCL		13.854348	
RECOMMENDATION		Hall's Bootstrap UCL		14.297047	
Data are Non-parametric (0.05)		Percentile Bootstrap UCL		13.28587	
		BCA Bootstrap UCL		13.854348	
Use 95% Chebyshev (Mean, Sd) UCL		95% Chebyshev (Mean, Sd) UCL		18.050271	
		97.5% Chebyshev (Mean, Sd) UCL		21.494593	
		99% Chebyshev (Mean, Sd) UCL		28.260296	