Health Risk Assessment Report
Coliseum Properties
Oakland, California

prepared for:

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HEALTH RISK ASSESSMENT REPORT

COLISUEM PROPERTIES

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1. Introduction

Millennium Holdings, Inc. (Millennium) has undertaken the responsibility for determining the appropriate management of detected contaminants at the properties located on 5050/750-50th, 5051, and 5200 Coliseum Way, Oakland, Alameda County.

A variety of manufacturing processes have historically occurred at the Site location since the turn of the century. Onsite data have already been collected by several consultants, and currently the regulatory oversight agency is the San Francisco Bay Regional Water Quality Control Board (SFRWQCB). On February 18, 1998, SFRWQCB issued a letter requesting several Technical Reports to assist with, 1) investigation of soil and groundwater pollution in the vicinity and, 2) facility cleanup and/or risk management of the contamination.

As part of SFRWQCB requirements, a *Risk Assessment Workplan (Workplan)*, and *Health Risk Assessment Report (HRA)* must be completed. The purpose of the risk assessment process is to determine if the contaminants detected at the Site pose a threat to human health. The *Workplan* was submitted to the SFRWQB in November, 1998. A separate data package was submitted in January, 1999. Those data along with additional data on detected organic constituents are included in this *HRA Report.* The fundamental approach to the *HRA*, the guidance that was used in completing the *HRA*, and the results and conclusions that may be drawn from the *HRA* are presented in this *HRA Report.*

Because the *HRA* will serve as one tool in the overall *Site Management Plan*, it must provide information that can be used to define the need for, and extent of, potential site mitigation. To this end the *HRA* consists of the following components:

- Risk Assessment Approach
- Toxicity Assessment
- Exposure Assessment
- Risk Characterization
- Uncertainty Analysis
- Preliminary Risk Management Strategy

2. Risk Assessment Approach

This *HRA* fulfills the requirements of SFRWQCB, and allows Millennium to properly evaluate site related risk management and remediation options. The approach is based primarily on the risk assessment methodologies described in the following regulatory guidance documents:

- Cal/EPA. 1992. *Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste and Permitted Facilities*. Office of the Science Advisor.

- U.S. EPA. 1989a. Risk Assessment Guidance for Superfund (RAGS) Volume I: Human Health Evaluation Manual (Part A). Office of Emergency and Remedial Response. EPA/540/1-89/002. December, 1989.

3. Site-Specific Data

There are three separate properties for which Millennium has assumed environmental responsibility. Each location will be treated as a separate Area of Concern (AOC) for the purposes of establishing the potential health impacts of exposure to metals and organic contaminants. Detected inorganic compounds are AOC-specific. Data for each location were independently treated for statistical distribution, and the exposure concentrations in each location were used to estimate AOC-specific risks and hazards for each relevant exposure scenario. The volatile organic compound (VOC) data that are included in this *HRA* are from soil and groundwater, and the semi-volatile organic compound (SVOC) data are from

groundwater. These data are used as the starting points for defining exposure point concentrations on a sitewide basis. In this way the arbitrary grouping of data from groundwater wells that collect groundwater from more than one property over time is avoided and provides a better depiction of the potential movement of VOCs and SVOCs.

It is noted here that the soil data sets for all three properties were compiled and analyzed for *HRA* purposes. The data were provided to SFRWQCB for review as a separate submittal in advance of completion of the *HRA*, in January, 1999. The additional VOC and SVOC data from groundwater were statistically treated and are included as Appendix E of this report.

4. Exposure Assessment

Based upon a) the land use, b) evaluation of complete exposure pathways, and c) the fate and transport potential of the detected constituents, an exposure assessment was prepared. The exposure assessment was predicated on existing Site data as presented in the *Remedial Investigation.* Additional data obtained during the course of the *HRA* were added as applicable.

4.1.1 Exposure Scenarios

To determine the potential impacts to public health that the detected contaminants may pose, two distinct exposure scenarios were evaluated as part of this *HRA*. The first scenario assumed that the site remains in its current state, and that exposures can only occur if construction and excavation activities take place. The second scenario assumes that the properties remain industrial as zoned, and that additional buildings are constructed on each of the properties.

Under current conditions exposure to subsurface inorganic soil contamination was assumed to occur on AOC-specific basis. That is, exposures are specific to each individual property. Access to site soils is prevented by the existing asphalt and concrete structures, and at the property located at 5051Coliseum Way the impacted soils have been covered by several feet of imported fill material. Exposure to subsurface contamination during short-term excavation activities was included as a current scenario in this *HRA*. Because of the nature of the distribution of the contaminants onsite the inorganic compounds are evaluated on a point-by-point basis rather than using a statistical distribution. For the current use scenario this was considered to be a better depiction of the lack of a data trend and the heterogeneity of the data. Accordingly, risks and hazards were estimated for a construction scenario on a point-by-point basis in each AOC.

Under future conditions exposure to VOCs migrating up from soil or groundwater has the potential to occur if industrial structures were built. On properties 5050/750-50th and 5200 Coliseum Way, VOCs were detected in site soil at depths of 2.5 to 11.5 feet below ground surface. For ease of interpretation, a single future hypothetical industrial exposure scenario which includes potential exposure to the VOCs detected in soil and groundwater on a sitewide basis is developed as part of this *HRA*. The sitewide exposure conditions assume that the VOCs from all groundwater and soil locations could contribute to total potential future risks or hazards. A statistical distribution of the data was prepared whereby the 95% Upper Confidence Limit (UCL) on the arithmetic mean for sitewide groundwater and soil VOC and SVOC data. In this case a statistical distribution of the VOC and SVOC data in soil and groundwater was thought to better depict a hypothetical future industrial use scenario because of the greater migration potential of these compounds. Thus, the exposure point concentrations are based on a 95% UCL of the each data set for soil and groundwater. The groundwater in these locations is not potable, and is therefore not considered to be a source of drinking water.

4.1.2 Exposure Pathways

Based on the identification of potential receptors, two potential exposure scenarios have been developed. These include the following:

- Excavation Exposure Scenario
- Future Industrial Use Scenario

An exposure pathway analysis was performed to identify the existing complete exposure pathways for each of the above referenced scenarios. And, only those pathways that were considered complete under the excavation and future industrial use scenarios were considered in the risk analysis. The following conditions were assumed:

- The excavation scenario represents potential construction exposure over a short-term duration. This includes direct and indirect exposures to inorganic and organic compounds on a point by point basis.
- The future industrial scenario represent potential industrial or commercial exposures with indirect exposure to VOCs[1] only on a sitewide basis.
- Exposures will be limited to onsite receptors.
- Drinking water is provided by a municipal water supply which does not rely on water from this site. Therefore there are no direct drinking water exposures to groundwater.

The pathways considered to be complete are listed in Table 1.

Exposures - Therefore must limit contaminants to onsite : No off site migration is allowed to occur.

[1] In addition to VOCs, some SVOCs are EPA criteria for volatility.

4.1.3 Estimation of Exposure Point Concentrations

To properly assess the anticipated exposure pathways, it was necessary to quantify exposure point concentrations in soil and in air. The following sections describe the methods used for determining the applicable exposure point concentrations in this *HRA*.

4.1.3.1 Soil Concentrations

As previously discussed, contaminants detected in site soils are evaluated on a point-by-point basis rather than using a statistical distribution. This was considered to be a better depiction of the lack of a data trend and the heterogeneity of the data for the excavation exposure scenario. Therefore, individual soil data sets for each of the three subject properties were compiled and analyzed for *HRA* purposes. Those data were provided to SFRWQCB for review as a separate submittal in advance of completion of the *HRA*, in January, 1999.

When a contaminant was detected, the detected concentration was used in the estimation of exposure point concentrations. When a contaminant was not detected in any given sample, but was detected at least once in other samples, one-half of the reported detection limit was included as the value for estimation of exposure point concentrations.

4.1.3.2 Outdoor Air Concentrations

During excavation activities it is likely that respirable particulate material, such as dust could be generated. Exposure to volatile organic compounds may also occur during an excavation process. Each of these possibilities is addressed in the following sections.

4.1.3.2.1 Particulates

The excavation process is typically not described by the general risk assessment guidance documents. To best describe potential exposures to particulate matter containing metals and semi-volatile organic compounds generated during the excavation process the published and verified work of Hawley was used (Hawley, 1985). In an attempt to quantify potential dust exposures Hawley reviewed the work of Wolfe et al. (Wolfe et al., 1978).

Wolfe et al. estimated potential respiratory exposure of mixers, baggers, and stackers in a fertilizer mixing plant characterized as "relatively dusty." Dust levels *per se* were not given in their results because the researchers were concerned with exposure to the pesticide (disulfoton) in the granular material being added to fertilizer pellets. Since the pesticide was in a nominal 10% formulation, Hawley assumed total dust values to be ten times the reported pesticide exposure values should reflect dust exposure. Accordingly, Hawley estimated the following particulate inhalation exposures based on the Wolfe et al. data:

maximum exposure 34 mg_{dust}/hour
average exposure 3.2 mg_{dust}/hour

Wolfe and Armstrong (Wolfe and Armstrong, 1971) studied exposure of formulating plant workers to DDT. Two plants formulating 50% DDT powder were investigated. In one plant, the ventilation system was termed "obviously inadequate" and general housekeeping lax. Hawley estimated the following inhalation exposures based on the Wolfe and Armstrong data:

mean values for five work periods for baggers 0.32 mg_{dust}/hour
mean value for five work periods for mixers 0.52 mg_{dust}/hour

The relevance of these studies is that they directly pertain to occupational exposures, and the inhalation parameters can be taken as surrogates for the hypothetical construction activities evaluated in this *HRA*.

It should be noted that the inhalation exposures estimated by Hawley are conservative as they represent exposure to dust generated in a "dry process" environment. It is likely that the soils at the Millennium property will have a higher moisture content thus reducing, although not eliminating, dust generation. Also, the soil at the Millennium property is not likely to contain the same percentage of dust generating particulates as the processes that Wolfe et al., and Wolfe and Armstrong originally studied.

Assuming an 8-hour workday, the range of potential exposure to dust, as described by Hawley, is 2.56 mg_{dust}/day to 272 mg_{dust}/day. Per industry definition dust describes airborne solid particles that range in size from 0.1 to 25 µm (Olishifski, 1985). For such particles with a mean aerodynamic diameter between 0.2 and 20 µm, the sum of the fractions deposited in the three areas of the respiratory tract varies from 60 to 90% (International Council on Radiological Protection [ICRP 2], 1979). Therefore, it can be assumed that 75% of the dust generated on site is respirable and is retained in the lungs. Scaling dust exposure accordingly, the inhalation of respirable dust ranges from 1.92 to 204 mg_{dust}/day.

Recognizing the variability associated with the studies reviewed by Hawley this *HRA* utilizes an average of the aforementioned respirable dust range (i.e., 103 mg_{dust}/day). The contaminant concentration on the dust is assumed to be equal to the concentration detected in the site soil.

4.1.3.2.2 Volatile Organic Compounds

To describe the relationship between the VOCs in soil, and their potential concentration in air, a volatilization factor for each of the VOCs was calculated using the methodology presented in the U.S. EPA *Soil Screening Guidance* (U.S. EPA, 1996a, b). This methodology describes the relationship between the concentration of the VOC in soil and the flux of the volatilized contaminant to air. The calculation of compound-specific volatilization factors is presented in Table 2. Table 2 also identifies the chemical and physical parameters that were used in calculating the soil to air volatilization factor.

This relationship, however, is appropriate for describing non-agitated vapor phase diffusion, and does not adequately describe the increase in volatilization that may occur when the contaminated soil is handled. To account for the latter effects an additional *agitation factor* was included to appropriately increase the volatilization factor.

The agitation factor was obtained from the Air/Superfund National Technical Guidance Study Series, Volume III - *Estimation of Air Emissions from Cleanup Activities at Superfund Sites* (U.S. EPA, 1989b). For the purpose of this assessment, minor site excavation was assumed. Such excavation may best be typified by mechanical backhoe activity and excavation. For such activities, the agitation factor is estimated to range from 2.5 to 28 (Schmidt, 1983). To conservatively assess potential concentrations of VOCs, the higher agitation factor of 28 was used in this *HRA*.

Accordingly, the concentration of volatiles in air were calculated as follows:

$$C_s \times 1/VF_s \times AF = C_a$$

where:

C_s = Concentration in soil (mg/kg)
VF = Volatilization Factor (cu.m/kg)
AF = Agitation factor (unitless)
C_a = Concentration in air (mg/cu.m)

4.1.3.3 Indoor Air Concentrations

Estimates of indoor air concentrations of VOCs were made using the published American Society for Testing and Materials approach (ASTM, 1995). The ASTM methodology is based on the work of Johnson and Ettinger (Johnson and Ettinger, 1991), and estimates volatilization factors that describe the relationship between the concentration of VOCs in soil and ground water to the concentration of VOCs in an enclosed building.

Accordingly, the concentration of VOCs in indoor air was calculated using the following methodology:

$$VF_{sesp} \times C_s = C_{aindoor}$$

where:
VF_{sesp} = Volatilization factor - soil to enclosed space (mg/m^3-air)/(mg/kg-soil)
C_s = Concentration in soil (mg/kg)
$C_{aindoor}$ = Concentration in indoor air (mg/m^3)

and

$$VF_{wesp} \times C_w = C_{aindoor}$$

where:
VF_{wesp} = Volatilization factor - groundwater to enclosed space (mg/m^3-air)/(mg/kg-soil)
C_w = Concentration in groundwater (mg/kg)
$C_{aindoor}$ = Concentration in indoor air (mg/m^3)

A description of the model parameters used in the evaluation of the potential VOC composition of indoor air is provided in Appendix E of this *HRA Report*.

4.1.4 Exposure Factors

Exposure factors were obtained from reference sources that are known to be acceptable to Cal/EPA. Because potential exposures at the property may differ from "typical exposures," it was necessary to identify the most applicable site-specific exposure parameters. The risk assessment therefore selected exposure factors from the following regulatory guidance documents:

- Cal/EPA. 1992. *Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste and Permitted Facilities.* Office of the Science Advisor.
- U.S. EPA. 1997. *Exposure Factors Handbook.* Final version Office of Research and Development. National Center for Environmental Assessment. Washington, D.C. EPA/600/P-95/002Fa.
- Hawley. J.K. 1985. *Assessment of Health Risk from Exposure to Contaminated Soil.* Risk Analysis, Vol. 5, No.4, 1985.

4.1.4.1 Excavation Scenario

The following information provides the rationale for selection of the exposure assumptions used to quantify potential exposures under the excavation exposure scenario.

Soil Ingestion Rate - 480 mg/workday. This value is consistent with the Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual Supplemental Guidance "Standard Default Exposure Factors" (U.S. EPA, 1991). This assumption is descriptive of a person engaged in yard work, and is considered analogous to someone involved in construction/landscaping activities.

Outdoor Worker Inhalation Rate - 10.4 m^3/workday. This value was obtained from the U.S. EPA Exposure Factors Handbook, Volume I of III - General Factors, Table 5-21 (U.S. EPA, 1997). The U.S. EPA reports that the hourly average inhalation rate for outdoor workers is 1.3 m^3/hour. This average accounts for a fraction of slow, moderate, and heavy activities. Assuming an 8 hour workday the 10.4 m^3/workday inhalation rate is achieved.

Exposure Duration - 1 year. The U.S. EPA suggests that exposure duration for construction activities is usually short-term, and are often dictated by the weather and would vary according to site-specific construction/maintenance plans. This assessment assumes that no major construction will occur, and exposures are limited to infrastructure repair and maintenance (e.g., utility line excavation and repair). Such activities generally require less than a year to accomplish.

Exposure Frequency - 60 days. The U.S. EPA suggests that exposure frequencies for construction activities are usually short-term and often dictated by the weather and is generally less than a year. For the purpose of this assessment, it is assumed that exposure frequencies are limited to 60 days out of a year, representing three work months at any given location.

Lifetime - 70 years. By convention.

Bodyweight - 70 kilograms. By convention.

Skin Area Exposed - 5800 cm. This value is recommended by the Cal/EPA, and represents exposure to the head, hands, forearms, and lower legs for adults.

Soil Adherence Factor - 0.2 mg/cm^2. Per the U.S. EPA (U.S. EPA, 1992), this value may be the best value to represent an average over all exposed skin. Although higher values of soil adherence have been measured, the U.S. EPA suggests that these measurements area derived from hand measurements only, and may overestimate average adherence for the entire skin area.

Dermal Absorption - 10% organics, 3% arsenic and cadmium, 1% all other metals.

These factors are presented in Table 3. Further, Table 3 represents the integration of the exposure factors into Pathway Exposure Factors (PEFs). The PEFs are utilized to simplify the calculation of intakes. That is, intakes are calculated as:

$$\mathbf{lADI = C_m * lPEF}$$

where:
lADI = Lifetime Average Daily Intake (*used to quantify carcinogenic health risks*)
Cm = Concentration in exposure media
lPEF = Lifetime pathway exposure factor

and

$$\mathbf{dADI = C_m \times dPEF}$$

where:
dADI = Daily Lifetime Average Daily Intake (*used to quantify noncarcinogenic health hazards*)
C_m = Concentration in exposure media
dPEF = Daily pathway exposure factor

4.1.4.2 Industrial Scenario

This scenario assumes that an industrial building complex could be built on any of the three subject properties. As a result, potential employees working indoors could be indirectly

exposed to subsurface VOCs that might volatilize through the soil and building foundations. As a result of this transport process, indoor air may contain concentrations of VOCs that would be available for inhalation. The following exposure factors were used in this HRA to assess potential health impacts under this future hypothetical scenario.

Worker Inhalation Rate - 10.4 cu.m/workday. This value was obtained from the U.S. EPA *Exposure Factors Handbook*, Volume I of III Table 5-21 (U.S. EPA, 1997). The U.S. EPA reports that the hourly average inhalation rate for outdoor workers is 1.3 m^3/hour. This average accounts for a fraction of slow, moderate, and heavy activities. Assuming an 8 hour workday, the 10.4 m^3/workday inhalation rate is achieved. It is noted that this inhalation rate is consistent with the inhalation rate utilized for the outdoor worker, and is therefore conservative of most indoor workers. However, in the event that a "warehouse" type environment might be available this inhalation rate could be appropriate.

Exposure Duration - 25 years. This value is recommended by the Cal/EPA to best represent a working lifetime. However, based on the most recent U.S. EPA information and data, this value is conservative. The U.S. EPA has determined that a working lifetime is approximately 21.9 years, and that an individual has a mean occupational tenure of 6.6 years (U.S. EPA, 1997).

Exposure Frequency - 250 days. This value is recommended by the Cal/EPA to best represent the number of days per year that an individual works.

Lifetime - 70 years. By convention.

Bodyweight - 70 kilograms. By convention.

These factors and calculated PEFs are also presented in Table 3.

5. Toxicity Assessment

The data sources/databases recognized by the SFRWQCB for use in the toxicity assessment will be the most recent versions of the following published document hierarchy:

- Cal/EPA Criteria for Carcinogens

- U.S. EPA Integrated Risk Information System
- U.S. EPA Health Effects Assessment Summary Tables

All the toxicity data were taken from these sources since the compounds detected onsite include metals, and semi-volatile and volatile organic compounds. Table 4 contains a list of site-specific toxicity criteria for VOCs, SVOCs, and inorganic compounds other than lead used in this *HRA*.

6. Risk Characterization

6.1 Methodology for Carcinogens and Noncarcinogens

The calculation of carcinogenic (cancer) risk probability is the product of a compound-specific slope factor (SF), and the estimated exposure dose (i.e., compound intake) of that same compound. In any given scenario, multiple potential exposure pathways and COI exist. An independent cancer risk calculation is made for each compound, in each pathway that it may be present. The overall cancer risk, under a specific scenario, is the sum of the independent cancer risks for each compound, along all potential exposure routes.

The formula that will be used for calculating the cancer risk probability is:

$$\text{Cancer Risk Probability} = SF * |ADI$$

A quantitative description of potential noncarcinogenic (noncancer) health impacts is a ratio defined as a Hazard Quotient (HQ). The HQ is a ratio of an exposure point concentration or exposure dose of a specific COC divided by the compound-specific RfD or RfC. The overall cumulative Hazard Index (HI), under any scenario is the sum of the independent HQs for each compound, along all potential exposure routes.

The formula that will be used for calculating noncancer HQ is:

$$HQ = dADI / RfD \text{ or } RfC$$

and:

$$HI = HQ_1 + HQ_2 + \ldots HQ_n$$

6.2 Lead Methodology

The DTSC LEADSPREAD model was used to estimate potential impacts of lead in soil on blood lead levels (BLL). This model allows us to develop an acceptable BLL (expressed as micrograms of lead [μg_{lead}] per deciliter of blood [dl_{blood}]) based on industrial exposure parameters. Each lead concentration detected onsite was compared to the acceptable value estimated using LEADSPREAD on a point-by-point basis. The inputs to the LEADSPREAD model and the results obtained are tabulated in detail in Appendix F of this report. In summary, using construction scenario assumptions LEADSPREAD estimates an acceptable[2] concentration of lead in soil as 315 mg/kg. Appendix F, Table F-2 provides a list of the points at which the concentrations were greater or less than the acceptable BLL of 10 µg/kg at each property.

6.3 Results

Risk characterization results have been summarized in tables for report presentation. A set of results is provided for each AOC, and all carcinogenic risk and noncarcinogenic hazard calculations are provided as appendices to this HRA Report.

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[2] Acceptable is defined as lead exposures that produces a 95th percentile BLL of 10 µg/dl.

6.3.1 Excavation Exposure Scenario

The following results were estimated in order to represent a hypothetical scenario that could occur if the existing paving and/or surface structures on the subject properties were invaded for construction purposes. The evaluation is based on a point-by-point analysis of the inorganic data on an AOC-specific basis. Because of the nature of the distribution of inorganic contamination in each AOC, a point-by-point analysis is more likely to represent the onsite conditions than a statistical depiction of aggregate points. The results are expressed separately for lead and the other inorganic compounds. It is noted here that the Hazard Indices (HI) are included in the text with 2 decimal places although additional decimal places are included in the tables. A discussion of the interpretation of the results with respect to their regulatory significance and their potential impact on overall site management follows in Sections 7.0 and 8.0.

6.3.1.1 Property 5050/750-50th

The results of this *HRA* indicate a carcinogenic risk probability range of 5.0E-08 to 1.3E-03, with an average risk of 2.1E-05. The results are tabulated in detail in Appendix C-1. The noncarcinogenic Hazard Indices (HI) range from 0.01 to 93.90, with an average HI of 2.19. The results are tabulated in detail in Appendix D-1.

With respect to the noncarcinogenic hazards, it can be seen in Figure 1 that the majority of data points (67%) in this location result in an HI of less than unity. Additionally, in Figure 2, 95% of the data points are at or below the 1.0E-05 risk level. Figures 3 and 4 provide a pictorial description of the relative ranges of carcinogenic risk probabilities and noncarcinogenic Hazard Indices, respectively.

A point-by-point comparison for lead identifying the acceptable BLL concentration and the detected onsite concentrations is provided in Appendix F.

6.3.1.2 Property 5051

The results of this *HRA* indicate a carcinogenic risk probability range of 2.9E-08 to 1.5E-04, with an average risk of 6.8E-06. The results are tabulated in detail in Appendix C-2. The noncarcinogenic Hazard Indices (HI) range from 0.02 to 25.18, with an average HI of 1.93. The results are tabulated in detail in Appendix D-2.

For noncarcinogenic hazards, it can be seen in Figure 1 that the majority of data points (76.5%) in this location result in an HI of less than unity. Additionally, in Figure 2 98% of the data points are at or below the 1.0E-05 risk level. Figures 5 and 6 provide a pictorial description of the relative ranges of carcinogenic risk probabilities and noncarcinogenic Hazard Indices, respectively.

A point-by-point comparison for lead identifying the acceptable BLL concentration and the detected onsite concentrations is provided in Appendix F.

6.3.1.3 Property 5200

The results of this *HRA* indicate a carcinogenic risk probability range of 2.3-07 to 1.9E-05, with an average risk of 7.7E-05. The results are tabulated in detail in Appendix C-3. The noncarcinogenic Hazard Indices (HI) range from 0.06 to 253.32, with an average HI of 25.36. The results are tabulated in detail in Appendix D-3.

Figure 1 indicates that 100% of the data points are at or below the 1.0E-05 risk level. With respect to the noncarcinogenic hazards, it can be seen in Figure 2 that 14.3% of the data points in this location result in an HI of less than unity, and 52.4% have an HI that is

does this require action?

approximately one order of magnitude greater than unity. One data point exhibits an HI 100 times unity, and six data points have HI's 10 times unity. These may be viewed as hot spots. Figures 7 and 8 provide a pictorial description of the relative ranges of carcinogenic risk probabilities and noncarcinogenic Hazard Indices, respectively.

A point-by-point comparison for lead identifying the acceptable BLL concentration and the detected onsite concentrations is provided in Appendix F.

6.3.2 Future Industrial Use Scenario

The presence of VOCs in groundwater, and SVOCs in sitewide soil and groundwater, are the basis for the future hypothetical industrial use condition on all three properties. VOCs have been detected in the groundwater beneath the site, and VOCs and SVOCs have been detected in the soil at properties 5050/750-50th and 5200 Coliseum Way. Assuming that future use envisions industrial buildings developed on the Coliseum Way properties, the presence of VOCs and SVOCs on a sitewide basis has therefore been included in this analysis as a statistical distribution. As stated in Section 3, the 95% UCL in soil and groundwater have been used as the starting points for estimating indoor air concentrations and the associated potential risks and hazards.

The results of the indoor analysis are based on an aggregate of the contribution of VOC and SVOC concentrations from soil and groundwater that may migrate up through the soil column and the building foundation to produce an estimated indoor air concentration with an associated total risk and hazard as follows:

Carcinogenic Risk	1.21E-06
Noncarcinogenic Hazard	0.0766

The format of the calculation of risk and hazard is provided in detail in Appendix E of this *HRA* report.

7. Uncertainty Analysis

A qualitative estimate of uncertainties in an HRA can assist with the interpretation of the risk characterization results. Typically the uncertainties most commonly cited center around the derivation of toxicological data, exposure factors, and the statistical treatment of site-specific data. These types of uncertainties build conservatism into the risk assessment as a safety factor in the overall process.

Rather than describe the inherent uncertainties present in all risk assessment processes it was considered more useful to describe where the key uncertainties lie in this specific *HRA*. Thus, in defining the potential for exposure to onsite contamination it is clear the greatest uncertainty in the current use scenario is the heterogeneous nature of the deposited contamination. That is, although this *HRA* provides a point-by-point analysis of current conditions, the ability for any individual to be exposed to a single point concentration over any given length of time is extremely low. What the point estimates provide however are a relative range of risks and hazards across each site. To reconcile this type of uncertainty a relative distribution of the risks and hazards across each site is provided. In this way, although we are unable to absolutely predict the ability to contact each point location, we can identify the number of points that lie above and below the acceptable levels as defined by federal and state regulations.

Future use conditions are depicted by a hypothetical industrial scenario that includes potential exposure to VOCs and SVOCs in soil and groundwater. Although it is recognized that the presence of such compounds exists, the likelihood of them remaining at the detected levels following the construction and grading activities that would be required to construct a building and its foundation are extremely low. Similarly, the future use scenario in this *HRA* includes a

25 year exposure duration which is likely to overestimate the total time spent in any one occupational location. Thus, the predicted risks and hazards based on current concentrations are likely to be reduced in the future, and are likely to be overestimates of the future true risk probabilities and hazard ratios.

8. Preliminary Risk Management Strategy

The results of the future industrial use scenario as presented in this *HRA* indicate that there is no significant risk or hazard posed by the presence of VOCs and SVOCs in the soil and groundwater at any of the subject properties on Coliseum Way. Regulatory decision-making as part of the remedial alternative evaluation process is therefore based on 1) estimates of potential risk and hazard, 2) the location of the site, and 3) the current and future use of the site which is assumed to remain industrial in accordance with planning and zoning restrictions. Based on the results of the future use scenario in this *HRA*, remediation may not be necessary.

The total risk probability is within the carcinogenic risk range identified as "acceptable" under the U.S. National Oil and Hazardous Substances Pollution Contingency Plan under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (40 CFR 300 §300.430), which identifies the $1x10^{-4}$ to $1x10^{-6}$ risk range as generally "acceptable." A risk level of $1x10^{-5}$ may also be utilized as a point of departure for determining the need to establish remediation goals, as is seen in California's Proposition 65 legislation (22 CCR, Chapter 3. Safe Drinking Water and Toxic Enforcement of 1986), in which it is stated as:

> *"22-12711. (a) (1). Where a state or federal agency has developed a regulatory level for a chemical known to the state to cause cancer which is calculated to result in not more than one excess case of cancer in an exposed population of 100,000, such level shall constitute the no significant risk level."*

Under this premise, the results of the future use scenario describe a potential risk of less than one excess cancer risk in 100,000 exposed persons. Additionally, with respect to noncarcinogenic hazard ratios, the regulatory decision-making point of departure is generally unity (1), at both the federal and state level. Under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), applicable or relevant & appropriate requirements for noncarcinogens is stated as follows; "For systemic toxicants, acceptable exposure levels shall represent concentration levels to which the human population, including sensitive subgroups, may be exposed without adverse effect during a lifetime or part of a lifetime incorporating an adequate margin of safety..." (40 CFR 300 §300.430(e)(2)(i)(A)[1]). When the estimated exposure point concentrations are equal to the acceptable exposure levels, the ratio is unity (1). Under this premise, the results of the future scenario describe a potential Hazard Index of less than unity.

The results of the excavation exposure conditions scenario as presented in this *HRA* reflect the relative distribution of the potential impacts of exposure to onsite carcinogenic and noncarcinogenic compounds. It can be seen from the results that the distribution of noncarcinogenic hazards occurs within a fairly narrow range on each property, and that there are significantly fewer data points with estimated HI that exceed unity. However, those that do exceed tend to do so in extreme cases such that the probability of encountering those data points, and concentrations associated to them, can not be predicted with any certainty.

The carcinogenic risk probabilities on each property are primarily at or below the 1.0E-05 risk level, with few samples at 5050/750-50th (5%), and 5051 Coliseum Way (2%) producing results in excess of this level.

Additional information on the presence of lead at all three properties suggests that lead deposited onsite is the result of historic waste disposal practices. In the majority of samples the presence of lead is at or below the acceptable 315 mg/kg concentration estimated using LEADSPREAD. The distribution of onsite concentrations appears to be directly related to the heterogeneous disposition of waste materials below the ground surface and therefore the

location of hot spots other than those already sampled can not be predicted with a high degree of uncertainty.

The heterogeneous distribution of lead concentrations in soil combined with the range of noncarcinogenic HI results provides support for the notion that potential exposure to contamination in the subsurface soils should only take place under restricted and supervised conditions. Further, the use of trained personnel during construction activities is likely to be required. These types of site mitigation measures will be considered further and addressed in a soils management plan that will be submitted to SFRWQCB under separate cover.

The future hypothetical industrial use scenario developed in this *HRA Report* indicates that no significant impacts to human health are likely, leading to the conclusion that in the future such onsite activities can occur unrestricted. The results of this *HRA* therefore lend themselves to the proposition that managing the soils in place is an effective and efficient from of site management. The principles of a site management strategy specifically for soils will be addressed in a Soil Management Plan that will be provided to the SFRQWCB as a separate submittal.

9. References

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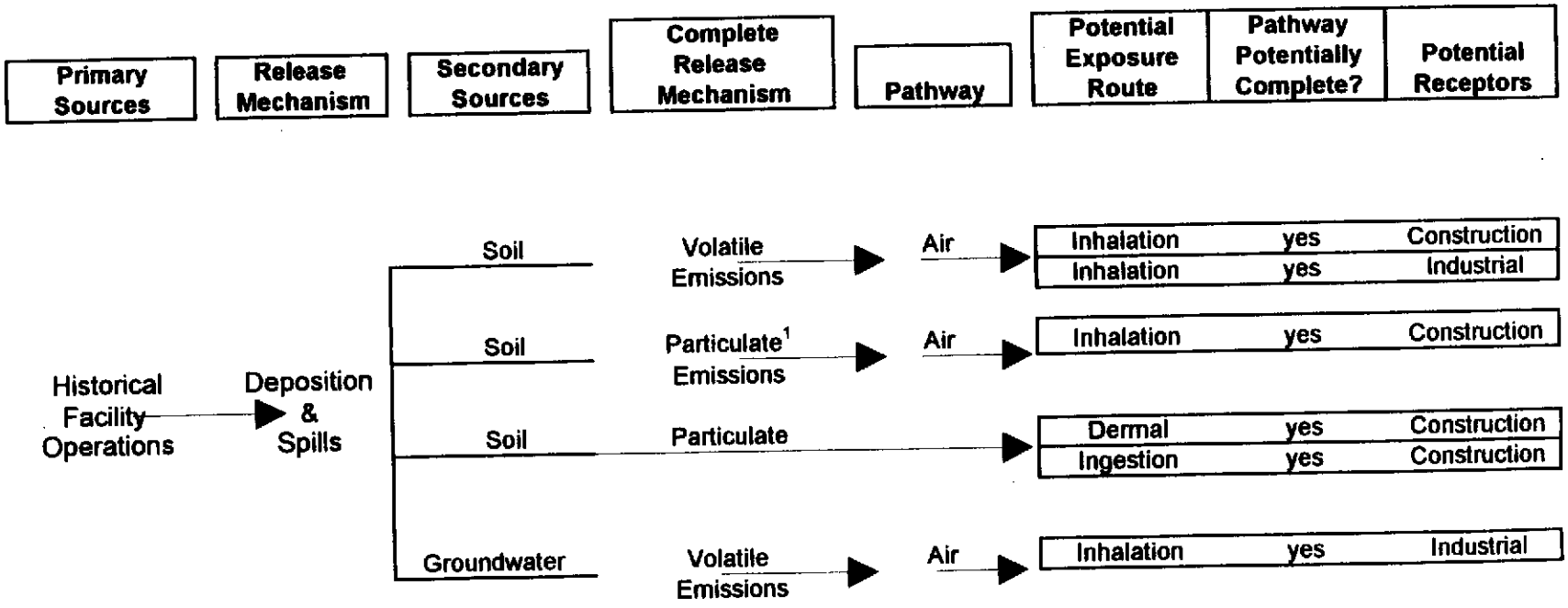
10. Acronyms

AOC	Area of Concern
ASTM	American Society for Testing and Materials
BLL	Blood Lead Levels
Cal/EPA	California Environmental Protection Agency
cm^2	centimeter square
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
COC	Compound of Concern
dADI	Daily Lifetime Average Daily Intake
dl	Deciliter
DTSC	Department of Toxic Substances Control
EPC	Exposure Point Concentration
HEAST	Health Effect Assessment Summary Tables
HERD	Human Ecological Risk Division (*of DTSC*)
HI	Hazard Index
HQ	Hazard Quotient
HRA	Health Risk Assessment
ICRP	International Council on Radiological Protection
IRIS	Integrated Risk Information Systems
g	Grams
kg	Kilogram
lADI	Lifetime Average Daily Intake
m^3	Cubic meter
µg	Microgram
mg	Milligram
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
dPEF	Daily Pathway Exposure Factor
lPEF	Lifetime Pathway Exposure Factor

RAGS	Risk Assessment Guidance for Superfund
RfD	Reference Dose
SF	Slope Factor
SFRWQCB	San Francisco Regional Water Quality Control Board
SVOC	Semi-volatile Organic Compound
µg	Microgram
µg/dl	Microgram per deciliter
UCL	Upper Confidence Limit
USEPA	United States Environmental Protection Agency

TABLE 1
SUMMARY OF COMPLETE EXPOSURE PATHWAYS



Notes:

1 Particualte emissions refers to metals and semivolatile organic compounds due to the physical characteristics of the latter group of compounds.

TABLE 2
Calculation of Soil to Air Volatilization Factor (VF)

$$VF_s(m^3/kg) = (Q/C) \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times \rho_b \times D_A)} \times 10^{-4}(m^2/cm^2)$$

where:

$$D_A = \frac{[(\Theta_a^{10/3} D_i H' + \Theta_w^{10/3} D_w)/n^2]}{\rho_B K_d + \Theta_w + \Theta_a H'}$$

Parameter	Definition (units)	Benzene	Ethylbenzene	Toluene	Xylenes	o-Xylene	p,m-Xylenes	Acetone
VF_s	Volatilization factor (m^3/kg)	3.18E+02	6.60E+02	4.82E+02	1.89E+03	2.19E+03	1.81E+03	5.68E+02
	Volatilization factor (kg/m^3) (1/VF_s)	*3.14E-03*	*1.51E-03*	*2.08E-03*	*5.29E-04*	*4.56E-04*	*5.51E-04*	*1.76E-03*
D_A	Apparent diffusivity (cm^2/s)	1.43E-03	3.32E-04	6.25E-04	4.06E-05	3.01E-05	4.41E-05	4.49E-04
Q/C	Inverse of the mean conc. at the center of a 0.5-acre square source (g/m^2-s per kg/m^3)	8.95E+01	8.95E+01	8.95E+01	8.95E+01	8.95E+01	8.95E+01	8.95E+01
T	Exposure interval (s)	5.18E+06	5.18E+06	5.18E+06	5.18E+06	5.18E+06	5.18E+06	5.18E+06
ρ_b	Dry soil bulk density (g/cm^3)	1.500	1.500	1.500	1.500	1.500	1.500	1.500
Θ_a	Air filled soil porosity (Lair/Lsoil)	0.280	0.280	0.280	0.280	0.280	0.280	0.280
n	Total soil porosity (Lpore/Lsoil)	0.430	0.430	0.430	0.430	0.430	0.430	0.430
Θ_w	Water-filled soil porosity (Lwater/Lsoil)	0.150	0.150	0.150	0.150	0.150	0.150	0.150
ρ_s	Soil particle density (g/cm3)	2.650	2.650	2.650	2.650	2.650	2.650	2.650
Di	Diffusivity in air (cm^2/s)	0.088	0.075	0.087	0.007	0.007	0.007	0.575
H	Henry's Law constant (atm-m^3/mol)	5.59E-03	7.88E-03	6.64E-03	7.04E-03	5.19E-03	7.66E-03	3.88E-05
	Henry's Law constant (Pa-m^3/mol)	5.66E+02	7.98E+02	6.73E+02	7.13E+02	5.26E+02	7.76E+02	3.93E+00
H'	Dimensionless Henry's Law constant	2.29E-01	3.23E-01	2.72E-01	2.89E-01	2.13E-01	3.14E-01	1.59E-03
D_w	Diffusivity in water (cm^2/s)	9.80E-06	7.80E-06	8.60E-06	7.80E-06	7.80E-06	7.80E-06	1.14E-05
K_d	Soil-water partition coefficient (cm^3/g) = Kocfoc	5.89E-01	3.63E+00	1.82E+00	2.40E+00	2.40E+00	2.40E+00	5.75E-03
K_{oc}	Soil organic carbon-water partition coefficient (cm^3/g)	5.89E+01	3.63E+02	1.82E+02	2.40E+02	2.40E+02	2.40E+02	5.75E-01
f_{oc}	Fraction organic carbon in soil (g/g)	0.01	0.01	0.01	0.01	0.01	0.01	0.01

TABLE 2
Calculation of Soil to Air Volatilization Factor (VF)
Page 2 of 2

$$VF_s(m^3/kg) = (Q/C)\,x\,\frac{(3.14\,x\,D_A\,x\,T)^{1/2}}{(2\,x\,\rho_b\,x\,D_A)}\,x\,10^{-4}(m^2/cm^2)$$

where:

$$D_A = \frac{[(\Theta_a^{10/3} D_i H' + \Theta_w^{10/3} D_w)/n^2]}{\rho_B K_d + \Theta_w + \Theta_a H'}$$

Parameter	Definition (units)	Methylene Chloride	Naphthalene	Styrene	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene
VF_s	Volatilization factor (m^3/kg)	2.68E+02	6.92E+03	1.66E+03	5.19E+02	6.23E+02
	Volatilization factor (kg/m^3) (1/VF_s)	*3.73E-03*	*1.44E-04*	*6.04E-04*	*1.93E-03*	*1.61E-03*
D_A	Apparent diffusivity (cm^2/s)	2.02E-03	3.02E-06	5.28E-05	5.38E-04	3.74E-04
Q/C	Inverse of the mean conc. at the center of a 0.5-acre square source (g/m^2-s per kg/m^3)	8.95E+01	8.95E+01	8.95E+01	8.95E+01	8.95E+01
T	Exposure interval (s)	5.18E+06	5.18E+06	5.18E+06	5.18E+06	5.18E+06
ρ_b	Dry soil bulk density (g/cm^3)	1.500	1.500	1.500	1.500	1.500
Θ_a	Air filled soil porosity (Lair/Lsoil)	0.280	0.280	0.280	0.280	0.280
n	Total soil porosity (Lpore/Lsoil)	0.430	0.430	0.430	0.430	0.430
Θ_w	Water-filled soil porosity (Lwater/Lsoil)	0.150	0.150	0.150	0.150	0.150
ρ_s	Soil particle density (g/cm3)	2.650	2.650	2.650	2.650	2.650
Di	Diffusivity in air (cm^2/s)	0.101	0.059	0.071	0.087	0.087
H	Henry's Law constant (atm-m^3/mol)	2.19E-03	4.83E-04	2.75E-03	5.70E-03	3.93E-03
	Henry's Law constant (Pa-m^3/mol)	2.22E+02	4.89E+01	2.79E+02	5.78E+02	3.98E+02
H'	Dimensionless Henry's Law constant	8.98E-02	1.98E-02	1.13E-01	2.34E-01	1.61E-01
D_w	Diffusivity in water (cm^2/s)	1.17E-05	7.50E-06	8.00E-06	8.60E-06	8.60E-06
K_d	Soil-water partition coefficient (cm^3/g) = Kocfoc	1.17E-01	2.00E+01	7.76E+00	1.82E+00	1.82E+00
K_{oc}	Soil organic carbon-water partition coefficient (cm^3/g)	1.17E+01	2.00E+03	7.76E+02	1.82E+02	1.82E+02
f_{oc}	Fraction organic carbon in soil (g/g)	0.01	0.01	0.01	0.01	0.01

TABLE 3
EXPOSURE FACTORS AND CALCULATION OF PATHWAY EXPOSURE FACTORS

ORAL EXPOSURE	Exposure Frequency	days/year	Exposure Duration	Lifetime	Ingestion Rate	Body Weight	Lifetime Pathway Exposure Factor	Daily Pathway Exposure Factor
units	days	days/year	years	years	mg/day	kilograms	$mg_{soil}/kg_{bodyweight}$-day	$mg_{soil}/kg_{bodyweight}$-day
notation	EF	(d/y)	ED	L	IRsoil	BW	lPEFsoil	dPEFsoil
equation							EF*ED*IRsoil/(d/y)*L*BW	(IRsoil/BW)*(EF/(d/y))
Construction	60	365	1	70	480	70	0.016	1.127

VOC INHALATION EXPOSURE	Exposure Frequency	days/year	Exposure Duration	Lifetime	Inhalation Rate	Body Weight	Lifetime Pathway Exposure Factor	Daily Pathway Exposure Factor
units	days	days/year	years	years	cu.m/day	kilograms	$cu.m_{air}/kg_{bodyweight}$-day	$cu.m_{air}/kg_{bodyweight}$-day
notation	EF	(d/y)	ED	L	IRair	BW	lPEFair	dPEFair
equation							EF*ED*IRair/(d/y)*L*BW	(IRair/BW)*(EF/(d/y))
Construction	60	365	1	70	10.4	70	0.000	0.024
Occupational	250	365	25	70	10.4	70	0.036	0.102

DERMAL EXPOSURE	Exposure Frequency	days/year	Exposure Duration	Lifetime	Skin Area Exposed	Body Weight	Lifetime Pathway Exposure Factor	Daily Pathway Exposure Factor
units	days	days/year	years	years	sq.cm/day	kilograms	$sq.cm_{skin}/kg_{bodyweight}$-day	$sq.cm_{skin}/kg_{bodyweight}$-day
notation	EF	(d/y)	ED	L	SA	BW	lPEFskin	dPEFskin
equation							EF*ED*SA/(d/y)*L*BW	(SA/BW)*(EF/(d/y))
Construction	60	365	1	70	5800	70	0.195	13.620

PARTICULATE INHALATION EXPOSURE	Exposure Frequency	days/year	Exposure Duration	Lifetime	Inhalation Exposure Rate	Body Weight	Lifetime Pathway Exposure Factor	Daily Pathway Exposure Factor
units	days	days/year	years	years	mg/day	kilograms	$mg/kg_{bodyweight}$-day	$mg/kg_{bodyweight}$-day
notation	EF	(d/y)	ED	L	IER	BW	lPEFair	dPEFair
equation							EF*ED*IER/(d/y)*L*BW	(IER/BW)*(EF/(d/y))
Construction	60	365	1	70	103	70	0.00346	0.242

TABLE 4
SUMMARY OF TOXICITY INFORMATION FOR CONSTITUENTS DETECTED AT MILLENNIUM PROPERTIES, ALAMEDA, CA

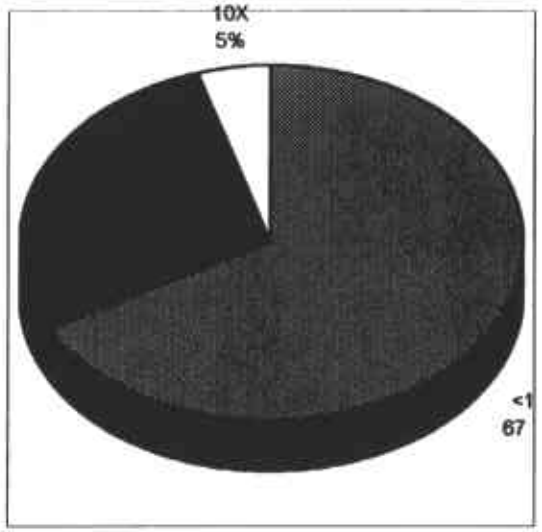
Constituent Name	CAS Number	Oral Carcinogenic Slope Factors SFo 1/(mg/kg-d)	note	Oral Reference Doses RfDo (mg/kg-d)	note	Inhalation Carcinogenic Slope Factors SFi 1/(mg/kg-d)	note	Inhalation Reference Doses RfDi (mg/kg-d)	note
Ag - Silver	7440-22-4			5.00E-03	i				
As - Arsenic	7440-38-2	1.50E+00	i	3.00E-04	i	1.20E+01	ca		
Ba - Barium	7440-39-3			7.00E-02	i				
Be - Beryllium	7440-41-7	4.30E+00	i	5.00E-03	i	8.40E+00	i	5.70E-06	i
Cd - Cadmium	7440-43-9			5.00E-04	i	1.50E+01	ca		
Co - Cobalt	7440-48-4			6.00E-02	n			2.86E-04	n
Cr - Chromium	16065-83-1			1.00E+00	i				
Cu - Copper	7440-50-8			3.71E-02	h				
Hg - Mercury	22967-92-6			1.00E-04	i				
Mo - Molybdenum	7439-98-7			5.00E-03	h				
Ni - Nickel	7440-02-0			2.00E-02	i				
Pb - Lead	7439-92-1								
Sb - Antimony	7440-36-0			4.00E-04	i				
Se - Selenium	7782-49-2			5.00E-03	i				
Tl - Thallium	7791-12-0			8.00E-05	i				
V - Vanadium	7440-62-2			7.00E-03	h				
Zn - Zinc	7440-62-2			7.00E-03	h				
2-Methylnaphthalene	91-57-6			2.00E-02	nap			8.60E-04	nap
Acenaphthylene	208-96-8			2.00E-02	nap			8.60E-04	nap
Acenaphthene	83-32-9			6.00E-02	i			6.00E-02	r
Anthracene	120-12-7			3.00E-01	i			3.00E-01	r
Benzo(a)anthracene	120-12-7			3.00E-01	i			3.00E-01	r
Benzo(a)pyrene	50-32-8	1.20E+01	ca			1.20E+01	ca		
Benzo(b)fluoranthene	205-99-2	1.20E+00	ca*			1.20E+00	ca*		
Benzo(k)fluoranthene	207-08-9	1.20E-01	ca*			1.20E-01	ca*		
Benzo(g,h,I)perylene	191-24-2			2.00E-02	nap			8.60E-04	nap
Bis(2-ethylhexyl)phthalate	117-81-7	8.40E-03	ca	2.00E-02	i	8.40E-03	ca	2.20E-02	r
Chrysene	218-01-9	1.20E-02	ca			1.20E-02	ca		
Dibenz(a,h)anthracene	53-70-3	1.20E+01	ca			1.20E+01	ca		
Dibenzofuran	132-64-9			4.00E-03	n			4.00E-03	r
2,4-Dimethylphenol	105-67-9			2.00E-02	i			2.00E-02	r
Fluoranthene	206-44-0			4.00E-02	i			4.00E-02	r
Fluorene	86-73-7			4.00E-02	i			4.00E-02	r
Indeno(1,2,3-cd)pyrene	193-39-5	1.20E+00	ca			1.20E+00	ca		
2-Methylnaphthalene	91-57-6			2.00E-02	nap			8.60E-04	nap
2-Methylphenol	95-48-7			5.00E-02	i			5.00E-02	r
4-Methylphenol	106-44-5			5.00E-03	h			5.00E-03	r
Naphthalene	91-20-3			2.00E-02	i			8.60E-04	i
N-Nitroso-diphenylamine	621-64-7	9.00E-03	ca			9.00E-03	ca		
Phenanthrene	85-01-8			2.00E-02	nap			8.60E-04	nap
Phenol	108-95-2			6.00E-01	i			6.00E-01	r

TABLE 4
SUMMARY OF TOXICITY INFORMATION FOR CONSTITUENTS DETECTED AT MILLENNIUM PROPERTIES, ALAMEDA, CA

Constituent Name	CAS Number	Oral Carcinogenic Slope Factors SFo 1/(mg/kg-d)	note	Oral Reference Doses RfDo (mg/kg-d)	note	Inhalation Carcinogenic Slope Factors SFi 1/(mg/kg-d)	note	Inhalation Reference Doses RfDi (mg/kg-d)	note
Pyrene	129-00-0			3.00E-02	i			3.00E-02	r
Benzene	71-43-2	1.00E-01	ca	3.00E-03	n	1.00E-01	ca	1.70E-03	n
Ethylbenzene	100-41-4			1.00E-01	i			2.90E-01	i
Toluene	108-88-3			2.00E-01	i			1.10E-01	h
Xylenes	1330-20-7			2.00E+00	i				
o-Xylene	95-47-6			2.00E+00	i				
p,m-Xylenes	108-38-3			2.00E+00	i				
Acetone	67-64-1			1.00E-01	i			1.00E-01	r
Methylene Chloride	75-09-2	1.40E-02	ca	6.00E-02	i	3.50E-03	ca	8.57E-01	h
Styrene	100-42-5			2.00E-01	i			2.90E-01	i
1,2,4-Trimethylbenzene	95-63-6			2.00E-01	tol			2.00E-01	tol
1,3,5-Trimethylbenzene	108-67-8			2.00E-01	tol			2.00E-01	tol

Notes:
ca = California Criteria for Carcinogens
i = U.S. EPA Integrated Risk Information System
n = National Center of Environmental Assessment, as reporte by U.S. EPA, Region IX
h = U.S. EPA Health Effects Assessment Summary Tables
nap = Toxicity assumed to be equivalent to naphthalene
tol = Toxicity assumed to be equivalent to toluene
r = route to route extrapolation, as reported by U.S. EPA, Region IX

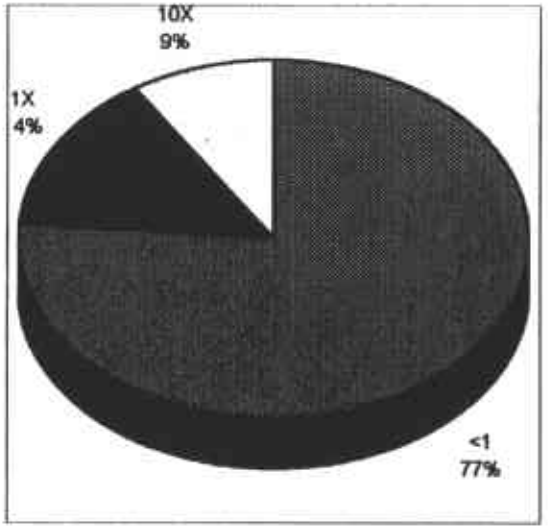
FIGURE 1
SUMMARY OF NONCARCINOGENIC HAZARDS
All Detected Constituents
Construction Scenario
All Pathways



Property 5050/750-50th

Hazard Magnitude	Number of Samples	Percentage
<1	116	67.1%
1X	49	28.3%
10X	8	4.6%
100X	0	0.0%
Total	173	100.0%

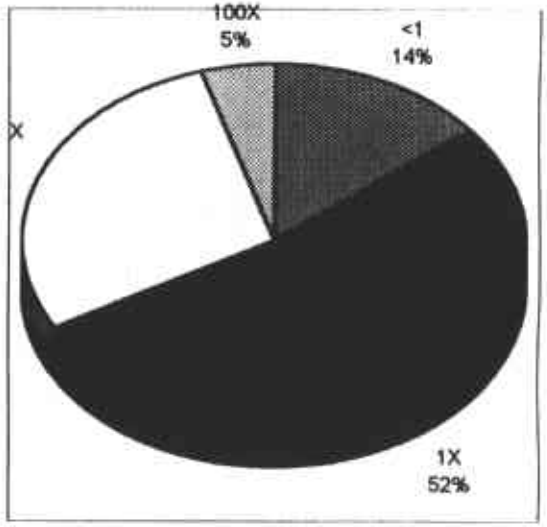
Minimum Hazard	0.0083
Maximum Hazard	93.8982
Average Hazard	2.1959



Property 5051

Hazard Magnitude	Number of Samples	Percentage
<1	101	76.5%
1X	19	14.4%
10X	12	9.1%
100X	0	0.0%
Total	132	100.0%

Minimum Hazard	0.0174
Maximum Hazard	25.1775
Average Hazard	1.9348

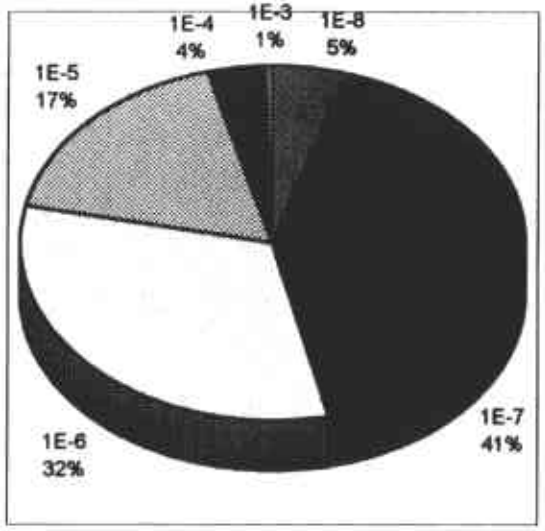


Property 5200

Hazard Magnitude	Number of Samples	Percentage
<1	3	14.3%
1X	11	52.4%
10X	6	28.6%
but got 100X	1	4.8%
Total	21	100.0%

Minimum Hazard	0.0603
Maximum Hazard	253.3219
Average Hazard	25.3635

FIGURE 2
SUMMARY OF CARCINOGENIC RISKS
All Detected Constituents
Construction Scenario
All Pathways

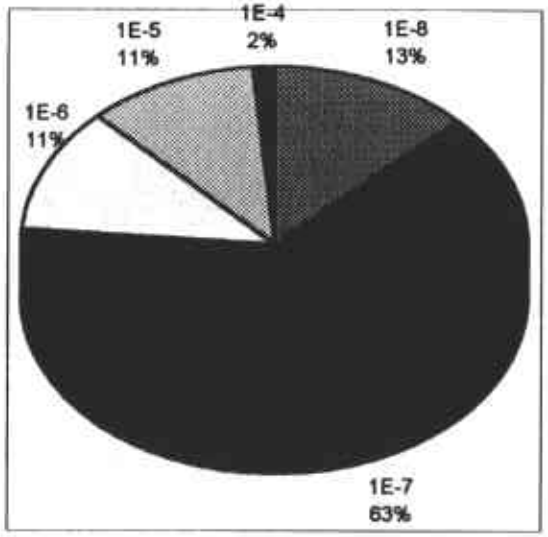


Property 5050/750-50th

Risk Magnitude	Number of Samples	Percentage
1E-8	8	5%
1E-7	69	42%
1E-6	53	32%
1E-5	29	17%
1E-4	6	4%
1E-3	1	1%
Total	166	100%

hot spot

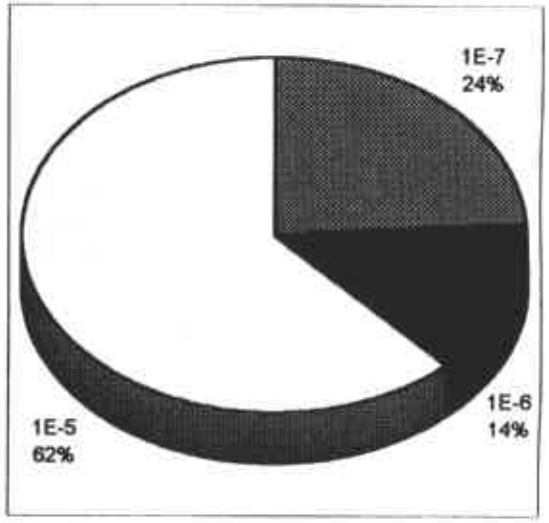
Minimum Risk	5.0E-08
Maximum Risk	1.3E-03
Average Risk	2.1E-05



Property 5051

Risk Magnitude	Number of Samples	Percentage
1E-8	17	13%
1E-7	84	64%
1E-6	15	11%
1E-5	14	11%
1E-4	2	2%
Total	132	100%

Minimum Risk	2.9E-08
Maximum Risk	1.5E-04
Average Risk	6.8E-06



Property 5200

Risk Magnitude	Number of Samples	Percentage
1E-7	5	24%
1E-6	3	14%
1E-5	13	62%
Total	21	100%

Minimum Risk	2.3E-07
Maximum Risk	7.7E-05
Average Risk	1.9E-05

FIGURE 3
GRAPHICAL REPRESENTATIONS OF HAZARD ESTIMATES
All Detected Constituents
Construction Scenario
All Pathways
Property 5050/750-50th

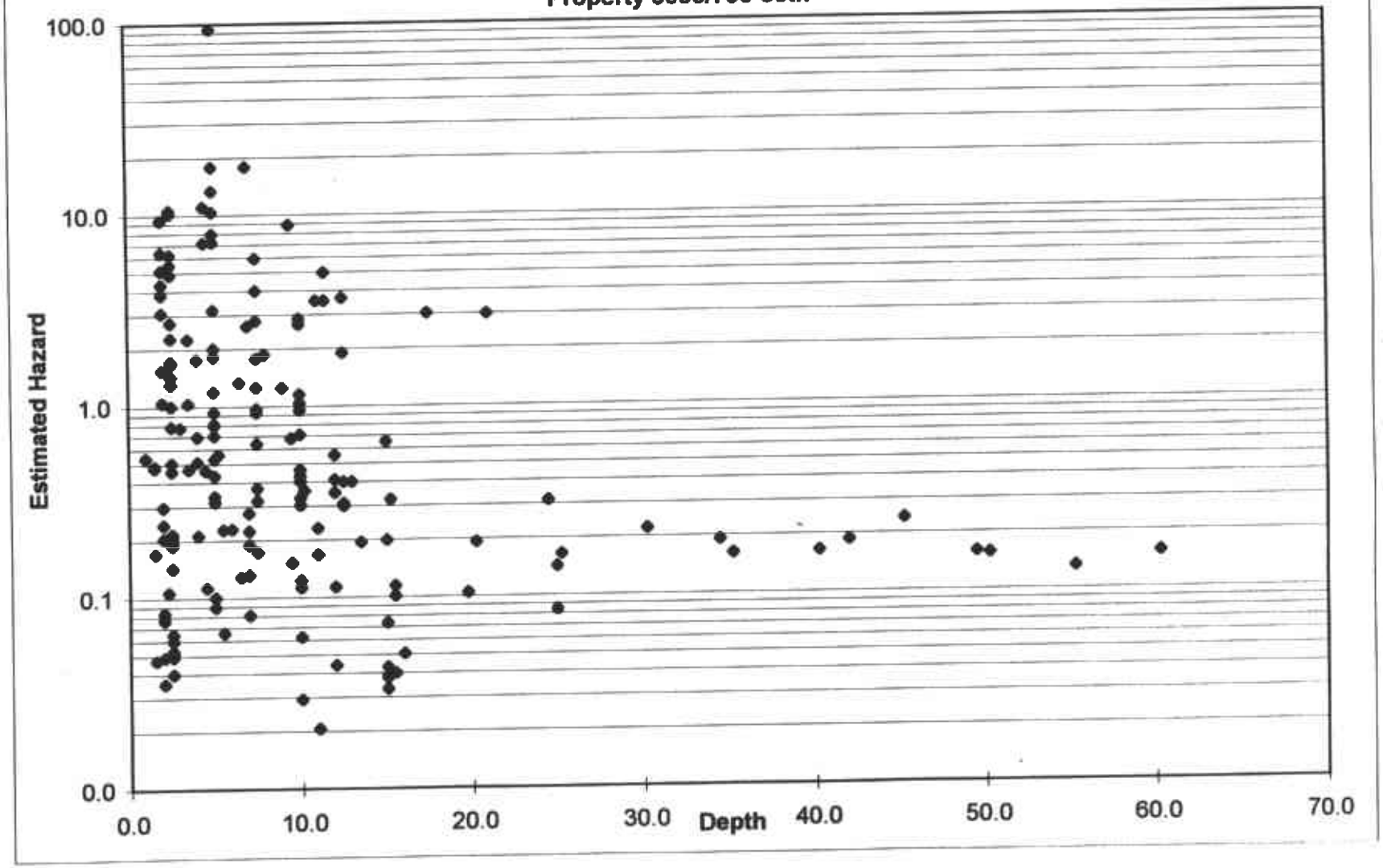


FIGURE 4
GRAPHICAL REPRESENTATIONS OF RISK ESTIMATES
All Detected Constituents
Construction Scenario
All Pathways
Property 5050/750-50th

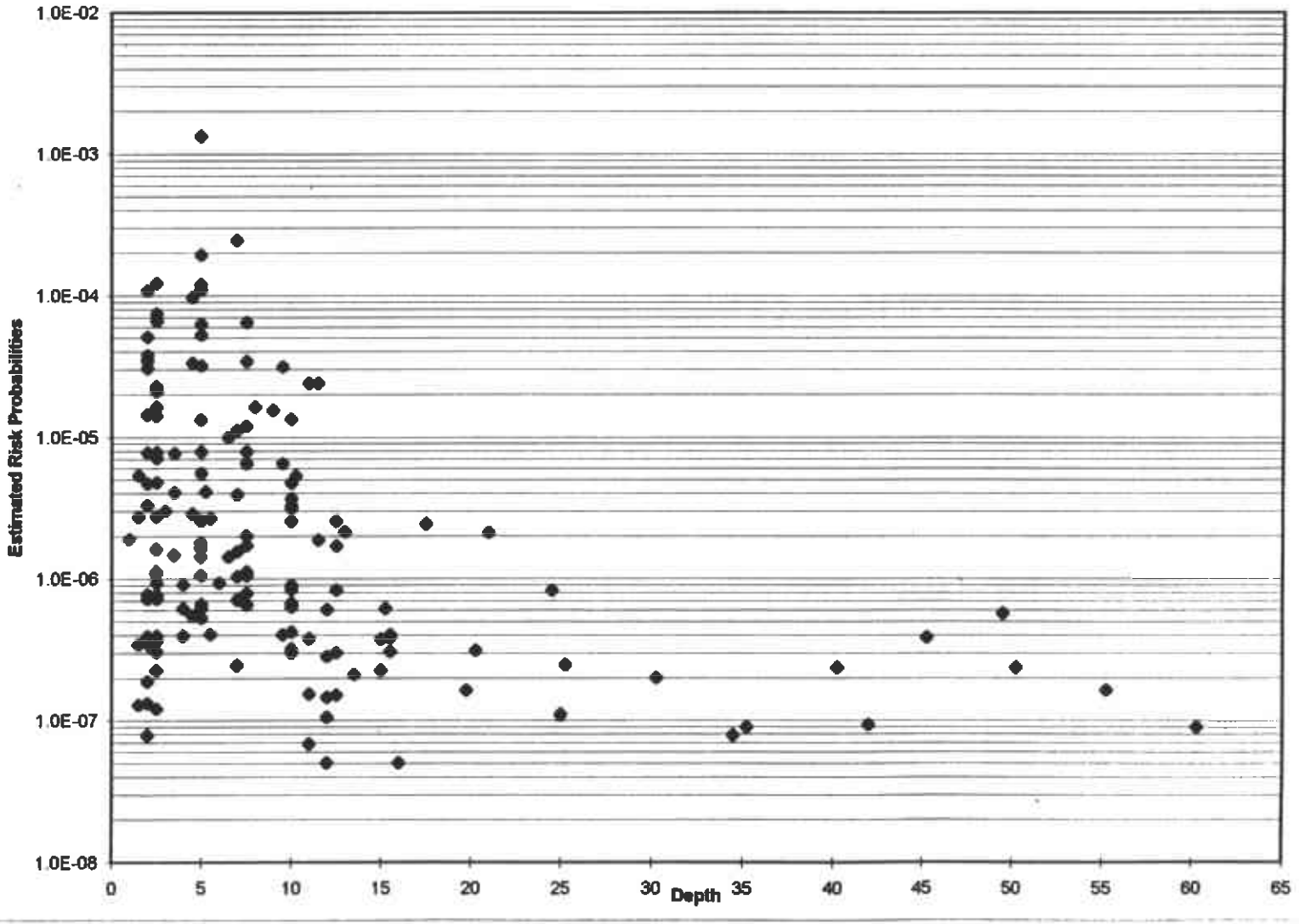


FIGURE 5
GRAPHICAL REPRESENTATIONS OF HAZARD ESTIMATES
All Detected Constituents
Construction Scenario
All Pathways
Property 5051

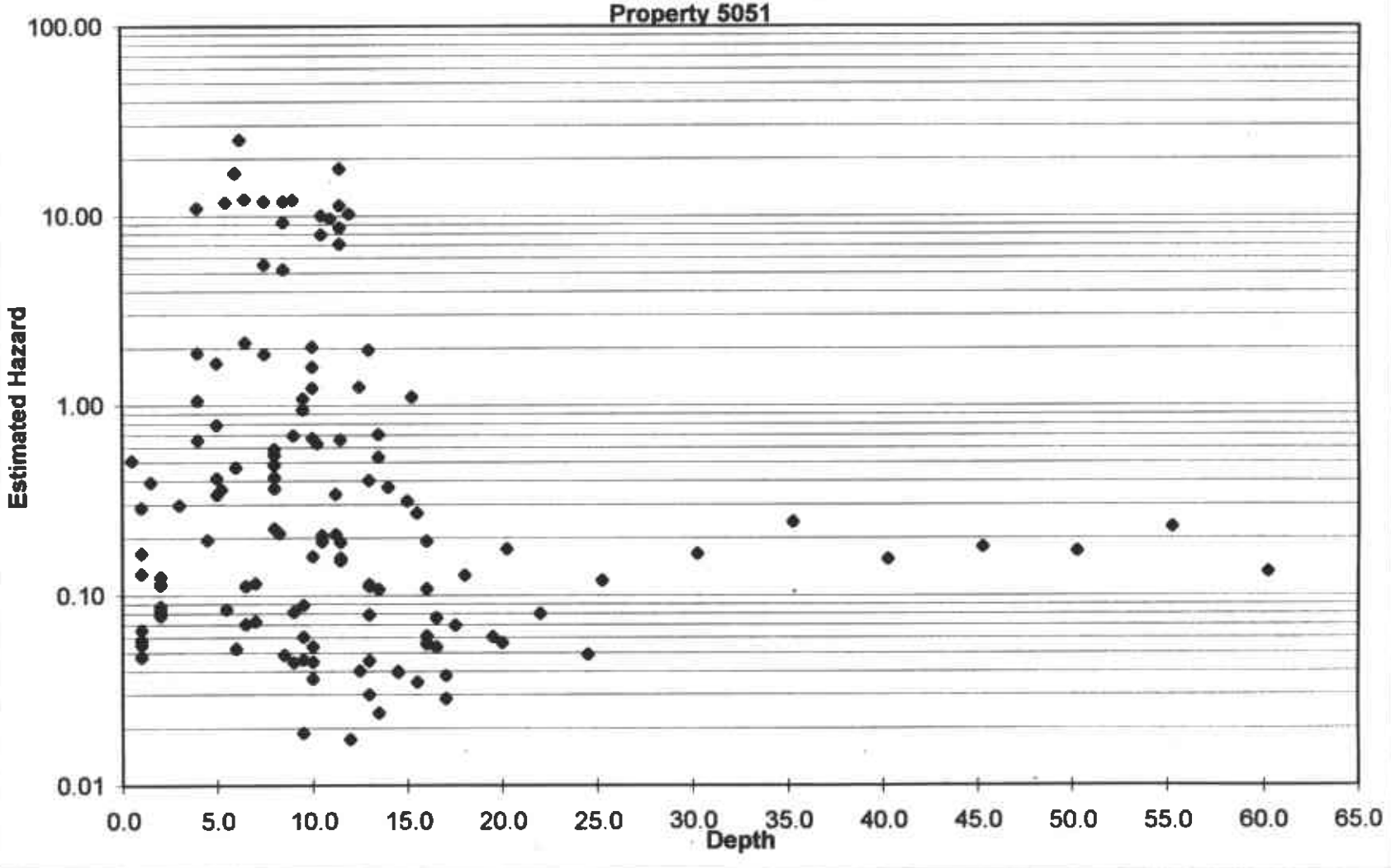


FIGURE 6
GRAPHICAL REPRESENTATIONS OF RISK ESTIMATES
All Detected Constituents
Construction Scenario
All Pathways
Property 5051

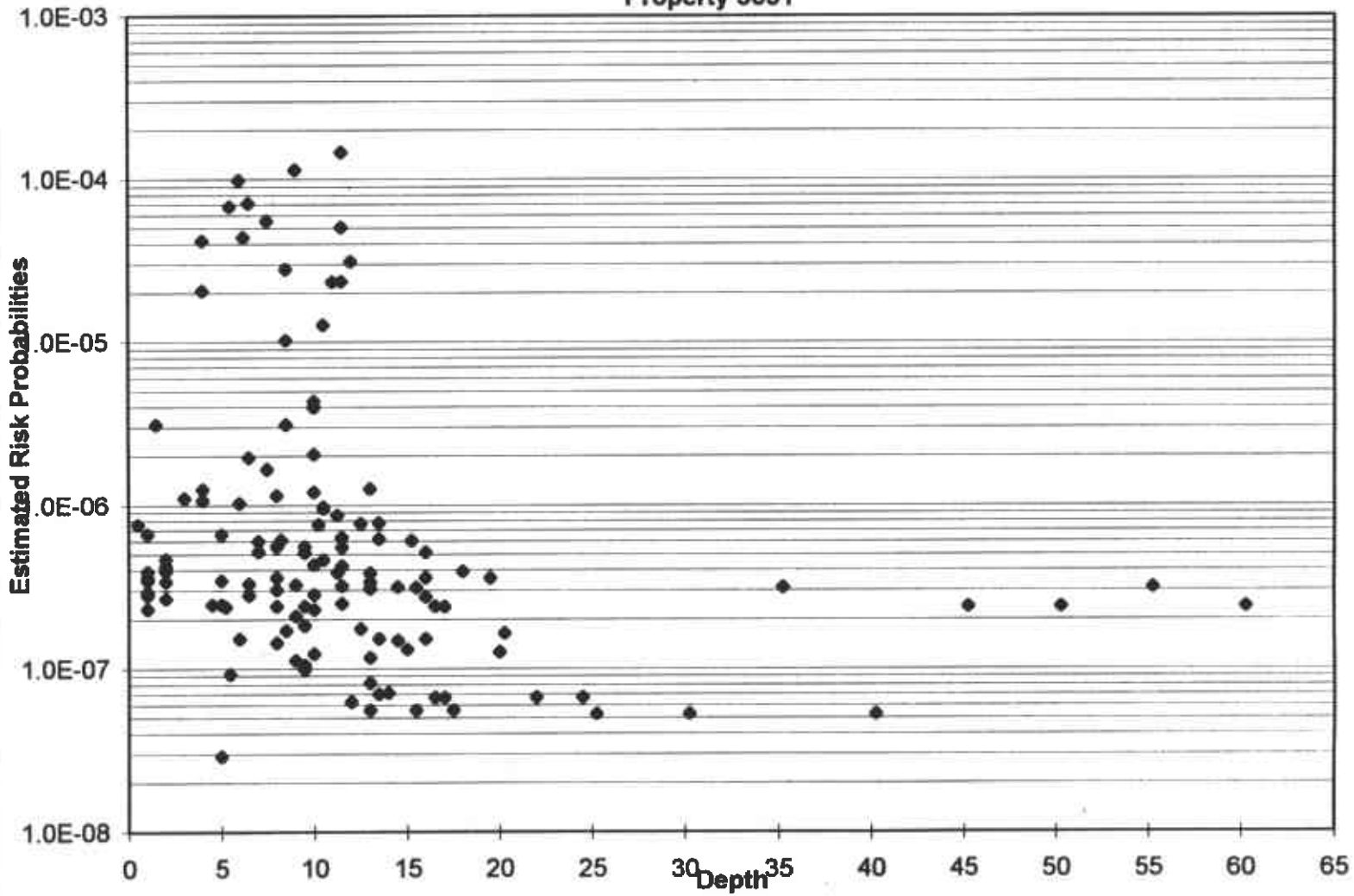


FIGURE 7
GRAPHICAL REPRESENTATIONS OF HAZARD ESTIMATES
All Detected Constituents
Construction Scenario
All Pathways
Property 5200

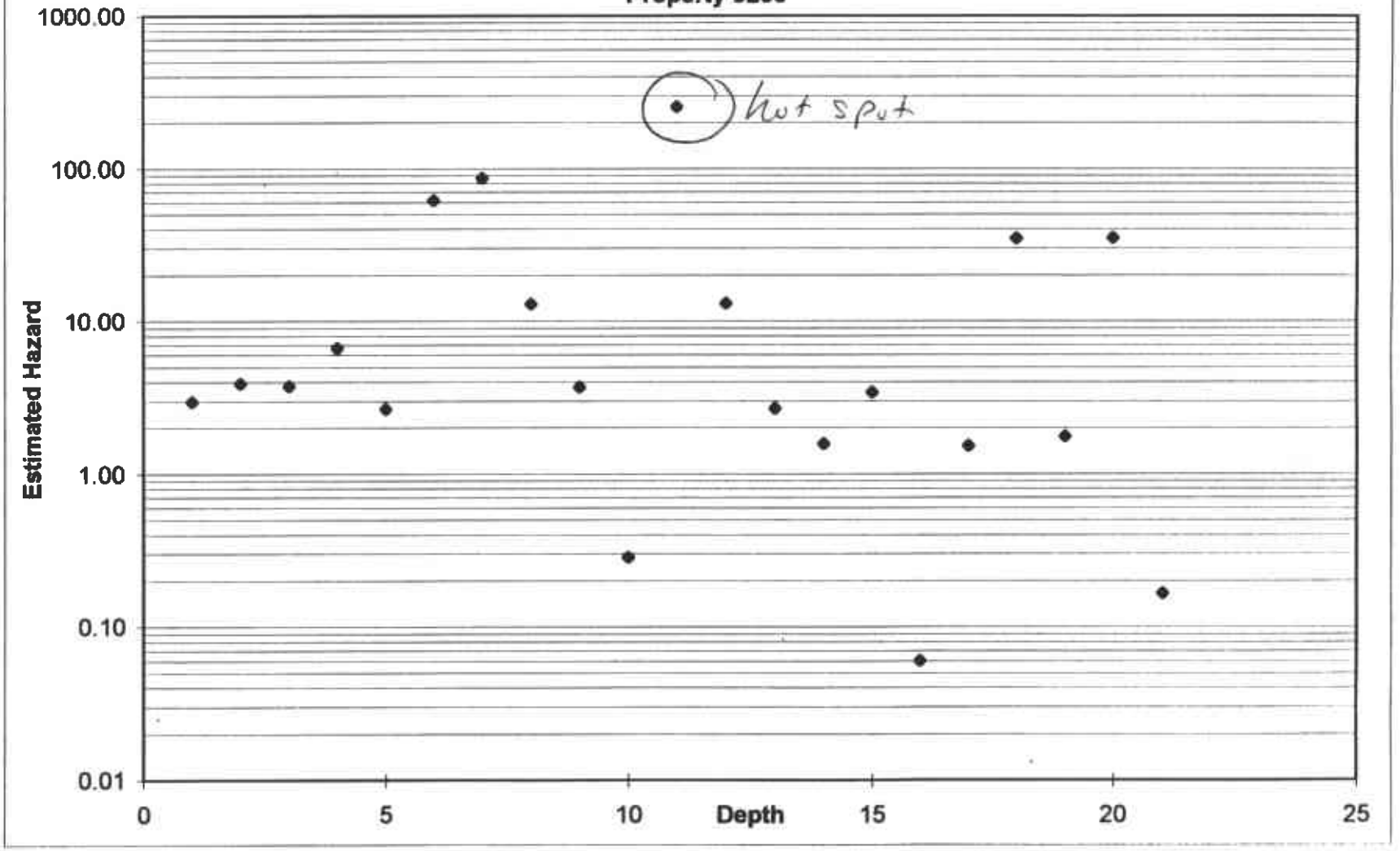
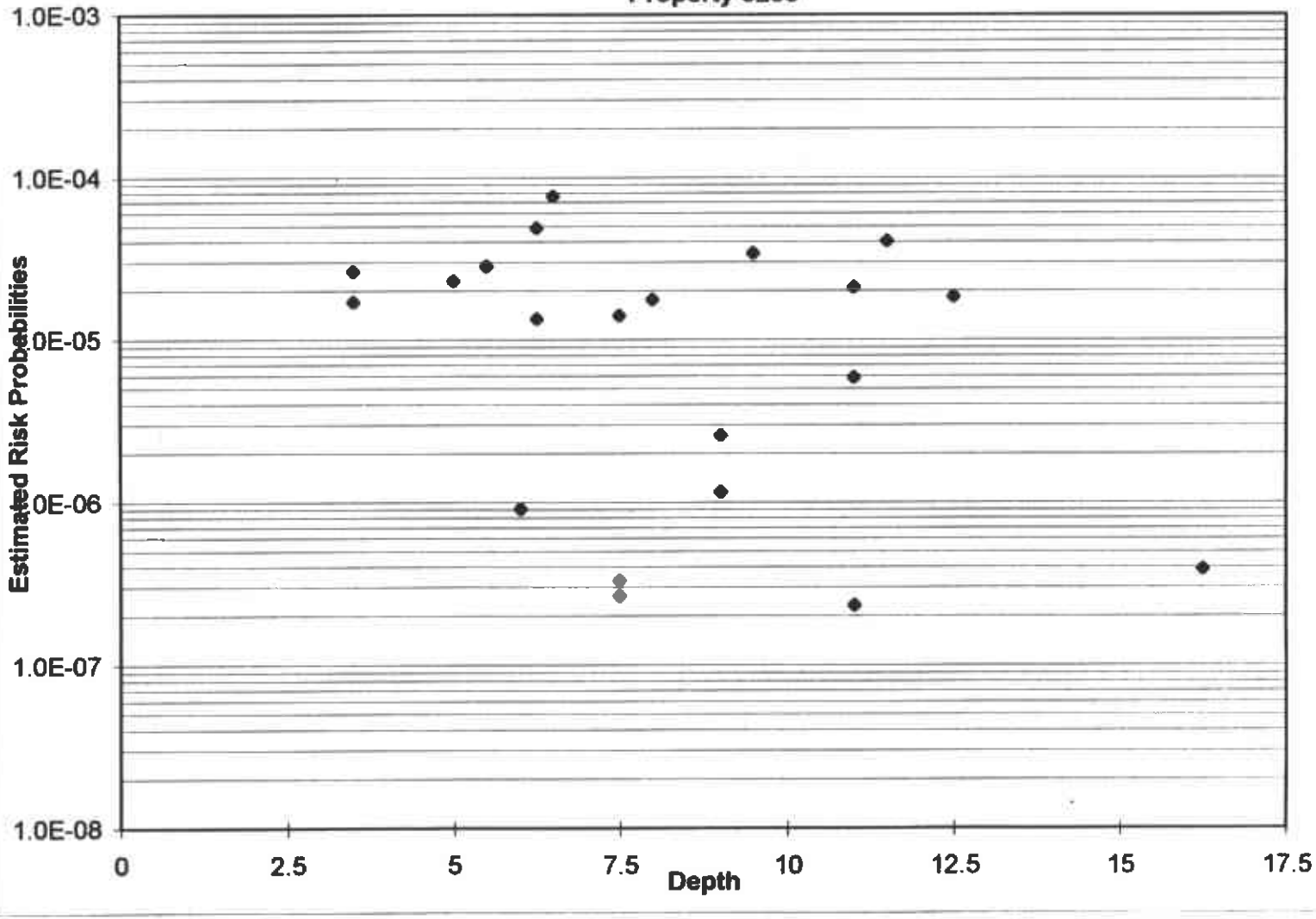


FIGURE 8
GRAPHICAL REPRESENTATIONS OF RISK ESTIMATES
All Detected Constituents
Construction Scenario
All Pathways
Property 5200



APPENDIX A

ESTIMATED CARCINOGENIC RISKS

APPENDIX A

Appendix A calculates the carcinogenic risks resulting from exposure to constituents detected at least once at the Site, as assumed in the excavation scenario. Risks are calculated on a point by point basis and are presented by constituent class, and by route of exposure.

Risks are calculated using the following equations:

Oral Risk

$$Cs * CF * IPEF * SFo = Risk$$

where:

- Cs = Concentration in soil ($mg_{constituent}/kg_{soil}$) - Provided to RWQCB January 13, 1999.
- CF = Conversion Factor (1E-6kg/mg)
- IPEF = Oral Lifetime Pathway Exposure Factor ($mg_{soil}/kg_{bodyweight}$-day) - Table 3
- SFo = Oral Carcinogenic Slope Factor (1/mg/kg-day)- Table 4
- Risk = Constituent specific carcinogenic risk (unitless)

Dermal Risk

$$Cs * CF * IPEF * AF * SFo = Risk$$

where:

- Cs = Concentration in soil ($mg_{constituent}/kg_{soil}$) - Provided to RWQCB January 13, 1999.
- CF = Conversion Factor (1E-6kg/mg)
- IPEF = Dermal Lifetime Pathway Exposure Factor ($sq.cm_{skin}/kg_{bodyweight}$-day) - Table 3
- DAF = Dermal Absorption Factor (10% organics, 3% arsenic and cadmium, 1% all other metals)
- SFo = Oral Carcinogenic Slope Factor (1/mg/kg-day)- Table 4
- Risk = Constituent specific carcinogenic risk (unitless)

Inhalation Risk - Particulates (metals and semi-volatile organic compounds)

$$Cs * IPEF * SFo = Risk$$

where:

- Cs = Concentration in soil ($mg_{constituent}/kg_{soil}$) - Provided to RWQCB January 13, 1999.
- IPEF = Particulate Inhalation Lifetime Pathway Exposure Factor ($mg_{soil}/kg_{bodyweight}$-day) - Table 3
- SFo = Oral Carcinogenic Slope Factor (1/mg/kg-day)- Table 4
- Risk = Constituent specific carcinogenic risk (unitless)

Inhalation Risk - Volatiles (volatile organic compounds)

$$Cs * 1/VF_s * AF * IPEF * SFo = Risk$$

where:

- Cs = Concentration in soil ($mg_{constituent}/kg_{soil}$) - Provided to RWQCB January 13, 1999.
- VF_s = Volatilization Factor from soil (m^3/kg) - Table 2
- AF = Agitation Factor = 28 (unitless) - Section 4.1.4.2.2
- IPEF = Volatile Inhalation Lifetime Pathway Exposure Factor ($cu.m_{air}/kg_{bodyweight}$-day) - Table 3
- SFo = Oral Carcinogenic Slope Factor (1/mg/kg-day)- Table 4
- Risk = Constituent specific carcinogenic risk (unitless)

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
B-2	5051	4	6.5E-06	3.5E-08	6.6E-06
B-3	5051	4	8.9E-06	3.5E-08	9.0E-06
B-4	5051	11.5	1.4E-07	3.5E-08	1.8E-07
BA-4	5051	2	1.3E-07	3.5E-08	1.7E-07
BA-4	5051	2	1.1E-07	1.2E-08	1.2E-07
BA-4	5051	6.5	7.5E-08	1.6E-08	9.1E-08
BA-4	5051	6.5	7.2E-08	3.5E-08	1.1E-07
BA-4	5051	8	3.1E-08	6.9E-09	3.8E-08
BA-4	5051	8	4.5E-08	1.7E-08	6.2E-08
BA-4	5051	9.5	2.1E-08	1.2E-08	3.3E-08
BA-4	5051	9.5	5.1E-08	1.4E-08	6.5E-08
BA-4	5051	12	6.9E-09	1.0E-08	1.7E-08
B-5	5051	11.5	1.2E-05	3.5E-08	1.2E-05
BA-5	5051	4	2.4E-07	3.5E-08	2.8E-07
BA-5	5051	4	1.9E-07	1.5E-08	2.0E-07
BA-5	5051	8	8.5E-08	2.1E-08	1.1E-07
BA-5	5051	8	5.0E-08	1.6E-08	6.7E-08
BA-5	5051	9	5.6E-08	2.1E-08	7.6E-08
BA-5	5051	9	3.1E-08	6.9E-09	3.8E-08
BA-5	5051	9	8.4E-08	1.1E-08	9.6E-08
BA-5	5051	10	8.0E-08	2.1E-08	1.0E-07
BA-5	5051	10	5.8E-08	1.6E-08	7.4E-08
BA-5	5051	13	2.2E-08	1.2E-08	3.4E-08
BA-5	5051	16	8.5E-08	1.8E-08	1.0E-07
B-6	5051	6.5	5.6E-07	6.9E-09	5.6E-07
B-7	5051	6.5	2.2E-05	3.5E-08	2.2E-05
B-8	5051	7.5	5.3E-06	3.5E-08	5.3E-06
B-9	5051	2	1.3E-07	2.1E-08	1.5E-07
B-9	5051	7	1.8E-07	3.5E-08	2.1E-07
B-9	5051	11.5	1.2E-07	1.4E-08	1.3E-07
B-9	5051	16.5	6.0E-09	2.8E-08	3.4E-08
B-9	5051	19.5	1.0E-07	2.1E-08	1.2E-07
B-10	5051	2	9.9E-08	2.1E-08	1.2E-07
B-10	5051	6	3.4E-08	2.8E-08	6.2E-08
B-10	5051	10	4.3E-07	2.8E-08	4.6E-07
B-10	5051	13	9.2E-08	1.4E-08	1.1E-07
B-10	5051	16	5.1E-08	2.8E-08	7.8E-08
B-11	5051	0.5	1.2E-08	1.3E-07	1.4E-07
B-11	5051	5	6.0E-09	3.5E-09	9.5E-09
B-11	5051	8	7.5E-08	3.5E-09	7.8E-08
B-11	5051	12.5	4.8E-08	1.4E-08	6.2E-08
B-11	5051	16	1.5E-07	2.1E-08	1.8E-07
B-12	5051	17	6.0E-09	2.8E-08	3.4E-08
B-12	5051	20	2.9E-08	2.1E-08	5.0E-08
B-12	5051	24.5	6.0E-09	2.8E-08	3.4E-08
B-13	5051	1	9.7E-08	2.8E-08	1.2E-07
B-13	5051	13	9.4E-08	2.8E-08	1.2E-07

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
B-13	5051	18	1.1E-07	2.8E-08	1.4E-07
B-13	5051	22	6.0E-09	2.8E-08	3.4E-08
B-14	5051	2	1.2E-07	1.4E-08	1.3E-07
B-14	5051	7	1.5E-07	3.5E-08	1.8E-07
B-14	5051	9.5	6.3E-08	2.8E-08	9.0E-08
B-14	5051	13	6.0E-09	2.1E-08	2.7E-08
B-14	5051	16	7.7E-08	2.1E-08	9.8E-08
MWA-1	5051	1	1.8E-07	2.8E-08	2.1E-07
MWA-1	5051	1.5	9.5E-07	1.8E-08	9.7E-07
MWA-1	5051	2	7.0E-08	1.4E-08	8.4E-08
MWA-1	5051	3	2.2E-07	3.0E-08	2.5E-07
MWA-1	5051	6	1.6E-07	3.5E-08	1.9E-07
MWA-1	5051	7.5	3.1E-07	3.1E-08	3.5E-07
MWA-1	5051	8	2.7E-07	4.8E-08	3.1E-07
MWA-1	5051	8.5	1.3E-07	3.5E-08	1.6E-07
MWA-1	5051	8.5	3.0E-06	7.8E-09	3.0E-06
MWA-1	5051	9	3.6E-05	3.5E-09	3.6E-05
MWA-1	5051	10	1.2E-07	3.5E-08	1.6E-07
MWA-1	5051	10	9.5E-07	2.2E-08	9.7E-07
MWA-1	5051	11.5	6.1E-08	1.9E-08	8.1E-08
MWA-1	5051	13	9.5E-08	2.2E-08	1.2E-07
MWA-1	5051	14.5	8.2E-08	1.6E-08	9.8E-08
MWA-1	5051	17	6.4E-08	1.1E-08	7.5E-08
MWA-2	5051	5.5	1.9E-05	2.1E-08	1.9E-05
MWA-2	5051	6	2.9E-05	3.5E-08	2.9E-05
MWA-2	5051	9.5	2.7E-09	1.4E-08	1.7E-08
MWA-2	5051	10	1.3E-07	2.1E-08	1.5E-07
MWA-2	5051	11.5	1.0E-07	2.1E-08	1.2E-07
MWA-2	5051	11.5	1.5E-08	1.2E-08	2.7E-08
MWA-2	5051	13.5	2.7E-09	1.3E-08	1.6E-08
MWA-2	5051	14.5	1.2E-08	1.9E-08	3.2E-08
MWA-3	5051	4.5	6.0E-09	2.2E-08	2.8E-08
MWA-3	5051	5	1.6E-07	3.5E-08	2.0E-07
MWA-3	5051	9.5	7.8E-09	1.6E-08	2.4E-08
MWA-3	5051	10	2.9E-07	2.8E-08	3.2E-07
MWA-3	5051	10.5	3.6E-06	1.8E-08	3.6E-06
MWA-3	5051	11	7.0E-06	3.5E-08	7.0E-06
MWA-3	5051	11.5	1.6E-05	3.5E-08	1.6E-05
MWA-3	5051	11.5	7.2E-06	1.6E-08	7.2E-06
MWA-3	5051	12	9.2E-06	3.5E-08	9.2E-06
MWA-3	5051	12.5	1.9E-07	1.6E-08	2.1E-07
MWA-3	5051	13	3.1E-07	2.1E-08	3.3E-07
MWA-3	5051	13.5	3.4E-08	1.5E-08	4.9E-08
MWA-3	5051	15	3.0E-08	7.0E-09	3.7E-08
MW-4	5051	1	8.7E-08	1.4E-08	1.0E-07
MW-4	5051	8.5	5.3E-08	3.5E-08	8.8E-08
MW-4	5051	10.5	2.4E-07	3.5E-08	2.8E-07
MW-4	5051	14	1.4E-08	1.4E-08	2.8E-08

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
MW-4	5051	15.5	8.9E-08	2.1E-08	1.1E-07
MW-5	5051	1	7.2E-08	3.5E-08	1.1E-07
MW-5	5051	10.5	7.2E-08	2.8E-08	1.0E-07
MW-5	5051	13.5	1.8E-07	2.1E-08	2.0E-07
MW-5	5051	17.5	6.0E-09	2.1E-08	2.7E-08
MW-6	5051	1	1.0E-07	2.8E-08	1.3E-07
MW-6	5051	7.5	2.9E-07	3.5E-08	3.2E-07
MW-6	5051	9.5	1.6E-07	3.5E-09	1.6E-07
MW-6	5051	13	1.4E-08	2.1E-08	3.5E-08
MW-6	5051	16	3.4E-08	2.8E-08	6.2E-08
MW-7	5051	1	1.2E-07	1.4E-08	1.3E-07
MW-7	5051	5.5	1.4E-08	2.8E-08	4.2E-08
MW-7	5051	10.5	2.9E-07	1.4E-08	3.0E-07
MW-7	5051	13.5	2.3E-07	1.4E-08	2.5E-07
MW-7	5051	16.5	6.3E-08	2.8E-08	9.0E-08
MW-8	5051	1	6.3E-08	2.1E-08	8.4E-08
MW-8	5051	8.5	4.3E-08	2.1E-08	6.4E-08
MW-8	5051	10	2.7E-08	6.9E-09	3.3E-08
MW-8	5051	15.5	6.0E-09	2.1E-08	2.7E-08
LF-1-2.5	5050/750-50	2.5	6.5E-06	0.0E+00	6.5E-06
LF-1-7.5	5050/750-50	7.5	2.7E-07	0.0E+00	2.7E-07
LF-1-21	5050/750-50	21	4.8E-08	0.0E+00	4.8E-08
LF-2-2.5	5050/750-50	2.5	1.3E-06	0.0E+00	1.3E-06
LF-2-5.5	5050/750-50	5.5	7.0E-07	0.0E+00	7.0E-07
LF-2-7.5	5050/750-50	7.5	3.9E-06	0.0E+00	3.9E-06
LF-2-15.5	5050/750-50	15.5	1.2E-07	0.0E+00	1.2E-07
LF-3-2.5	5050/750-50	2.5	1.2E-07	0.0E+00	1.2E-07
LF-3-7	5050/750-50	7	3.4E-07	0.0E+00	3.4E-07
LF-3-15	5050/750-50	15	7.2E-08	0.0E+00	7.2E-08
LF-4-2	5050/750-50	2	1.2E-08	0.0E+00	1.2E-08
LF-4-3.5	5050/750-50	3.5	8.2E-07	0.0E+00	8.2E-07
LF-4-15	5050/750-50	15	7.2E-08	0.0E+00	7.2E-08
LF-5-2	5050/750-50	2	1.2E-07	0.0E+00	1.2E-07
LF-5-3.5	5050/750-50	3.5	2.3E-06	0.0E+00	2.3E-06
LF-5-11	5050/750-50	11	4.8E-08	0.0E+00	4.8E-08
LF-5-15	5050/750-50	15	1.2E-07	0.0E+00	1.2E-07
LF-6-2	5050/750-50	2	2.4E-07	0.0E+00	2.4E-07
LF-6-9	5050/750-50	9	4.8E-06	0.0E+00	4.8E-06
LF-6-15.5	5050/750-50	15.5	1.2E-07	0.0E+00	1.2E-07
LF-7-2	5050/750-50	2	1.5E-06	0.0E+00	1.5E-06
LF-7-4	5050/750-50	4	2.9E-07	0.0E+00	2.9E-07
LF-7-10	5050/750-50	10	9.7E-08	0.0E+00	9.7E-08
LF-7-15.5	5050/750-50	15.5	9.7E-08	0.0E+00	9.7E-08
LF-8-2.5	5050/750-50	2.5	5.1E-07	1.4E-08	5.2E-07
LF-8-5.0	5050/750-50	5	1.6E-05	3.5E-09	1.6E-05
LF-8-10.0	5050/750-50	10	1.7E-07	1.4E-08	1.8E-07
LF-9-4.5	5050/750-50	4.5	7.2E-07	3.5E-08	7.6E-07
LF-9-11.0	5050/750-50	11	7.5E-06	1.7E-08	7.5E-06

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
LF-9-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00
LF-10-3.0	5050/750-50	3	8.9E-07	3.5E-09	9.0E-07
LF-10-4.5	5050/750-50	4.5	1.7E-07	6.9E-09	1.8E-07
LF-10-7.5	5050/750-50	7.5	6.5E-07	6.9E-09	6.6E-07
LF-11-2.5	5050/750-50	2.5	4.8E-06	3.5E-09	4.8E-06
LF-11-5.0	5050/750-50	5	8.5E-06	8.3E-08	8.5E-06
LF-11-7.5	5050/750-50	7.5	4.8E-08	1.4E-08	6.2E-08
LF-11-12.5	5050/750-50	12.5	7.2E-08	3.5E-08	1.1E-07
LF-11-25.0	5050/750-50	25	2.4E-08	2.1E-08	4.5E-08
LF-12B-2.5	5050/750-50	2.5	2.7E-07	1.4E-08	2.8E-07
LF-12B-5.0	5050/750-50	5	1.7E-06	3.5E-09	1.7E-06
LF-12B-7.5	5050/750-50	7.5	2.4E-07	3.5E-09	2.5E-07
LF-12B-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00
LF-13-2.5	5050/750-50	2.5	2.4E-05	0.0E+00	2.4E-05
LF-13-5.0	5050/750-50	5	6.3E-05	0.0E+00	6.3E-05
LF-13-7.0	5050/750-50	7	1.3E-06	0.0E+00	1.3E-06
LF-14-1.5	5050/750-50	1.5	1.2E-08	4.8E-08	6.1E-08
LF-14-2-7	5050/750-50	2-7	2.9E-05	3.5E-08	2.9E-05
LF-14-12.5	5050/750-50	12.5	1.2E-08	1.4E-08	2.6E-08
LF-15-11.0	5050/750-50	11	1.2E-08	1.4E-08	2.6E-08
LF-15-13.5	5050/750-50	13.5	4.8E-08	1.4E-08	6.2E-08
LF-16-1.5-3	5050/750-50	1.5-3	4.8E-08	3.5E-08	8.3E-08
LF-16-8.0	5050/750-50	8	5.1E-06	1.4E-08	5.1E-06
LF-16-13.0	5050/750-50	13	6.5E-07	3.5E-09	6.6E-07
LF-16-25.0	5050/750-50	25	2.4E-08	2.1E-08	4.5E-08
LF-17-2.5	5050/750-50	2.5	2.9E-07	3.5E-09	2.9E-07
LF-17-5.5	5050/750-50	5.5	1.2E-07	6.9E-09	1.3E-07
LF-17-12.0	5050/750-50	12	1.2E-08	6.9E-09	1.9E-08
LF-F1-1.0	5050/750-50	1	4.8E-07	1.4E-08	5.0E-07
SB-1-5.0	5050/750-50	5	4.3E-04	3.5E-09	4.3E-04
SB-1-7.0	5050/750-50	7	8.0E-05	3.5E-09	8.0E-05
SB-1-9.5	5050/750-50	9.5	1.2E-07	1.4E-08	1.3E-07
SB-2-2.5	5050/750-50	2.5	9.7E-08	4.2E-08	1.4E-07
SB-2-7.5	5050/750-50	7.5	5.1E-07	3.5E-09	5.1E-07
SB-2-12.5	5050/750-50	12.5	7.2E-08	6.9E-09	7.9E-08
SB-3-2.5	5050/750-50	2.5	1.9E-07	3.5E-08	2.3E-07
SB-3-4.5	5050/750-50	4.5	6.8E-06	6.9E-08	6.8E-06
SB-3-7.0	5050/750-50	7	3.4E-06	3.5E-09	3.4E-06
SB-3-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00
SB-4-2.5	5050/750-50	2.5	9.7E-08	6.2E-08	1.6E-07
SB-4-7.5	5050/750-50	7.5	1.1E-05	6.9E-08	1.1E-05
SB-4-12.0	5050/750-50	12	3.6E-08	2.1E-08	5.7E-08
SB-5-9.5	5050/750-50	9.5	2.1E-06	1.4E-08	2.1E-06
SB-6-2.5	5050/750-50	2.5	6.5E-06	3.5E-09	6.5E-06
SB-6-7.0	5050/750-50	7	1.4E-07	2.1E-08	1.7E-07
SB-6-12.0	5050/750-50	12	3.6E-08	1.4E-08	5.0E-08
SB-7-2.5	5050/750-50	2.5	7.2E-08	4.8E-08	1.2E-07
SB-7-11.5	5050/750-50	11.5	7.5E-06	1.7E-08	7.5E-06

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
SB-7-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00
SB-8-2.5	5050/750-50	2.5	4.8E-08	4.8E-08	9.7E-08
SB-8-5.0	5050/750-50	5	7.0E-07	3.5E-08	7.4E-07
SB-8-10.0	5050/750-50	10	1.0E-06	2.1E-08	1.0E-06
SB-9-2.5	5050/750-50	2.5	3.9E-05	1.4E-08	3.9E-05
SB-9-7.5	5050/750-50	7.5	6.3E-06	3.5E-09	6.3E-06
SB-9-12.5	5050/750-50	12.5	9.7E-08	4.2E-08	1.4E-07
SB-10-5.0	5050/750-50	5	3.9E-05	2.1E-08	3.9E-05
SB-10-7.0	5050/750-50	7	7.2E-08	1.4E-08	8.6E-08
SB-10-10.0	5050/750-50	10	9.7E-08	1.4E-08	1.1E-07
SB-11-2.5	5050/750-50	2.5	3.4E-07	2.1E-08	3.6E-07
SB-11-7.5	5050/750-50	7.5	3.4E-07	6.9E-09	3.5E-07
SB-11-12.5	5050/750-50	12.5	2.4E-07	2.1E-08	2.6E-07
SB-12-2.0	5050/750-50	2	3.4E-05	6.9E-09	3.4E-05
SB-12-5.0	5050/750-50	5	2.0E-05	7.6E-08	2.0E-05
SB-12-12.0	5050/750-50	12	1.4E-07	3.5E-09	1.5E-07
SB-13-2.5	5050/750-50	2.5	8.0E-07	3.5E-09	8.0E-07
SB-13-7.5	5050/750-50	7.5	2.4E-06	3.5E-09	2.4E-06
SB-13-10.0	5050/750-50	10	4.8E-08	6.9E-09	5.5E-08
SB-13-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00
SB-14-2.0	5050/750-50	2	1.0E-06	1.4E-08	1.1E-06
SB-14-5.0	5050/750-50	5	1.9E-07	3.5E-09	2.0E-07
SB-14-10	5050/750-50	10	4.3E-06	1.5E-08	4.4E-06
SB-15-3.5	5050/750-50	3.5	4.1E-07	6.9E-09	4.2E-07
SB-15-6.0	5050/750-50	6	2.7E-07	6.9E-09	2.7E-07
SB-15-11.0	5050/750-50	11	9.7E-08	2.1E-08	1.2E-07
SB-16-5.0	5050/750-50	5	2.4E-06	3.5E-08	2.4E-06
SB-16-6.5	5050/750-50	6.5	4.6E-07	6.9E-09	4.7E-07
SB-17-2.0	5050/750-50	2	1.9E-07	4.2E-08	2.3E-07
SB-17-5.0	5050/750-50	5	4.6E-07	3.5E-09	4.6E-07
SB-17-6.5	5050/750-50	6.5	3.1E-06	1.4E-08	3.2E-06
SB-17-12.0	5050/750-50	12	2.4E-08	1.4E-08	3.8E-08
SB-18-1.5	5050/750-50	1.5	9.7E-08	1.4E-08	1.1E-07
SB-18-2.5	5050/750-50	2.5	8.2E-07	3.5E-09	8.2E-07
SB-18-5.0	5050/750-50	5	7.7E-07	3.5E-09	7.8E-07
SB-18-7.0	5050/750-50	7	3.1E-07	6.9E-09	3.2E-07
SB-19-2.5	5050/750-50	2.5	1.6E-05	3.5E-08	1.6E-05
SB-19-5.0B	5050/750-50	5	1.2E-05	3.5E-09	1.2E-05
SB-19-10.0	5050/750-50	10	1.1E-06	3.5E-09	1.1E-06
SB-20-2.5	5050/750-50	2.5	1.2E-08	4.8E-08	6.1E-08
SB-20-9.5	5050/750-50	9.5	4.6E-06	3.5E-08	4.6E-06
SB-20-16.0	5050/750-50	16	1.2E-08	6.9E-09	1.9E-08
SB-21-2.5	5050/750-50	2.5	2.1E-05	4.2E-08	2.1E-05
SB-21-7.5	5050/750-50	7.5	4.8E-08	6.9E-09	5.5E-08
SB-21-11.5	5050/750-50	11.5	1.2E-08	6.9E-09	1.9E-08
SB-21-17.5	5050/750-50	17.5	4.8E-08	1.4E-08	6.2E-08
SB-21-24.5	5050/750-50	24.5	7.2E-08	2.1E-08	9.3E-08
SB-21-34.5	5050/750-50	34.5	1.2E-08	1.4E-08	2.6E-08

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
SB-21-42.0	5050/750-50	42	1.2E-08	3.5E-08	4.7E-08
SB-21-49.5	5050/750-50	49.5	1.7E-07	2.8E-08	2.0E-07
SS-1-2.5	5050/750-50	2.5	4.6E-06	3.5E-09	4.6E-06
SS-2-2.0	5050/750-50	2	1.1E-05	6.9E-09	1.1E-05
SS-3-2.0	5050/750-50	2	2.4E-06	6.9E-09	2.4E-06
SS-4-1.5	5050/750-50	1.5	8.5E-07	2.8E-08	8.7E-07
SS-5-1.5	5050/750-50	1.5	1.7E-06	2.8E-08	1.7E-06
SS-6-2.0	5050/750-50	2	8.9E-06	6.9E-09	8.9E-06
SS-7-2.0	5050/750-50	2	3.6E-08	6.9E-09	4.3E-08
SS-8-2.0	5050/750-50	2	1.2E-05	2.1E-08	1.2E-05
SS-10-2.5	5050/750-50	2.5	2.4E-06	3.5E-09	2.4E-06
SS-11-2.0	5050/750-50	2	3.9E-06	6.9E-09	3.9E-06
SS-12-2.5	5050/750-50	2.5	1.4E-06	6.9E-09	1.4E-06
SS-13-2.0	5050/750-50	2	3.6E-08	1.4E-08	5.0E-08
SS-13-2.5	5050/750-50	2.5	4.6E-07	2.1E-08	4.8E-07
SS-18-2.0	5050/750-50	2	1.5E-05	6.9E-09	1.5E-05
SS-19-2.5	5050/750-50	2.5	2.2E-07	2.1E-08	2.4E-07
B1		5	3.4E-07	0.0E+00	3.4E-07
B1		10	1.9E-07	3.0E-08	2.2E-07
B2		10	1.8E-07	0.0E+00	1.8E-07
B3		5	1.0E-07	2.0E-08	1.2E-07
B3		10	2.3E-07	2.1E-08	2.5E-07
B4		5	2.3E-07	1.9E-08	2.5E-07
B4		10	2.0E-07	1.9E-08	2.2E-07
MW1		5	5.2E-07	0.0E+00	5.2E-07
MW1		10	2.6E-07	2.8E-08	2.9E-07
MW2		5	3.4E-07	0.0E+00	3.4E-07
MW2		10	1.8E-07	0.0E+00	1.8E-07
MW3		10	1.8E-07	0.0E+00	1.8E-07
MW4		10	2.0E-07	1.9E-08	2.2E-07
CW-1	5200	6.5	2.1E-05	6.9E-09	2.2E-05
CW-1	5200	8	2.3E-06	2.8E-08	2.4E-06
CW-1	5200	9	7.5E-07	7.6E-08	8.2E-07
CW-1	5200	11	4.8E-08	2.8E-08	7.6E-08
CW-2	5200	3.5	5.1E-06	2.1E-08	5.1E-06
CW-2	5200	5	7.0E-06	2.1E-08	7.0E-06
CW-2	5200	7.5	9.7E-08	1.4E-08	1.1E-07
CW-2	5200	9.5	4.1E-06	1.4E-08	4.1E-06
CW-3	5200	3.5	7.5E-06	3.5E-08	7.5E-06
CW-3	5200	6	4.8E-08	2.1E-08	6.9E-08
CW-3	5200	9	3.6E-07	2.1E-08	3.8E-07
CW-3	5200	11	1.9E-06	6.2E-08	1.9E-06
CW-4	5200	5.5	5.1E-06	1.4E-08	5.1E-06
CW-4	5200	7.5	1.2E-08	2.1E-08	3.3E-08
CW-4	5200	11.5	2.1E-06	6.9E-09	2.1E-06
CW-4	5200	12.5	2.9E-06	1.4E-08	2.9E-06
CW-5	5200	7.5	1.6E-06	6.9E-09	1.6E-06
CW-5	5200	11	2.1E-06	2.1E-08	2.1E-06

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
CSB-1	5051/PGE	6-6.5'	1.4E-05	3.5E-09	1.4E-05
CSB-1	5051/PGE	8-8.5'	1.9E-07	3.5E-09	2.0E-07
CSB-3	5050	5'	7.2E-08	3.5E-09	7.6E-08
CSB-4	5050	4'	1.9E-07	3.5E-09	2.0E-07
CSB-5	5050/750-50	4'	1.9E-07	3.5E-09	2.0E-07
CSB-6	5050/750-50	4'	1.2E-07	3.5E-09	1.2E-07
CSB-8	5050	5'-5.5'	1.3E-06	3.5E-10	1.3E-06
CSB-8	5050	10'-10.5'	3.9E-08	3.5E-09	4.2E-08
CSB-8	5050	15'-15.5'	2.0E-07	3.5E-09	2.0E-07
CSB-8	5050	19.5'-20'	4.8E-08	3.5E-09	5.2E-08
CSB-8	5050	20'-20.5'	9.7E-08	3.5E-09	1.0E-07
CSB-8	5050	25'-25.5'	7.2E-08	3.5E-09	7.6E-08
CSB-8	5050	30-30.5	4.8E-08	3.5E-09	5.2E-08
CSB-8	5050	35'-35.5'	2.4E-08	3.5E-09	2.8E-08
CSB-8	5050	40'-40.5'	7.2E-08	3.5E-09	7.6E-08
CSB-8	5050	45'-45.5'	1.2E-07	3.5E-09	1.2E-07
CSB-8	5050	50'-50.5'	7.2E-08	3.5E-09	7.6E-08
CSB-8	5050	55'-55.5'	4.8E-08	3.5E-09	5.2E-08
CSB-8	5050	60'-60.5'	2.4E-08	3.5E-09	2.8E-08
CSB-9	5051	5'-5.5'	7.2E-08	3.5E-09	7.6E-08
CSB-9	5051	10'-10.5'	2.4E-07	3.5E-09	2.5E-07
CSB-9	5051	15'-15.5'	1.4E-07	3.5E-09	1.5E-07
CSB-9	5051	20'-20.5'	4.8E-08	3.5E-09	5.2E-08
CSB-9	5051	25'-25.5'	1.2E-08	3.5E-09	1.6E-08
CSB-9	5051	30'-30.5'	1.2E-08	3.5E-09	1.6E-08
CSB-9	5051	35'-35.5'	9.7E-08	3.5E-09	1.0E-07
CSB-9	5051	40'-40.5'	1.2E-08	3.5E-09	1.6E-08
CSB-9	5051	45'-45.5'	7.2E-08	3.5E-09	7.6E-08
CSB-9	5051	50'-50.5'	7.2E-08	3.5E-09	7.6E-08
CSB-9	5051	55'-55.5'	9.7E-08	3.5E-09	1.0E-07
CSB-9	5051	60'-60.5'	7.2E-08	3.5E-09	7.6E-08
CW-6	5200	6-6.5'	1.4E-05	3.5E-09	1.4E-05
CW-7	5200	6-6.5'	3.4E-06	3.5E-09	3.4E-06
CW-7	5200	16-16.5'	1.2E-07	3.5E-09	1.2E-07
CW-8	5051/EBMUD	5'	9.7E-08	3.5E-09	1.0E-07
CW-9	5051/EBMUD	5'	7.2E-08	3.5E-09	7.6E-08
CW-10	5051/PGE	11-11.5	2.7E-07	3.5E-09	2.7E-07
CW-12	5051/PGE	11-11.5	1.2E-07	3.5E-09	1.2E-07
CW-13	5050	5'	1.7E-07	3.5E-09	1.7E-07

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Metals
Construction Scenario
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
B-2	5051	4	2.36E-06	4.1834E-09	2.3683E-06
B-3	5051	4	3.24E-06	4.1834E-09	3.2439E-06
B-4	5051	11.5	5.25E-08	4.1834E-09	5.6719E-08
BA-4	5051	2	4.82E-08	4.1834E-09	5.2341E-08
BA-4	5051	2	3.98E-08	1.506E-09	4.1346E-08
BA-4	5051	6.5	2.71E-08	1.9578E-09	2.9014E-08
BA-4	5051	6.5	2.63E-08	4.1834E-09	3.0451E-08
BA-4	5051	8	1.14E-08	8.3668E-10	1.2219E-08
BA-4	5051	8	1.63E-08	2.0499E-09	1.8336E-08
BA-4	5051	9.5	7.67E-09	1.4475E-09	9.1177E-09
BA-4	5051	9.5	1.84E-08	1.6734E-09	2.0061E-08
BA-4	5051	12	2.51E-09	1.2467E-09	3.7596E-09
B-5	5051	11.5	4.38E-06	4.1834E-09	4.3822E-06
BA-5	5051	4	8.76E-08	4.1834E-09	9.1743E-08
BA-5	5051	4	6.73E-08	1.824E-09	6.9157E-08
BA-5	5051	8	3.06E-08	2.51E-09	3.3156E-08
BA-5	5051	8	1.82E-08	1.9829E-09	2.0195E-08
BA-5	5051	9	2.01E-08	2.51E-09	2.2649E-08
BA-5	5051	9	1.14E-08	8.3668E-10	1.2219E-08
BA-5	5051	9	3.06E-08	1.3638E-09	3.1922E-08
BA-5	5051	10	2.89E-08	2.51E-09	3.1405E-08
BA-5	5051	10	2.11E-08	1.9495E-09	2.3051E-08
BA-5	5051	13	7.99E-09	1.4475E-09	9.4416E-09
BA-5	5051	16	3.07E-08	2.2005E-09	3.2934E-08
B-6	5051	6.5	2.01E-07	8.3668E-10	2.0222E-07
B-7	5051	6.5	8.14E-06	4.1834E-09	8.1472E-06
B-8	5051	7.5	1.93E-06	4.1834E-09	1.9305E-06
B-9	5051	2	4.55E-08	2.51E-09	4.8041E-08
B-9	5051	7	6.39E-08	4.1834E-09	6.8102E-08
B-9	5051	11.5	4.20E-08	1.6734E-09	4.3702E-08
B-9	5051	16.5	2.19E-09	3.3467E-09	5.5357E-09
B-9	5051	19.5	3.77E-08	2.51E-09	4.0161E-08
B-10	5051	2	3.59E-08	2.51E-09	3.8409E-08
B-10	5051	6	1.23E-08	3.3467E-09	1.5605E-08
B-10	5051	10	1.58E-07	3.3467E-09	1.6095E-07
B-10	5051	13	3.33E-08	1.6734E-09	3.4946E-08
B-10	5051	16	1.84E-08	3.3467E-09	2.1734E-08
B-11	5051	0.5	4.38E-09	1.5897E-08	2.0275E-08
B-11	5051	5	2.19E-09	4.1834E-10	2.6073E-09
B-11	5051	8	2.71E-08	4.1834E-10	2.7562E-08
B-11	5051	12.5	1.75E-08	1.6734E-09	1.9185E-08
B-11	5051	16	5.60E-08	2.51E-09	5.8548E-08
B-12	5051	17	2.19E-09	3.3467E-09	5.5357E-09
B-12	5051	20	1.05E-08	2.51E-09	1.3017E-08
B-12	5051	24.5	2.19E-09	3.3467E-09	5.5357E-09
B-13	5051	1	3.50E-08	3.3467E-09	3.837E-08
B-13	5051	13	3.41E-08	3.3467E-09	3.7495E-08
B-13	5051	18	3.94E-08	3.3467E-09	4.2748E-08

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Metals
Construction Scenario
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
B-13	5051	22	2.19E-09	3.3467E-09	5.5357E-09
B-14	5051	2	4.29E-08	1.6734E-09	4.4577E-08
B-14	5051	7	5.43E-08	4.1834E-09	5.847E-08
B-14	5051	9.5	2.28E-08	3.3467E-09	2.6112E-08
B-14	5051	13	2.19E-09	2.51E-09	4.699E-09
B-14	5051	16	2.80E-08	2.51E-09	3.0529E-08
MWA-1	5051	1	6.57E-08	3.3467E-09	6.9016E-08
MWA-1	5051	1.5	3.46E-07	2.1168E-09	3.4798E-07
MWA-1	5051	2	2.54E-08	1.6734E-09	2.7066E-08
MWA-1	5051	3	7.92E-08	3.5726E-09	8.2726E-08
MWA-1	5051	6	5.78E-08	4.1834E-09	6.1973E-08
MWA-1	5051	7.5	1.14E-07	3.7567E-09	1.1758E-07
MWA-1	5051	8	9.63E-08	5.8568E-09	1.0217E-07
MWA-1	5051	8.5	4.55E-08	4.1834E-09	4.9714E-08
MWA-1	5051	8.5	1.09E-06	9.4545E-10	1.0954E-06
MWA-1	5051	9	1.31E-05	4.1834E-10	1.3134E-05
MWA-1	5051	10	4.47E-08	4.1834E-09	4.8839E-08
MWA-1	5051	10	3.43E-07	2.6439E-09	3.4588E-07
MWA-1	5051	11.5	2.22E-08	2.3176E-09	2.4558E-08
MWA-1	5051	13	3.46E-08	2.6104E-09	3.7196E-08
MWA-1	5051	14.5	2.99E-08	1.8825E-09	3.174E-08
MWA-1	5051	17	2.30E-08	1.3722E-09	2.44E-08
MWA-2	5051	5.5	7.06E-06	2.5519E-09	7.0598E-06
MWA-2	5051	6	1.05E-05	4.1834E-09	1.0511E-05
MWA-2	5051	9.5	9.63E-10	1.7152E-09	2.6783E-09
MWA-2	5051	10	4.55E-08	2.51E-09	4.8041E-08
MWA-2	5051	11.5	3.68E-08	2.51E-09	3.9285E-08
MWA-2	5051	11.5	5.40E-09	1.4809E-09	6.8833E-09
MWA-2	5051	13.5	9.63E-10	1.5981E-09	2.5612E-09
MWA-2	5051	14.5	4.47E-09	2.3427E-09	6.8082E-09
MWA-3	5051	4.5	2.18E-09	2.7108E-09	4.8911E-09
MWA-3	5051	5	5.87E-08	4.1834E-09	6.2848E-08
MWA-3	5051	9.5	2.82E-09	1.9829E-09	4.8023E-09
MWA-3	5051	10	1.05E-07	3.3467E-09	1.0842E-07
MWA-3	5051	10.5	1.29E-06	2.2339E-09	1.2894E-06
MWA-3	5051	11	2.54E-06	4.1834E-09	2.5434E-06
MWA-3	5051	11.5	5.78E-06	4.1834E-09	5.7831E-06
MWA-3	5051	11.5	2.60E-06	1.916E-09	2.6024E-06
MWA-3	5051	12	3.33E-06	4.1834E-09	3.3314E-06
MWA-3	5051	12.5	7.06E-08	1.9578E-09	7.2531E-08
MWA-3	5051	13	1.14E-07	2.51E-09	1.1634E-07
MWA-3	5051	13.5	1.23E-08	1.8072E-09	1.4153E-08
MWA-3	5051	15	1.10E-08	8.4505E-10	1.1878E-08
MW-4	5051	1	3.15E-08	1.6734E-09	3.3195E-08
MW-4	5051	8.5	1.93E-08	4.1834E-09	2.3446E-08
MW-4	5051	10.5	8.76E-08	4.1834E-09	9.1743E-08
MW-4	5051	14	5.25E-09	1.6734E-09	6.9269E-09
MW-4	5051	15.5	3.24E-08	2.51E-09	3.4907E-08
MW-5	5051	1	2.63E-08	4.1834E-09	3.0451E-08

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Metals
Construction Scenario
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
MW-5	5051	10.5	2.63E-08	3.3467E-09	2.9615E-08
MW-5	5051	13.5	6.57E-08	2.51E-09	6.818E-08
MW-5	5051	17.5	2.19E-09	2.51E-09	4.699E-09
MW-6	5051	1	3.68E-08	3.3467E-09	4.0122E-08
MW-6	5051	7.5	1.05E-07	4.1834E-09	1.0925E-07
MW-6	5051	9.5	5.69E-08	4.1834E-10	5.7332E-08
MW-6	5051	13	5.25E-09	2.51E-09	7.7636E-09
MW-6	5051	16	1.23E-08	3.3467E-09	1.5605E-08
MW-7	5051	1	4.29E-08	1.6734E-09	4.4577E-08
MW-7	5051	5.5	5.25E-09	3.3467E-09	8.6003E-09
MW-7	5051	10.5	1.05E-07	1.6734E-09	1.0674E-07
MW-7	5051	13.5	8.49E-08	1.6734E-09	8.6606E-08
MW-7	5051	16.5	2.28E-08	3.3467E-09	2.6112E-08
MW-8	5051	1	2.28E-08	2.51E-09	2.5275E-08
MW-8	5051	8.5	1.58E-08	2.51E-09	1.8271E-08
MW-8	5051	10	9.63E-09	8.3668E-10	1.0468E-08
MW-8	5051	15.5	2.19E-09	2.51E-09	4.699E-09
LF-1-2.5	5050/750-50	2.5	2.36E-06	0	2.3641E-06
LF-1-7.5	5050/750-50	7.5	9.63E-08	0	9.6315E-08
LF-1-21	5050/750-50	21	1.75E-08	0	1.7512E-08
LF-2-2.5	5050/750-50	2.5	4.73E-07	0	4.7282E-07
LF-2-5.5	5050/750-50	5.5	2.54E-07	0	2.5392E-07
LF-2-7.5	5050/750-50	7.5	1.40E-06	0	1.401E-06
LF-2-15.5	5050/750-50	15.5	4.38E-08	0	4.378E-08
LF-3-2.5	5050/750-50	2.5	4.38E-08	0	4.378E-08
LF-3-7	5050/750-50	7	1.23E-07	0	1.2258E-07
LF-3-15	5050/750-50	15	2.63E-08	0	2.6268E-08
LF-4-2	5050/750-50	2	4.38E-09	0	4.378E-09
LF-4-3.5	5050/750-50	3.5	2.98E-07	0	2.977E-07
LF-4-15	5050/750-50	15	2.63E-08	0	2.6268E-08
LF-5-2	5050/750-50	2	4.38E-08	0	4.378E-08
LF-5-3.5	5050/750-50	3.5	8.49E-07	0	8.4933E-07
LF-5-11	5050/750-50	11	1.75E-08	0	1.7512E-08
LF-5-15	5050/750-50	15	4.38E-08	0	4.378E-08
LF-6-2	5050/750-50	2	8.76E-08	0	8.7559E-08
LF-6-9	5050/750-50	9	1.75E-06	0	1.7512E-06
LF-6-15.5	5050/750-50	15.5	4.38E-08	0	4.378E-08
LF-7-2	5050/750-50	2	5.52E-07	0	5.5162E-07
LF-7-4	5050/750-50	4	1.05E-07	0	1.0507E-07
LF-7-10	5050/750-50	10	3.50E-08	0	3.5024E-08
LF-7-15.5	5050/750-50	15.5	3.50E-08	0	3.5024E-08
LF-8-2.5	5050/750-50	2.5	1.84E-07	1.6734E-09	1.8555E-07
LF-8-5.0	5050/750-50	5	5.78E-06	4.1834E-10	5.7793E-06
LF-8-10.0	5050/750-50	10	6.13E-08	1.6734E-09	6.2965E-08
LF-9-4.5	5050/750-50	4.5	2.63E-07	4.1834E-09	2.6686E-07
LF-9-11.0	5050/750-50	11	2.71E-06	2.0917E-09	2.7164E-06
LF-9-15.0	5050/750-50	15	0.00E+00	0	0
LF-10-3.0	5050/750-50	3	3.24E-07	4.1834E-10	3.2439E-07
LF-10-4.5	5050/750-50	4.5	6.13E-08	8.3668E-10	6.2128E-08

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Metals
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Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
LF-10-7.5	5050/750-50	7.5	2.36E-07	8.3668E-10	2.3725E-07
LF-11-2.5	5050/750-50	2.5	1.75E-06	4.1834E-10	1.7516E-06
LF-11-5.0	5050/750-50	5	3.06E-06	1.004E-08	3.0746E-06
LF-11-7.5	5050/750-50	7.5	1.75E-08	1.6734E-09	1.9185E-08
LF-11-12.5	5050/750-50	12.5	2.63E-08	4.1834E-09	3.0451E-08
LF-11-25.0	5050/750-50	25	8.76E-09	2.51E-09	1.1266E-08
LF-12B-2.5	5050/750-50	2.5	9.63E-08	1.6734E-09	9.7989E-08
LF-12B-5.0	5050/750-50	5	6.13E-07	4.1834E-10	6.1333E-07
LF-12B-7.5	5050/750-50	7.5	8.76E-08	4.1834E-10	8.7978E-08
LF-12B-15.0	5050/750-50	15	0.00E+00	0	0
LF-13-2.5	5050/750-50	2.5	8.76E-06	0	8.7559E-06
LF-13-5.0	5050/750-50	5	2.28E-05	0	2.2765E-05
LF-13-7.0	5050/750-50	7	4.64E-07	0	4.6406E-07
LF-14-1.5	5050/750-50	1.5	4.38E-09	5.8568E-09	1.0235E-08
LF-14-2-7	5050/750-50	2-7	1.05E-05	4.1834E-09	1.0511E-05
LF-14-12.5	5050/750-50	12.5	4.38E-09	1.6734E-09	6.0513E-09
LF-15-11.0	5050/750-50	11	4.38E-09	1.6734E-09	6.0513E-09
LF-15-13.5	5050/750-50	13.5	1.75E-08	1.6734E-09	1.9185E-08
LF-16-1.5-3	5050/750-50	1.5-3	1.75E-08	4.1834E-09	2.1695E-08
LF-16-8.0	5050/750-50	8	1.84E-06	1.6734E-09	1.8404E-06
LF-16-13.0	5050/750-50	13	2.36E-07	4.1834E-10	2.3683E-07
LF-16-25.0	5050/750-50	25	8.76E-09	2.51E-09	1.1266E-08
LF-17-2.5	5050/750-50	2.5	1.05E-07	4.1834E-10	1.0549E-07
LF-17-5.5	5050/750-50	5.5	4.38E-08	8.3668E-10	4.4616E-08
LF-17-12.0	5050/750-50	12	4.38E-09	8.3668E-10	5.2146E-09
LF-F1-1.0	5050/750-50	1	1.75E-07	1.6734E-09	1.7679E-07
SB-1-5.0	5050/750-50	5	1.58E-04	4.1834E-10	0.00015761
SB-1-7.0	5050/750-50	7	2.89E-05	4.1834E-10	2.8895E-05
SB-1-9.5	5050/750-50	9.5	4.38E-08	1.6734E-09	4.5453E-08
SB-2-2.5	5050/750-50	2.5	3.50E-08	5.0201E-09	4.0044E-08
SB-2-7.5	5050/750-50	7.5	1.84E-07	4.1834E-10	1.8429E-07
SB-2-12.5	5050/750-50	12.5	2.63E-08	8.3668E-10	2.7105E-08
SB-3-2.5	5050/750-50	2.5	7.00E-08	4.1834E-09	7.4231E-08
SB-3-4.5	5050/750-50	4.5	2.45E-06	8.3668E-09	2.46E-06
SB-3-7.0	5050/750-50	7	1.23E-06	4.1834E-10	1.2263E-06
SB-3-15.0	5050/750-50	15	0.00E+00	0	0
SB-4-2.5	5050/750-50	2.5	3.50E-08	7.5301E-09	4.2554E-08
SB-4-7.5	5050/750-50	7.5	3.85E-06	8.3668E-09	3.861E-06
SB-4-12.0	5050/750-50	12	1.31E-08	2.51E-09	1.5644E-08
SB-5-9.5	5050/750-50	9.5	7.53E-07	1.6734E-09	7.5468E-07
SB-6-2.5	5050/750-50	2.5	2.36E-06	4.1834E-10	2.3645E-06
SB-6-7.0	5050/750-50	7	5.25E-08	2.51E-09	5.5046E-08
SB-6-12.0	5050/750-50	12	1.31E-08	1.6734E-09	1.4807E-08
SB-7-2.5	5050/750-50	2.5	2.63E-08	5.8568E-09	3.2125E-08
SB-7-11.5	5050/750-50	11.5	2.71E-06	2.0917E-09	2.7164E-06
SB-7-15.0	5050/750-50	15	0.00E+00	0	0
SB-8-2.5	5050/750-50	2.5	1.75E-08	5.8568E-09	2.3369E-08
SB-8-5.0	5050/750-50	5	2.54E-07	4.1834E-09	2.5811E-07
SB-8-10.0	5050/750-50	10	3.68E-07	2.51E-09	3.7026E-07

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Metals
Construction Scenario
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
SB-9-2.5	5050/750-50	2.5	1.40E-05	1.6734E-09	1.4011E-05
SB-9-7.5	5050/750-50	7.5	2.28E-06	4.1834E-10	2.277E-06
SB-9-12.5	5050/750-50	12.5	3.50E-08	5.0201E-09	4.0044E-08
SB-10-5.0	5050/750-50	5	1.40E-05	2.51E-09	1.4012E-05
SB-10-7.0	5050/750-50	7	2.63E-08	1.6734E-09	2.7941E-08
SB-10-10.0	5050/750-50	10	3.50E-08	1.6734E-09	3.6697E-08
SB-11-2.5	5050/750-50	2.5	1.23E-07	2.51E-09	1.2509E-07
SB-11-7.5	5050/750-50	7.5	1.23E-07	8.3668E-10	1.2342E-07
SB-11-12.5	5050/750-50	12.5	8.76E-08	2.51E-09	9.0069E-08
SB-12-2.0	5050/750-50	2	1.23E-05	8.3668E-10	1.2259E-05
SB-12-5.0	5050/750-50	5	7.27E-06	9.2035E-09	7.2766E-06
SB-12-12.0	5050/750-50	12	5.25E-08	4.1834E-10	5.2954E-08
SB-13-2.5	5050/750-50	2.5	2.89E-07	4.1834E-10	2.8936E-07
SB-13-7.5	5050/750-50	7.5	8.76E-07	4.1834E-10	8.7601E-07
SB-13-10.0	5050/750-50	10	1.75E-08	8.3668E-10	1.8349E-08
SB-13-15.0	5050/750-50	15	0.00E+00	0	0
SB-14-2.0	5050/750-50	2	3.77E-07	1.6734E-09	3.7818E-07
SB-14-5.0	5050/750-50	5	7.00E-08	4.1834E-10	7.0466E-08
SB-14-10	5050/750-50	10	1.58E-06	1.8407E-09	1.5779E-06
SB-15-3.5	5050/750-50	3.5	1.49E-07	8.3668E-10	1.4969E-07
SB-15-6.0	5050/750-50	6	9.63E-08	8.3668E-10	9.7152E-08
SB-15-11.0	5050/750-50	11	3.50E-08	2.51E-09	3.7534E-08
SB-16-5.0	5050/750-50	5	8.67E-07	4.1834E-09	8.7102E-07
SB-16-6.5	5050/750-50	6.5	1.66E-07	8.3668E-10	1.672E-07
SB-17-2.0	5050/750-50	2	7.00E-08	5.0201E-09	7.5068E-08
SB-17-5.0	5050/750-50	5	1.66E-07	4.1834E-10	1.6678E-07
SB-17-6.5	5050/750-50	6.5	1.14E-06	1.6734E-09	1.1399E-06
SB-17-12.0	5050/750-50	12	8.76E-09	1.6734E-09	1.0429E-08
SB-18-1.5	5050/750-50	1.5	3.50E-08	1.6734E-09	3.6697E-08
SB-18-2.5	5050/750-50	2.5	2.98E-07	4.1834E-10	2.9812E-07
SB-18-5.0	5050/750-50	5	2.80E-07	4.1834E-10	2.8061E-07
SB-18-7.0	5050/750-50	7	1.14E-07	8.3668E-10	1.1466E-07
SB-19-2.5	5050/750-50	2.5	5.95E-06	4.1834E-09	5.9582E-06
SB-19-5.0B	5050/750-50	5	4.38E-06	4.1834E-10	4.3784E-06
SB-19-10.0	5050/750-50	10	3.85E-07	4.1834E-10	3.8568E-07
SB-20-2.5	5050/750-50	2.5	4.38E-09	5.8568E-09	1.0235E-08
SB-20-9.5	5050/750-50	9.5	1.66E-06	4.1834E-09	1.6678E-06
SB-20-16.0	5050/750-50	16	4.38E-09	8.3668E-10	5.2146E-09
SB-21-2.5	5050/750-50	2.5	7.62E-06	5.0201E-09	7.6227E-06
SB-21-7.5	5050/750-50	7.5	1.75E-08	8.3668E-10	1.8349E-08
SB-21-11.5	5050/750-50	11.5	4.38E-09	8.3668E-10	5.2146E-09
SB-21-17.5	5050/750-50	17.5	1.75E-08	1.6734E-09	1.9185E-08
SB-21-24.5	5050/750-50	24.5	2.63E-08	2.51E-09	2.8778E-08
SB-21-34.5	5050/750-50	34.5	4.38E-09	1.6734E-09	6.0513E-09
SB-21-42.0	5050/750-50	42	4.38E-09	4.1834E-09	8.5614E-09
SB-21-49.5	5050/750-50	49.5	6.13E-08	3.3467E-09	6.4638E-08
SS-1-2.5	5050/750-50	2.5	1.66E-06	4.1834E-10	1.664E-06
SS-2-2.0	5050/750-50	2	4.03E-06	8.3668E-10	4.0286E-06
SS-3-2.0	5050/750-50	2	8.76E-07	8.3668E-10	8.7643E-07

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Metals
Construction Scenario
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
SS-4-1.5	5050/750-50	1.5	3.06E-07	3.3467E-09	3.098E-07
SS-5-1.5	5050/750-50	1.5	6.13E-07	3.3467E-09	6.1626E-07
SS-6-2.0	5050/750-50	2	3.24E-06	8.3668E-10	3.2405E-06
SS-7-2.0	5050/750-50	2	1.31E-08	8.3668E-10	1.3971E-08
SS-8-2.0	5050/750-50	2	4.38E-06	2.51E-09	4.3805E-06
SS-10-2.5	5050/750-50	2.5	8.76E-07	4.1834E-10	8.7601E-07
SS-11-2.0	5050/750-50	2	1.40E-06	8.3668E-10	1.4018E-06
SS-12-2.5	5050/750-50	2.5	4.90E-07	8.3668E-10	4.9117E-07
SS-13-2.0	5050/750-50	2	1.31E-08	1.6734E-09	1.4807E-08
SS-13-2.5	5050/750-50	2.5	1.66E-07	2.51E-09	1.6887E-07
SS-18-2.0	5050/750-50	2	5.60E-06	8.3668E-10	5.6046E-06
SS-19-2.5	5050/750-50	2.5	7.88E-08	2.51E-09	8.1314E-08
B1		5	1.22E-07	0	1.2171E-07
B1		10	6.74E-08	3.6814E-09	7.1102E-08
B2		10	6.39E-08	0	6.3918E-08
B3		5	3.68E-08	2.4264E-09	3.9201E-08
B3		10	8.32E-08	2.5937E-09	8.5775E-08
B4		5	8.23E-08	2.259E-09	8.4565E-08
B4		10	7.09E-08	2.3427E-09	7.3266E-08
MW1		5	1.89E-07	0	1.8913E-07
MW1		10	9.46E-08	3.3467E-09	9.7911E-08
MW2		5	1.24E-07	0	1.2433E-07
MW2		10	6.48E-08	0	6.4794E-08
MW3		10	6.48E-08	0	6.4794E-08
MW4		10	7.27E-08	2.259E-09	7.4933E-08
CW-1	5200	6.5	7.79E-06	8.3668E-10	7.7936E-06
CW-1	5200	8	8.49E-07	3.3467E-09	8.5267E-07
CW-1	5200	9	2.71E-07	9.2035E-09	2.8064E-07
CW-1	5200	11	1.75E-08	3.3467E-09	2.0859E-08
CW-2	5200	3.5	1.84E-06	2.51E-09	1.8413E-06
CW-2	5200	5	2.54E-06	2.51E-09	2.5417E-06
CW-2	5200	7.5	3.50E-08	1.6734E-09	3.6697E-08
CW-2	5200	9.5	1.49E-06	1.6734E-09	1.4902E-06
CW-3	5200	3.5	2.71E-06	4.1834E-09	2.7185E-06
CW-3	5200	6	1.75E-08	2.51E-09	2.0022E-08
CW-3	5200	9	1.31E-07	2.51E-09	1.3385E-07
CW-3	5200	11	6.74E-07	7.5301E-09	6.8174E-07
CW-4	5200	5.5	1.84E-06	1.6734E-09	1.8404E-06
CW-4	5200	7.5	4.38E-09	2.51E-09	6.888E-09
CW-4	5200	11.5	7.62E-07	8.3668E-10	7.626E-07
CW-4	5200	12.5	1.05E-06	1.6734E-09	1.0524E-06
CW-5	5200	7.5	5.95E-07	8.3668E-10	5.9624E-07
CW-5	5200	11	7.44E-07	2.51E-09	7.4676E-07
CSB-1	5051/PGE	6-6.5'	5.17E-06	4.1834E-10	5.1664E-06
CSB-1	5051/PGE	8-8.5'	7.00E-08	4.1834E-10	7.0466E-08
CSB-3	5050	5'	2.63E-08	4.1834E-10	2.6686E-08
CSB-4	5050	4'	7.00E-08	4.1834E-10	7.0466E-08
CSB-5	5050/750-50	4'	7.00E-08	4.1834E-10	7.0466E-08
CSB-6	5050/750-50	4'	4.38E-08	4.1834E-10	4.4198E-08

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Metals
Construction Scenario
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Metals Total
CSB-8	5050	5'-5.5'	4.64E-07	4.1834E-11	4.6411E-07
CSB-8	5050	10'-10.5'	1.40E-08	4.1834E-10	1.4428E-08
CSB-8	5050	15'-15.5'	7.09E-08	4.1834E-10	7.1341E-08
CSB-8	5050	19.5'-20'	1.75E-08	4.1834E-10	1.793E-08
CSB-8	5050	20'-20.5'	3.50E-08	4.1834E-10	3.5442E-08
CSB-8	5050	25'-25.5'	2.63E-08	4.1834E-10	2.6686E-08
CSB-8	5050	30-30.5	1.75E-08	4.1834E-10	1.793E-08
CSB-8	5050	35'-35.5'	8.76E-09	4.1834E-10	9.1743E-09
CSB-8	5050	40'-40.5'	2.63E-08	4.1834E-10	2.6686E-08
CSB-8	5050	45'-45.5'	4.38E-08	4.1834E-10	4.4198E-08
CSB-8	5050	50'-50.5'	2.63E-08	4.1834E-10	2.6686E-08
CSB-8	5050	55'-55.5'	1.75E-08	4.1834E-10	1.793E-08
CSB-8	5050	60'-60.5'	8.76E-09	4.1834E-10	9.1743E-09
CSB-9	5051	5'-5.5'	2.63E-08	4.1834E-10	2.6686E-08
CSB-9	5051	10'-10.5'	8.76E-08	4.1834E-10	8.7978E-08
CSB-9	5051	15'-15.5'	5.25E-08	4.1834E-10	5.2954E-08
CSB-9	5051	20'-20.5'	1.75E-08	4.1834E-10	1.793E-08
CSB-9	5051	25'-25.5'	4.38E-09	4.1834E-10	4.7963E-09
CSB-9	5051	30'-30.5'	4.38E-09	4.1834E-10	4.7963E-09
CSB-9	5051	35'-35.5'	3.50E-08	4.1834E-10	3.5442E-08
CSB-9	5051	40'-40.5'	4.38E-09	4.1834E-10	4.7963E-09
CSB-9	5051	45'-45.5'	2.63E-08	4.1834E-10	2.6686E-08
CSB-9	5051	50'-50.5'	2.63E-08	4.1834E-10	2.6686E-08
CSB-9	5051	55'-55.5'	3.50E-08	4.1834E-10	3.5442E-08
CSB-9	5051	60'-60.5'	2.63E-08	4.1834E-10	2.6686E-08
CW-6	5200	6-6.5'	4.99E-06	4.1834E-10	4.9913E-06
CW-7	5200	6-6.5'	1.23E-06	4.1834E-10	1.2263E-06
CW-7	5200	16-16.5'	4.38E-08	4.1834E-10	4.4198E-08
CW-8	5051/EBMUD	5'	3.50E-08	4.1834E-10	3.5442E-08
CW-9	5051/EBMUD	5'	2.63E-08	4.1834E-10	2.6686E-08
CW-10	5051/PGE	11-11.5	9.63E-08	4.1834E-10	9.6734E-08
CW-12	5051/PGE	11-11.5	4.38E-08	4.1834E-10	4.4198E-08
CW-13	5050	5'	6.04E-08	4.1834E-10	6.0834E-08

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Cd	Metals Total
B-2	5051	4	1.1E-05	1.5E-08	5.7E-07	1.2E-05
B-3	5051	4	1.5E-05	1.5E-08	1.5E-05	3.0E-05
B-4	5051	11.5	2.5E-07	1.5E-08	5.2E-08	3.2E-07
BA-4	5051	2	2.3E-07	1.5E-08	5.2E-09	2.5E-07
BA-4	5051	2	1.9E-07	5.2E-09	3.7E-08	2.3E-07
BA-4	5051	6.5	1.3E-07	6.8E-09	7.7E-08	2.1E-07
BA-4	5051	6.5	1.2E-07	1.5E-08	5.2E-09	1.4E-07
BA-4	5051	8	5.4E-08	2.9E-09	3.6E-08	9.3E-08
BA-4	5051	8	7.7E-08	7.1E-09	2.0E-07	2.8E-07
BA-4	5051	9.5	3.6E-08	5.0E-09	2.2E-08	6.3E-08
BA-4	5051	9.5	8.7E-08	5.8E-09	5.2E-09	9.8E-08
BA-4	5051	12	1.2E-08	4.3E-09	2.5E-08	4.1E-08
B-5	5051	11.5	2.1E-05	1.5E-08	1.1E-04	1.3E-04
BA-5	5051	4	4.1E-07	1.5E-08	2.7E-07	7.0E-07
BA-5	5051	4	3.2E-07	6.3E-09	6.6E-07	9.8E-07
BA-5	5051	8	1.5E-07	8.7E-09	2.6E-07	4.2E-07
BA-5	5051	8	8.6E-08	6.9E-09	1.2E-07	2.2E-07
BA-5	5051	9	9.5E-08	8.7E-09	5.2E-09	1.1E-07
BA-5	5051	9	5.4E-08	2.9E-09	5.2E-09	6.2E-08
BA-5	5051	9	1.4E-07	4.7E-09	4.9E-08	2.0E-07
BA-5	5051	10	1.4E-07	8.7E-09	5.2E-09	1.5E-07
BA-5	5051	10	1.0E-07	6.8E-09	2.6E-08	1.3E-07
BA-5	5051	13	3.8E-08	5.0E-09	3.1E-08	7.4E-08
BA-5	5051	16	1.5E-07	7.6E-09	7.0E-08	2.2E-07
B-6	5051	6.5	9.5E-07	2.9E-09	2.4E-07	1.2E-06
B-7	5051	6.5	3.9E-05	1.5E-08	2.2E-06	4.1E-05
B-8	5051	7.5	9.1E-06	1.5E-08	3.9E-05	4.8E-05
B-9	5051	2	2.2E-07	8.7E-09	5.2E-09	2.3E-07
B-9	5051	7	3.0E-07	1.5E-08	5.2E-09	3.2E-07
B-9	5051	11.5	2.0E-07	5.8E-09	4.7E-08	2.5E-07
B-9	5051	16.5	1.0E-08	1.2E-08	5.2E-09	2.7E-08
B-9	5051	19.5	1.8E-07	8.7E-09	5.2E-09	1.9E-07
B-10	5051	2	1.7E-07	8.7E-09	5.2E-09	1.8E-07
B-10	5051	6	5.8E-08	1.2E-08	5.2E-09	7.5E-08
B-10	5051	10	7.5E-07	1.2E-08	6.7E-07	1.4E-06
B-10	5051	13	1.6E-07	5.8E-09	5.2E-09	1.7E-07
B-10	5051	16	8.7E-08	1.2E-08	1.6E-07	2.6E-07
B-11	5051	0.5	2.1E-08	5.5E-08	5.2E-07	5.9E-07
B-11	5051	5	1.0E-08	1.5E-09	5.2E-09	1.7E-08
B-11	5051	8	1.3E-07	1.5E-09	5.2E-09	1.4E-07
B-11	5051	12.5	8.3E-08	5.8E-09	5.2E-09	9.4E-08
B-11	5051	16	2.7E-07	8.7E-09	5.2E-09	2.8E-07
B-12	5051	17	1.0E-08	1.2E-08	5.2E-09	2.7E-08
B-12	5051	20	5.0E-08	8.7E-09	5.2E-09	6.4E-08
B-12	5051	24.5	1.0E-08	1.2E-08	5.2E-09	2.7E-08
B-13	5051	1	1.7E-07	1.2E-08	5.2E-09	1.8E-07

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Cd	Metals Total
B-13	5051	13	1.6E-07	1.2E-08	5.2E-09	1.8E-07
B-13	5051	18	1.9E-07	1.2E-08	1.6E-08	2.1E-07
B-13	5051	22	1.0E-08	1.2E-08	5.2E-09	2.7E-08
B-14	5051	2	2.0E-07	5.8E-09	2.6E-08	2.3E-07
B-14	5051	7	2.6E-07	1.5E-08	5.2E-09	2.8E-07
B-14	5051	9.5	1.1E-07	1.2E-08	5.2E-09	1.2E-07
B-14	5051	13	1.0E-08	8.7E-09	5.2E-09	2.4E-08
B-14	5051	16	1.3E-07	8.7E-09	5.2E-09	1.5E-07
MWA-1	5051	1	3.1E-07	1.2E-08	6.7E-08	3.9E-07
MWA-1	5051	1.5	1.6E-06	7.3E-09	1.7E-07	1.8E-06
MWA-1	5051	2	1.2E-07	5.8E-09	3.1E-08	1.6E-07
MWA-1	5051	3	3.7E-07	1.2E-08	3.9E-07	7.7E-07
MWA-1	5051	6	2.7E-07	1.5E-08	4.9E-07	7.8E-07
MWA-1	5051	7.5	5.4E-07	1.3E-08	6.3E-07	1.2E-06
MWA-1	5051	8	4.6E-07	2.0E-08	2.5E-07	7.3E-07
MWA-1	5051	8.5	2.2E-07	1.5E-08	9.8E-06	1.0E-05
MWA-1	5051	8.5	5.2E-06	3.3E-09	1.9E-05	2.4E-05
MWA-1	5051	9	6.2E-05	1.5E-09	2.5E-06	6.5E-05
MWA-1	5051	10	2.1E-07	1.5E-08	3.9E-06	4.1E-06
MWA-1	5051	10	1.6E-06	9.2E-09	1.0E-06	2.7E-06
MWA-1	5051	11.5	1.1E-07	8.0E-09	3.2E-08	1.5E-07
MWA-1	5051	13	1.6E-07	9.1E-09	5.5E-08	2.3E-07
MWA-1	5051	14.5	1.4E-07	6.5E-09	3.8E-08	1.9E-07
MWA-1	5051	17	1.1E-07	4.8E-09	2.5E-08	1.4E-07
MWA-2	5051	5.5	3.3E-05	8.9E-09	7.7E-06	4.1E-05
MWA-2	5051	6	5.0E-05	1.5E-08	9.3E-06	5.9E-05
MWA-2	5051	9.5	4.6E-09	6.0E-09	6.9E-08	7.9E-08
MWA-2	5051	10	2.2E-07	8.7E-09	1.0E-08	2.3E-07
MWA-2	5051	11.5	1.7E-07	8.7E-09	2.9E-07	4.7E-07
MWA-2	5051	11.5	2.6E-08	5.1E-09	2.6E-07	2.9E-07
MWA-2	5051	13.5	4.6E-09	5.5E-09	4.2E-08	5.2E-08
MWA-2	5051	14.5	2.1E-08	8.1E-09	8.0E-08	1.1E-07
MWA-3	5051	4.5	1.0E-08	9.4E-09	1.9E-07	2.1E-07
MWA-3	5051	5	2.8E-07	1.5E-08	1.1E-07	4.0E-07
MWA-3	5051	9.5	1.3E-08	6.9E-09	4.6E-07	4.8E-07
MWA-3	5051	10	5.0E-07	1.2E-08	2.7E-07	7.8E-07
MWA-3	5051	10.5	6.1E-06	7.7E-09	1.9E-06	8.0E-06
MWA-3	5051	11	1.2E-05	1.5E-08	1.7E-06	1.4E-05
MWA-3	5051	11.5	2.7E-05	1.5E-08	1.3E-06	2.9E-05
MWA-3	5051	11.5	1.2E-05	6.6E-09	1.5E-06	1.4E-05
MWA-3	5051	12	1.6E-05	1.5E-08	2.9E-06	1.9E-05
MWA-3	5051	12.5	3.3E-07	6.8E-09	1.5E-07	4.9E-07
MWA-3	5051	13	5.4E-07	8.7E-09	2.6E-07	8.1E-07
MWA-3	5051	13.5	5.8E-08	6.3E-09	2.4E-08	8.9E-08
MWA-3	5051	15	5.2E-08	2.9E-09	2.7E-08	8.2E-08
MW-4	5051	1	1.5E-07	5.8E-09	5.2E-09	1.6E-07
MW-4	5051	8.5	9.1E-08	1.5E-08	2.9E-06	3.0E-06

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Cd	Metals Total
MW-4	5051	10.5	4.1E-07	1.5E-08	1.6E-07	5.8E-07
MW-4	5051	14	2.5E-08	5.8E-09	5.2E-09	3.6E-08
MW-4	5051	15.5	1.5E-07	8.7E-09	5.2E-09	1.7E-07
MW-5	5051	1	1.2E-07	1.5E-08	5.2E-09	1.4E-07
MW-5	5051	10.5	1.2E-07	1.2E-08	2.0E-07	3.3E-07
MW-5	5051	13.5	3.1E-07	8.7E-09	3.1E-08	3.5E-07
MW-5	5051	17.5	1.0E-08	8.7E-09	5.2E-09	2.4E-08
MW-6	5051	1	1.7E-07	1.2E-08	5.2E-09	1.9E-07
MW-6	5051	7.5	5.0E-07	1.5E-08	7.3E-07	1.2E-06
MW-6	5051	9.5	2.7E-07	1.5E-09	6.7E-08	3.4E-07
MW-6	5051	13	2.5E-08	8.7E-09	5.2E-09	3.9E-08
MW-6	5051	16	5.8E-08	1.2E-08	5.2E-09	7.5E-08
MW-7	5051	1	2.0E-07	5.8E-09	5.2E-09	2.1E-07
MW-7	5051	5.5	2.5E-08	1.2E-08	5.2E-09	4.2E-08
MW-7	5051	10.5	5.0E-07	5.8E-09	5.7E-08	5.6E-07
MW-7	5051	13.5	4.0E-07	5.8E-09	3.6E-08	4.4E-07
MW-7	5051	16.5	1.1E-07	1.2E-08	5.2E-09	1.2E-07
MW-8	5051	1	1.1E-07	8.7E-09	5.2E-09	1.2E-07
MW-8	5051	8.5	7.5E-08	8.7E-09	5.2E-09	8.9E-08
MW-8	5051	10	4.6E-08	2.9E-09	3.1E-08	8.0E-08
MW-8	5051	15.5	1.0E-08	8.7E-09	5.2E-09	2.4E-08
LF-1-2.5	5050/750-50	2.5	1.1E-05	0.0E+00	1.0E-06	1.2E-05
LF-1-7.5	5050/750-50	7.5	4.6E-07	0.0E+00	5.7E-06	6.2E-06
LF-1-21	5050/750-50	21	8.3E-08	0.0E+00	2.0E-06	2.1E-06
LF-2-2.5	5050/750-50	2.5	2.2E-06	0.0E+00	3.1E-06	5.3E-06
LF-2-5.5	5050/750-50	5.5	1.2E-06	0.0E+00	5.2E-07	1.7E-06
LF-2-7.5	5050/750-50	7.5	6.6E-06	0.0E+00	4.7E-08	6.7E-06
LF-2-15.5	5050/750-50	15.5	2.1E-07	0.0E+00	3.1E-08	2.4E-07
LF-3-2.5	5050/750-50	2.5	2.1E-07	0.0E+00	2.1E-08	2.3E-07
LF-3-7	5050/750-50	7	5.8E-07	0.0E+00	5.2E-07	1.1E-06
LF-3-15	5050/750-50	15	1.2E-07	0.0E+00	5.2E-09	1.3E-07
LF-4-2	5050/750-50	2	2.1E-08	0.0E+00	4.1E-08	6.2E-08
LF-4-3.5	5050/750-50	3.5	1.4E-06	0.0E+00	1.6E-06	3.0E-06
LF-4-15	5050/750-50	15	1.2E-07	0.0E+00	5.2E-09	1.3E-07
LF-5-2	5050/750-50	2	2.1E-07	0.0E+00	2.1E-08	2.3E-07
LF-5-3.5	5050/750-50	3.5	4.0E-06	0.0E+00	5.2E-07	4.5E-06
LF-5-11	5050/750-50	11	8.3E-08	0.0E+00	5.2E-09	8.8E-08
LF-5-15	5050/750-50	15	2.1E-07	0.0E+00	5.2E-09	2.1E-07
LF-6-2	5050/750-50	2	4.1E-07	0.0E+00	3.1E-08	4.5E-07
LF-6-9	5050/750-50	9	8.3E-06	0.0E+00	5.7E-07	8.9E-06
LF-6-15.5	5050/750-50	15.5	2.1E-07	0.0E+00	1.6E-08	2.2E-07
LF-7-2	5050/750-50	2	2.6E-06	0.0E+00	5.2E-09	2.6E-06
LF-7-4	5050/750-50	4	5.0E-07	0.0E+00	2.1E-08	5.2E-07
LF-7-10	5050/750-50	10	1.7E-07	0.0E+00	5.2E-09	1.7E-07
LF-7-15.5	5050/750-50	15.5	1.7E-07	0.0E+00	1.0E-08	1.8E-07
LF-8-2.5	5050/750-50	2.5	8.7E-07	5.8E-09	2.6E-08	9.0E-07
LF-8-5.0	5050/750-50	5	2.7E-05	1.5E-09	3.3E-06	3.1E-05

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Cd	Metals Total
LF-8-10.0	5050/750-50	10	2.9E-07	5.8E-09	3.1E-07	6.0E-07
LF-9-4.5	5050/750-50	4.5	1.2E-06	1.5E-08	3.1E-07	1.6E-06
LF-9-11.0	5050/750-50	11	1.3E-05	7.3E-09	8.8E-07	1.4E-05
LF-9-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00	0.0E+00
LF-10-3.0	5050/750-50	3	1.5E-06	1.5E-09	2.7E-07	1.8E-06
LF-10-4.5	5050/750-50	4.5	2.9E-07	2.9E-09	2.1E-08	3.1E-07
LF-10-7.5	5050/750-50	7.5	1.1E-06	2.9E-09	2.6E-09	1.1E-06
LF-11-2.5	5050/750-50	2.5	8.3E-06	1.5E-09	1.4E-06	9.7E-06
LF-11-5.0	5050/750-50	5	1.5E-05	3.5E-08	5.7E-06	2.0E-05
LF-11-7.5	5050/750-50	7.5	8.3E-08	5.8E-09	6.2E-07	7.1E-07
LF-11-12.5	5050/750-50	12.5	1.2E-07	1.5E-08	2.3E-06	2.4E-06
LF-11-25.0	5050/750-50	25	4.1E-08	8.7E-09	2.6E-09	5.3E-08
LF-12B-2.5	5050/750-50	2.5	4.6E-07	5.8E-09	2.9E-07	7.5E-07
LF-12B-5.0	5050/750-50	5	2.9E-06	1.5E-09	3.3E-07	3.2E-06
LF-12B-7.5	5050/750-50	7.5	4.1E-07	1.5E-09	3.8E-07	7.9E-07
LF-12B-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00	0.0E+00
LF-13-2.5	5050/750-50	2.5	4.1E-05	0.0E+00	0.0E+00	4.1E-05
LF-13-5.0	5050/750-50	5	1.1E-04	0.0E+00	0.0E+00	1.1E-04
LF-13-7.0	5050/750-50	7	2.2E-06	0.0E+00	0.0E+00	2.2E-06
LF-14-1.5	5050/750-50	1.5	2.1E-08	2.0E-08	1.0E-08	5.1E-08
LF-14-2-7	5050/750-50	2-7	5.0E-05	1.5E-08	7.8E-06	5.8E-05
LF-14-12.5	5050/750-50	12.5	2.1E-08	5.8E-09	4.7E-08	7.3E-08
LF-15-11.0	5050/750-50	11	2.1E-08	5.8E-09	2.6E-09	2.9E-08
LF-15-13.5	5050/750-50	13.5	8.3E-08	5.8E-09	4.1E-08	1.3E-07
LF-16-1.5-3	5050/750-50	1.5-3	8.3E-08	1.5E-08	1.2E-07	2.2E-07
LF-16-8.0	5050/750-50	8	8.7E-06	5.8E-09	6.2E-07	9.3E-06
LF-16-13.0	5050/750-50	13	1.1E-06	1.5E-09	1.3E-07	1.3E-06
LF-16-25.0	5050/750-50	25	4.1E-08	8.7E-09	5.2E-09	5.5E-08
LF-17-2.5	5050/750-50	2.5	5.0E-07	1.5E-09	3.6E-08	5.4E-07
LF-17-5.5	5050/750-50	5.5	2.1E-07	2.9E-09	2.6E-08	2.4E-07
LF-17-12.0	5050/750-50	12	2.1E-08	2.9E-09	2.6E-09	2.6E-08
LF-F1-1.0	5050/750-50	1	8.3E-07	5.8E-09	3.9E-07	1.2E-06
SB-1-5.0	5050/750-50	5	7.5E-04	1.5E-09	2.9E-06	7.5E-04
SB-1-7.0	5050/750-50	7	1.4E-04	1.5E-09	3.5E-07	1.4E-04
SB-1-9.5	5050/750-50	9.5	2.1E-07	5.8E-09	1.0E-08	2.2E-07
SB-2-2.5	5050/750-50	2.5	1.7E-07	1.7E-08	2.6E-09	1.9E-07
SB-2-7.5	5050/750-50	7.5	8.7E-07	1.5E-09	1.6E-07	1.0E-06
SB-2-12.5	5050/750-50	12.5	1.2E-07	2.9E-09	2.1E-08	1.5E-07
SB-3-2.5	5050/750-50	2.5	3.3E-07	1.5E-08	1.2E-07	4.7E-07
SB-3-4.5	5050/750-50	4.5	1.2E-05	2.9E-08	1.2E-05	2.4E-05
SB-3-7.0	5050/750-50	7	5.8E-06	1.5E-09	7.8E-07	6.6E-06
SB-3-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00	0.0E+00
SB-4-2.5	5050/750-50	2.5	1.7E-07	2.6E-08	2.6E-09	1.9E-07
SB-4-7.5	5050/750-50	7.5	1.8E-05	2.9E-08	1.3E-06	2.0E-05
SB-4-12.0	5050/750-50	12	6.2E-08	8.7E-09	2.6E-09	7.3E-08
SB-5-9.5	5050/750-50	9.5	3.6E-06	5.8E-09	1.2E-07	3.7E-06
SB-6-2.5	5050/750-50	2.5	1.1E-05	1.5E-09	1.6E-06	1.3E-05

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Cd	Metals Total
SB-6-7.0	5050/750-50	7	2.5E-07	8.7E-09	2.3E-07	4.9E-07
SB-6-12.0	5050/750-50	12	6.2E-08	5.8E-09	1.5E-07	2.2E-07
SB-7-2.5	5050/750-50	2.5	1.2E-07	2.0E-08	1.0E-08	1.6E-07
SB-7-11.5	5050/750-50	11.5	1.3E-05	7.3E-09	8.8E-07	1.4E-05
SB-7-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00	0.0E+00
SB-8-2.5	5050/750-50	2.5	8.3E-08	2.0E-08	5.2E-09	1.1E-07
SB-8-5.0	5050/750-50	5	1.2E-06	1.5E-08	3.6E-07	1.6E-06
SB-8-10.0	5050/750-50	10	1.7E-06	8.7E-09	2.6E-09	1.8E-06
SB-9-2.5	5050/750-50	2.5	6.6E-05	5.8E-09	2.7E-06	6.9E-05
SB-9-7.5	5050/750-50	7.5	1.1E-05	1.5E-09	4.6E-05	5.6E-05
SB-9-12.5	5050/750-50	12.5	1.7E-07	1.7E-08	1.3E-06	1.5E-06
SB-10-5.0	5050/750-50	5	6.6E-05	8.7E-09	4.8E-07	6.7E-05
SB-10-7.0	5050/750-50	7	1.2E-07	5.8E-09	2.6E-09	1.3E-07
SB-10-10.0	5050/750-50	10	1.7E-07	5.8E-09	2.6E-09	1.7E-07
SB-11-2.5	5050/750-50	2.5	5.8E-07	8.7E-09	2.6E-08	6.2E-07
SB-11-7.5	5050/750-50	7.5	5.8E-07	2.9E-09	2.6E-09	5.9E-07
SB-11-12.5	5050/750-50	12.5	4.1E-07	8.7E-09	5.7E-08	4.8E-07
SB-12-2.0	5050/750-50	2	5.8E-05	2.9E-09	3.4E-06	6.1E-05
SB-12-5.0	5050/750-50	5	3.4E-05	3.2E-08	1.4E-06	3.6E-05
SB-12-12.0	5050/750-50	12	2.5E-07	1.5E-09	1.6E-07	4.1E-07
SB-13-2.5	5050/750-50	2.5	1.4E-06	1.5E-09	3.2E-07	1.7E-06
SB-13-7.5	5050/750-50	7.5	4.1E-06	1.5E-09	4.5E-07	4.6E-06
SB-13-10.0	5050/750-50	10	8.3E-08	2.9E-09	2.6E-07	3.5E-07
SB-13-15.0	5050/750-50	15	0.0E+00	0.0E+00	0.0E+00	
SB-14-2.0	5050/750-50	2	1.8E-06	5.8E-09	7.3E-08	1.9E-06
SB-14-5.0	5050/750-50	5	3.3E-07	1.5E-09	1.6E-08	3.5E-07
SB-14-10	5050/750-50	10	7.5E-06	6.4E-09	6.7E-08	7.5E-06
SB-15-3.5	5050/750-50	3.5	7.0E-07	2.9E-09	1.9E-07	9.0E-07
SB-15-6.0	5050/750-50	6	4.6E-07	2.9E-09	6.2E-08	5.2E-07
SB-15-11.0	5050/750-50	11	1.7E-07	8.7E-09	5.2E-08	2.3E-07
SB-16-5.0	5050/750-50	5	4.1E-06	1.5E-08	4.7E-07	4.6E-06
SB-16-6.5	5050/750-50	6.5	7.9E-07	2.9E-09	2.6E-09	7.9E-07
SB-17-2.0	5050/750-50	2	3.3E-07	1.7E-08	6.7E-08	4.2E-07
SB-17-5.0	5050/750-50	5	7.9E-07	1.5E-09	2.6E-09	7.9E-07
SB-17-6.5	5050/750-50	6.5	5.4E-06	5.8E-09	4.7E-08	5.4E-06
SB-17-12.0	5050/750-50	12	4.1E-08	5.8E-09	2.6E-09	5.0E-08
SB-18-1.5	5050/750-50	1.5	1.7E-07	5.8E-09	2.6E-08	2.0E-07
SB-18-2.5	5050/750-50	2.5	1.4E-06	1.5E-09	2.0E-05	2.2E-05
SB-18-5.0	5050/750-50	5	1.3E-06	1.5E-09	1.1E-05	1.2E-05
SB-18-7.0	5050/750-50	7	5.4E-07	2.9E-09	1.0E-08	5.5E-07
SB-19-2.5	5050/750-50	2.5	2.8E-05	1.5E-08	1.6E-05	4.4E-05
SB-19-5.0B	5050/750-50	5	2.1E-05	1.5E-09	7.3E-05	9.3E-05
SB-19-10.0	5050/750-50	10	1.8E-06	1.5E-09	1.3E-06	3.2E-06
SB-20-2.5	5050/750-50	2.5	2.1E-08	2.0E-08	2.6E-09	4.4E-08
SB-20-9.5	5050/750-50	9.5	7.9E-06	1.5E-08	1.7E-05	2.5E-05
SB-20-16.0	5050/750-50	16	2.1E-08	2.9E-09	2.6E-09	2.6E-08
SB-21-2.5	5050/750-50	2.5	3.6E-05	1.7E-08	8.8E-07	3.7E-05

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Cd	Metals Total
SB-21-7.5	5050/750-50	7.5	8.3E-08	2.9E-09	5.0E-07	5.8E-07
SB-21-11.5	5050/750-50	11.5	2.1E-08	2.9E-09	1.8E-06	1.8E-06
SB-21-17.5	5050/750-50	17.5	8.3E-08	5.8E-09	2.3E-06	2.4E-06
SB-21-24.5	5050/750-50	24.5	1.2E-07	8.7E-09	5.7E-07	7.0E-07
SB-21-34.5	5050/750-50	34.5	2.1E-08	5.8E-09	2.1E-08	4.7E-08
SB-21-42.0	5050/750-50	42	2.1E-08	1.5E-08	2.6E-09	3.8E-08
SB-21-49.5	5050/750-50	49.5	2.9E-07	1.2E-08	5.2E-09	3.1E-07
SS-1-2.5	5050/750-50	2.5	7.9E-06	1.5E-09	2.6E-09	7.9E-06
SS-2-2.0	5050/750-50	2	1.9E-05	2.9E-09	4.3E-07	2.0E-05
SS-3-2.0	5050/750-50	2	4.1E-06	2.9E-09	3.3E-07	4.5E-06
SS-4-1.5	5050/750-50	1.5	1.5E-06	1.2E-08	1.0E-07	1.6E-06
SS-5-1.5	5050/750-50	1.5	2.9E-06	1.2E-08	1.2E-07	3.0E-06
SS-6-2.0	5050/750-50	2	1.5E-05	2.9E-09	2.9E-06	1.8E-05
SS-7-2.0	5050/750-50	2	6.2E-08	2.9E-09	1.0E-08	7.5E-08
SS-8-2.0	5050/750-50	2	2.1E-05	8.7E-09	3.7E-07	2.1E-05
SS-10-2.5	5050/750-50	2.5	4.1E-06	1.5E-09	3.8E-07	4.5E-06
SS-11-2.0	5050/750-50	2	6.6E-06	2.9E-09	2.5E-06	9.2E-06
SS-12-2.5	5050/750-50	2.5	2.3E-06	2.9E-09	6.2E-07	2.9E-06
SS-13-2.0	5050/750-50	2	6.2E-08	5.8E-09	5.7E-08	1.3E-07
SS-13-2.5	5050/750-50	2.5	7.9E-07	8.7E-09	1.6E-07	9.5E-07
SS-18-2.0	5050/750-50	2	2.7E-05	2.9E-09	3.2E-06	3.0E-05
SS-19-2.5	5050/750-50	2.5	3.7E-07	8.7E-09	1.6E-08	4.0E-07
B1		5	5.8E-07	0.0E+00	2.3E-08	6.0E-07
B1		10	3.2E-07	1.3E-08	1.7E-08	3.5E-07
B2		10	3.0E-07	0.0E+00	2.7E-06	3.0E-06
B3		5	1.7E-07	8.4E-09	3.2E-07	5.0E-07
B3		10	3.9E-07	9.0E-09	1.5E-07	5.5E-07
B4		5	3.9E-07	7.8E-09	1.0E-06	1.4E-06
B4		10	3.4E-07	8.1E-09	2.1E-07	5.5E-07
MW1		5	9.0E-07	0.0E+00	2.9E-08	9.2E-07
MW1		10	4.5E-07	1.2E-08	5.7E-08	5.2E-07
MW2		5	5.9E-07	0.0E+00	5.9E-07	1.2E-06
MW2		10	3.1E-07	0.0E+00	2.0E-06	2.3E-06
MW3		10	3.1E-07	0.0E+00	1.2E-07	4.3E-07
MW4		10	3.4E-07	7.8E-09	0.0E+00	3.5E-07
CW-1	5200	6.5	3.7E-05	2.9E-09	1.0E-05	4.7E-05
CW-1	5200	8	4.0E-06	1.2E-08	1.0E-05	1.4E-05
CW-1	5200	9	1.3E-06	3.2E-08	1.5E-07	1.5E-06
CW-1	5200	11	8.3E-08	1.2E-08	4.1E-08	1.4E-07
CW-2	5200	3.5	8.7E-06	8.7E-09	1.5E-06	1.0E-05
CW-2	5200	5	1.2E-05	8.7E-09	1.5E-06	1.3E-05
CW-2	5200	7.5	1.7E-07	5.8E-09	1.0E-08	1.8E-07
CW-2	5200	9.5	7.0E-06	5.8E-09	5.2E-08	7.1E-06
CW-3	5200	3.5	1.3E-05	1.5E-08	3.1E-06	1.6E-05
CW-3	5200	6	8.3E-08	8.7E-09	7.3E-07	8.2E-07
CW-3	5200	9	6.2E-07	8.7E-09	1.0E-08	6.4E-07
CW-3	5200	11	3.2E-06	2.6E-08	1.0E-08	3.2E-06

APPENDIX A-1
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	As	Be	Cd	Metals Total
CW-4	5200	5.5	8.7E-06	5.8E-09	1.2E-05	2.1E-05
CW-4	5200	7.5	2.1E-08	8.7E-09	1.1E-07	1.4E-07
CW-4	5200	11.5	3.6E-06	2.9E-09	1.0E-08	3.6E-06
CW-4	5200	12.5	5.0E-06	5.8E-09	2.5E-07	5.2E-06
CW-5	5200	7.5	2.8E-06	2.9E-09	2.6E-06	5.5E-06
CW-5	5200	11	3.5E-06	8.7E-09	2.5E-07	3.8E-06
CSB-1	5051/PGE	6-6.5'	2.4E-05	1.5E-09	1.9E-07	2.5E-05
CSB-1	5051/PGE	8-8.5'	3.3E-07	1.5E-09	1.0E-08	3.4E-07
CSB-3	5050	5'	1.2E-07	1.5E-09	1.0E-08	1.4E-07
CSB-4	5050	4'	3.3E-07	1.5E-09	1.0E-08	3.4E-07
CSB-5	5050/750-50	4'	3.3E-07	1.5E-09	1.0E-08	3.4E-07
CSB-6	5050/750-50	4'	2.1E-07	1.5E-09	1.0E-08	2.2E-07
CSB-8	5050	5'-5.5'	2.2E-06	1.5E-10	1.7E-07	2.4E-06
CSB-8	5050	10'-10.5'	6.6E-08	1.5E-09	5.2E-06	5.3E-06
CSB-8	5050	15'-15.5'	3.4E-07	1.5E-09	1.0E-08	3.5E-07
CSB-8	5050	19.5'-20'	8.3E-08	1.5E-09	1.0E-08	9.5E-08
CSB-8	5050	20'-20.5'	1.7E-07	1.5E-09	1.0E-08	1.8E-07
CSB-8	5050	25'-25.5'	1.2E-07	1.5E-09	2.1E-08	1.5E-07
CSB-8	5050	30-30.5	8.3E-08	1.5E-09	4.7E-08	1.3E-07
CSB-8	5050	35'-35.5'	4.1E-08	1.5E-09	1.0E-08	5.3E-08
CSB-8	5050	40'-40.5'	1.2E-07	1.5E-09	1.0E-08	1.4E-07
CSB-8	5050	45'-45.5'	2.1E-07	1.5E-09	1.0E-08	2.2E-07
CSB-8	5050	50'-50.5'	1.2E-07	1.5E-09	1.0E-08	1.4E-07
CSB-8	5050	55'-55.5'	8.3E-08	1.5E-09	1.0E-08	9.5E-08
CSB-8	5050	60'-60.5'	4.1E-08	1.5E-09	1.0E-08	5.3E-08
CSB-9	5051	5'-5.5'	1.2E-07	1.5E-09	1.0E-08	1.4E-07
CSB-9	5051	10'-10.5'	4.1E-07	1.5E-09	1.0E-08	4.3E-07
CSB-9	5051	15'-15.5'	2.5E-07	1.5E-09	1.6E-07	4.1E-07
CSB-9	5051	20'-20.5'	8.3E-08	1.5E-09	1.0E-08	9.5E-08
CSB-9	5051	25'-25.5'	2.1E-08	1.5E-09	1.0E-08	3.3E-08
CSB-9	5051	30'-30.5'	2.1E-08	1.5E-09	1.0E-08	3.3E-08
CSB-9	5051	35'-35.5'	1.7E-07	1.5E-09	1.0E-08	1.8E-07
CSB-9	5051	40'-40.5'	2.1E-08	1.5E-09	1.0E-08	3.3E-08
CSB-9	5051	45'-45.5'	1.2E-07	1.5E-09	1.0E-08	1.4E-07
CSB-9	5051	50'-50.5'	1.2E-07	1.5E-09	1.0E-08	1.4E-07
CSB-9	5051	55'-55.5'	1.7E-07	1.5E-09	1.0E-08	1.8E-07
CSB-9	5051	60'-60.5'	1.2E-07	1.5E-09	1.0E-08	1.4E-07
CW-6	5200	6-6.5'	2.4E-05	1.5E-09	6.2E-06	3.0E-05
CW-7	5200	6-6.5'	5.8E-06	1.5E-09	3.1E-06	8.9E-06
CW-7	5200	16-16.5'	2.1E-07	1.5E-09	1.0E-08	2.2E-07
CW-8	5051/EBMUD	5'	1.7E-07	1.5E-09	3.6E-08	2.0E-07
CW-9	5051/EBMUD	5'	1.2E-07	1.5E-09	1.0E-08	1.4E-07
CW-10	5051/PGE	11-11.5	4.6E-07	1.5E-09	4.1E-08	5.0E-07
CW-12	5051/PGE	11-11.5	2.1E-07	1.5E-09	1.0E-08	2.2E-07
CW-13	5050	5'	2.9E-07	1.5E-09	1.0E-08	3.0E-07

APPENDIX A-2
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Semivolatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	property	Sample Depth	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	N-Nitroso-diphenylamine	SVOC Total
LF-8-5.0	5050/750-50	5	1.64E-07	1.64E-08	1.64E-09	1.15E-10	1.15E-10	0.00E+00	1.64E-08	0.00E+00	1.99E-07
LF-8-7.5	5050/750-50	7.5	1.93E-06	3.09E-07	8.02E-09	5.61E-10	2.84E-09	0.00E+00	8.02E-08	0.00E+00	2.33E-06
LF-9-4.5	5050/750-50	4.5	2.13E-07	3.48E-08	1.28E-09	2.71E-10	1.62E-10	0.00E+00	6.38E-09	0.00E+00	2.55E-07
LF-14-12.5	5050/750-50	12.5	3.19E-08	3.19E-09	3.19E-10	2.23E-11	2.23E-11	0.00E+00	3.19E-09	0.00E+00	3.86E-08
SB-1-7.0	5050/750-50	7	1.64E-07	1.64E-08	1.64E-09	1.15E-10	1.15E-10	0.00E+00	1.64E-08	0.00E+00	1.99E-07
SB-2-15	5050/750-50	15	3.19E-08	3.19E-09	3.19E-10	2.23E-11	2.23E-11	0.00E+00	3.19E-09	0.00E+00	3.86E-08
SB-15-6.0	5050/750-50	6	3.19E-08	3.19E-09	3.19E-10	2.23E-11	2.23E-11	0.00E+00	3.19E-09	0.00E+00	3.86E-08
SB-17-6.5	5050/750-50	6.5	3.19E-08	3.19E-09	3.19E-10	2.23E-11	2.23E-11	0.00E+00	3.19E-09	0.00E+00	3.86E-08
SB-18-7.0	5050/750-50	7	3.19E-08	3.19E-09	3.19E-10	4.46E-11	2.23E-11	0.00E+00	3.19E-09	0.00E+00	3.86E-08
SB-19-7.5	5050/750-50	5	3.19E-08	3.19E-09	3.19E-10	2.23E-11	2.23E-11	0.00E+00	3.19E-09	0.00E+00	3.86E-08
SB-19-10.0	5050/750-50	10	8.02E-08	8.02E-09	8.02E-10	5.61E-11	5.61E-11	0.00E+00	8.02E-09	0.00E+00	9.71E-08
SB-20-9.5	5050/750-50	9.5	1.41E-07	1.43E-08	6.96E-10	2.23E-11	6.22E-11	0.00E+00	3.19E-09	0.00E+00	1.59E-07
CW-2	5200	9.5	1.35E-05	9.66E-07	7.73E-08	0.00E+00	1.08E-08	1.93E-06	3.86E-07	2.90E-09	1.69E-05
CW-4	5200	5.5	5.60E-07	4.83E-08	2.90E-09	0.00E+00	4.60E-10	5.80E-08	2.51E-08	1.45E-11	6.95E-07
CW-4	5200	7.5	1.93E-08	1.93E-09	1.93E-10	0.00E+00	1.35E-11	3.86E-08	1.93E-09	1.45E-11	6.21E-08
CW-4	5200	11.5	2.13E-05	2.13E-06	2.51E-07	0.00E+00	3.25E-08	2.90E-06	9.08E-07	2.90E-10	2.75E-05
CW-4	5200	12.5	2.90E-06	3.67E-07	1.35E-08	0.00E+00	6.76E-09	1.93E-07	7.73E-08	7.25E-11	3.56E-06
CW-5	5200	7.5	1.93E-08	1.93E-09	1.93E-10	0.00E+00	1.35E-11	3.86E-08	1.93E-09	1.45E-11	6.21E-08
CW-5	5200	11	5.02E-06	5.41E-07	3.48E-08	0.00E+00	1.22E-08	2.13E-06	1.55E-07	7.25E-11	7.89E-06

APPENDIX A-2
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Semivolatile Organic Compounds
Dermal Route of Exposure

Well/Boring Name	property	Sample Depth	N-Nitroso-diphenylamine	SVOC Total
CW-4	5200	5.5	2.1E-11	2.1E-11
CW-4	5200	7.5	2.1E-11	2.1E-11
CW-4	5200	11.5	4.2E-10	4.2E-10
CW-4	5200	12.5	1.05E-10	1.05E-10
CW-5	5200	7.5	2.1E-11	2.1E-11
CW-5	5200	11	1.05E-10	1.05E-10

APPENDIX A-2
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Semivolatile Organic Compounds
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	N-Nitroso-diphenylamine	SVOC Total
CW-4	5200	5.5	2.1E-11	2.1E-11
CW-4	5200	7.5	2.1E-11	2.1E-11
CW-4	5200	11.5	4.2E-10	4.2E-10
CW-4	5200	12.5	1.05E-10	1.05E-10
CW-5	5200	7.5	2.1E-11	2.1E-11
CW-5	5200	11	1.05E-10	1.05E-10

APPENDIX A-2
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Semivolatile Organic Compounds
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	N-Nitroso-diphenylamine	SVOC Total
LF-8-5.0	5050/750-50	5	3.52E-08	3.52E-09	3.52E-10	2.47E-11	2.47E-11	0.00E+00	3.52E-09	0.00E+00	4.27E-08
LF-8-7.5	5050/750-50	7.5	4.15E-07	6.63E-08	1.72E-09	1.20E-10	6.10E-10	0.00E+00	1.72E-08	0.00E+00	5.01E-07
LF-9-4.5	5050/750-50	4.5	4.56E-08	7.46E-09	2.74E-10	5.81E-11	3.48E-11	0.00E+00	1.37E-09	0.00E+00	5.48E-08
LF-14-12.5	5050/750-50	12.5	6.84E-09	6.84E-10	6.84E-11	4.79E-12	4.79E-12	0.00E+00	6.84E-10	0.00E+00	8.29E-09
SB-1-7.0	5050/750-50	7	3.52E-08	3.52E-09	3.52E-10	2.47E-11	2.47E-11	0.00E+00	3.52E-09	0.00E+00	4.27E-08
SB-2-15	5050/750-50	15	6.84E-09	6.84E-10	6.84E-11	4.79E-12	4.79E-12	0.00E+00	6.84E-10	0.00E+00	8.29E-09
SB-15-6.0	5050/750-50	6	6.84E-09	6.84E-10	6.84E-11	4.79E-12	4.79E-12	0.00E+00	6.84E-10	0.00E+00	8.29E-09
SB-17-6.5	5050/750-50	6.5	6.84E-09	6.84E-10	6.84E-11	4.79E-12	4.79E-12	0.00E+00	6.84E-10	0.00E+00	8.29E-09
SB-18-7.0	5050/750-50	7	6.84E-09	6.84E-10	6.84E-11	9.58E-12	4.79E-12	0.00E+00	6.84E-10	0.00E+00	8.29E-09
SB-19-7.5	5050/750-50	5	6.84E-09	6.84E-10	6.84E-11	4.79E-12	4.79E-12	0.00E+00	6.84E-10	0.00E+00	8.29E-09
SB-19-10.0	5050/750-50	10	1.72E-08	1.72E-09	1.72E-10	1.20E-11	1.20E-11	0.00E+00	1.72E-09	0.00E+00	2.08E-08
SB-20-9.5	5050/750-50	9.5	3.03E-08	3.07E-09	1.49E-10	4.79E-12	1.34E-11	0.00E+00	6.84E-10	0.00E+00	3.42E-08
CW-2	5200	9.5	2.90E-06	2.07E-07	1.66E-08	0.00E+00	2.32E-09	4.15E-07	8.29E-08	6.22E-10	3.63E-06
CW-4	5200	5.5	1.20E-07	1.04E-08	6.22E-10	0.00E+00	9.87E-11	1.24E-08	5.39E-09	3.11E-12	1.49E-07
CW-4	5200	7.5	4.15E-09	4.15E-10	4.15E-11	0.00E+00	2.90E-12	8.29E-09	4.15E-10	3.11E-12	1.33E-08
CW-4	5200	11.5	4.56E-06	4.56E-07	5.39E-08	0.00E+00	6.97E-09	6.22E-07	1.95E-07	6.22E-11	5.90E-06
CW-4	5200	12.5	6.22E-07	7.88E-08	2.90E-09	0.00E+00	1.45E-09	4.15E-08	1.66E-08	1.55E-11	7.63E-07
CW-5	5200	7.5	4.15E-09	4.15E-10	4.15E-11	0.00E+00	2.90E-12	8.29E-09	4.15E-10	3.11E-12	1.33E-08
CW-5	5200	11	1.08E-06	1.16E-07	7.46E-09	0.00E+00	2.61E-09	4.56E-07	3.32E-08	1.55E-11	1.69E-06

APPENDIX A-3
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Volatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Benzene	Methylene Chloride	Total
LF-1-5.5	5050/750-50	5.5	8.1E-13	0.0E+00	8.1E-13
LF-1-10.5	5050/750-50	10.5	8.1E-13	0.0E+00	8.1E-13
LF-13-7.0	5050/750-50	7.0	4.0E-12	0.0E+00	4.0E-12
LF-14-1.5	5050/750-50	1.5	4.0E-12	0.0E+00	4.0E-12
LF-14-4.5	5050/750-50	4.5	4.0E-12	0.0E+00	4.0E-12
LF-15-11.0	5050/750-50	11.0	4.0E-12	0.0E+00	4.0E-12
SB-1-7.0	5050/750-50	7.0	7.1E-11	0.0E+00	7.1E-11
SB-17-5.0	5050/750-50	5.0	4.0E-12	0.0E+00	4.0E-12
SB-17-6.5	5050/750-50	6.5	6.9E-11	0.0E+00	6.9E-11
SB-17-9.5	5050/750-50	9.5	4.0E-12	0.0E+00	4.0E-12
SB-18-7.0	5050/750-50	7.0	4.0E-12	0.0E+00	4.0E-12
SB-19-7.5	5050/750-50	7.5	4.0E-12	0.0E+00	4.0E-12
SB-19-10	5050/750-50	10.0	4.0E-12	0.0E+00	4.0E-12
SB-20-9.5	5050/750-50	9.5	4.0E-12	0.0E+00	4.0E-12
SB-21-10	5050/750-50	10.0	4.0E-12	0.0E+00	4.0E-12
SS-20-2.0	5050/750-50	2.0	4.0E-12	0.0E+00	4.0E-12
CW-2	5200	9.5	4.0E-10	1.6E-10	5.6E-10
CW-4	5200	5.5	4.0E-12	1.6E-12	5.6E-12
CW-4	5200	7.5	4.0E-12	1.1E-12	5.2E-12
CW-4	5200	11.5	2.4E-10	1.4E-12	2.4E-10
CW-4	5200	12.5	2.4E-09	6.8E-10	3.1E-09
CW-5	5200	7.5	3.2E-09	6.8E-10	3.9E-09
CW-5	5200	11.0	2.4E-09	6.8E-10	3.1E-09
CSB-3	5050	5'	4.0E-12	0.0E+00	4.0E-12
CSB-4	5050	4'	4.0E-12	0.0E+00	4.0E-12
CSB-5	750-50	4'	4.0E-12	0.0E+00	4.0E-12
CSB-6	750-50	4'	4.0E-12	0.0E+00	4.0E-12
CW-8	5051/EBMUD	5'	4.0E-12	0.0E+00	4.0E-12
CW-9	5051/EBMUD	5'	4.0E-12	0.0E+00	4.0E-12
CW-13	5050	5'	4.0E-13	0.0E+00	4.0E-13

APPENDIX A-3
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Volatile Organic Compounds
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Benzene	Methylene Chloride	Total
LF-1-5.5	5050/750-50	5.5	9.7E-13	0.0E+00	9.7E-13
LF-1-10.5	5050/750-50	10.5	9.7E-13	0.0E+00	9.7E-13
LF-13-7.0	5050/750-50	7.0	4.9E-12	0.0E+00	4.9E-12
LF-14-1.5	5050/750-50	1.5	4.9E-12	0.0E+00	4.9E-12
LF-14-4.5	5050/750-50	4.5	4.9E-12	0.0E+00	4.9E-12
LF-15-11.0	5050/750-50	11.0	4.9E-12	0.0E+00	4.9E-12
SB-1-7.0	5050/750-50	7.0	8.6E-11	0.0E+00	8.6E-11
SB-17-5.0	5050/750-50	5.0	4.9E-12	0.0E+00	4.9E-12
SB-17-6.5	5050/750-50	6.5	8.4E-11	0.0E+00	8.4E-11
SB-17-9.5	5050/750-50	9.5	4.9E-12	0.0E+00	4.9E-12
SB-18-7.0	5050/750-50	7.0	4.9E-12	0.0E+00	4.9E-12
SB-19-7.5	5050/750-50	7.5	4.9E-12	0.0E+00	4.9E-12
SB-19-10	5050/750-50	10.0	4.9E-12	0.0E+00	4.9E-12
SB-20-9.5	5050/750-50	9.5	4.9E-12	0.0E+00	4.9E-12
SB-21-10	5050/750-50	10.0	4.9E-12	0.0E+00	4.9E-12
SS-20-2.0	5050/750-50	2.0	4.9E-12	0.0E+00	4.9E-12
CW-2	5200	9.5	4.9E-10	1.9E-10	6.8E-10
CW-4	5200	5.5	4.9E-12	1.9E-12	6.8E-12
CW-4	5200	7.5	4.9E-12	1.4E-12	6.2E-12
CW-4	5200	11.5	2.9E-10	1.6E-12	2.9E-10
CW-4	5200	12.5	2.9E-09	8.2E-10	3.7E-09
CW-5	5200	7.5	3.9E-09	8.2E-10	4.7E-09
CW-5	5200	11.0	2.9E-09	8.2E-10	3.7E-09
CSB-3	5050	5'	4.9E-12	0.0E+00	4.9E-12
CSB-4	5050	4'	4.9E-12	0.0E+00	4.9E-12
CSB-5	750-50	4'	4.9E-12	0.0E+00	4.9E-12
CSB-6	750-50	4'	4.9E-12	0.0E+00	4.9E-12
CW-8	5051/EBMUD	5'	4.9E-12	0.0E+00	4.9E-12
CW-9	5051/EBMUD	5'	4.9E-12	0.0E+00	4.9E-12
CW-13	5050	5'	4.9E-13	0.0E+00	4.9E-13

APPENDIX A-3
ESTIMATED CARCINOGENIC RISKS
Construction Scenario
Volatile Organic Compounds
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Benzene	Methylene Chloride	Total
LF-1-5.5	5050/750-50	5.5	1.5E-09	0.0E+00	1.5E-09
LF-1-10.5	5050/750-50	10.5	1.5E-09	0.0E+00	1.5E-09
LF-13-7.0	5050/750-50	7.0	7.7E-09	0.0E+00	7.7E-09
LF-14-1.5	5050/750-50	1.5	7.7E-09	0.0E+00	7.7E-09
LF-14-4.5	5050/750-50	4.5	7.7E-09	0.0E+00	7.7E-09
LF-15-11.0	5050/750-50	11.0	7.7E-09	0.0E+00	7.7E-09
SB-1-7.0	5050/750-50	7.0	1.4E-07	0.0E+00	1.4E-07
SB-17-5.0	5050/750-50	5.0	7.7E-09	0.0E+00	7.7E-09
SB-17-6.5	5050/750-50	6.5	1.3E-07	0.0E+00	1.3E-07
SB-17-9.5	5050/750-50	9.5	7.7E-09	0.0E+00	7.7E-09
SB-18-7.0	5050/750-50	7.0	7.7E-09	0.0E+00	7.7E-09
SB-19-7.5	5050/750-50	7.5	7.7E-09	0.0E+00	7.7E-09
SB-19-10	5050/750-50	10.0	7.7E-09	0.0E+00	7.7E-09
SB-20-9.5	5050/750-50	9.5	7.7E-09	0.0E+00	7.7E-09
SB-21-10	5050/750-50	10.0	7.7E-09	0.0E+00	7.7E-09
SS-20-2.0	5050/750-50	2.0	7.7E-09	0.0E+00	7.7E-09
CW-2	5200	9.5	7.7E-07	8.9E-08	8.6E-07
CW-4	5200	5.5	7.7E-09	8.9E-10	8.6E-09
CW-4	5200	7.5	7.7E-09	3.2E-10	8.0E-09
CW-4	5200	11.5	4.6E-07	7.7E-10	4.6E-07
CW-4	5200	12.5	4.6E-06	1.9E-07	4.8E-06
CW-5	5200	7.5	6.1E-06	1.9E-07	6.3E-06
CW-5	5200	11.0	4.6E-06	1.9E-07	4.8E-06
CSB-3	5050	5'	7.7E-09	0.0E+00	7.7E-09
CSB-4	5050	4'	7.7E-09	0.0E+00	7.7E-09
CSB-5	750-50	4'	7.7E-09	0.0E+00	7.7E-09
CSB-6	750-50	4'	7.7E-09	0.0E+00	7.7E-09
CW-8	5051/EBMUD	5'	7.7E-09	0.0E+00	7.7E-09
CW-9	5051/EBMUD	5'	7.7E-09	0.0E+00	7.7E-09
CW-13	5050	5'	7.7E-10	0.0E+00	7.7E-10

APPENDIX B

ESTIMATED NONCARCINOGENIC HAZARDS

APPENDIX B

Appendix A calculates the noncarcinogenic hazards resulting from exposure to constituents detected at least once at the Site, as assumed in the excavation scenario. Hazards are calculated on a point by point basis and are presented by constituent class, and by route of exposure.

Hazards are calculated using the following equations:

Oral Hazard

$$(Cs * CF * dPEF)/RfDo = Hazard$$

where:

- Cs = Concentration in soil ($mg_{constituent}/kg_{soil}$) - Provided to RWQCB January 13, 1999.
- CF = Conversion Factor (1E-6kg/mg)
- dPEF = Oral Daily Pathway Exposure Factor ($mg_{soil}/kg_{bodyweight}$-day) - Table 3
- RfDo = Oral Reference Dose (mg/kg-day)- Table 4
- Hazard = Constituent and route specific hazards (unitless)

Dermal Hazard

$$(Cs * CF * dPEF * DAF)/RfDo = Hazard$$

where:

- Cs = Concentration in soil ($mg_{constituent}/kg_{soil}$) - Provided to RWQCB January 13, 1999.
- CF = Conversion Factor (1E-6kg/mg)
- dPEF = Dermal Daily Pathway Exposure Factor ($sq.cm_{skin}/kg_{bodyweight}$-day) - Table 3
- DAF = Dermal Absorption Factor (10% organics, 3% arsenic and cadmium, 1% all other metals)
- RfDo = Oral Reference Dose (mg/kg-day)- Table 4
- Hazard = Constituent and route specific hazards (unitless)

Inhalation Hazard - Particulates (metals and semi-volatile organic compounds)

$$(Cs * dPEF)/RfDi = Risk$$

where:

- Cs = Concentration in soil ($mg_{constituent}/kg_{soil}$) - Provided to RWQCB January 13, 1999.
- dPEF = Daily Particulate Inhalation Lifetime Pathway Exposure Factor ($mg_{soil}/kg_{bodyweight}$-day) - Table 3
- RfDi = Inhalation Reference Dose (mg/kg-day)- Table 4
- Hazard = Constituent and route specific hazards (unitless)

Inhalation Hazard - Volatiles (volatile organic compounds)

$$(Cs * 1/VF_s * AF * dPEF)/RfDi = Risk$$

where:

Cs = Concentration in soil ($mg_{constituent}/kg_{soil}$) - Provided to RWQCB January 13, 1999.

VF_s = Volatilization Factor from soil (m^3/kg) - Table 2

AF = Agitation Factor = 28 (unitless) - Section 4.1.4.2.2

dPEF = Daily Volatile Inhalation Lifetime Pathway Exposure Factor ($cu.m_{air}/kg_{bodyweight}$-day) - Table 3

RfDi = Inhalation Reference Dose (mg/kg-day)- Table 4

Hazard = Constituent and route specific hazards (unitless)

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
B-2	5051	4	5.19E-03	1.01E+00	4.03E-03	1.13E-04	2.48E-02	1.88E-05	1.24E-05	4.86E-02	9.92E-03
B-3	5051	4	6.76E-03	1.39E+00	1.93E-02	1.13E-04	6.31E-01	4.70E-04	7.89E-06	1.09E-01	1.24E-02
B-4	5051	11.5	1.35E-03	2.25E-02	1.93E-02	1.13E-04	2.25E-03	2.25E-04	1.35E-05	2.58E-03	3.38E-04
BA-4	5051	2	1.13E-05	2.07E-02	3.06E-03	1.13E-04	2.25E-04	3.19E-04	5.75E-05	6.68E-04	1.01E-03
BA-4	5051	2	4.51E-05	1.71E-02	2.06E-03	4.06E-05	1.60E-03	8.12E-05	1.58E-05	3.43E-04	1.34E-03
BA-4	5051	6.5	4.62E-05	1.16E-02	1.95E-02	5.28E-05	3.34E-03	1.54E-04	1.54E-05	6.31E-04	1.16E-03
BA-4	5051	6.5	1.13E-05	1.13E-02	4.83E-03	1.13E-04	2.25E-04	1.88E-04	4.28E-05	1.00E-03	1.01E-03
BA-4	5051	8	6.76E-05	4.88E-03	3.06E-02	2.25E-05	1.58E-03	1.80E-04	2.37E-05	1.76E-02	1.01E-03
BA-4	5051	8	8.79E-05	6.99E-03	2.53E-01	5.52E-05	8.57E-03	2.22E-04	1.96E-05	7.40E-03	4.24E-04
BA-4	5051	9.5	4.96E-05	3.29E-03	1.80E-03	3.90E-05	9.51E-04	7.42E-05	1.79E-05	5.80E-04	4.02E-04
BA-4	5051	9.5	1.13E-05	7.89E-03	5.96E-03	4.51E-05	2.25E-04	8.64E-05	2.93E-05	8.50E-04	3.38E-04
BA-4	5051	12	4.28E-05	1.08E-03	1.66E-03	3.36E-05	1.10E-03	6.41E-05	1.88E-05	7.37E-04	7.72E-04
B-5	5051	11.5	2.48E-03	1.88E+00	1.53E-02	1.13E-04	4.73E+00	1.13E-04	9.24E-05	1.00E-01	7.33E-01
BA-5	5051	4	1.35E-04	3.76E-02	8.86E-03	1.13E-04	1.19E-02	6.20E-04	8.90E-05	1.06E-02	2.82E-02
BA-5	5051	4	4.51E-05	2.89E-02	8.15E-03	4.91E-05	2.86E-02	6.24E-03	1.98E-04	1.17E-02	8.75E-03
BA-5	5051	8	6.76E-05	1.32E-02	4.67E-02	6.76E-05	1.15E-02	1.60E-04	4.28E-05	3.64E-03	1.47E-02
BA-5	5051	8	5.07E-05	7.82E-03	1.13E-01	5.34E-05	5.34E-03	1.17E-04	1.67E-05	4.34E-03	2.78E-03
BA-5	5051	9	2.25E-05	8.64E-03	2.90E-02	6.76E-05	2.25E-04	7.51E-05	4.51E-05	1.94E-03	3.38E-04
BA-5	5051	9	6.76E-05	4.88E-03	4.67E-01	2.25E-05	2.25E-04	7.51E-06	2.03E-05	7.59E-03	3.38E-04
BA-5	5051	9	5.52E-05	1.31E-02	8.79E-03	3.67E-05	2.13E-03	6.95E-05	2.10E-05	4.04E-04	3.11E-04
BA-5	5051	10	1.13E-05	1.24E-02	7.41E-03	6.76E-05	2.25E-04	9.21E-05	3.61E-05	1.55E-03	3.38E-04
BA-5	5051	10	5.64E-05	9.06E-03	8.02E-03	5.25E-05	1.11E-03	7.03E-05	2.34E-05	2.77E-03	5.16E-04
BA-5	5051	13	4.96E-05	3.43E-03	3.62E-03	3.90E-05	1.33E-03	1.08E-04	2.22E-05	6.74E-04	7.51E-04
BA-5	5051	16	3.61E-05	1.32E-02	1.22E-01	5.93E-05	3.07E-03	2.80E-04	3.98E-05	8.19E-04	1.39E-03
B-6	5051	6.5	4.51E-05	8.64E-02	1.61E+00	2.25E-05	1.04E-02	1.88E-06	1.13E-05	1.88E-03	2.59E-02
B-7	5051	6.5	6.31E-03	3.49E+00	2.25E-02	1.13E-04	9.47E-02	3.76E-05	6.76E-06	2.58E-02	9.36E-03
B-8	5051	7.5	1.58E-03	8.27E-01	2.42E-03	1.13E-04	1.69E+00	2.25E-04	6.76E-06	2.82E-02	2.82E-03
B-9	5051	2	1.13E-05	1.95E-02	1.77E-03	6.76E-05	2.25E-04	1.80E-04	4.96E-05	6.68E-04	3.38E-04
B-9	5051	7	4.51E-05	2.74E-02	2.90E-03	1.13E-04	2.25E-04	1.41E-04	4.51E-05	1.06E-03	2.59E-03
B-9	5051	11.5	6.76E-05	1.80E-02	4.51E-03	4.51E-05	2.03E-03	1.33E-04	3.49E-05	2.49E-03	9.13E-03
B-9	5051	16.5	1.13E-05	9.39E-04	1.47E-03	9.02E-05	2.25E-04	1.22E-04	5.52E-05	5.46E-04	3.38E-04
B-9	5051	19.5	1.13E-05	1.62E-02	1.09E-03	6.76E-05	2.25E-04	1.88E-04	4.62E-05	3.95E-04	9.02E-04
B-10	5051	2	1.13E-05	1.54E-02	1.61E-03	6.76E-05	2.25E-04	3.38E-04	8.68E-05	3.34E-03	1.35E-03
B-10	5051	6	1.13E-05	5.26E-03	1.47E-03	9.02E-05	2.25E-04	1.50E-04	4.96E-05	6.37E-04	3.38E-04

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
B-10	5051	10	1.13E-04	6.76E-02	4.67E-03	9.02E-05	2.93E-02	2.63E-04	6.88E-05	1.34E-03	2.93E-03
B-10	5051	13	1.13E-05	1.43E-02	1.16E-03	4.51E-05	2.25E-04	9.96E-05	4.17E-05	3.34E-04	3.38E-04
B-10	5051	16	1.13E-05	7.89E-03	2.09E-03	9.02E-05	6.99E-03	1.88E-04	5.64E-05	4.55E-04	7.89E-04
B-11	5051	0.5	3.83E-04	1.88E-03	2.74E-02	4.28E-04	2.25E-02	5.64E-05	5.86E-05	3.03E-03	3.38E-03
B-11	5051	5	1.13E-05	9.39E-04	6.28E-01	1.13E-05	2.25E-04	1.88E-06	1.69E-05	2.73E-03	3.38E-04
B-11	5051	8	6.76E-05	1.16E-02	1.51E-03	1.13E-05	2.25E-04	5.45E-04	1.24E-04	4.55E-03	3.38E-04
B-11	5051	12.5	1.13E-05	7.51E-03	5.64E-04	4.51E-05	2.25E-04	1.39E-04	3.83E-05	3.34E-04	3.38E-04
B-11	5051	16	1.13E-05	2.40E-02	1.77E-03	6.76E-05	2.25E-04	5.64E-04	6.54E-05	7.89E-04	3.38E-04
B-12	5051	17	1.13E-05	9.39E-04	6.44E-04	9.02E-05	2.25E-04	1.84E-04	5.07E-05	4.86E-04	3.38E-04
B-12	5051	20	1.13E-05	4.51E-03	3.86E-03	6.76E-05	2.25E-04	2.63E-04	5.97E-05	7.28E-04	3.38E-04
B-12	5051	24.5	1.13E-05	9.39E-04	1.24E-03	9.02E-05	2.25E-04	2.63E-04	7.55E-05	1.15E-03	3.38E-04
B-13	5051	1	4.51E-05	1.50E-02	6.28E-03	9.02E-05	2.25E-04	2.25E-04	5.86E-05	1.40E-03	3.49E-03
B-13	5051	13	1.13E-05	1.47E-02	3.54E-03	9.02E-05	2.25E-04	2.07E-04	4.85E-05	8.80E-04	1.92E-03
B-13	5051	18	1.13E-05	1.69E-02	4.51E-03	9.02E-05	6.76E-04	2.44E-04	5.86E-05	1.55E-03	3.38E-04
B-13	5051	22	1.13E-05	9.39E-04	7.09E-04	9.02E-05	2.25E-04	1.80E-04	6.54E-05	7.28E-04	3.38E-04
B-14	5051	2	4.51E-05	1.84E-02	6.28E-03	4.51E-05	1.13E-03	2.25E-04	7.21E-05	2.25E-03	3.72E-03
B-14	5051	7	1.13E-05	2.33E-02	2.25E-03	1.13E-04	2.25E-04	1.52E-04	3.72E-05	8.80E-04	3.38E-04
B-14	5051	9.5	1.13E-05	9.77E-03	3.38E-03	9.02E-05	2.25E-04	1.75E-04	3.95E-05	7.59E-04	3.38E-04
B-14	5051	13	1.13E-05	9.39E-04	1.58E-03	6.76E-05	2.25E-04	1.01E-04	4.96E-05	4.55E-04	3.38E-04
B-14	5051	16	1.13E-05	1.20E-02	2.90E-03	6.76E-05	2.25E-04	2.07E-04	6.20E-05	8.19E-04	6.76E-04
MWA-1	5051	1	4.51E-05	2.82E-02	8.53E-03	9.02E-05	2.93E-03	2.82E-04	8.57E-05	3.64E-03	5.41E-02
MWA-1	5051	1.5	4.62E-05	1.48E-01	6.70E-03	5.70E-05	7.46E-03	1.33E-03	2.82E-05	1.81E-03	4.00E-03
MWA-1	5051	2	2.25E-05	1.09E-02	6.60E-03	4.51E-05	1.35E-03	1.45E-04	3.38E-05	1.09E-03	2.48E-03
MWA-1	5051	3	1.06E-04	3.40E-02	2.53E-03	9.63E-05	1.69E-02	6.69E-05	4.73E-05	4.40E-03	2.96E-04
MWA-1	5051	6	1.80E-04	2.48E-02	3.38E-03	1.13E-04	2.12E-02	7.33E-05	4.73E-05	4.25E-03	1.35E-03
MWA-1	5051	7.5	4.73E-05	4.88E-02	3.20E-03	1.01E-04	2.75E-02	1.99E-04	3.10E-05	2.92E-02	4.96E-02
MWA-1	5051	8	1.58E-04	4.13E-02	9.18E-03	1.58E-04	1.10E-02	1.30E-04	4.28E-05	1.88E-03	2.03E-01
MWA-1	5051	8.5	4.51E-03	1.95E-02	1.48E-02	1.13E-04	4.28E-01	5.64E-04	2.93E-05	1.15E-01	2.25E-01
MWA-1	5051	8.5	1.05E-03	4.70E-01	2.38E-02	2.55E-05	8.14E-01	1.66E-04	9.06E-06	8.47E-02	6.75E-02
MWA-1	5051	9	9.02E-03	5.64E+00	1.93E-03	1.13E-05	1.10E-01	3.76E-05	5.19E-05	5.77E-02	6.43E-01
MWA-1	5051	10	6.76E-05	1.92E-02	2.74E-03	1.13E-04	1.69E-01	3.19E-04	8.45E-05	1.61E-03	3.38E-04
MWA-1	5051	10	5.19E-05	1.47E-01	9.81E-04	7.12E-05	4.49E-02	1.47E-04	4.19E-05	1.11E-03	2.98E-03
MWA-1	5051	11.5	5.30E-05	9.54E-03	5.78E-04	6.24E-05	1.39E-03	1.12E-04	2.14E-05	7.04E-04	5.76E-04
MWA-1	5051	13	5.07E-05	1.48E-02	9.34E-04	7.03E-05	2.41E-03	9.19E-05	3.24E-05	3.58E-04	9.77E-04

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
MWA-1	5051	14.5	5.19E-05	1.28E-02	5.68E-04	5.07E-05	1.67E-03	1.01E-04	3.12E-05	5.22E-04	6.50E-04
MWA-1	5051	17	4.85E-05	9.88E-03	3.57E-04	3.70E-05	1.11E-03	7.98E-05	2.58E-05	2.94E-04	1.16E-03
MWA-2	5051	5.5	1.39E-03	3.03E+00	4.93E-02	6.88E-05	3.34E-01	7.35E-05	1.25E-05	5.03E-01	7.03E-03
MWA-2	5051	6	4.73E-03	4.51E+00	1.93E-02	1.13E-04	4.06E-01	9.39E-05	1.69E-05	5.46E-02	3.49E-02
MWA-2	5051	9.5	4.96E-05	4.13E-04	2.74E-03	4.62E-05	3.00E-03	3.78E-05	1.87E-05	3.03E-04	8.41E-04
MWA-2	5051	10	1.13E-05	1.95E-02	2.42E-03	6.76E-05	4.51E-04	7.89E-05	3.16E-05	1.64E-03	3.38E-04
MWA-2	5051	11.5	1.13E-04	1.58E-02	2.74E-02	6.76E-05	1.26E-02	1.45E-04	4.28E-05	1.06E-03	3.38E-04
MWA-2	5051	11.5	5.52E-05	2.32E-03	2.48E-02	3.99E-05	1.11E-02	1.01E-04	2.46E-05	8.16E-04	8.27E-04
MWA-2	5051	13.5	4.96E-05	4.13E-04	1.69E-03	4.31E-05	1.81E-03	1.31E-04	2.21E-05	2.82E-04	6.58E-04
MWA-2	5051	14.5	4.06E-05	1.92E-03	2.08E-03	6.31E-05	3.49E-03	2.09E-04	4.33E-05	6.13E-04	6.44E-04
MWA-3	5051	4.5	4.06E-05	9.36E-04	1.29E-02	7.30E-05	8.39E-03	1.19E-04	3.58E-05	7.83E-03	3.00E-03
MWA-3	5051	5	1.58E-04	2.52E-02	1.37E-02	1.13E-04	4.73E-03	1.58E-04	4.85E-05	5.46E-03	3.95E-03
MWA-3	5051	9.5	4.62E-05	1.21E-03	1.58E-03	5.34E-05	2.01E-02	1.74E-04	2.47E-05	1.12E-03	2.03E-03
MWA-3	5051	10	4.51E-05	4.51E-02	1.93E-03	9.02E-05	1.17E-02	2.63E-04	3.27E-05	1.91E-03	3.61E-03
MWA-3	5051	10.5	5.30E-05	5.52E-01	1.15E-02	6.02E-05	8.05E-02	5.24E-04	2.69E-05	7.13E-06	7.47E-02
MWA-3	5051	11	4.28E-03	1.09E+00	1.21E-02	1.13E-04	7.44E-02	2.63E-04	2.71E-05	1.24E-01	7.33E-02
MWA-3	5051	11.5	6.76E-03	2.48E+00	5.47E-03	1.13E-04	5.64E-02	1.50E-04	1.58E-04	8.19E-02	2.03E-01
MWA-3	5051	11.5	4.51E-05	1.12E+00	5.75E-03	5.16E-05	6.72E-02	5.05E-03	3.09E-05	8.98E-02	1.34E-01
MWA-3	5051	12	2.48E-03	1.43E+00	9.34E-03	1.13E-04	1.24E-01	6.01E-04	9.13E-05	1.21E-01	3.83E-02
MWA-3	5051	12.5	4.62E-05	3.03E-02	2.82E-04	5.28E-05	6.40E-03	8.62E-05	3.16E-05	9.04E-04	3.89E-04
MWA-3	5051	13	4.51E-05	4.88E-02	1.03E-03	6.76E-05	1.15E-02	1.16E-04	3.38E-05	1.03E-03	3.38E-04
MWA-3	5051	13.5	4.06E-05	5.30E-03	4.46E-04	4.87E-05	1.05E-03	4.88E-05	2.28E-05	2.90E-03	4.93E-04
MWA-3	5051	15	5.52E-05	4.73E-03	1.35E-04	2.28E-05	1.17E-03	8.44E-05	1.67E-05	3.70E-04	1.19E-03
MW-4	5051	1	1.13E-05	1.35E-02	9.82E-04	4.51E-05	2.25E-04	1.20E-04	3.61E-05	3.95E-04	3.38E-04
MW-4	5051	8.5	2.71E-03	8.27E-03	3.06E-02	1.13E-04	1.26E-01	1.13E-04	1.24E-05	3.34E-03	1.47E-03
MW-4	5051	10.5	1.13E-03	3.76E-02	2.09E-03	1.13E-04	6.76E-03	3.01E-04	1.24E-05	4.25E-03	2.71E-02
MW-4	5051	14	1.13E-05	2.25E-03	1.38E-02	4.51E-05	2.25E-04	1.05E-04	5.41E-05	3.95E-04	2.37E-03
MW-4	5051	15.5	1.13E-05	1.39E-02	1.61E-02	6.76E-05	2.25E-04	1.86E-04	6.65E-05	5.16E-04	1.58E-03
MW-5	5051	1	1.13E-05	1.13E-02	3.06E-03	1.13E-04	2.25E-04	1.84E-04	4.73E-05	8.19E-04	3.38E-04
MW-5	5051	10.5	2.25E-05	1.13E-02	5.15E-03	9.02E-05	8.57E-03	1.58E-04	3.38E-05	8.50E-04	3.38E-04
MW-5	5051	13.5	4.51E-05	2.82E-02	1.03E-03	6.76E-05	1.35E-03	3.38E-04	3.61E-05	6.68E-04	3.38E-04
MW-5	5051	17.5	1.13E-05	9.39E-04	4.03E-03	6.76E-05	2.25E-04	1.43E-04	4.51E-05	5.46E-04	2.14E-03
MW-6	5051	1	1.13E-05	1.58E-02	3.22E-03	9.02E-05	2.25E-04	2.63E-04	5.64E-05	1.09E-03	1.01E-03
MW-6	5051	7.5	1.13E-04	4.51E-02	1.26E-02	1.13E-04	3.16E-02	4.51E-04	2.37E-04	1.58E-02	2.59E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
MW-6	5051	9.5	1.13E-05	2.44E-02	4.03E-01	1.13E-05	2.93E-03	1.88E-06	2.82E-05	1.24E-02	3.38E-04
MW-6	5051	13	1.13E-05	2.25E-03	2.42E-03	6.76E-05	2.25E-04	1.35E-04	5.75E-05	5.77E-04	3.38E-04
MW-6	5051	16	1.13E-05	5.26E-03	1.22E-03	9.02E-05	2.25E-04	1.84E-04	6.20E-05	7.89E-04	3.38E-04
MW-7	5051	1	1.13E-05	1.84E-02	1.61E-03	4.51E-05	2.25E-04	9.39E-05	2.82E-05	4.25E-04	3.38E-04
MW-7	5051	5.5	1.13E-05	2.25E-03	5.15E-03	9.02E-05	2.25E-04	2.44E-04	4.96E-05	1.46E-03	1.69E-03
MW-7	5051	10.5	2.25E-05	4.51E-02	9.34E-03	4.51E-05	2.48E-03	2.82E-04	3.95E-05	1.18E-03	4.28E-02
MW-7	5051	13.5	1.13E-05	3.64E-02	1.08E-03	4.51E-05	1.58E-03	6.95E-04	3.83E-05	3.34E-04	6.76E-04
MW-7	5051	16.5	1.13E-05	9.77E-03	2.42E-03	9.02E-05	2.25E-04	2.07E-04	4.62E-05	4.55E-04	1.47E-03
MW-8	5051	1	1.13E-05	9.77E-03	3.22E-03	6.76E-05	2.25E-04	1.73E-04	4.40E-05	6.98E-04	2.59E-03
MW-8	5051	8.5	1.13E-05	6.76E-03	2.25E-03	6.76E-05	2.25E-04	1.69E-04	3.61E-05	5.16E-04	1.24E-03
MW-8	5051	10	1.13E-05	4.13E-03	1.38E-03	2.25E-05	1.35E-03	7.14E-05	2.59E-05	4.25E-04	3.38E-04
MW-8	5051	15.5	1.13E-05	9.39E-04	1.93E-03	6.76E-05	2.25E-04	1.35E-04	4.51E-05	9.10E-04	3.38E-04

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
LF-1-2.5	5050/750-50	2.5	0.00E+00	1.01E+00	7.57E-03	0.00E+00	4.51E-02	0.00E+00	5.19E-05	0.00E+00	0.00E+00
LF-1-7.5	5050/750-50	7.5	0.00E+00	4.13E-02	9.02E-03	0.00E+00	2.48E-01	0.00E+00	7.33E-05	0.00E+00	0.00E+00
LF-1-21	5050/750-50	21	0.00E+00	7.51E-03	1.43E-03	0.00E+00	8.57E-02	0.00E+00	5.97E-05	0.00E+00	0.00E+00
LF-2-2.5	5050/750-50	2.5	0.00E+00	2.03E-01	5.15E-02	0.00E+00	1.35E-01	0.00E+00	4.06E-05	0.00E+00	0.00E+00
LF-2-5.5	5050/750-50	5.5	0.00E+00	1.09E-01	1.22E-03	0.00E+00	2.25E-02	0.00E+00	1.13E-05	0.00E+00	0.00E+00
LF-2-7.5	5050/750-50	7.5	0.00E+00	6.01E-01	1.35E-03	0.00E+00	2.03E-03	0.00E+00	3.83E-05	0.00E+00	0.00E+00
LF-2-15.5	5050/750-50	15.5	0.00E+00	1.88E-02	4.83E-04	0.00E+00	1.35E-03	0.00E+00	5.19E-05	0.00E+00	0.00E+00
LF-3-2.5	5050/750-50	2.5	0.00E+00	1.88E-02	4.35E-03	0.00E+00	9.02E-04	0.00E+00	6.76E-06	0.00E+00	0.00E+00
LF-3-7	5050/750-50	7	0.00E+00	5.26E-02	6.76E-02	0.00E+00	2.25E-02	0.00E+00	6.76E-06	0.00E+00	0.00E+00
LF-3-15	5050/750-50	15	0.00E+00	1.13E-02	3.70E-03	0.00E+00	2.25E-04	0.00E+00	4.96E-05	0.00E+00	0.00E+00
LF-4-2	5050/750-50	2	0.00E+00	1.88E-03	3.54E-03	0.00E+00	1.80E-03	0.00E+00	2.59E-05	0.00E+00	0.00E+00
LF-4-3.5	5050/750-50	3.5	0.00E+00	1.28E-01	9.66E-01	0.00E+00	6.76E-02	0.00E+00	3.61E-05	0.00E+00	0.00E+00
LF-4-15	5050/750-50	15	0.00E+00	1.13E-02	2.25E-03	0.00E+00	2.25E-04	0.00E+00	5.52E-05	0.00E+00	0.00E+00
LF-5-2	5050/750-50	2	0.00E+00	1.88E-02	1.32E-03	0.00E+00	9.02E-04	0.00E+00	1.47E-05	0.00E+00	0.00E+00
LF-5-3.5	5050/750-50	3.5	0.00E+00	3.64E-01	2.58E-02	0.00E+00	2.25E-02	0.00E+00	3.72E-05	0.00E+00	0.00E+00
LF-5-11	5050/750-50	11	0.00E+00	7.51E-03	1.29E-03	0.00E+00	2.25E-04	0.00E+00	4.28E-05	0.00E+00	0.00E+00
LF-5-15	5050/750-50	15	0.00E+00	1.88E-02	4.51E-04	0.00E+00	2.25E-04	0.00E+00	5.41E-05	0.00E+00	0.00E+00
LF-6-2	5050/750-50	2	0.00E+00	3.76E-02	1.61E-03	0.00E+00	1.35E-03	0.00E+00	1.01E-05	0.00E+00	0.00E+00

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
LF-6-9	5050/750-50	9	0.00E+00	7.51E-01	3.22E-03	0.00E+00	2.48E-02	0.00E+00	3.49E-05	0.00E+00	0.00E+00
LF-6-15.5	5050/750-50	15.5	0.00E+00	1.88E-02	8.21E-04	0.00E+00	6.76E-04	0.00E+00	7.55E-05	0.00E+00	0.00E+00
LF-7-2	5050/750-50	2	0.00E+00	2.37E-01	1.08E+00	0.00E+00	2.25E-04	0.00E+00	9.02E-06	0.00E+00	0.00E+00
LF-7-4	5050/750-50	4	0.00E+00	4.51E-02	1.48E+00	0.00E+00	9.02E-04	0.00E+00	1.24E-05	0.00E+00	0.00E+00
LF-7-10	5050/750-50	10	0.00E+00	1.50E-02	2.25E-03	0.00E+00	2.25E-04	0.00E+00	4.96E-05	0.00E+00	0.00E+00
LF-7-15.5	5050/750-50	15.5	0.00E+00	1.50E-02	2.42E-03	0.00E+00	4.51E-04	0.00E+00	5.41E-05	0.00E+00	0.00E+00
LF-8-2.5	5050/750-50	2.5	1.13E-04	7.89E-02	4.35E-03	4.51E-05	1.13E-03	1.62E-04	1.24E-05	3.64E-04	3.83E-03
LF-8-5.0	5050/750-50	5	2.12E-03	2.48E+00	9.50E-01	1.13E-05	1.44E-01	2.82E-06	9.02E-06	1.97E-02	2.93E-02
LF-8-10.0	5050/750-50	10	6.76E-05	2.63E-02	5.64E-03	4.51E-05	1.33E-02	8.45E-05	3.04E-05	3.64E-03	1.01E-03
LF-9-4.5	5050/750-50	4.5	6.09E-04	1.13E-01	2.25E-02	1.13E-04	1.33E-02	2.07E-04	2.93E-05	3.95E-03	3.72E-03
LF-9-11.0	5050/750-50	11	4.96E-03	1.16E+00	2.74E-03	5.64E-05	3.83E-02	3.01E-04	3.72E-05	5.16E-02	7.89E-03
LF-9-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-10-3.0	5050/750-50	3	2.93E-04	1.39E-01	8.05E-03	1.13E-05	1.17E-02	2.25E-04	8.12E-05	4.25E-03	7.55E-03
LF-10-4.5	5050/750-50	4.5	4.51E-05	2.63E-02	5.80E-03	2.25E-05	9.02E-04	2.44E-04	4.40E-05	5.46E-04	3.38E-04
LF-10-7.5	5050/750-50	7.5	5.86E-04	1.01E-01	2.09E-03	2.25E-05	1.13E-04	1.15E-04	4.40E-05	5.16E-03	6.99E-02
LF-11-2.5	5050/750-50	2.5	1.47E-03	7.51E-01	2.74E-03	1.13E-05	6.09E-02	8.08E-05	3.38E-05	1.40E-02	9.92E-03
LF-11-5.0	5050/750-50	5	1.47E-02	1.32E+00	4.51E-03	2.71E-04	2.48E-01	1.50E-04	2.25E-05	1.40E-02	1.09E-02
LF-11-7.5	5050/750-50	7.5	2.25E-05	7.51E-03	1.19E-03	4.51E-05	2.71E-02	1.39E-04	6.76E-05	4.55E-04	3.04E-03
LF-11-12.5	5050/750-50	12.5	1.13E-04	1.13E-02	1.77E-03	1.13E-04	9.92E-02	1.50E-04	6.20E-05	6.98E-04	3.38E-04
LF-11-25.0	5050/750-50	25	2.25E-05	3.76E-03	1.77E-03	6.76E-05	1.13E-04	2.25E-04	7.33E-05	8.19E-04	1.92E-03
LF-12B-2.5	5050/750-50	2.5	1.15E-03	4.13E-02	6.76E-02	4.51E-05	1.24E-02	1.88E-04	4.85E-05	2.09E-02	6.54E-03
LF-12B-5.0	5050/750-50	5	1.58E-04	2.63E-01	6.76E-02	1.13E-05	1.44E-02	1.77E-04	5.97E-05	2.31E-03	1.06E-01
LF-12B-7.5	5050/750-50	7.5	1.58E-04	3.76E-02	5.64E-03	1.13E-05	1.65E-02	8.64E-05	2.82E-05	1.88E-02	5.52E-03
LF-12B-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-2.5	5050/750-50	2.5	0.00E+00	3.76E+00	3.22E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-5.0	5050/750-50	5	0.00E+00	9.77E+00	7.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-7.0	5050/750-50	7	0.00E+00	1.99E-01	2.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-1.5	5050/750-50	1.5	1.13E-05	1.88E-03	5.47E-03	1.58E-04	4.51E-04	1.77E-04	1.24E-05	5.46E-04	1.24E-03
LF-14-2-7	5050/750-50	2-7	8.79E-03	4.51E+00	2.58E-01	1.13E-04	3.38E-01	1.88E-04	2.14E-05	5.16E-02	7.66E-02
LF-14-12.5	5050/750-50	12.5	6.76E-05	1.88E-03	1.22E-02	4.51E-05	2.03E-03	9.39E-05	4.40E-05	4.25E-03	3.38E-04
LF-15-11.0	5050/750-50	11	2.25E-05	1.88E-03	2.42E-03	4.51E-05	1.13E-04	1.67E-04	5.97E-05	5.16E-04	1.35E-03
LF-15-13.5	5050/750-50	13.5	2.25E-05	7.51E-03	1.61E-03	4.51E-05	1.80E-03	2.44E-04	8.68E-05	6.98E-04	2.71E-03
LF-16-1.5-3	5050/750-50	1.5-3	6.76E-05	7.51E-03	2.09E-02	1.13E-04	5.41E-03	1.58E-04	1.35E-05	8.19E-04	1.69E-03
LF-16-8.0	5050/750-50	8	7.89E-04	7.89E-01	7.57E-03	4.51E-05	2.71E-02	1.54E-04	3.16E-05	6.98E-03	6.43E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
LF-16-13.0	5050/750-50	13	1.13E-04	1.01E-01	1.77E-02	1.13E-05	5.86E-03	9.77E-05	4.62E-05	1.61E-02	7.89E-04
LF-16-25.0	5050/750-50	25	1.13E-05	3.76E-03	1.03E-03	6.76E-05	2.25E-04	1.69E-04	4.17E-05	8.50E-04	3.38E-04
LF-17-2.5	5050/750-50	2.5	9.02E-05	4.51E-02	7.09E-03	1.13E-05	1.58E-03	2.07E-04	6.31E-05	1.64E-03	1.47E-03
LF-17-5.5	5050/750-50	5.5	4.51E-05	1.88E-02	1.93E-03	2.25E-05	1.13E-03	1.63E-04	2.59E-05	3.95E-04	2.03E-03
LF-17-12.0	5050/750-50	12	2.25E-05	1.88E-03	2.58E-03	2.25E-05	1.13E-04	2.82E-04	4.51E-05	5.16E-04	3.38E-04
LF-F1-1.0	5050/750-50	1	2.03E-04	7.51E-02	2.58E-02	4.51E-05	1.69E-02	1.88E-04	1.24E-05	2.55E-03	2.48E-03
SB-1-5.0	5050/750-50	5	2.14E-03	6.76E+01	3.06E-01	1.13E-05	1.26E-01	2.82E-06	2.14E-05	1.67E-02	1.12E-01
SB-1-7.0	5050/750-50	7	1.35E-04	1.24E+01	2.90E-01	1.13E-05	1.51E-02	7.33E-05	4.51E-06	2.70E-03	6.99E-03
SB-1-9.5	5050/750-50	9.5	4.51E-05	1.88E-02	7.25E-03	4.51E-05	4.51E-04	3.76E-04	4.73E-05	4.25E-04	9.02E-04
SB-2-2.5	5050/750-50	2.5	2.25E-05	1.50E-02	3.22E-03	1.35E-04	1.13E-04	2.07E-04	1.80E-05	7.59E-04	1.58E-03
SB-2-7.5	5050/750-50	7.5	4.51E-04	7.89E-02	3.06E-03	1.13E-05	6.76E-03	2.07E-04	5.64E-06	3.95E-02	3.38E-04
SB-2-12.5	5050/750-50	12.5	1.13E-05	1.13E-02	1.48E-03	2.25E-05	9.02E-04	1.09E-04	3.61E-05	3.95E-04	3.38E-04
SB-3-2.5	5050/750-50	2.5	1.13E-04	3.01E-02	3.70E-02	1.13E-04	5.19E-03	1.86E-04	3.16E-05	1.40E-03	3.38E-04
SB-3-4.5	5050/750-50	4.5	2.93E-03	1.05E+00	6.92E-02	2.25E-04	5.41E-01	4.13E-04	5.64E-06	5.46E-02	1.08E-01
SB-3-7.0	5050/750-50	7	9.92E-04	5.26E-01	3.86E-03	1.13E-05	3.38E-02	8.64E-05	1.69E-05	1.21E-02	8.68E-03
SB-3-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-4-2.5	5050/750-50	2.5	6.76E-05	1.50E-02	4.67E-03	2.03E-04	1.13E-04	1.88E-04	1.35E-05	3.95E-04	1.47E-03
SB-4-7.5	5050/750-50	7.5	1.58E-03	1.65E+00	7.41E-04	2.25E-04	5.64E-02	3.01E-04	5.64E-06	7.28E-02	3.27E-03
SB-4-12.0	5050/750-50	12	4.51E-05	5.64E-03	1.11E-03	6.76E-05	1.13E-04	1.65E-04	4.28E-05	4.55E-04	3.38E-04
SB-5-9.5	5050/750-50	9.5	3.83E-04	3.23E-01	1.03E-02	4.51E-05	5.19E-03	1.54E-04	3.61E-05	6.07E-03	1.47E-03
SB-6-2.5	5050/750-50	2.5	7.89E-03	1.01E+00	2.42E-01	1.13E-05	6.99E-02	9.39E-05	1.58E-05	3.03E-02	4.28E-02
SB-6-7.0	5050/750-50	7	6.76E-05	2.25E-02	3.06E-03	6.76E-05	1.01E-02	6.20E-05	2.59E-05	4.55E-02	1.92E-03
SB-6-12.0	5050/750-50	12	2.25E-05	5.64E-03	1.13E-03	4.51E-05	6.54E-03	2.07E-04	4.06E-05	9.71E-04	3.38E-04
SB-7-2.5	5050/750-50	2.5	2.25E-05	1.13E-02	2.74E-03	1.58E-04	4.51E-04	1.54E-04	1.35E-05	5.16E-04	1.01E-03
SB-7-11.5	5050/750-50	11.5	4.28E-03	1.16E+00	3.70E-03	5.64E-05	3.83E-02	2.82E-04	5.30E-05	1.00E-01	5.07E-03
SB-7-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-8-2.5	5050/750-50	2.5	1.13E-05	7.51E-03	4.19E-03	1.58E-04	2.25E-04	1.63E-04	1.58E-05	3.64E-04	1.24E-03
SB-8-5.0	5050/750-50	5	7.89E-03	1.09E-01	6.60E-03	1.13E-04	1.58E-02	3.57E-04	2.25E-05	7.28E-02	2.93E-03
SB-8-10.0	5050/750-50	10	1.13E-05	1.58E-01	4.35E-03	6.76E-05	1.13E-04	1.67E-04	7.10E-05	6.68E-04	1.24E-03
SB-9-2.5	5050/750-50	2.5	1.47E-03	6.01E+00	6.12E-03	4.51E-05	1.19E-01	2.25E-04	4.51E-05	1.43E-02	5.30E-02
SB-9-7.5	5050/750-50	7.5	3.16E-03	9.77E-01	1.77E-03	1.13E-05	1.98E+00	3.19E-05	1.13E-05	8.50E-03	5.07E-02
SB-9-12.5	5050/750-50	12.5	4.51E-05	1.50E-02	1.47E-03	1.35E-04	5.86E-02	2.44E-04	6.09E-05	1.03E-03	1.47E-03
SB-10-5.0	5050/750-50	5	1.29E-03	6.01E+00	1.21E-03	6.76E-05	2.10E-02	1.62E-04	3.04E-05	1.40E-02	8.68E-03
SB-10-7.0	5050/750-50	7	2.25E-05	1.13E-02	2.42E-03	4.51E-05	1.13E-04	3.95E-04	3.61E-05	4.55E-04	3.38E-04

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
SB-10-10.0	5050/750-50	10	1.13E-05	1.50E-02	1.61E-03	4.51E-05	1.13E-04	2.07E-04	4.40E-05	3.64E-04	1.01E-03
SB-11-2.5	5050/750-50	2.5	3.83E-04	5.26E-02	5.47E-03	6.76E-05	1.13E-03	1.62E-04	9.02E-06	1.03E-03	3.83E-03
SB-11-7.5	5050/750-50	7.5	1.13E-05	5.26E-02	1.03E-03	2.25E-05	1.13E-04	1.03E-04	5.86E-05	4.55E-04	1.24E-03
SB-11-12.5	5050/750-50	12.5	4.51E-05	3.76E-02	6.12E-03	6.76E-05	2.48E-03	3.95E-04	6.31E-05	7.89E-04	7.89E-04
SB-12-2.0	5050/750-50	2	3.16E-03	5.26E+00	1.77E-03	2.25E-05	1.47E-01	2.25E-04	3.95E-05	5.16E-02	4.73E-02
SB-12-5.0	5050/750-50	5	1.31E-02	3.12E+00	1.11E-03	2.48E-04	6.09E-02	3.38E-04	1.69E-05	2.25E-02	6.65E-02
SB-12-12.0	5050/750-50	12	1.13E-05	2.25E-02	1.08E-03	1.13E-05	6.76E-03	8.83E-05	3.95E-05	6.68E-04	3.38E-04
SB-13-2.5	5050/750-50	2.5	2.25E-04	1.24E-01	3.22E-02	1.13E-05	1.38E-02	3.38E-04	9.02E-05	3.95E-03	7.78E-03
SB-13-7.5	5050/750-50	7.5	6.99E-03	3.76E-01	1.24E-02	1.13E-05	1.96E-02	1.54E-04	3.72E-05	8.50E-03	6.54E-02
SB-13-10.0	5050/750-50	10	4.51E-05	7.51E-03	8.86E-04	2.25E-05	1.15E-02	7.14E-05	4.85E-05	2.28E-03	5.30E-03
SB-13-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-14-2.0	5050/750-50	2	4.51E-05	1.62E-01	4.03E-03	4.51E-05	3.16E-03	1.47E-04	1.13E-05	5.16E-04	1.03E-02
SB-14-5.0	5050/750-50	5	1.13E-05	3.01E-02	6.60E-03	1.13E-05	6.76E-04	1.20E-04	3.04E-05	3.64E-04	9.02E-04
SB-14-10	5050/750-50	10	5.19E-04	6.76E-01	7.73E-03	4.96E-05	2.93E-03	1.86E-04	5.86E-05	2.55E-03	1.00E-02
SB-15-3.5	5050/750-50	3.5	1.13E-04	6.39E-02	6.76E-02	2.25E-05	8.34E-03	1.09E-04	1.92E-05	1.94E-03	2.25E-03
SB-15-6.0	5050/750-50	6	2.71E-04	4.13E-02	2.74E-02	2.25E-05	2.71E-03	1.15E-04	3.49E-05	7.28E-03	6.76E-04
SB-15-11.0	5050/750-50	11	4.51E-05	1.50E-02	1.93E-02	6.76E-05	2.25E-03	3.57E-04	5.19E-05	9.41E-04	1.13E-03
SB-16-5.0	5050/750-50	5	1.58E-03	3.72E-01	1.77E-03	1.13E-04	2.03E-02	1.69E-04	1.80E-05	9.41E-02	2.71E-03
SB-16-6.5	5050/750-50	6.5	1.13E-04	7.14E-02	2.09E-03	2.25E-05	1.13E-04	1.52E-04	2.59E-05	5.16E-04	3.38E-04
SB-17-2.0	5050/750-50	2	6.76E-05	3.01E-02	4.99E-02	1.35E-04	2.93E-03	1.80E-04	1.24E-05	9.41E-04	1.92E-03
SB-17-5.0	5050/750-50	5	4.51E-05	7.14E-02	6.12E-01	1.13E-05	1.13E-04	2.82E-06	3.38E-06	1.09E-03	3.38E-04
SB-17-6.5	5050/750-50	6.5	1.13E-04	4.88E-01	4.67E-01	4.51E-05	2.03E-03	2.82E-06	3.49E-05	1.24E-03	1.58E-03
SB-17-12.0	5050/750-50	12	1.13E-05	3.76E-03	1.93E-03	4.51E-05	1.13E-04	1.52E-04	4.51E-05	4.25E-04	3.38E-04
SB-18-1.5	5050/750-50	1.5	4.51E-05	1.50E-02	1.77E-02	4.51E-05	1.13E-03	1.52E-04	6.76E-06	3.34E-04	1.92E-03
SB-18-2.5	5050/750-50	2.5	1.80E-04	1.28E-01	5.15E-02	1.13E-05	8.79E-01	9.96E-05	1.01E-05	5.16E-03	1.24E-03
SB-18-5.0	5050/750-50	5	9.02E-05	1.20E-01	2.25E-02	1.13E-05	4.73E-01	1.73E-04	9.02E-06	2.22E-03	7.89E-04
SB-18-7.0	5050/750-50	7	4.51E-05	4.88E-02	3.86E-03	2.25E-05	4.51E-04	5.64E-05	2.37E-05	1.46E-02	1.01E-03
SB-19-2.5	5050/750-50	2.5	7.44E-03	2.55E+00	2.58E-02	1.13E-04	6.99E-01	2.44E-04	1.35E-05	6.07E-02	9.36E-02
SB-19-5.0B	5050/750-50	5	8.79E-03	1.88E+00	3.22E-03	1.13E-05	3.16E+00	5.64E-04	5.64E-07	1.09E-01	6.99E-01
SB-19-10.0	5050/750-50	10	1.35E-04	1.65E-01	1.77E-02	1.13E-05	5.86E-02	5.26E-05	3.38E-05	1.91E-02	1.58E-03
SB-20-2.5	5050/750-50	2.5	1.13E-05	1.88E-03	1.61E-03	1.58E-04	1.13E-04	1.88E-04	1.24E-05	2.49E-04	3.38E-04
SB-20-9.5	5050/750-50	9.5	2.25E-04	7.14E-01	2.42E-03	1.13E-04	7.44E-01	2.07E-04	1.35E-05	6.07E-03	3.38E-04
SB-20-16.0	5050/750-50	16	2.25E-05	1.88E-03	1.77E-03	2.25E-05	1.13E-04	9.02E-05	4.28E-05	3.34E-04	3.38E-04
SB-21-2.5	5050/750-50	2.5	3.16E-03	3.27E+00	2.90E-03	1.35E-04	3.83E-02	1.24E-04	2.25E-05	1.52E-02	2.82E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
SB-21-7.5	5050/750-50	7.5	2.25E-05	7.51E-03	9.98E-04	2.25E-05	2.16E-02	9.39E-05	6.99E-05	5.16E-04	7.89E-04
SB-21-11.5	5050/750-50	11.5	2.25E-05	1.88E-03	9.50E-04	2.25E-05	7.89E-02	9.39E-05	4.06E-05	5.16E-04	3.38E-04
SB-21-17.5	5050/750-50	17.5	1.13E-05	7.51E-03	1.14E-03	4.51E-05	9.92E-02	1.45E-04	5.41E-05	5.16E-04	3.38E-04
SB-21-24.5	5050/750-50	24.5	2.25E-05	1.13E-02	3.86E-04	6.76E-05	2.48E-02	2.63E-04	5.07E-05	6.68E-04	3.38E-04
SB-21-34.5	5050/750-50	34.5	4.51E-05	1.88E-03	7.57E-03	4.51E-05	9.02E-04	8.83E-04	4.17E-05	8.50E-04	3.38E-04
SB-21-42.0	5050/750-50	42	4.51E-05	1.88E-03	3.06E-03	1.13E-04	1.13E-04	2.82E-04	5.64E-05	8.50E-04	3.38E-04
SB-21-49.5	5050/750-50	49.5	1.13E-05	2.63E-02	1.61E-03	9.02E-05	2.25E-04	9.96E-05	4.28E-05	5.77E-04	3.38E-04
SS-1-2.5	5050/750-50	2.5	2.07E-03	7.14E-01	2.25E-01	1.13E-05	1.13E-04	2.82E-06	1.24E-05	1.18E-03	3.38E-04
SS-2-2.0	5050/750-50	2	8.79E-04	1.73E+00	9.82E-02	2.25E-05	1.87E-02	5.07E-05	1.24E-05	2.67E-03	5.19E-03
SS-3-2.0	5050/750-50	2	7.21E-04	3.76E-01	4.83E-02	2.25E-05	1.44E-02	6.95E-05	1.13E-05	5.46E-03	4.51E-03
SS-4-1.5	5050/750-50	1.5	2.25E-04	1.32E-01	7.09E-02	9.02E-05	4.51E-03	1.88E-04	1.01E-05	2.55E-03	5.64E-03
SS-5-1.5	5050/750-50	1.5	1.13E-04	2.63E-01	3.22E-03	9.02E-05	5.41E-03	2.82E-04	5.19E-05	1.55E-03	5.52E-03
SS-6-2.0	5050/750-50	2	4.28E-03	1.39E+00	1.34E-02	2.25E-05	1.26E-01	1.56E-04	2.37E-05	6.98E-02	2.71E-02
SS-7-2.0	5050/750-50	2	4.51E-05	5.64E-03	7.41E-03	2.25E-05	4.51E-04	4.88E-04	6.09E-05	1.09E-03	3.38E-04
SS-8-2.0	5050/750-50	2	1.40E-03	1.88E+00	9.66E-03	6.76E-05	1.62E-02	1.67E-04	1.58E-05	1.03E-02	1.13E-02
SS-10-2.5	5050/750-50	2.5	7.66E-04	3.76E-01	7.25E-03	1.13E-05	1.67E-02	8.64E-05	1.47E-05	2.09E-02	1.80E-02
SS-11-2.0	5050/750-50	2	1.13E-03	6.01E-01	1.58E-03	2.25E-05	1.10E-01	1.69E-04	4.96E-05	1.12E-02	8.90E-03
SS-12-2.5	5050/750-50	2.5	3.16E-04	2.10E-01	4.03E-02	2.25E-05	2.71E-02	2.44E-04	6.88E-05	3.95E-03	5.64E-03
SS-13-2.0	5050/750-50	2	4.51E-05	5.64E-03	7.89E-03	4.51E-05	2.48E-03	1.60E-04	5.64E-05	8.19E-04	3.72E-03
SS-13-2.5	5050/750-50	2.5	6.76E-05	7.14E-02	2.42E-02	6.76E-05	6.76E-03	2.25E-04	4.73E-05	1.06E-03	1.69E-03
SS-18-2.0	5050/750-50	2	1.58E-03	2.40E+00	1.45E-02	2.25E-05	1.40E-01	1.78E-04	4.51E-05	1.40E-02	4.28E-02
SS-19-2.5	5050/750-50	2.5	2.25E-05	3.38E-02	2.58E-02	6.76E-05	6.76E-04	2.07E-04	4.51E-05	1.40E-03	1.92E-03
B1		5	0.00E+00	5.22E-02	1.54E-01	0.00E+00	9.92E-04	1.54E-04	2.73E-05	3.91E-03	1.80E-03
B1		10	0.00E+00	2.89E-02	2.00E-02	9.92E-05	7.21E-04	2.72E-04	3.95E-05	9.44E-04	2.71E-03
B2		10	0.00E+00	2.74E-02	7.75E-04	0.00E+00	1.19E-01	1.15E-04	3.93E-05	8.41E-04	5.41E-04
B3		5	0.00E+00	1.58E-02	2.13E-04	6.54E-05	1.38E-02	1.13E-04	2.14E-05	2.85E-04	3.49E-04
B3		10	0.00E+00	3.57E-02	1.69E-03	6.99E-05	6.54E-03	2.29E-04	7.94E-05	6.34E-04	1.80E-03
B4		5	0.00E+00	3.53E-02	1.60E-03	6.09E-05	4.55E-02	1.39E-04	2.58E-05	6.71E-04	3.27E-04
B4		10	0.00E+00	3.04E-02	1.05E-03	6.31E-05	9.02E-03	2.97E-04	3.74E-05	5.74E-04	5.19E-04
MW1		5	4.58E-03	8.12E-02	1.66E-03	0.00E+00	1.26E-03	1.26E-04	2.02E-05	9.38E-04	1.92E-03
MW1		10	0.00E+00	4.06E-02	2.00E-03	9.02E-05	2.48E-03	3.12E-04	3.76E-05	7.92E-04	4.85E-02
MW2		5	0.00E+00	5.34E-02	4.96E-04	0.00E+00	2.55E-02	4.70E-05	4.17E-05	2.92E-03	6.20E-04
MW2		10	0.00E+00	2.78E-02	1.27E-03	0.00E+00	8.68E-02	1.13E-04	3.46E-05	8.47E-04	5.64E-04
MW3		10	0.00E+00	2.78E-02	1.77E-03	0.00E+00	5.41E-03	1.32E-04	3.92E-05	1.55E-03	7.21E-04

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
MW4		10	0.00E+00	3.12E-02	1.27E-03	6.09E-05	0.00E+00	9.21E-05	4.24E-05	2.82E-04	1.24E-03
CW-1	5200	6.5	1.42E-02	3.34E+00	3.86E-03	2.25E-05	4.51E-01	8.45E-04	2.14E-05	1.64E-01	5.64E-04
CW-1	5200	8	3.83E-03	3.64E-01	1.29E-02	9.02E-05	4.51E-01	8.08E-04	5.64E-06	1.67E-01	5.64E-04
CW-1	5200	9	5.64E-05	1.16E-01	1.77E+00	2.48E-04	6.54E-03	1.48E-03	1.92E-05	3.03E-03	5.64E-04
CW-1	5200	11	5.64E-05	7.51E-03	8.70E-03	9.02E-05	1.80E-03	1.32E-04	3.72E-05	7.28E-04	5.64E-04
CW-2	5200	3.5	5.64E-05	7.89E-01	3.22E-02	6.76E-05	6.54E-02	2.82E-04	5.52E-05	1.27E-02	5.64E-04
CW-2	5200	5	5.64E-05	1.09E+00	2.90E-02	6.76E-05	6.31E-02	2.44E-04	3.83E-05	1.18E-02	5.64E-04
CW-2	5200	7.5	5.64E-05	1.50E-02	3.06E+00	4.51E-05	4.51E-04	2.82E-03	4.51E-06	3.95E-04	5.64E-04
CW-2	5200	9.5	5.64E-05	6.39E-01	5.31E-01	4.51E-05	2.25E-03	6.76E-04	5.64E-06	1.76E-03	5.64E-04
CW-3	5200	3.5	1.01E-03	1.16E+00	1.77E-01	1.13E-04	1.35E-01	4.70E-04	5.52E-05	1.70E-02	5.64E-04
CW-3	5200	6	5.64E-05	7.51E-03	1.16E+00	6.76E-05	3.16E-02	1.24E-03	1.13E-05	1.76E-03	5.64E-04
CW-3	5200	9	5.64E-05	5.64E-02	1.21E+00	6.76E-05	4.51E-04	1.26E-03	4.51E-06	9.71E-04	5.64E-04
CW-3	5200	11	5.64E-05	2.89E-01	6.60E-01	2.03E-04	4.51E-04	1.45E-03	2.25E-05	3.64E-03	5.64E-04
CW-4	5200	5.5	1.69E-03	7.89E-01	2.25E-01	4.51E-05	5.19E-01	4.70E-04	2.25E-05	1.30E-01	5.64E-04
CW-4	5200	7.5	5.64E-05	1.88E-03	3.54E-02	6.76E-05	4.96E-03	2.25E-04	4.62E-05	6.68E-04	5.64E-04
CW-4	5200	11.5	2.93E-03	3.27E-01	1.93E-02	2.25E-05	4.51E-04	7.51E-05	6.76E-06	2.40E-03	5.64E-04
CW-4	5200	12.5	1.10E-03	4.51E-01	3.70E-03	4.51E-05	1.10E-02	2.07E-04	1.92E-05	3.03E-03	5.64E-04
CW-5	5200	7.5	5.64E-05	2.55E-01	4.67E-02	2.25E-05	1.15E-01	2.63E-04	2.82E-05	9.41E-03	5.64E-04
CW-5	5200	11	5.64E-05	3.19E-01	6.76E-03	6.76E-05	1.10E-02	2.82E-04	2.71E-05	1.43E-02	5.64E-04
CSB-1	5051/PGE	6-6.5'	4.73E-03	2.22E+00	4.19E-02	1.13E-05	8.34E-03	6.20E-04	1.69E-05	9.41E-03	1.92E+01
CSB-1	5051/PGE	8-8.5'	1.13E-04	3.01E-02	1.47E-03	1.13E-05	4.51E-04	6.20E-04	3.38E-06	2.31E-03	1.01E-01
CSB-3	5050	5'	1.13E-04	1.13E-02	1.45E-04	1.13E-05	4.51E-04	3.57E-04	5.64E-06	1.52E-04	3.38E-02
CSB-4	5050	4'	6.76E-04	3.01E-02	1.38E-03	1.13E-05	4.51E-04	9.77E-04	1.24E-05	1.67E-03	3.04E-01
CSB-5	5050/750-50	4'	6.76E-04	3.01E-02	6.76E-03	1.13E-05	4.51E-04	1.47E-03	1.80E-05	1.82E-03	4.17E-01
CSB-6	5050/750-50	4'	4.51E-04	1.88E-02	1.47E-03	1.13E-05	4.51E-04	3.57E-04	7.89E-06	2.12E-04	1.01E-01
CSB-8	5050	5'-5.5'	1.13E-04	1.99E-01	7.73E-04	1.13E-06	7.44E-03	3.19E-04	8.23E-06	3.34E-04	1.13E-02
CSB-8	5050	10'-10.5'	4.51E-04	6.01E-03	2.58E-03	1.13E-05	2.25E-01	2.82E-04	3.95E-05	1.52E-05	5.64E-04
CSB-8	5050	15'-15.5'	6.76E-04	3.04E-02	1.08E-03	1.13E-05	4.51E-04	1.88E-03	1.69E-05	1.06E-03	5.64E-03
CSB-8	5050	19.5'-20'	4.51E-04	7.51E-03	4.35E-04	1.13E-05	4.51E-04	8.45E-04	1.35E-05	4.86E-04	5.64E-03
CSB-8	5050	20'-20.5'	2.25E-04	1.50E-02	1.18E-03	1.13E-05	4.51E-04	1.01E-03	2.03E-05	5.46E-04	5.64E-03
CSB-8	5050	25'-25.5'	2.25E-04	1.13E-02	6.28E-04	1.13E-05	9.02E-04	9.39E-04	1.35E-05	4.25E-04	2.25E-02
CSB-8	5050	30-30.5	4.51E-04	7.51E-03	5.80E-03	1.13E-05	2.03E-03	1.03E-03	2.59E-05	8.50E-04	5.64E-03
CSB-8	5050	35'-35.5'	4.51E-04	3.76E-03	1.11E-03	1.13E-05	4.51E-04	8.27E-04	1.35E-05	6.98E-04	5.64E-03
CSB-8	5050	40'-40.5'	4.51E-04	1.13E-02	3.70E-03	1.13E-05	4.51E-04	6.20E-04	2.14E-05	4.86E-04	5.64E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg
CSB-8	5050	45'-45.5'	6.76E-04	1.88E-02	3.22E-03	1.13E-05	4.51E-04	9.02E-04	1.47E-05	6.37E-04	5.64E-03
CSB-8	5050	50'-50.5'	4.96E-03	1.13E-02	1.37E-03	1.13E-05	4.51E-04	7.14E-04	1.13E-05	5.16E-04	5.64E-03
CSB-8	5050	55'-55.5'	4.51E-04	7.51E-03	2.09E-03	1.13E-05	4.51E-04	4.13E-04	9.02E-06	4.25E-04	5.64E-03
CSB-8	5050	60'-60.5'	4.51E-04	3.76E-03	1.55E-03	1.13E-05	4.51E-04	6.58E-04	9.02E-06	5.16E-04	5.64E-03
CSB-9	5051	5'-5.5'	4.51E-04	1.13E-02	2.58E-03	1.13E-05	4.51E-04	7.89E-04	1.24E-05	4.86E-04	1.58E-01
CSB-9	5051	10'-10.5'	9.02E-04	3.76E-02	3.54E-04	1.13E-05	4.51E-04	8.27E-04	1.13E-05	6.98E-04	3.49E-01
CSB-9	5051	15'-15.5'	1.13E-04	2.25E-02	1.01E-03	1.13E-05	6.76E-03	6.01E-04	1.58E-05	4.55E-04	3.38E-01
CSB-9	5051	20'-20.5'	1.13E-04	7.51E-03	1.77E-03	1.13E-05	4.51E-04	9.77E-04	9.02E-06	3.64E-04	5.64E-03
CSB-9	5051	25'-25.5'	2.25E-04	1.88E-03	2.74E-04	1.13E-05	4.51E-04	7.33E-04	1.01E-05	4.86E-04	5.64E-03
CSB-9	5051	30'-30.5'	4.51E-04	1.88E-03	1.22E-03	1.13E-05	4.51E-04	9.02E-04	1.01E-05	5.77E-04	5.64E-03
CSB-9	5051	35'-35.5'	4.51E-04	1.50E-02	4.99E-03	1.13E-05	4.51E-04	1.75E-03	2.37E-05	6.68E-04	5.64E-03
CSB-9	5051	40'-40.5'	4.51E-04	1.88E-03	1.38E-03	1.13E-05	4.51E-04	7.51E-04	1.35E-05	6.98E-04	5.64E-03
CSB-9	5051	45'-45.5'	4.51E-04	1.13E-02	2.74E-03	1.13E-05	4.51E-04	7.89E-04	1.47E-05	6.37E-04	5.64E-03
CSB-9	5051	50'-50.5'	4.51E-04	1.13E-02	1.77E-03	1.13E-05	4.51E-04	8.08E-04	1.13E-05	6.68E-04	5.64E-03
CSB-9	5051	55'-55.5'	4.51E-04	1.50E-02	1.93E-03	1.13E-05	4.51E-04	1.09E-03	1.47E-05	6.98E-04	3.38E-02
CSB-9	5051	60'-60.5'	4.51E-04	1.13E-02	6.12E-04	1.13E-05	4.51E-04	6.76E-04	6.76E-06	5.16E-04	5.64E-03
CW-6	5200	6-6.5'	1.13E-04	2.14E+00	6.28E-02	1.13E-05	2.71E-01	5.64E-04	1.92E-05	3.34E-02	4.85E+01
CW-7	5200	6-6.5'	1.13E-04	5.26E-01	8.53E-01	1.13E-05	1.33E-01	2.25E-04	4.28E-05	8.19E-03	6.20E+01
CW-7	5200	16-16.5'	2.25E-04	1.88E-02	2.58E-03	1.13E-05	4.51E-04	9.58E-04	9.02E-06	6.07E-04	5.64E-02
CW-8	5051/EBMU	5'	6.76E-04	1.50E-02	2.25E-02	1.13E-05	1.58E-03	7.70E-04	1.01E-05	1.58E-03	1.35E+00
CW-9	5051/EBMU	5'	4.51E-04	1.13E-02	2.09E-03	1.13E-05	4.51E-04	7.89E-04	1.35E-05	4.55E-04	2.71E-01
CW-10	5051/PGE	11-11.5	2.25E-04	4.13E-02	6.60E-03	1.13E-05	1.80E-03	1.88E-03	2.59E-05	1.46E-03	1.01E-01
CW-12	5051/PGE	11-11.5	2.25E-04	1.88E-02	1.93E-03	1.13E-05	4.51E-04	1.09E-03	1.01E-05	6.37E-04	6.76E-02
CW-13	5050	5'	4.51E-04	2.59E-02	2.03E-03	1.13E-05	4.51E-04	7.70E-04	1.24E-05	1.06E-03	2.71E-01

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
B-2	5051	4	7.44E-03	5.07E-04		1.41E-02	2.25E-04	7.05E-02	4.51E-03	2.58E-01	1.46E+00
B-3	5051	4	6.76E-04	4.68E-03		1.38E+00	6.76E-04	3.10E+00	1.29E-03	2.90E+00	9.56E+00
B-4	5051	11.5	2.25E-04	1.24E-02		1.41E-02	2.25E-04	1.97E-01	3.70E-02	7.41E+00	7.72E+00
BA-4	5051	2	4.51E-05	2.25E-03		1.41E-03	1.13E-04	4.23E-02	7.25E-03	1.50E-02	9.44E-02
BA-4	5051	2	4.28E-04	7.78E-04		5.64E-04	2.25E-05	0.00E+00	1.60E-03	4.12E-02	6.72E-02
BA-4	5051	6.5	5.23E-04	8.62E-04		5.78E-04	2.25E-05	0.00E+00	2.80E-03	1.32E-02	5.45E-02
BA-4	5051	6.5	2.25E-05	1.92E-03		1.41E-03	1.13E-04	4.23E-02	7.41E-03	1.77E-02	8.96E-02
BA-4	5051	8	5.64E-04	1.80E-02		2.82E-03	1.13E-04	7.05E-03	4.35E-02	6.44E-02	1.92E-01
BA-4	5051	8	1.05E-03	1.41E-02		5.50E-04	2.25E-05	0.00E+00	4.07E-02	8.94E-02	4.22E-01
BA-4	5051	9.5	3.09E-04	6.43E-04		6.20E-04	2.48E-05	0.00E+00	2.25E-03	2.11E-03	1.32E-02
BA-4	5051	9.5	1.13E-04	9.58E-04		1.41E-03	1.13E-04	7.05E-03	4.19E-03	6.44E-03	3.57E-02
BA-4	5051	12	3.25E-04	8.40E-04		5.35E-04	2.14E-05	0.00E+00	1.72E-03	3.91E-03	1.29E-02
B-5	5051	11.5	1.58E-03	3.95E-03		7.33E-02	4.51E-04	7.05E-02	6.60E-03	8.21E+00	1.58E+01
BA-5	5051	4	3.83E-04	6.76E-03		1.41E-02	1.13E-04	7.05E-02	6.76E-03	3.54E-01	5.51E-01
BA-5	5051	4	3.02E-03	6.43E-03		5.64E-04	2.25E-05	0.00E+00	3.78E-03	5.83E-01	6.89E-01
BA-5	5051	8	3.38E-04	3.16E-03		1.69E-02	1.13E-04	7.05E-03	6.76E-03	2.42E-01	3.66E-01
BA-5	5051	8	1.05E-03	8.00E-03		6.34E-04	2.59E-05	0.00E+00	4.65E-02	3.30E-01	5.19E-01
BA-5	5051	9	4.73E-04	1.97E-03		1.41E-03	1.13E-04	7.05E-03	6.76E-03	9.82E-03	6.79E-02
BA-5	5051	9	7.44E-04	1.41E-02		1.41E-03	1.13E-04	0.00E+00	4.67E-02	7.57E-02	6.19E-01
BA-5	5051	9	9.72E-04	1.30E-03		6.90E-04	2.71E-05	0.00E+00	2.93E-03	3.37E-03	3.42E-02
BA-5	5051	10	1.80E-04	1.18E-03		1.41E-03	1.13E-04	7.05E-03	4.99E-03	4.83E-03	4.19E-02
BA-5	5051	10	4.89E-04	8.17E-04		7.05E-04	2.82E-05	0.00E+00	2.93E-03	8.70E-03	3.53E-02
BA-5	5051	13	4.31E-04	1.27E-03		6.20E-04	2.48E-05	0.00E+00	2.14E-03	3.39E-01	3.53E-01
BA-5	5051	16	6.24E-04	5.81E-03		4.51E-04	1.80E-05	0.00E+00	4.54E-03	5.96E-03	1.58E-01
B-6	5051	6.5	2.71E-04	4.57E-03		1.41E-03	2.25E-04	7.05E-03	2.58E-02	1.26E-01	1.90E+00
B-7	5051	6.5	1.58E-03	9.58E-04		2.40E+00	2.25E-04	7.05E-02	4.99E-03	4.03E+00	1.02E+01
B-8	5051	7.5	1.13E-03	7.89E-04		5.35E-01	2.25E-04	3.80E+00	4.03E-04	3.70E+00	1.06E+01
B-9	5051	2	2.25E-05	2.99E-03		5.64E-03	2.25E-04	7.05E-03	6.28E-03	1.34E-02	5.84E-02
B-9	5051	7	2.25E-05	3.21E-03		2.82E-03	2.25E-04	2.82E-02	4.99E-03	1.77E-02	9.17E-02
B-9	5051	11.5	6.76E-05	1.80E-03		5.64E-03	1.13E-04	7.05E-03	4.35E-03	7.09E-02	1.26E-01
B-9	5051	16.5	2.25E-05	3.95E-03		1.41E-03	1.13E-04	4.23E-02	5.64E-03	5.47E-03	6.27E-02
B-9	5051	19.5	2.25E-05	4.51E-03		1.41E-03	2.25E-04	7.05E-03	5.96E-03	4.83E-03	4.31E-02
B-10	5051	2	2.25E-05	9.02E-03		1.41E-03	2.25E-04	7.05E-03	9.18E-03	3.70E-02	8.64E-02
B-10	5051	6	2.25E-05	2.87E-03		1.41E-03	2.25E-04	7.05E-03	6.76E-03	1.32E-02	3.98E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
B-10	5051	10	8.57E-04	6.76E-03		2.82E-03	1.13E-04	7.05E-03	7.57E-03	9.50E-01	1.08E+00
B-10	5051	13	1.80E-04	1.24E-03		1.41E-03	1.13E-04	7.05E-03	4.51E-03	2.25E-03	3.33E-02
B-10	5051	16	2.25E-05	5.07E-03		1.41E-03	4.51E-04	7.05E-03	5.80E-03	3.38E-03	4.17E-02
B-11	5051	0.5	2.25E-04	1.58E-03		1.41E-02	9.02E-04	7.05E-02	2.09E-03	3.06E-01	4.54E-01
B-11	5051	5	4.06E-04	1.47E-02		1.41E-03	4.51E-04	7.05E-03	3.70E-02	1.26E-02	7.06E-01
B-11	5051	8	2.12E-03	3.27E-02		5.64E-03	6.76E-04	7.05E-03	1.09E-01	1.26E-01	3.02E-01
B-11	5051	12.5	1.35E-04	1.92E-03		1.41E-03	4.51E-04	7.05E-03	4.51E-03	4.03E-03	2.87E-02
B-11	5051	16	4.51E-05	7.89E-03		1.41E-03	2.25E-04	7.05E-03	1.93E-02	4.99E-03	6.88E-02
B-12	5051	17	2.25E-05	3.33E-03		1.41E-03	1.13E-04	7.05E-03	5.31E-03	5.96E-03	2.62E-02
B-12	5051	20	2.25E-05	7.89E-03		1.41E-03	4.51E-04	7.05E-03	6.12E-03	5.64E-03	3.86E-02
B-12	5051	24.5	2.25E-05	4.96E-03		1.41E-03	4.51E-04	7.05E-03	7.41E-03	7.41E-03	3.30E-02
B-13	5051	1	9.02E-05	2.99E-03		2.82E-03	1.13E-04	7.05E-02	6.60E-03	2.74E-02	1.37E-01
B-13	5051	13	2.25E-05	2.59E-03		1.41E-03	1.13E-04	4.23E-02	5.47E-03	1.48E-02	8.83E-02
B-13	5051	18	2.25E-05	3.78E-03		1.41E-03	1.13E-04	4.23E-02	8.53E-03	1.93E-02	9.98E-02
B-13	5051	22	2.25E-05	5.02E-03		1.41E-03	1.13E-04	4.23E-02	4.51E-03	7.25E-03	6.39E-02
B-14	5051	2	2.25E-05	3.83E-03		1.41E-03	4.51E-04	7.05E-03	6.92E-03	3.70E-02	8.89E-02
B-14	5051	7	2.25E-05	1.92E-03		1.41E-03	4.51E-04	7.05E-03	5.96E-03	9.66E-03	5.38E-02
B-14	5051	9.5	2.25E-05	2.76E-03		1.41E-03	1.13E-04	7.05E-03	4.83E-03	1.40E-02	4.50E-02
B-14	5051	13	2.25E-05	1.75E-03		1.41E-03	1.13E-04	7.05E-03	4.83E-03	3.70E-03	2.26E-02
B-14	5051	16	2.25E-05	5.24E-03		1.41E-03	1.13E-04	7.05E-03	6.28E-03	6.60E-03	4.37E-02
MWA-1	5051	1	1.35E-04	7.89E-03		2.82E-03	1.13E-04	7.05E-02	7.41E-03	5.31E-02	2.40E-01
MWA-1	5051	1.5	6.29E-04	2.51E-03		5.78E-04	2.37E-05	0.00E+00	2.77E-03	8.89E-02	2.65E-01
MWA-1	5051	2	2.25E-05	1.97E-03		1.41E-03	1.13E-04	7.05E-03	5.64E-03	3.06E-02	6.95E-02
MWA-1	5051	3	1.44E-03	1.34E-03		2.25E-03	2.71E-05	0.00E+00	1.74E-03	1.92E-01	2.57E-01
MWA-1	5051	6	8.12E-04	1.35E-03		1.97E-02	2.25E-04	2.82E-02	2.09E-03	3.06E-01	4.14E-01
MWA-1	5051	7.5	1.73E-03	1.97E-03		8.88E-02	2.37E-05	0.00E+00	2.98E-03	1.39E+00	1.64E+00
MWA-1	5051	8	2.25E-05	1.80E-03		1.41E-02	1.13E-04	2.82E-02	4.67E-03	1.61E-01	4.77E-01
MWA-1	5051	8.5	9.02E-04	2.99E-03		1.72E+00	1.13E-04	8.74E-01	2.25E-03	4.83E+00	8.24E+00
MWA-1	5051	8.5	1.12E-03	1.71E-03		1.73E-01	2.37E-05	0.00E+00	5.41E-04	8.99E+00	1.06E+01
MWA-1	5051	9	4.73E-03	2.14E-03		3.10E-01	4.51E-04	7.05E-02	4.51E-02	2.74E+00	9.63E+00
MWA-1	5051	10	1.58E-04	9.58E-03		1.41E-03	1.13E-04	4.23E-02	6.76E-03	1.56E+00	1.82E+00
MWA-1	5051	10	8.77E-04	5.08E-03		6.48E-04	2.59E-05	0.00E+00	3.11E-03	1.18E+00	1.39E+00
MWA-1	5051	11.5	5.03E-04	1.12E-03		6.62E-04	2.71E-05	0.00E+00	1.24E-03	5.67E-01	5.83E-01
MWA-1	5051	13	5.79E-04	2.24E-03		6.34E-04	2.48E-05	0.00E+00	2.72E-03	6.89E-02	9.49E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
MWA-1	5051	14.5	4.49E-04	2.60E-03		6.48E-04	2.59E-05	0.00E+00	2.37E-03	5.94E-03	2.85E-02
MWA-1	5051	17	3.67E-04	1.75E-03		6.06E-04	2.48E-05	0.00E+00	1.79E-03	2.80E-03	2.03E-02
MWA-2	5051	5.5	1.77E-03	2.99E-03		1.53E-01	1.06E-04	0.00E+00	1.24E-02	5.78E+00	9.87E+00
MWA-2	5051	6	1.80E-03	4.90E-03		2.34E+00	9.02E-04	7.05E-02	2.25E-02	6.60E+00	1.41E+01
MWA-2	5051	9.5	4.24E-04	8.23E-04		1.65E-03	2.73E-05	0.00E+00	1.82E-03	6.59E-02	7.81E-02
MWA-2	5051	10	2.03E-04	1.41E-03		1.41E-03	1.13E-04	7.05E-03	4.35E-03	9.66E-02	1.36E-01
MWA-2	5051	11.5	2.25E-05	2.20E-03		5.64E-03	1.13E-04	2.82E-02	5.80E-03	6.28E-02	1.62E-01
MWA-2	5051	11.5	4.51E-04	1.20E-03		1.67E-03	2.71E-05	0.00E+00	2.45E-03	9.07E-02	1.37E-01
MWA-2	5051	13.5	4.60E-04	2.24E-03		6.20E-04	2.48E-05	0.00E+00	1.87E-03	5.94E-03	1.63E-02
MWA-2	5051	14.5	5.66E-04	3.78E-03		5.07E-04	2.03E-05	0.00E+00	4.56E-03	8.57E-03	2.71E-02
MWA-3	5051	4.5	7.15E-04	1.35E-03		5.07E-04	2.03E-05	0.00E+00	3.41E-03	1.30E-01	1.70E-01
MWA-3	5051	5	2.25E-05	1.69E-03		8.45E-03	1.13E-04	7.05E-02	5.80E-03	1.51E-01	2.91E-01
MWA-3	5051	9.5	7.82E-04	1.32E-03		5.78E-04	2.37E-05	0.00E+00	2.56E-03	8.10E-01	8.42E-01
MWA-3	5051	10	2.25E-05	1.58E-03		1.41E-03	1.13E-04	7.05E-02	8.37E-03	4.35E-01	5.81E-01
MWA-3	5051	10.5	6.74E-03	2.04E-03		1.09E-01	8.95E-05	0.00E+00	5.64E-03	6.14E+00	6.98E+00
MWA-3	5051	11	1.06E-02	2.14E-03		1.55E-01	6.76E-04	7.05E-02	7.41E-03	6.76E+00	8.39E+00
MWA-3	5051	11.5	1.29E-02	3.49E-03		8.45E-01	6.76E-04	7.05E-02	1.11E-02	5.80E+00	9.57E+00
MWA-3	5051	11.5	5.64E-03	1.02E-03		1.44E-01	7.71E-05	0.00E+00	3.51E-03	4.32E+00	5.89E+00
MWA-3	5051	12	2.71E-03	2.48E-03		2.79E-01	1.13E-04	2.82E-02	7.57E-03	6.76E+00	8.81E+00
MWA-3	5051	12.5	9.42E-04	1.87E-03		5.78E-04	2.25E-05	0.00E+00	5.35E-03	1.06E+00	1.11E+00
MWA-3	5051	13	5.64E-04	1.92E-03		1.41E-03	1.13E-04	5.64E-02	5.64E-03	1.61E+00	1.74E+00
MWA-3	5051	13.5	4.22E-04	6.82E-04		5.07E-04	2.03E-05	0.00E+00	1.95E-03	6.10E-01	6.24E-01
MWA-3	5051	15	4.17E-04	9.64E-04		6.90E-04	2.71E-05	0.00E+00	1.29E-03	2.64E-01	2.75E-01
MW-4	5051	1	2.25E-05	1.52E-03		1.41E-03	1.13E-04	7.05E-03	4.03E-03	4.67E-03	3.45E-02
MW-4	5051	8.5	2.25E-04	7.89E-03		1.41E-02	1.13E-04	7.05E-02	4.51E-02	4.35E+00	4.66E+00
MW-4	5051	10.5	2.25E-04	1.69E-02		1.41E-02	1.13E-04	7.05E-02	5.31E-02	8.70E+00	8.93E+00
MW-4	5051	14	2.25E-05	3.33E-03		1.41E-03	1.13E-04	7.05E-03	4.03E-03	2.90E-01	3.25E-01
MW-4	5051	15.5	2.25E-05	6.20E-03		1.41E-03	1.13E-04	7.05E-03	5.96E-03	1.77E-01	2.31E-01
MW-5	5051	1	2.25E-05	2.99E-03		1.41E-03	1.13E-04	7.05E-03	4.99E-03	9.34E-03	4.20E-02
MW-5	5051	10.5	4.51E-05	2.20E-03		2.82E-03	1.13E-04	7.05E-03	4.83E-03	1.34E-01	1.77E-01
MW-5	5051	13.5	1.49E-03	2.71E-03		2.82E-03	4.51E-04	7.05E-03	6.92E-03	4.03E-01	4.56E-01
MW-5	5051	17.5	2.25E-05	3.66E-03		2.82E-03	1.13E-04	2.82E-02	4.83E-03	8.53E-03	5.63E-02
MW-6	5051	1	2.25E-05	4.45E-03		5.64E-03	1.13E-04	4.23E-02	7.09E-03	2.09E-02	1.02E-01
MW-6	5051	7.5	2.25E-04	2.37E-02		1.41E-02	4.51E-04	7.05E-02	5.80E-03	4.67E+00	4.92E+00

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
MW-6	5051	9.5	2.12E-03	2.87E-02		1.41E-03	4.51E-04	7.05E-03	1.58E-01	3.22E-01	9.62E-01
MW-6	5051	13	2.25E-05	3.27E-03		1.41E-03	4.51E-04	4.23E-02	5.80E-03	5.47E-03	6.48E-02
MW-6	5051	16	2.25E-05	4.40E-03		1.41E-03	1.13E-04	1.41E-02	5.80E-03	7.25E-03	4.13E-02
MW-7	5051	1	2.25E-05	1.47E-03		1.41E-03	1.13E-04	7.05E-03	3.22E-03	6.76E-03	4.12E-02
MW-7	5051	5.5	2.25E-05	3.21E-03		2.82E-03	1.13E-04	2.82E-02	8.21E-03	1.11E-02	6.48E-02
MW-7	5051	10.5	9.02E-05	4.23E-03		1.41E-03	1.13E-04	7.05E-03	6.76E-03	2.90E-02	1.50E-01
MW-7	5051	13.5	1.35E-04	3.83E-03		1.41E-03	1.13E-04	7.05E-03	4.19E-03	2.74E-03	6.04E-02
MW-7	5051	16.5	2.25E-05	4.73E-03		1.41E-03	1.13E-04	7.05E-03	4.99E-03	4.51E-03	3.75E-02
MW-8	5051	1	2.25E-05	2.03E-03		1.41E-03	1.13E-04	7.05E-03	6.28E-03	1.58E-02	4.95E-02
MW-8	5051	8.5	2.25E-05	1.69E-03		1.41E-03	1.13E-04	7.05E-03	4.67E-03	9.02E-03	3.53E-02
MW-8	5051	10	2.25E-05	1.58E-03		1.41E-03	2.25E-04	7.05E-03	2.42E-03	8.53E-03	2.90E-02
MW-8	5051	15.5	2.25E-05	3.10E-03		1.41E-03	1.13E-04	7.05E-03	3.70E-03	5.64E-03	2.56E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
LF-1-2.5	5050/750-50	2.5	0.00E+00	7.33E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-01	1.81E+00
LF-1-7.5	5050/750-50	7.5	0.00E+00	7.33E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.99E+00	5.30E+00
LF-1-21	5050/750-50	21	0.00E+00	3.66E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E+00	2.67E+00
LF-2-2.5	5050/750-50	2.5	0.00E+00	2.76E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E+00	1.50E+00
LF-2-5.5	5050/750-50	5.5	0.00E+00	6.76E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-02	1.82E-01
LF-2-7.5	5050/750-50	7.5	0.00E+00	1.86E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-02	7.00E-01
LF-2-15.5	5050/750-50	15.5	0.00E+00	3.72E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-02	9.85E-02
LF-3-2.5	5050/750-50	2.5	0.00E+00	4.51E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-02	4.01E-02
LF-3-7	5050/750-50	7	0.00E+00	8.45E-05		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-02	1.59E-01
LF-3-15	5050/750-50	15	0.00E+00	2.93E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-02	6.33E-02
LF-4-2	5050/750-50	2	0.00E+00	1.75E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-02	3.15E-02
LF-4-3.5	5050/750-50	3.5	0.00E+00	4.62E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.21E-01	1.99E+00
LF-4-15	5050/750-50	15	0.00E+00	5.41E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.89E-03	2.71E-02
LF-5-2	5050/750-50	2	0.00E+00	1.07E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-02	3.98E-02
LF-5-3.5	5050/750-50	3.5	0.00E+00	2.82E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-01	8.50E-01
LF-5-11	5050/750-50	11	0.00E+00	3.33E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-03	1.67E-02
LF-5-15	5050/750-50	15	0.00E+00	5.52E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-03	3.05E-02
LF-6-2	5050/750-50	2	0.00E+00	6.76E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-02	6.05E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
LF-6-9	5050/750-50	9	0.00E+00	1.35E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-01	9.58E-01
LF-6-15.5	5050/750-50	15.5	0.00E+00	4.62E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-02	8.62E-02
LF-7-2	5050/750-50	2	0.00E+00	1.01E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-02	1.33E+00
LF-7-4	5050/750-50	4	0.00E+00	1.18E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-02	1.56E+00
LF-7-10	5050/750-50	10	0.00E+00	2.14E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-03	2.29E-02
LF-7-15.5	5050/750-50	15.5	0.00E+00	5.47E-03		0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.18E-03	3.26E-02
LF-8-2.5	5050/750-50	2.5	2.25E-04	9.02E-04		1.41E-03	2.25E-04	4.23E-02	4.19E-03	2.42E-02	1.62E-01
LF-8-5.0	5050/750-50	5	6.54E-04	5.58E-03		1.18E-01	2.25E-03	4.23E-02	2.90E-02	2.74E+00	6.56E+00
LF-8-10.0	5050/750-50	10	3.38E-05	1.47E-03		1.41E-03	2.25E-04	4.23E-02	4.51E-03	1.93E-01	2.93E-01
LF-9-4.5	5050/750-50	4.5	4.96E-04	1.86E-03		3.10E-02	2.25E-04	7.05E-03	5.64E-03	1.77E-01	3.81E-01
LF-9-11.0	5050/750-50	11	7.66E-03	1.58E-03		2.28E-01	2.25E-04	3.52E-02	4.03E-03	1.35E+00	2.90E+00
LF-9-15.0	5050/750-50	15	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-02	3.86E-02
LF-10-3.0	5050/750-50	3	2.03E-04	6.20E-03		1.13E-02	2.25E-04	7.05E-03	6.12E-03	4.51E-01	6.53E-01
LF-10-4.5	5050/750-50	4.5	4.51E-05	2.37E-03		1.41E-03	2.25E-04	7.05E-03	4.51E-03	3.54E-02	8.53E-02
LF-10-7.5	5050/750-50	7.5	1.80E-04	2.42E-03		1.69E-02	2.25E-04	7.05E-03	5.31E-03	4.83E-02	2.60E-01
LF-11-2.5	5050/750-50	2.5	1.26E-03	1.24E-03		3.38E-02	9.02E-04	1.55E-01	5.31E-03	2.90E-01	1.33E+00
LF-11-5.0	5050/750-50	5	3.16E-03	1.13E-03		1.83E-01	2.25E-04	5.64E-02	5.15E-03	7.25E-01	2.58E+00
LF-11-7.5	5050/750-50	7.5	3.38E-05	3.95E-03		1.41E-03	2.25E-04	7.05E-02	4.83E-03	7.41E-01	8.61E-01
LF-11-12.5	5050/750-50	12.5	6.76E-04	5.07E-03		1.41E-02	2.25E-04	7.05E-02	5.96E-03	3.06E+00	3.27E+00
LF-11-25.0	5050/750-50	25	3.38E-05	4.68E-03		1.41E-03	2.25E-04	8.45E-02	6.44E-03	9.82E-03	1.16E-01
LF-12B-2.5	5050/750-50	2.5	8.34E-04	4.23E-03		2.54E-02	2.25E-04	7.05E-03	8.53E-03	2.42E-01	4.38E-01
LF-12B-5.0	5050/750-50	5	2.03E-04	4.45E-03		1.13E-02	2.25E-04	7.05E-03	6.44E-03	2.90E-01	7.73E-01
LF-12B-7.5	5050/750-50	7.5	2.25E-04	9.58E-04		1.41E-03	2.25E-04	7.05E-03	3.54E-03	2.25E-01	3.23E-01
LF-12B-15.0	5050/750-50	15	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-01	1.77E-01
LF-13-2.5	5050/750-50	2.5	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E+00
LF-13-5.0	5050/750-50	5	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.84E+00
LF-13-7.0	5050/750-50	7	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-01
LF-14-1.5	5050/750-50	1.5	3.38E-05	9.58E-04		1.41E-03	2.25E-04	7.05E-03	3.54E-03	8.86E-03	3.20E-02
LF-14-2-7	5050/750-50	2-7	1.13E-03	4.90E-03		1.21E-01	6.76E-04	4.51E-01	2.09E-02	3.06E+00	8.90E+00
LF-14-12.5	5050/750-50	12.5	3.38E-05	2.65E-03		1.41E-03	2.25E-04	4.23E-02	3.22E-03	1.93E-01	2.64E-01
LF-15-11.0	5050/750-50	11	3.38E-05	3.89E-03		1.41E-03	2.25E-04	5.64E-02	4.99E-03	6.60E-02	1.40E-01
LF-15-13.5	5050/750-50	13.5	3.38E-05	6.76E-03		1.41E-03	2.25E-04	4.23E-02	4.67E-03	9.18E-02	1.62E-01
LF-16-1.5-3	5050/750-50	1.5-3	3.38E-05	9.02E-04		1.41E-03	2.25E-04	7.05E-03	3.22E-03	3.86E-02	8.82E-02
LF-16-8.0	5050/750-50	8	1.17E-03	1.30E-03		3.66E-02	9.02E-04	2.82E-02	4.67E-03	5.80E-01	1.49E+00

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
LF-16-13.0	5050/750-50	13	6.76E-05	3.49E-03		1.41E-03	2.25E-04	2.82E-02	5.80E-03	1.51E-01	3.33E-01
LF-16-25.0	5050/750-50	25	3.38E-05	3.55E-03		1.41E-03	2.25E-04	4.23E-02	4.03E-03	9.34E-03	6.73E-02
LF-17-2.5	5050/750-50	2.5	9.02E-05	6.76E-03		1.41E-03	2.25E-04	4.23E-02	4.35E-03	3.86E-02	1.51E-01
LF-17-5.5	5050/750-50	5.5	6.76E-05	1.69E-03		2.82E-03	2.25E-04	7.05E-03	3.38E-03	8.21E-03	4.80E-02
LF-17-12.0	5050/750-50	12	3.38E-05	3.21E-03		1.41E-03	2.25E-04	7.05E-03	5.31E-03	4.83E-03	2.79E-02
LF-F1-1.0	5050/750-50	1	1.80E-04	1.41E-03		1.41E-03	2.25E-04	7.05E-03	3.70E-03	3.22E-01	4.59E-01
SB-1-5.0	5050/750-50	5	1.44E-03	1.30E-03		1.27E-01	3.38E-03	9.86E-02	5.80E-03	7.73E-01	6.92E+01
SB-1-7.0	5050/750-50	7	1.13E-04	1.63E-03		2.82E-03	5.64E-04	4.23E-02	9.66E-04	4.35E-01	1.32E+01
SB-1-9.5	5050/750-50	9.5	3.38E-05	4.45E-03		1.41E-03	5.64E-04	7.05E-03	4.35E-03	7.09E-02	1.17E-01
SB-2-2.5	5050/750-50	2.5	3.38E-05	1.35E-03		1.41E-03	2.25E-04	7.05E-03	3.54E-03	1.16E-02	4.63E-02
SB-2-7.5	5050/750-50	7.5	3.16E-03	2.82E-04		1.41E-02	2.25E-04	2.82E-01	8.05E-04	1.14E-01	5.44E-01
SB-2-12.5	5050/750-50	12.5	2.03E-04	1.58E-03		1.41E-03	2.25E-04	7.05E-03	3.22E-03	2.42E-01	2.70E-01
SB-3-2.5	5050/750-50	2.5	9.02E-05	1.92E-03		5.64E-03	5.64E-04	7.05E-03	5.47E-03	6.60E-02	1.61E-01
SB-3-4.5	5050/750-50	4.5	1.35E-03	4.17E-03		9.30E-02	5.64E-04	7.05E-02	1.22E-02	4.19E+00	6.20E+00
SB-3-7.0	5050/750-50	7	1.17E-03	1.07E-03		3.10E-02	5.64E-04	7.05E-03	4.51E-03	1.59E+00	2.23E+00
SB-3-15.0	5050/750-50	15	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-02	3.38E-02
SB-4-2.5	5050/750-50	2.5	3.38E-05	9.02E-04		1.41E-03	5.64E-04	7.05E-03	3.86E-03	6.60E-03	4.26E-02
SB-4-7.5	5050/750-50	7.5	3.83E-03	6.20E-04		1.41E-02	5.64E-04	7.05E-02	8.05E-04	2.42E-01	2.12E+00
SB-4-12.0	5050/750-50	12	9.69E-04	2.09E-03		1.41E-03	5.64E-04	8.45E-02	4.83E-03	2.58E-01	3.60E-01
SB-5-9.5	5050/750-50	9.5	5.41E-04	2.42E-03		1.97E-02	2.25E-04	7.05E-03	4.67E-03	1.48E-01	5.30E-01
SB-6-2.5	5050/750-50	2.5	1.44E-03	4.06E-03		1.38E-01	5.64E-04	1.55E-01	1.61E-02	2.42E+00	4.14E+00
SB-6-7.0	5050/750-50	7	3.38E-05	9.02E-04		1.41E-03	5.64E-04	5.64E-02	3.38E-03	4.67E-02	1.93E-01
SB-6-12.0	5050/750-50	12	3.38E-05	3.38E-03		1.41E-03	5.64E-04	5.64E-02	3.22E-03	2.25E-01	3.05E-01
SB-7-2.5	5050/750-50	2.5	6.76E-05	9.02E-04		1.41E-03	2.25E-04	7.05E-03	3.38E-03	9.34E-03	3.87E-02
SB-7-11.5	5050/750-50	11.5	6.99E-03	1.86E-03		3.38E-02	3.61E-03	2.25E-01	7.25E-03	2.58E+00	4.17E+00
SB-7-15.0	5050/750-50	15	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-03	7.41E-03
SB-8-2.5	5050/750-50	2.5	6.76E-05	9.58E-04		2.82E-03	2.25E-04	7.05E-03	3.70E-03	9.34E-03	3.80E-02
SB-8-5.0	5050/750-50	5	8.79E-03	2.25E-03		8.45E-02	6.76E-04	7.05E-02	1.61E-03	1.21E+00	1.59E+00
SB-8-10.0	5050/750-50	10	3.38E-05	3.10E-03		1.41E-03	2.25E-04	8.45E-02	5.80E-03	8.53E-02	3.45E-01
SB-9-2.5	5050/750-50	2.5	1.08E-03	3.27E-03		1.24E-01	2.93E-03	1.97E-01	6.12E-03	1.24E+00	7.78E+00
SB-9-7.5	5050/750-50	7.5	1.17E-03	2.25E-04		3.10E-02	1.13E-03	7.05E-03	2.74E-03	4.83E-01	3.55E+00
SB-9-12.5	5050/750-50	12.5	3.38E-05	5.64E-03		1.41E-03	2.25E-04	7.05E-02	6.76E-03	1.51E+00	1.68E+00
SB-10-5.0	5050/750-50	5	8.57E-03	1.97E-03		6.48E-02	2.25E-04	4.23E-02	4.83E-03	1.77E+00	7.95E+00
SB-10-7.0	5050/750-50	7	9.02E-05	2.48E-03		1.41E-03	2.25E-04	7.05E-03	4.99E-03	2.25E-02	5.39E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
SB-10-10.0	5050/750-50	10	3.38E-05	2.42E-03		1.41E-03	2.25E-04	2.82E-02	5.64E-03	4.19E-02	9.82E-02
SB-11-2.5	5050/750-50	2.5	1.80E-04	5.64E-04		1.41E-03	2.25E-04	7.05E-02	3.70E-03	3.38E-02	1.75E-01
SB-11-7.5	5050/750-50	7.5	3.38E-05	3.10E-03		1.41E-03	2.25E-04	7.05E-02	4.51E-03	3.86E-03	1.39E-01
SB-11-12.5	5050/750-50	12.5	3.38E-05	6.76E-03		1.41E-03	2.25E-04	2.82E-02	6.60E-03	2.42E-01	3.33E-01
SB-12-2.0	5050/750-50	2	4.28E-03	3.38E-03		1.30E-01	2.48E-03	9.86E-02	3.86E-03	1.48E+00	7.23E+00
SB-12-5.0	5050/750-50	5	4.06E-03	1.86E-03		5.07E-01	2.25E-04	1.41E-02	9.18E-03	1.93E+00	5.75E+00
SB-12-12.0	5050/750-50	12	3.38E-05	3.89E-03		1.41E-03	2.25E-04	7.05E-03	5.15E-03	4.35E-01	4.84E-01
SB-13-2.5	5050/750-50	2.5	3.16E-04	9.02E-03		1.52E-01	2.25E-04	7.05E-03	6.44E-03	4.99E-01	8.57E-01
SB-13-7.5	5050/750-50	7.5	3.16E-04	2.48E-03		9.86E-02	2.25E-04	7.05E-03	3.54E-03	4.35E-01	1.04E+00
SB-13-10.0	5050/750-50	10	6.76E-05	1.75E-03		1.41E-03	2.25E-04	7.05E-03	2.58E-03	8.05E-01	8.46E-01
SB-13-15.0	5050/750-50	15	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-01	5.80E-01
SB-14-2.0	5050/750-50	2	1.13E-04	6.76E-04		1.41E-03	2.25E-04	7.05E-03	3.54E-03	3.22E-02	2.25E-01
SB-14-5.0	5050/750-50	5	1.13E-04	1.58E-03		1.41E-03	2.25E-04	7.05E-03	3.38E-03	2.58E-02	7.83E-02
SB-14-10	5050/750-50	10	1.58E-04	4.62E-03		5.64E-03	6.76E-04	7.05E-03	3.86E-03	1.53E-01	8.75E-01
SB-15-3.5	5050/750-50	3.5	1.35E-04	2.03E-03		1.41E-03	2.25E-04	7.05E-03	7.25E-03	2.42E-01	4.04E-01
SB-15-6.0	5050/750-50	6	2.71E-04	1.35E-03		5.64E-03	2.25E-04	7.05E-03	3.86E-03	9.18E-02	1.90E-01
SB-15-11.0	5050/750-50	11	3.38E-05	6.76E-03		1.41E-03	2.25E-04	7.05E-03	6.60E-03	1.27E-01	1.88E-01
SB-16-5.0	5050/750-50	5	2.03E-03	7.33E-04		1.41E-02	5.64E-04	7.05E-02	1.61E-03	4.03E-01	9.85E-01
SB-16-6.5	5050/750-50	6.5	3.38E-05	1.13E-03		1.41E-03	2.71E-03	7.05E-03	2.58E-03	3.70E-03	9.34E-02
SB-17-2.0	5050/750-50	2	3.38E-05	9.02E-04		5.64E-03	2.25E-04	7.05E-03	3.70E-03	9.82E-02	2.02E-01
SB-17-5.0	5050/750-50	5	3.38E-05	1.86E-03		1.41E-03	2.25E-04	7.05E-03	2.42E-03	5.15E-03	7.03E-01
SB-17-6.5	5050/750-50	6.5	1.13E-04	2.09E-03		1.41E-03	2.25E-04	4.23E-02	5.15E-03	2.74E-02	1.04E+00
SB-17-12.0	5050/750-50	12	3.38E-05	4.11E-03		1.41E-03	2.25E-04	7.05E-02	3.86E-03	4.03E-03	9.09E-02
SB-18-1.5	5050/750-50	1.5	3.38E-05	4.51E-04		1.41E-03	2.25E-04	8.45E-02	4.35E-03	1.56E-02	1.43E-01
SB-18-2.5	5050/750-50	2.5	1.58E-04	1.41E-03		5.64E-03	2.25E-04	1.13E-01	1.29E-03	1.30E+00	2.49E+00
SB-18-5.0	5050/750-50	5	4.28E-04	2.03E-03		1.41E-03	2.25E-04	5.64E-02	1.45E-03	1.13E+00	1.81E+00
SB-18-7.0	5050/750-50	7	9.02E-05	6.76E-04		1.41E-03	2.25E-04	7.05E-03	3.06E-03	2.09E-02	1.02E-01
SB-19-2.5	5050/750-50	2.5	1.80E-03	4.90E-03		2.68E-01	1.58E-03	7.05E-02	1.77E-02	5.15E+00	8.96E+00
SB-19-5.0B	5050/750-50	5	1.35E-03	5.52E-03		2.48E-01	6.76E-04	7.05E-03	1.61E-02	9.66E+00	1.58E+01
SB-19-10.0	5050/750-50	10	2.71E-04	1.18E-03		5.64E-03	2.25E-04	7.05E-02	4.03E-03	5.47E-01	8.92E-01
SB-20-2.5	5050/750-50	2.5	3.38E-05	6.76E-04		1.41E-03	2.25E-04	7.05E-03	3.70E-03	7.25E-03	2.49E-02
SB-20-9.5	5050/750-50	9.5	3.38E-04	3.16E-03		1.41E-02	2.25E-04	1.69E-01	8.05E-04	6.12E+00	7.77E+00
SB-20-16.0	5050/750-50	16	3.38E-05	2.09E-03		1.41E-03	2.25E-04	7.05E-03	3.38E-03	2.25E-02	4.13E-02
SB-21-2.5	5050/750-50	2.5	1.44E-03	6.76E-04		9.86E-02	2.25E-04	4.23E-02	3.54E-03	1.35E+00	4.83E+00

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
SB-21-7.5	5050/750-50	7.5	3.38E-05	3.89E-03		1.41E-03	2.25E-04	7.05E-02	7.57E-03	1.47E+00	1.58E+00
SB-21-11.5	5050/750-50	11.5	3.38E-05	2.48E-03		1.41E-03	2.25E-04	7.05E-03	3.70E-03	3.06E+00	3.16E+00
SB-21-17.5	5050/750-50	17.5	3.38E-05	4.45E-03		1.41E-03	2.25E-04	7.05E-03	4.19E-03	2.58E+00	2.70E+00
SB-21-24.5	5050/750-50	24.5	3.38E-05	4.45E-03		1.41E-03	2.25E-04	4.23E-02	4.99E-03	1.77E-01	2.68E-01
SB-21-34.5	5050/750-50	34.5	6.76E-05	8.45E-03		1.41E-03	2.25E-04	8.45E-02	5.47E-03	2.09E-02	1.34E-01
SB-21-42.0	5050/750-50	42	4.51E-05	4.06E-03		1.41E-03	2.25E-04	1.27E-01	5.31E-03	9.18E-03	1.54E-01
SB-21-49.5	5050/750-50	49.5	3.38E-05	2.03E-03		1.41E-03	2.25E-04	8.45E-02	5.31E-03	8.37E-03	1.31E-01
SS-1-2.5	5050/750-50	2.5	1.53E-03	1.07E-03		8.45E-03	4.51E-04	7.05E-03	8.53E-03	4.35E-02	1.01E+00
SS-2-2.0	5050/750-50	2	6.76E-04	1.13E-03		1.13E-02	2.25E-04	7.05E-03	5.47E-03	4.83E-01	2.36E+00
SS-3-2.0	5050/750-50	2	4.96E-04	1.01E-03		8.45E-03	2.25E-04	7.05E-03	3.86E-03	3.86E-01	8.57E-01
SS-4-1.5	5050/750-50	1.5	1.26E-03	5.07E-04		8.45E-03	2.25E-04	7.05E-03	5.64E-03	1.61E-01	4.00E-01
SS-5-1.5	5050/750-50	1.5	3.38E-05	2.31E-03		1.41E-03	5.64E-04	7.05E-03	8.37E-03	6.12E-02	3.60E-01
SS-6-2.0	5050/750-50	2	4.51E-03	1.58E-03		1.35E-01	5.64E-04	2.82E-02	4.03E-03	1.77E+00	3.58E+00
SS-7-2.0	5050/750-50	2	3.38E-05	2.48E-03		1.41E-03	5.64E-04	7.05E-03	1.14E-02	1.55E-02	5.40E-02
SS-8-2.0	5050/750-50	2	2.48E-02	1.35E-03		3.95E-02	2.25E-04	3.66E-01	6.60E-03	2.90E+00	5.27E+00
SS-10-2.5	5050/750-50	2.5	8.57E-04	6.76E-04		1.21E-01	2.25E-04	2.82E-02	2.74E-03	6.12E-01	1.21E+00
SS-11-2.0	5050/750-50	2	1.35E-03	2.09E-03		2.82E-02	3.61E-03	4.23E-01	4.99E-03	2.09E+00	3.29E+00
SS-12-2.5	5050/750-50	2.5	2.03E-04	6.76E-03		1.97E-02	5.64E-04	7.05E-03	5.64E-03	3.22E-01	6.50E-01
SS-13-2.0	5050/750-50	2	1.35E-04	2.14E-03		1.41E-03	5.64E-04	7.05E-03	6.28E-03	1.37E-01	1.75E-01
SS-13-2.5	5050/750-50	2.5	1.13E-04	2.14E-03		1.41E-03	2.25E-04	2.82E-02	5.96E-03	2.42E-01	3.85E-01
SS-18-2.0	5050/750-50	2	7.44E-04	3.55E-03		1.38E-01	1.35E-03	4.23E-02	4.67E-03	1.27E+00	4.08E+00
SS-19-2.5	5050/750-50	2.5	9.02E-05	5.64E-03		1.41E-03	2.25E-04	7.05E-03	5.64E-03	2.58E-02	1.10E-01
B1		5	0.00E+00	6.03E-04		0.00E+00	0.00E+00	0.00E+00	5.04E-03	2.38E-01	4.57E-01
B1		10	0.00E+00	5.63E-03		0.00E+00	0.00E+00	0.00E+00	6.71E-03	1.72E-02	8.33E-02
B2		10	0.00E+00	5.03E-03		0.00E+00	0.00E+00	0.00E+00	3.54E-03	2.40E+00	2.56E+00
B3		5	0.00E+00	1.05E-03		0.00E+00	0.00E+00	0.00E+00	2.75E-03	2.62E-01	2.97E-01
B3		10	0.00E+00	6.76E-03		0.00E+00	0.00E+00	0.00E+00	5.97E-03	3.40E-01	3.99E-01
B4		5	0.00E+00	1.18E-03		0.00E+00	0.00E+00	0.00E+00	3.19E-03	5.30E-01	6.18E-01
B4		10	0.00E+00	4.78E-03		0.00E+00	0.00E+00	0.00E+00	3.27E-03	5.64E-01	6.14E-01
MW1		5	0.00E+00	1.38E-03		1.80E-02	0.00E+00	0.00E+00	2.30E-03	1.48E-01	2.61E-01
MW1		10	0.00E+00	5.20E-03		0.00E+00	0.00E+00	0.00E+00	5.44E-03	1.44E-01	2.50E-01
MW2		5	0.00E+00	7.61E-04		0.00E+00	0.00E+00	0.00E+00	3.14E-03	6.12E-01	6.99E-01
MW2		10	0.00E+00	3.08E-03		0.00E+00	0.00E+00	0.00E+00	4.44E-03	2.25E+00	2.38E+00
MW3		10	0.00E+00	3.87E-03		0.00E+00	0.00E+00	0.00E+00	5.04E-03	2.38E-01	2.85E-01

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
MW4		10	0.00E+00	4.48E-03		0.00E+00	0.00E+00	0.00E+00	2.62E-03	3.88E-03	4.52E-02
CW-1	5200	6.5	1.13E-03	1.07E-03		9.02E-01	5.64E-03	1.41E-02	8.86E-03	5.96E+00	1.09E+01
CW-1	5200	8	1.13E-04	2.48E-03		5.35E-02	4.51E-04	7.05E-03	3.54E-02	1.05E+01	1.16E+01
CW-1	5200	9	2.03E-03	2.37E-02		1.41E-03	1.13E-04	2.82E-02	1.61E-01	1.93E-01	2.31E+00
CW-1	5200	11	1.13E-04	1.41E-03		1.41E-03	1.13E-04	7.05E-03	4.83E-03	1.26E-02	4.71E-02
CW-2	5200	3.5	4.51E-04	4.11E-03		1.44E-01	1.35E-03	1.41E-02	7.09E-03	1.40E+00	2.47E+00
CW-2	5200	5	1.58E-03	2.71E-03		1.35E-01	1.35E-03	7.05E-03	6.60E-03	1.77E+00	3.12E+00
CW-2	5200	7.5	1.13E-04	4.28E-03		1.41E-03	1.13E-04	7.05E-03	1.93E-02	6.28E-02	3.17E+00
CW-2	5200	9.5	1.13E-04	4.73E-03		8.45E-03	1.13E-04	7.05E-03	2.58E-02	1.77E-01	1.40E+00
CW-3	5200	3.5	1.35E-03	5.24E-03		2.23E-01	2.93E-03	1.13E-01	1.13E-02	1.38E+00	3.24E+00
CW-3	5200	6	1.13E-04	3.89E-03		1.41E-03	1.13E-04	1.41E-02	2.42E-02	1.08E+00	2.32E+00
CW-3	5200	9	1.13E-04	5.02E-03		1.41E-03	1.13E-04	1.41E-02	3.86E-02	9.50E-03	1.34E+00
CW-3	5200	11	2.25E-04	3.38E-02		1.41E-03	1.13E-04	5.64E-02	1.26E-01	6.44E-02	1.24E+00
CW-4	5200	5.5	1.13E-04	3.89E-03		3.38E-01	2.03E-03	5.64E-02	1.38E-02	3.70E+00	5.78E+00
CW-4	5200	7.5	1.13E-04	4.57E-03		1.41E-03	1.13E-04	7.05E-03	5.15E-03	1.77E-01	2.39E-01
CW-4	5200	11.5	1.58E-03	1.18E-03		1.04E-01	1.13E-03	7.05E-03	8.70E-03	9.02E-03	4.86E-01
CW-4	5200	12.5	1.35E-03	2.48E-03		3.38E-02	6.76E-04	7.05E-03	6.44E-03	1.59E+00	2.12E+00
CW-5	5200	7.5	1.13E-04	2.54E-03		8.45E-03	1.13E-04	7.05E-03	6.44E-03	1.30E+00	1.76E+00
CW-5	5200	11	4.51E-04	2.65E-03		2.82E-02	2.71E-03	7.05E-03	6.60E-03	3.54E-01	7.54E-01
CSB-1	5051/PGE	6-6.5'	1.13E-04	2.82E-05		5.64E-03	3.38E-04	7.05E-02	5.47E-03	4.35E-01	2.20E+01
CSB-1	5051/PGE	8-8.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	7.05E-03	3.70E-03	9.66E-03	1.58E-01
CSB-3	5050	5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	7.05E-03	2.25E-03	2.90E-03	6.00E-02
CSB-4	5050	4'	4.51E-05	2.82E-05		1.41E-03	5.64E-05	4.23E-02	6.44E-03	1.93E-02	4.09E-01
CSB-5	5050/750-50	4'	4.51E-05	2.82E-05		1.41E-03	5.64E-05	5.64E-02	7.09E-03	2.90E-02	5.52E-01
CSB-6	5050/750-50	4'	4.51E-05	2.82E-05		1.41E-03	5.64E-05	2.82E-02	5.15E-03	1.05E-02	1.69E-01
CSB-8	5050	5'-5.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	4.23E-02	3.06E-03	1.77E-01	4.43E-01
CSB-8	5050	10'-10.5'	1.13E-05	2.82E-05		2.82E-03	5.64E-05	8.45E-02	3.86E-03	4.67E-03	3.31E-01
CSB-8	5050	15'-15.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	1.41E-01	1.40E-02	7.73E-03	2.05E-01
CSB-8	5050	19.5'-20'	1.13E-05	2.82E-05		2.82E-03	5.64E-05	2.82E-02	4.03E-03	6.44E-03	5.74E-02
CSB-8	5050	20'-20.5'	1.13E-05	2.82E-05		5.64E-03	5.64E-05	8.45E-02	4.99E-03	7.41E-03	1.27E-01
CSB-8	5050	25'-25.5'	4.51E-05	2.82E-05		1.41E-03	5.64E-05	5.64E-02	5.96E-03	4.99E-03	1.06E-01
CSB-8	5050	30-30.5	1.13E-05	2.82E-05		1.41E-03	5.64E-05	1.13E-01	7.57E-03	8.37E-03	1.54E-01
CSB-8	5050	35'-35.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	8.45E-02	4.35E-03	5.80E-03	1.09E-01
CSB-8	5050	40'-40.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	8.45E-02	4.51E-03	5.47E-03	1.19E-01

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
CSB-8	5050	45'-45.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	1.27E-01	5.96E-03	7.73E-03	1.72E-01
CSB-8	5050	50'-50.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	7.05E-02	5.47E-03	4.83E-03	1.07E-01
CSB-8	5050	55'-55.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	7.05E-02	4.19E-03	4.83E-03	9.80E-02
CSB-8	5050	60'-60.5'	1.13E-05	2.82E-05		2.82E-03	5.64E-05	8.45E-02	4.03E-03	6.28E-03	1.11E-01
CSB-9	5051	5'-5.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	9.86E-02	5.80E-03	7.57E-03	2.87E-01
CSB-9	5051	10'-10.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	1.13E-01	4.67E-03	1.19E-02	5.21E-01
CSB-9	5051	15'-15.5'	1.13E-05	1.69E-04		1.41E-03	5.64E-05	7.05E-02	5.15E-03	5.15E-01	9.62E-01
CSB-9	5051	20'-20.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	7.05E-02	4.03E-03	2.25E-02	1.15E-01
CSB-9	5051	25'-25.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	5.64E-02	3.86E-03	4.83E-03	7.63E-02
CSB-9	5051	30'-30.5'	1.13E-05	2.82E-05		2.82E-03	5.64E-05	8.45E-02	6.12E-03	6.44E-03	1.11E-01
CSB-9	5051	35'-35.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	9.86E-02	7.25E-03	6.44E-03	1.43E-01
CSB-9	5051	40'-40.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	8.45E-02	4.99E-03	5.31E-03	1.08E-01
CSB-9	5051	45'-45.5'	1.13E-05	2.82E-05		5.64E-03	5.64E-05	8.45E-02	6.44E-03	7.25E-03	1.26E-01
CSB-9	5051	50'-50.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	8.45E-02	4.67E-03	5.47E-03	1.17E-01
CSB-9	5051	55'-55.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	8.45E-02	5.96E-03	1.18E-02	1.57E-01
CSB-9	5051	60'-60.5'	1.13E-05	2.82E-05		1.41E-03	5.64E-05	5.64E-02	5.31E-03	5.80E-03	8.86E-02
CW-6	5200	6-6.5'	9.24E-04	2.82E-04		2.25E-02	2.25E-03	8.45E-02	8.86E-03	3.38E+00	5.45E+01
CW-7	5200	6-6.5'	6.76E-05	2.82E-05		8.45E-03	5.19E-04	7.05E-03	3.54E-02	1.35E+01	7.71E+01
CW-7	5200	16-16.5'	2.25E-05	2.82E-05		5.64E-03	5.64E-05	7.05E-03	6.28E-03	5.96E-03	1.05E-01
CW-8	5051/EBMU	5'	1.13E-04	2.82E-05		1.41E-03	5.64E-05	1.41E-02	5.47E-03	3.54E-02	1.45E+00
CW-9	5051/EBMU	5'	2.25E-05	2.82E-05		1.41E-03	5.64E-05	2.82E-02	6.28E-03	9.98E-03	3.32E-01
CW-10	5051/PGE	11-11.5	2.25E-05	2.82E-05		5.64E-03	5.64E-05	4.23E-02	8.05E-03	9.02E-03	2.20E-01
CW-12	5051/PGE	11-11.5	4.51E-05	2.82E-05		5.64E-03	5.64E-05	2.82E-02	5.80E-03	9.02E-03	1.40E-01
CW-13	5050	5'	4.51E-05	2.82E-05		1.41E-03	5.64E-05	2.82E-02	4.51E-03	1.66E-02	3.52E-01

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
B-2	5051	4	6.27E-04	3.68E-01	4.86E-04	1.36E-05	3.00E-04	2.27E-06	1.50E-06	5.87E-03	1.20E-03	8.99E-04
B-3	5051	4	8.17E-04	5.04E-01	2.33E-03	1.36E-05	7.63E-03	5.68E-05	9.53E-07	1.32E-02	1.50E-03	8.17E-05
B-4	5051	11.5	1.63E-04	8.17E-03	2.33E-03	1.36E-05	2.72E-05	2.72E-05	1.63E-06	3.12E-04	4.09E-05	2.72E-05
BA-4	5051	2	1.36E-06	7.49E-03	3.70E-04	1.36E-05	2.72E-06	3.86E-05	6.95E-06	8.07E-05	1.23E-04	5.45E-06
BA-4	5051	2	5.45E-06	6.20E-03	2.49E-04	4.90E-06	1.93E-05	9.81E-06	1.91E-06	4.14E-05	1.62E-04	5.18E-05
BA-4	5051	6.5	5.58E-06	4.21E-03	2.36E-03	6.37E-06	4.03E-05	1.86E-05	1.87E-06	7.63E-05	1.40E-04	6.32E-05
BA-4	5051	6.5	1.36E-06	4.09E-03	5.84E-04	1.36E-05	2.72E-06	2.27E-05	5.18E-06	1.21E-04	1.23E-04	2.72E-06
BA-4	5051	8	8.17E-06	1.77E-03	3.70E-03	2.72E-06	1.91E-05	2.18E-05	2.86E-06	2.13E-03	1.23E-04	6.81E-05
BA-4	5051	8	1.06E-05	2.53E-03	3.05E-02	6.67E-06	1.04E-04	2.68E-05	2.37E-06	8.95E-04	5.12E-05	1.27E-04
BA-4	5051	9.5	5.99E-06	1.19E-03	2.18E-04	4.71E-06	1.15E-05	8.97E-06	2.17E-06	7.00E-05	4.86E-05	3.73E-05
BA-4	5051	9.5	1.36E-06	2.86E-03	7.20E-04	5.45E-06	2.72E-06	1.04E-05	3.54E-06	1.03E-04	4.09E-05	1.36E-05
BA-4	5051	12	5.18E-06	3.91E-04	2.00E-04	4.06E-06	1.33E-05	7.74E-06	2.27E-06	8.91E-05	9.33E-05	3.92E-05
B-5	5051	11.5	3.00E-04	6.81E-01	1.85E-03	1.36E-05	5.72E-02	1.36E-05	1.12E-05	1.21E-02	8.85E-02	1.91E-04
BA-5	5051	4	1.63E-05	1.36E-02	1.07E-03	1.36E-05	1.44E-04	7.49E-05	1.08E-05	1.28E-03	3.41E-03	4.63E-05
BA-5	5051	4	5.45E-06	1.05E-02	9.85E-04	5.94E-06	3.46E-04	7.54E-04	2.40E-05	1.42E-03	1.06E-03	3.65E-04
BA-5	5051	8	8.17E-06	4.77E-03	5.64E-03	8.17E-06	1.39E-04	1.93E-05	5.18E-06	4.40E-04	1.77E-03	4.09E-05
BA-5	5051	8	6.13E-06	2.83E-03	1.36E-02	6.46E-06	6.46E-05	1.42E-05	2.02E-06	5.24E-04	3.36E-04	1.27E-04
BA-5	5051	9	2.72E-06	3.13E-03	3.50E-03	8.17E-06	2.72E-06	9.08E-06	5.45E-06	2.35E-04	4.09E-05	5.72E-05
BA-5	5051	9	8.17E-06	1.77E-03	5.64E-02	2.72E-06	2.72E-06	9.08E-07	2.45E-06	9.17E-04	4.09E-05	8.99E-05
BA-5	5051	9	6.67E-06	4.75E-03	1.06E-03	4.44E-06	2.57E-05	8.40E-06	2.53E-06	4.88E-05	3.76E-05	1.17E-04
BA-5	5051	10	1.36E-06	4.49E-03	8.95E-04	8.17E-06	2.72E-06	1.11E-05	4.36E-06	1.87E-04	4.09E-05	2.18E-05
BA-5	5051	10	6.81E-06	3.28E-03	9.69E-04	6.35E-06	1.34E-05	8.49E-06	2.83E-06	3.34E-04	6.24E-05	5.91E-05
BA-5	5051	13	5.99E-06	1.24E-03	4.38E-04	4.71E-06	1.61E-05	1.30E-05	2.68E-06	8.14E-05	9.07E-05	5.20E-05
BA-5	5051	16	4.36E-06	4.78E-03	1.47E-02	7.16E-06	3.70E-05	3.38E-05	4.81E-06	9.90E-05	1.68E-04	7.55E-05
B-6	5051	6.5	5.45E-06	3.13E-02	1.95E-01	2.72E-06	1.25E-04	2.27E-07	1.36E-06	2.27E-04	3.13E-03	3.27E-05
B-7	5051	6.5	7.63E-04	1.27E+00	2.72E-03	1.36E-05	1.14E-03	4.54E-06	8.17E-07	3.12E-03	1.13E-03	1.91E-04
B-8	5051	7.5	1.91E-04	3.00E-01	2.92E-04	1.36E-05	2.04E-02	2.72E-05	8.17E-07	3.41E-03	3.41E-04	1.36E-04
B-9	5051	2	1.36E-06	7.08E-03	2.14E-04	8.17E-06	2.72E-06	2.18E-05	5.99E-06	8.07E-05	4.09E-05	2.72E-06
B-9	5051	7	5.45E-06	9.94E-03	3.50E-04	1.36E-05	2.72E-06	1.70E-05	5.45E-06	1.28E-04	3.13E-04	2.72E-06
B-9	5051	11.5	8.17E-06	6.54E-03	5.45E-04	5.45E-06	2.45E-05	1.61E-05	4.22E-06	3.01E-04	1.10E-03	8.17E-06
B-9	5051	16.5	1.36E-06	3.41E-04	1.77E-04	1.09E-05	2.72E-06	1.48E-05	6.67E-06	6.60E-05	4.09E-05	2.72E-06
B-9	5051	19.5	1.36E-06	5.86E-03	1.32E-04	8.17E-06	2.72E-06	2.27E-05	5.58E-06	4.77E-05	1.09E-04	2.72E-06
B-10	5051	2	1.36E-06	5.58E-03	1.95E-04	8.17E-06	2.72E-06	4.09E-05	1.05E-05	4.03E-04	1.63E-04	2.72E-06

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
B-10	5051	6	1.36E-06	1.91E-03	1.77E-04	1.09E-05	2.72E-06	1.82E-05	5.99E-06	7.70E-05	4.09E-05	2.72E-06
B-10	5051	10	1.36E-05	2.45E-02	5.64E-04	1.09E-05	3.54E-04	3.18E-05	8.31E-06	1.61E-04	3.54E-04	1.04E-04
B-10	5051	13	1.36E-06	5.18E-03	1.40E-04	5.45E-06	2.72E-06	1.20E-05	5.04E-06	4.03E-05	4.09E-05	2.18E-05
B-10	5051	16	1.36E-06	2.86E-03	2.53E-04	1.09E-05	8.44E-05	2.27E-05	6.81E-06	5.50E-05	9.53E-05	2.72E-06
B-11	5051	0.5	4.63E-05	6.81E-04	3.31E-03	5.18E-05	2.72E-04	6.81E-06	7.08E-06	3.67E-04	4.09E-04	2.72E-05
B-11	5051	5	1.36E-06	3.41E-04	7.59E-02	1.36E-06	2.72E-06	2.27E-07	2.04E-06	3.30E-04	4.09E-05	4.90E-05
B-11	5051	8	8.17E-06	4.22E-03	1.83E-04	1.36E-06	2.72E-06	6.58E-05	1.50E-05	5.50E-04	4.09E-05	2.56E-04
B-11	5051	12.5	1.36E-06	2.72E-03	6.81E-05	5.45E-06	2.72E-06	1.68E-05	4.63E-06	4.03E-05	4.09E-05	1.63E-05
B-11	5051	16	1.36E-06	8.72E-03	2.14E-04	8.17E-06	2.72E-06	6.81E-05	7.90E-06	9.53E-05	4.09E-05	5.45E-06
B-12	5051	17	1.36E-06	3.41E-04	7.78E-05	1.09E-05	2.72E-06	2.22E-05	6.13E-06	5.87E-05	4.09E-05	2.72E-06
B-12	5051	20	1.36E-06	1.63E-03	4.67E-04	8.17E-06	2.72E-06	3.18E-05	7.22E-06	8.80E-05	4.09E-05	2.72E-06
B-12	5051	24.5	1.36E-06	3.41E-04	1.50E-04	1.09E-05	2.72E-06	3.18E-05	9.13E-06	1.39E-04	4.09E-05	2.72E-06
B-13	5051	1	5.45E-06	5.45E-03	7.59E-04	1.09E-05	2.72E-06	2.72E-05	7.08E-06	1.69E-04	4.22E-04	1.09E-05
B-13	5051	13	1.36E-06	5.31E-03	4.28E-04	1.09E-05	2.72E-06	2.50E-05	5.86E-06	1.06E-04	2.32E-04	2.72E-06
B-13	5051	18	1.36E-06	6.13E-03	5.45E-04	1.09E-05	8.17E-06	2.95E-05	7.08E-06	1.87E-04	4.09E-05	2.72E-06
B-13	5051	22	1.36E-06	3.41E-04	8.56E-05	1.09E-05	2.72E-06	2.18E-05	7.90E-06	8.80E-05	4.09E-05	2.72E-06
B-14	5051	2	5.45E-06	6.67E-03	7.59E-04	5.45E-06	1.36E-05	2.72E-05	8.72E-06	2.71E-04	4.49E-04	2.72E-06
B-14	5051	7	1.36E-06	8.44E-03	2.72E-04	1.36E-05	2.72E-06	1.84E-05	4.49E-06	1.06E-04	4.09E-05	2.72E-06
B-14	5051	9.5	1.36E-06	3.54E-03	4.09E-04	1.09E-05	2.72E-06	2.11E-05	4.77E-06	9.17E-05	4.09E-05	2.72E-06
B-14	5051	13	1.36E-06	3.41E-04	1.91E-04	8.17E-06	2.72E-06	1.23E-05	5.99E-06	5.50E-05	4.09E-05	2.72E-06
B-14	5051	16	1.36E-06	4.36E-03	3.50E-04	8.17E-06	2.72E-06	2.50E-05	7.49E-06	9.90E-05	8.17E-05	2.72E-06
MWA-1	5051	1	5.45E-06	1.02E-02	1.03E-03	1.09E-05	3.54E-05	3.41E-05	1.04E-05	4.40E-04	6.54E-03	1.63E-05
MWA-1	5051	1.5	5.58E-06	5.38E-02	8.09E-04	6.89E-06	9.02E-05	1.61E-04	3.41E-06	2.19E-04	4.84E-04	7.60E-05
MWA-1	5051	2	2.72E-06	3.95E-03	7.98E-04	5.45E-06	1.63E-05	1.75E-05	4.09E-06	1.32E-04	3.00E-04	2.72E-06
MWA-1	5051	3	1.28E-05	1.23E-02	3.05E-04	1.16E-05	2.04E-04	8.08E-06	5.72E-06	5.32E-04	3.58E-05	1.74E-04
MWA-1	5051	6	2.18E-05	8.99E-03	4.09E-04	1.36E-05	2.56E-04	8.85E-06	5.72E-06	5.13E-04	1.63E-04	9.81E-05
MWA-1	5051	7.5	5.72E-06	1.77E-02	3.87E-04	1.22E-05	3.32E-04	2.41E-05	3.75E-06	3.53E-03	5.99E-03	2.09E-04
MWA-1	5051	8	1.91E-05	1.50E-02	1.11E-03	1.91E-05	1.33E-04	1.57E-05	5.18E-06	2.27E-04	2.45E-02	2.72E-06
MWA-1	5051	8.5	5.45E-04	7.08E-03	1.79E-03	1.36E-05	5.18E-03	6.81E-05	3.54E-06	1.39E-02	2.72E-02	1.09E-04
MWA-1	5051	8.5	1.27E-04	1.70E-01	2.88E-03	3.08E-06	9.83E-03	2.01E-05	1.10E-06	1.02E-02	8.16E-03	1.35E-04
MWA-1	5051	9	1.09E-03	2.04E+00	2.33E-04	1.36E-06	1.33E-03	4.54E-06	6.27E-06	6.97E-03	7.76E-02	5.72E-04
MWA-1	5051	10	8.17E-06	6.95E-03	3.31E-04	1.36E-05	2.04E-03	3.86E-05	1.02E-05	1.94E-04	4.09E-05	1.91E-05
MWA-1	5051	10	6.27E-06	5.34E-02	1.18E-04	8.61E-06	5.42E-04	1.78E-05	5.07E-06	1.34E-04	3.60E-04	1.06E-04

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
MWA-1	5051	11.5	6.40E-06	3.46E-03	6.99E-05	7.55E-06	1.68E-05	1.35E-05	2.59E-06	8.51E-05	6.96E-05	6.07E-05
MWA-1	5051	13	6.13E-06	5.38E-03	1.13E-04	8.50E-06	2.91E-05	1.11E-05	3.91E-06	4.33E-05	1.18E-04	7.00E-05
MWA-1	5051	14.5	6.27E-06	4.64E-03	6.87E-05	6.13E-06	2.02E-05	1.22E-05	3.77E-06	6.31E-05	7.86E-05	5.42E-05
MWA-1	5051	17	5.86E-06	3.58E-03	4.32E-05	4.47E-06	1.34E-05	9.65E-06	3.12E-06	3.56E-05	1.40E-04	4.44E-05
MWA-2	5051	5.5	1.68E-04	1.10E+00	5.95E-03	8.31E-06	4.03E-03	8.88E-06	1.51E-06	6.08E-02	8.50E-04	2.14E-04
MWA-2	5051	6	5.72E-04	1.63E+00	2.33E-03	1.36E-05	4.90E-03	1.14E-05	2.04E-06	6.60E-03	4.22E-03	2.18E-04
MWA-2	5051	9.5	5.99E-06	1.50E-04	3.31E-04	5.58E-06	3.62E-05	4.56E-06	2.26E-06	3.67E-05	1.02E-04	5.12E-05
MWA-2	5051	10	1.36E-06	7.08E-03	2.92E-04	8.17E-06	5.45E-06	9.53E-06	3.81E-06	1.98E-04	4.09E-05	2.45E-05
MWA-2	5051	11.5	1.36E-05	5.72E-03	3.31E-03	8.17E-06	1.53E-04	1.75E-05	5.18E-06	1.28E-04	4.09E-05	2.72E-06
MWA-2	5051	11.5	6.67E-06	8.40E-04	3.00E-03	4.82E-06	1.35E-04	1.23E-05	2.97E-06	9.86E-05	1.00E-04	5.45E-05
MWA-2	5051	13.5	5.99E-06	1.50E-04	2.04E-04	5.20E-06	2.18E-05	1.58E-05	2.67E-06	3.41E-05	7.95E-05	5.56E-05
MWA-2	5051	14.5	4.90E-06	6.95E-04	2.51E-04	7.63E-06	4.22E-05	2.52E-05	5.23E-06	7.41E-05	7.78E-05	6.84E-05
MWA-3	5051	4.5	4.90E-06	3.39E-04	1.56E-03	8.83E-06	1.01E-04	1.44E-05	4.33E-06	9.46E-04	3.62E-04	8.64E-05
MWA-3	5051	5	1.91E-05	9.13E-03	1.65E-03	1.36E-05	5.72E-05	1.91E-05	5.86E-06	6.60E-04	4.77E-04	2.72E-06
MWA-3	5051	9.5	5.58E-06	4.39E-04	1.91E-04	6.46E-06	2.43E-04	2.10E-05	2.98E-06	1.35E-04	2.45E-04	9.45E-05
MWA-3	5051	10	5.45E-06	1.63E-02	2.33E-04	1.09E-05	1.42E-04	3.18E-05	3.95E-06	2.31E-04	4.36E-04	2.72E-06
MWA-3	5051	10.5	6.40E-06	2.00E-01	1.39E-03	7.27E-06	9.72E-04	6.33E-05	3.26E-06	8.62E-07	9.03E-03	8.14E-04
MWA-3	5051	11	5.18E-04	3.95E-01	1.46E-03	1.36E-05	8.99E-04	3.18E-05	3.27E-06	1.50E-02	8.85E-03	1.28E-03
MWA-3	5051	11.5	8.17E-04	8.99E-01	6.62E-04	1.36E-05	6.81E-04	1.82E-05	1.91E-05	9.90E-03	2.45E-02	1.55E-03
MWA-3	5051	11.5	5.45E-06	4.05E-01	6.95E-04	6.24E-06	8.12E-04	6.11E-04	3.73E-06	1.09E-02	1.62E-02	6.81E-04
MWA-3	5051	12	3.00E-04	5.18E-01	1.13E-03	1.36E-05	1.50E-03	7.26E-05	1.10E-05	1.47E-02	4.63E-03	3.27E-04
MWA-3	5051	12.5	5.58E-06	1.10E-02	3.41E-05	6.37E-06	7.74E-05	1.04E-05	3.81E-06	1.09E-04	4.70E-05	1.14E-04
MWA-3	5051	13	5.45E-06	1.77E-02	1.25E-04	8.17E-06	1.39E-04	1.41E-05	4.09E-06	1.25E-04	4.09E-05	6.81E-05
MWA-3	5051	13.5	4.90E-06	1.92E-03	5.39E-05	5.88E-06	1.27E-05	5.90E-06	2.75E-06	3.50E-04	5.95E-05	5.09E-05
MWA-3	5051	15	6.67E-06	1.72E-03	1.63E-05	2.75E-06	1.42E-05	1.02E-05	2.02E-06	4.47E-05	1.44E-04	5.04E-05
MW-4	5051	1	1.36E-06	4.90E-03	1.19E-04	5.45E-06	2.72E-06	1.45E-05	4.36E-06	4.77E-05	4.09E-05	2.72E-06
MW-4	5051	8.5	3.27E-04	3.00E-03	3.70E-03	1.36E-05	1.53E-03	1.36E-05	1.50E-06	4.03E-04	1.77E-04	2.72E-05
MW-4	5051	10.5	1.36E-04	1.36E-02	2.53E-04	1.36E-05	8.17E-05	3.63E-05	1.50E-06	5.13E-04	3.27E-03	2.72E-05
MW-4	5051	14	1.36E-06	8.17E-04	1.67E-03	5.45E-06	2.72E-06	1.27E-05	6.54E-06	4.77E-05	2.86E-04	2.72E-06
MW-4	5051	15.5	1.36E-06	5.04E-03	1.95E-03	8.17E-06	2.72E-06	2.25E-05	8.04E-06	6.23E-05	1.91E-04	2.72E-06
MW-5	5051	1	1.36E-06	4.09E-03	3.70E-04	1.36E-05	2.72E-06	2.22E-05	5.72E-06	9.90E-05	4.09E-05	2.72E-06
MW-5	5051	10.5	2.72E-06	4.09E-03	6.23E-04	1.09E-05	1.04E-04	1.91E-05	4.09E-06	1.03E-04	4.09E-05	5.45E-06
MW-5	5051	13.5	5.45E-06	1.02E-02	1.25E-04	8.17E-06	1.63E-05	4.09E-05	4.36E-06	8.07E-05	4.09E-05	1.80E-04

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
MW-5	5051	17.5	1.36E-06	3.41E-04	4.86E-04	8.17E-06	2.72E-06	1.73E-05	5.45E-06	6.60E-05	2.59E-04	2.72E-06
MW-6	5051	1	1.36E-06	5.72E-03	3.89E-04	1.09E-05	2.72E-06	3.18E-05	6.81E-06	1.32E-04	1.23E-04	2.72E-06
MW-6	5051	7.5	1.36E-05	1.63E-02	1.52E-03	1.36E-05	3.81E-04	5.45E-05	2.86E-05	1.91E-03	3.13E-03	2.72E-05
MW-6	5051	9.5	1.36E-06	8.85E-03	4.86E-02	1.36E-06	3.54E-05	2.27E-07	3.41E-06	1.50E-03	4.09E-05	2.56E-04
MW-6	5051	13	1.36E-06	8.17E-04	2.92E-04	8.17E-06	2.72E-06	1.63E-05	6.95E-06	6.97E-05	4.09E-05	2.72E-06
MW-6	5051	16	1.36E-06	1.91E-03	1.48E-04	1.09E-05	2.72E-06	2.22E-05	7.49E-06	9.53E-05	4.09E-05	2.72E-06
MW-7	5051	1	1.36E-06	6.67E-03	1.95E-04	5.45E-06	2.72E-06	1.14E-05	3.41E-06	5.13E-05	4.09E-05	2.72E-06
MW-7	5051	5.5	1.36E-06	8.17E-04	6.23E-04	1.09E-05	2.72E-06	2.95E-05	5.99E-06	1.76E-04	2.04E-04	2.72E-06
MW-7	5051	10.5	2.72E-06	1.63E-02	1.13E-03	5.45E-06	3.00E-05	3.41E-05	4.77E-06	1.43E-04	5.18E-03	1.09E-05
MW-7	5051	13.5	1.36E-06	1.32E-02	1.30E-04	5.45E-06	1.91E-05	8.40E-05	4.63E-06	4.03E-05	8.17E-05	1.63E-05
MW-7	5051	16.5	1.36E-06	3.54E-03	2.92E-04	1.09E-05	2.72E-06	2.50E-05	5.58E-06	5.50E-05	1.77E-04	2.72E-06
MW-8	5051	1	1.36E-06	3.54E-03	3.89E-04	8.17E-06	2.72E-06	2.09E-05	5.31E-06	8.43E-05	3.13E-04	2.72E-06
MW-8	5051	8.5	1.36E-06	2.45E-03	2.72E-04	8.17E-06	2.72E-06	2.04E-05	4.36E-06	6.23E-05	1.50E-04	2.72E-06
MW-8	5051	10	1.36E-06	1.50E-03	1.67E-04	2.72E-06	1.63E-05	8.63E-06	3.13E-06	5.13E-05	4.09E-05	2.72E-06
MW-8	5051	15.5	1.36E-06	3.41E-04	2.33E-04	8.17E-06	2.72E-06	1.63E-05	5.45E-06	1.10E-04	4.09E-05	2.72E-06
LF-1-2.5	5050/750-50	2.5	0.00E+00	3.68E-01	9.15E-04	0.00E+00	5.45E-04	0.00E+00	6.27E-06	0.00E+00	0.00E+00	0.00E+00
LF-1-7.5	5050/750-50	7.5	0.00E+00	1.50E-02	1.09E-03	0.00E+00	3.00E-03	0.00E+00	8.85E-06	0.00E+00	0.00E+00	0.00E+00
LF-1-21	5050/750-50	21	0.00E+00	2.72E-03	1.73E-04	0.00E+00	1.04E-03	0.00E+00	7.22E-06	0.00E+00	0.00E+00	0.00E+00
LF-2-2.5	5050/750-50	2.5	0.00E+00	7.35E-02	6.23E-03	0.00E+00	1.63E-03	0.00E+00	4.90E-06	0.00E+00	0.00E+00	0.00E+00
LF-2-5.5	5050/750-50	5.5	0.00E+00	3.95E-02	1.48E-04	0.00E+00	2.72E-04	0.00E+00	1.36E-06	0.00E+00	0.00E+00	0.00E+00
LF-2-7.5	5050/750-50	7.5	0.00E+00	2.18E-01	1.63E-04	0.00E+00	2.45E-05	0.00E+00	4.63E-06	0.00E+00	0.00E+00	0.00E+00
LF-2-15.5	5050/750-50	15.5	0.00E+00	6.81E-03	5.84E-05	0.00E+00	1.63E-05	0.00E+00	6.27E-06	0.00E+00	0.00E+00	0.00E+00
LF-3-2.5	5050/750-50	2.5	0.00E+00	6.81E-03	5.25E-04	0.00E+00	1.09E-05	0.00E+00	8.17E-07	0.00E+00	0.00E+00	0.00E+00
LF-3-7	5050/750-50	7	0.00E+00	1.91E-02	8.17E-03	0.00E+00	2.72E-04	0.00E+00	8.17E-07	0.00E+00	0.00E+00	0.00E+00
LF-3-15	5050/750-50	15	0.00E+00	4.09E-03	4.48E-04	0.00E+00	2.72E-06	0.00E+00	5.99E-06	0.00E+00	0.00E+00	0.00E+00
LF-4-2	5050/750-50	2	0.00E+00	6.81E-04	4.28E-04	0.00E+00	2.18E-05	0.00E+00	3.13E-06	0.00E+00	0.00E+00	0.00E+00
LF-4-3.5	5050/750-50	3.5	0.00E+00	4.63E-02	1.17E-01	0.00E+00	8.17E-04	0.00E+00	4.36E-06	0.00E+00	0.00E+00	0.00E+00
LF-4-15	5050/750-50	15	0.00E+00	4.09E-03	2.72E-04	0.00E+00	2.72E-06	0.00E+00	6.67E-06	0.00E+00	0.00E+00	0.00E+00
LF-5-2	5050/750-50	2	0.00E+00	6.81E-03	1.60E-04	0.00E+00	1.09E-05	0.00E+00	1.77E-06	0.00E+00	0.00E+00	0.00E+00
LF-5-3.5	5050/750-50	3.5	0.00E+00	1.32E-01	3.11E-03	0.00E+00	2.72E-04	0.00E+00	4.49E-06	0.00E+00	0.00E+00	0.00E+00
LF-5-11	5050/750-50	11	0.00E+00	2.72E-03	1.56E-04	0.00E+00	2.72E-06	0.00E+00	5.18E-06	0.00E+00	0.00E+00	0.00E+00
LF-5-15	5050/750-50	15	0.00E+00	6.81E-03	5.45E-05	0.00E+00	2.72E-06	0.00E+00	6.54E-06	0.00E+00	0.00E+00	0.00E+00
LF-6-2	5050/750-50	2	0.00E+00	1.36E-02	1.95E-04	0.00E+00	1.63E-05	0.00E+00	1.23E-06	0.00E+00	0.00E+00	0.00E+00

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
LF-6-9	5050/750-50	9	0.00E+00	2.72E-01	3.89E-04	0.00E+00	3.00E-04	0.00E+00	4.22E-06	0.00E+00	0.00E+00	0.00E+00
LF-6-15.5	5050/750-50	15.5	0.00E+00	6.81E-03	9.92E-05	0.00E+00	8.17E-06	0.00E+00	9.13E-06	0.00E+00	0.00E+00	0.00E+00
LF-7-2	5050/750-50	2	0.00E+00	8.58E-02	1.30E-01	0.00E+00	2.72E-06	0.00E+00	1.09E-06	0.00E+00	0.00E+00	0.00E+00
LF-7-4	5050/750-50	4	0.00E+00	1.63E-02	1.79E-01	0.00E+00	1.09E-05	0.00E+00	1.50E-06	0.00E+00	0.00E+00	0.00E+00
LF-7-10	5050/750-50	10	0.00E+00	5.45E-03	2.72E-04	0.00E+00	2.72E-06	0.00E+00	5.99E-06	0.00E+00	0.00E+00	0.00E+00
LF-7-15.5	5050/750-50	15.5	0.00E+00	5.45E-03	2.92E-04	0.00E+00	5.45E-06	0.00E+00	6.54E-06	0.00E+00	0.00E+00	0.00E+00
LF-8-2.5	5050/750-50	2.5	1.36E-05	2.86E-02	5.25E-04	5.45E-06	1.36E-05	1.95E-05	1.50E-06	4.40E-05	4.63E-04	2.72E-05
LF-8-5.0	5050/750-50	5	2.56E-04	8.99E-01	1.15E-01	1.36E-06	1.74E-03	3.41E-07	1.09E-06	2.38E-03	3.54E-03	7.90E-05
LF-8-10.0	5050/750-50	10	8.17E-06	9.53E-03	6.81E-04	5.45E-06	1.61E-04	1.02E-05	3.68E-06	4.40E-04	1.23E-04	4.09E-06
LF-9-4.5	5050/750-50	4.5	7.35E-05	4.09E-02	2.72E-03	1.36E-05	1.61E-04	2.50E-05	3.54E-06	4.77E-04	4.49E-04	5.99E-05
LF-9-11.0	5050/750-50	11	5.99E-04	4.22E-01	3.31E-04	6.81E-06	4.63E-04	3.63E-05	4.49E-06	6.23E-03	9.53E-04	9.26E-04
LF-9-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-10-3.0	5050/750-50	3	3.54E-05	5.04E-02	9.73E-04	1.36E-06	1.42E-04	2.72E-05	9.81E-06	5.13E-04	9.13E-04	2.45E-05
LF-10-4.5	5050/750-50	4.5	5.45E-06	9.53E-03	7.00E-04	2.72E-06	1.09E-05	2.95E-05	5.31E-06	6.60E-05	4.09E-05	5.45E-06
LF-10-7.5	5050/750-50	7.5	7.08E-05	3.68E-02	2.53E-04	2.72E-06	1.36E-06	1.38E-05	5.31E-06	6.23E-04	8.44E-03	2.18E-05
LF-11-2.5	5050/750-50	2.5	1.77E-04	2.72E-01	3.31E-04	1.36E-06	7.35E-04	9.76E-06	4.09E-06	1.69E-03	1.20E-03	1.53E-04
LF-11-5.0	5050/750-50	5	1.77E-03	4.77E-01	5.45E-04	3.27E-05	3.00E-03	1.82E-05	2.72E-06	1.69E-03	1.32E-03	3.81E-04
LF-11-7.5	5050/750-50	7.5	2.72E-06	2.72E-03	1.44E-04	5.45E-06	3.27E-04	1.68E-05	8.17E-06	5.50E-05	3.68E-04	4.09E-06
LF-11-12.5	5050/750-50	12.5	1.36E-05	4.09E-03	2.14E-04	1.36E-05	1.20E-03	1.82E-05	7.49E-06	8.43E-05	4.09E-05	8.17E-05
LF-11-25.0	5050/750-50	25	2.72E-06	1.36E-03	2.14E-04	8.17E-06	1.36E-06	2.72E-05	8.85E-06	9.90E-05	2.32E-04	4.09E-06
LF-12B-2.5	5050/750-50	2.5	1.39E-04	1.50E-02	8.17E-03	5.45E-06	1.50E-04	2.27E-05	5.86E-06	2.53E-03	7.90E-04	1.01E-04
LF-12B-5.0	5050/750-50	5	1.91E-05	9.53E-02	8.17E-03	1.36E-06	1.74E-04	2.13E-05	7.22E-06	2.79E-04	1.28E-02	2.45E-05
LF-12B-7.5	5050/750-50	7.5	1.91E-05	1.36E-02	6.81E-04	1.36E-06	1.99E-04	1.04E-05	3.41E-06	2.27E-03	6.67E-04	2.72E-05
LF-12B-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-2.5	5050/750-50	2.5	0.00E+00	1.36E+00	3.89E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-5.0	5050/750-50	5	0.00E+00	3.54E+00	8.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-7.0	5050/750-50	7	0.00E+00	7.22E-02	2.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-1.5	5050/750-50	1.5	1.36E-06	6.81E-04	6.62E-04	1.91E-05	5.45E-06	2.13E-05	1.50E-06	6.60E-05	1.50E-04	4.09E-06
LF-14-2-7	5050/750-50	2-7	1.06E-03	1.63E+00	3.11E-02	1.36E-05	4.09E-03	2.27E-05	2.59E-06	6.23E-03	9.26E-03	1.36E-04
LF-14-12.5	5050/750-50	12.5	8.17E-06	6.81E-04	1.48E-03	5.45E-06	2.45E-05	1.14E-05	5.31E-06	5.13E-04	4.09E-05	4.09E-06
LF-15-11.0	5050/750-50	11	2.72E-06	6.81E-04	2.92E-04	5.45E-06	1.36E-06	2.02E-05	7.22E-06	6.23E-05	1.63E-04	4.09E-06
LF-15-13.5	5050/750-50	13.5	2.72E-06	2.72E-03	1.95E-04	5.45E-06	2.18E-05	2.95E-05	1.05E-05	8.43E-05	3.27E-04	4.09E-06
LF-16-1.5-3	5050/750-50	1.5-3	8.17E-06	2.72E-03	2.53E-03	1.36E-05	6.54E-05	1.91E-05	1.63E-06	9.90E-05	2.04E-04	4.09E-06

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
LF-16-8.0	5050/750-50	8	9.53E-05	2.86E-01	9.15E-04	5.45E-06	3.27E-04	1.86E-05	3.81E-06	8.43E-04	7.76E-04	1.42E-04
LF-16-13.0	5050/750-50	13	1.36E-05	3.68E-02	2.14E-03	1.36E-06	7.08E-05	1.18E-05	5.58E-06	1.94E-03	9.53E-05	8.17E-06
LF-16-25.0	5050/750-50	25	1.36E-06	1.36E-03	1.25E-04	8.17E-06	2.72E-06	2.04E-05	5.04E-06	1.03E-04	4.09E-05	4.09E-06
LF-17-2.5	5050/750-50	2.5	1.09E-05	1.63E-02	8.56E-04	1.36E-06	1.91E-05	2.50E-05	7.63E-06	1.98E-04	1.77E-04	1.09E-05
LF-17-5.5	5050/750-50	5.5	5.45E-06	6.81E-03	2.33E-04	2.72E-06	1.36E-05	1.97E-05	3.13E-06	4.77E-05	2.45E-04	8.17E-06
LF-17-12.0	5050/750-50	12	2.72E-06	6.81E-04	3.11E-04	2.72E-06	1.36E-06	3.41E-05	5.45E-06	6.23E-05	4.09E-05	4.09E-06
LF-F1-1.0	5050/750-50	1	2.45E-05	2.72E-02	3.11E-03	5.45E-06	2.04E-04	2.27E-05	1.50E-06	3.08E-04	3.00E-04	2.18E-05
SB-1-5.0	5050/750-50	5	2.59E-04	2.45E+01	3.70E-02	1.36E-06	1.53E-03	3.41E-07	2.59E-06	2.02E-03	1.35E-02	1.74E-04
SB-1-7.0	5050/750-50	7	1.63E-05	4.49E+00	3.50E-02	1.36E-06	1.83E-04	8.85E-06	5.45E-07	3.26E-04	8.44E-04	1.36E-05
SB-1-9.5	5050/750-50	9.5	5.45E-06	6.81E-03	8.76E-04	5.45E-06	5.45E-06	4.54E-05	5.72E-06	5.13E-05	1.09E-04	4.09E-06
SB-2-2.5	5050/750-50	2.5	2.72E-06	5.45E-03	3.89E-04	1.63E-05	1.36E-06	2.50E-05	2.18E-06	9.17E-05	1.91E-04	4.09E-06
SB-2-7.5	5050/750-50	7.5	5.45E-05	2.86E-02	3.70E-04	1.36E-06	8.17E-05	2.50E-05	6.81E-07	4.77E-03	4.09E-05	3.81E-04
SB-2-12.5	5050/750-50	12.5	1.36E-06	4.09E-03	1.79E-04	2.72E-06	1.09E-05	1.32E-05	4.36E-06	4.77E-05	4.09E-05	2.45E-05
SB-3-2.5	5050/750-50	2.5	1.36E-05	1.09E-02	4.48E-03	1.36E-05	6.27E-05	2.25E-05	3.81E-06	1.69E-04	4.09E-05	1.09E-05
SB-3-4.5	5050/750-50	4.5	3.54E-04	3.81E-01	8.37E-03	2.72E-05	6.54E-03	4.99E-05	6.81E-07	6.60E-03	1.31E-02	1.63E-04
SB-3-7.0	5050/750-50	7	1.20E-04	1.91E-01	4.67E-04	1.36E-06	4.09E-04	1.04E-05	2.04E-06	1.47E-03	1.05E-03	1.42E-04
SB-3-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-4-2.5	5050/750-50	2.5	8.17E-06	5.45E-03	5.64E-04	2.45E-05	1.36E-06	2.27E-05	1.63E-06	4.77E-05	1.77E-04	4.09E-06
SB-4-7.5	5050/750-50	7.5	1.91E-04	5.99E-01	8.95E-05	2.72E-05	6.81E-04	3.63E-05	6.81E-07	8.80E-03	3.95E-04	4.63E-04
SB-4-12.0	5050/750-50	12	5.45E-06	2.04E-03	1.34E-04	8.17E-06	1.36E-06	2.00E-05	5.18E-06	5.50E-05	4.09E-05	1.17E-04
SB-5-9.5	5050/750-50	9.5	4.63E-05	1.17E-01	1.25E-03	5.45E-06	6.27E-05	1.86E-05	4.36E-06	7.33E-04	1.77E-04	6.54E-05
SB-6-2.5	5050/750-50	2.5	9.53E-04	3.68E-01	2.92E-02	1.36E-06	8.44E-04	1.14E-05	1.91E-06	3.67E-03	5.18E-03	1.74E-04
SB-6-7.0	5050/750-50	7	8.17E-06	8.17E-03	3.70E-04	8.17E-06	1.23E-04	7.49E-06	3.13E-06	5.50E-03	2.32E-04	4.09E-06
SB-6-12.0	5050/750-50	12	2.72E-06	2.04E-03	1.36E-04	5.45E-06	7.90E-05	2.50E-05	4.90E-06	1.17E-04	4.09E-05	4.09E-06
SB-7-2.5	5050/750-50	2.5	2.72E-06	4.09E-03	3.31E-04	1.91E-05	5.45E-06	1.86E-05	1.63E-06	6.23E-05	1.23E-04	8.17E-06
SB-7-11.5	5050/750-50	11.5	5.18E-04	4.22E-01	4.48E-04	6.81E-06	4.63E-04	3.41E-05	6.40E-06	1.21E-02	6.13E-04	8.44E-04
SB-7-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-8-2.5	5050/750-50	2.5	1.36E-06	2.72E-03	5.06E-04	1.91E-05	2.72E-06	1.97E-05	1.91E-06	4.40E-05	1.50E-04	8.17E-06
SB-8-5.0	5050/750-50	5	9.53E-04	3.95E-02	7.98E-04	1.36E-05	1.91E-04	4.31E-05	2.72E-06	8.80E-03	3.54E-04	1.06E-03
SB-8-10.0	5050/750-50	10	1.36E-06	5.72E-02	5.25E-04	8.17E-06	1.36E-06	2.02E-05	8.58E-06	8.07E-05	1.50E-04	4.09E-06
SB-9-2.5	5050/750-50	2.5	1.77E-04	2.18E+00	7.39E-04	5.45E-06	1.44E-03	2.72E-05	5.45E-06	1.72E-03	6.40E-03	1.31E-04
SB-9-7.5	5050/750-50	7.5	3.81E-04	3.54E-01	2.14E-04	1.36E-06	2.40E-02	3.86E-06	1.36E-06	1.03E-03	6.13E-03	1.42E-04
SB-9-12.5	5050/750-50	12.5	5.45E-06	5.45E-03	1.77E-04	1.63E-05	7.08E-04	2.95E-05	7.35E-06	1.25E-04	1.77E-04	4.09E-06

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
SB-10-5.0	5050/750-50	5	1.55E-04	2.18E+00	1.46E-04	8.17E-06	2.53E-04	1.95E-05	3.68E-06	1.69E-03	1.05E-03	1.04E-03
SB-10-7.0	5050/750-50	7	2.72E-06	4.09E-03	2.92E-04	5.45E-06	1.36E-06	4.77E-05	4.36E-06	5.50E-05	4.09E-05	1.09E-05
SB-10-10.0	5050/750-50	10	1.36E-06	5.45E-03	1.95E-04	5.45E-06	1.36E-06	2.50E-05	5.31E-06	4.40E-05	1.23E-04	4.09E-06
SB-11-2.5	5050/750-50	2.5	4.63E-05	1.91E-02	6.62E-04	8.17E-06	1.36E-05	1.95E-05	1.09E-06	1.25E-04	4.63E-04	2.18E-05
SB-11-7.5	5050/750-50	7.5	1.36E-06	1.91E-02	1.25E-04	2.72E-06	1.36E-06	1.25E-05	7.08E-06	5.50E-05	1.50E-04	4.09E-06
SB-11-12.5	5050/750-50	12.5	5.45E-06	1.36E-02	7.39E-04	8.17E-06	3.00E-05	4.77E-05	7.63E-06	9.53E-05	9.53E-05	4.09E-06
SB-12-2.0	5050/750-50	2	3.81E-04	1.91E+00	2.14E-04	2.72E-06	1.77E-03	2.72E-05	4.77E-06	6.23E-03	5.72E-03	5.18E-04
SB-12-5.0	5050/750-50	5	1.58E-03	1.13E+00	1.34E-04	3.00E-05	7.35E-04	4.09E-05	2.04E-06	2.71E-03	8.04E-03	4.90E-04
SB-12-12.0	5050/750-50	12	1.36E-06	8.17E-03	1.30E-04	1.36E-06	8.17E-05	1.07E-05	4.77E-06	8.07E-05	4.09E-05	4.09E-06
SB-13-2.5	5050/750-50	2.5	2.72E-05	4.49E-02	3.89E-03	1.36E-06	1.66E-04	4.09E-05	1.09E-05	4.77E-04	9.40E-04	3.81E-05
SB-13-7.5	5050/750-50	7.5	8.44E-04	1.36E-01	1.50E-03	1.36E-06	2.37E-04	1.86E-05	4.49E-06	1.03E-03	7.90E-03	3.81E-05
SB-13-10.0	5050/750-50	10	5.45E-06	2.72E-03	1.07E-04	2.72E-06	1.39E-04	8.63E-06	5.86E-06	2.75E-04	6.40E-04	8.17E-06
SB-13-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-14-2.0	5050/750-50	2	5.45E-06	5.86E-02	4.86E-04	5.45E-06	3.81E-05	1.77E-05	1.36E-06	6.23E-05	1.24E-03	1.36E-05
SB-14-5.0	5050/750-50	5	1.36E-06	1.09E-02	7.98E-04	1.36E-06	8.17E-06	1.45E-05	3.68E-06	4.40E-05	1.09E-04	1.36E-05
SB-14-10	5050/750-50	10	6.27E-05	2.45E-01	9.34E-04	5.99E-06	3.54E-05	2.25E-05	7.08E-06	3.08E-04	1.21E-03	1.91E-05
SB-15-3.5	5050/750-50	3.5	1.36E-05	2.32E-02	8.17E-03	2.72E-06	1.01E-04	1.32E-05	2.32E-06	2.35E-04	2.72E-04	1.63E-05
SB-15-6.0	5050/750-50	6	3.27E-05	1.50E-02	3.31E-03	2.72E-06	3.27E-05	1.38E-05	4.22E-06	8.80E-04	8.17E-05	3.27E-05
SB-15-11.0	5050/750-50	11	5.45E-06	5.45E-03	2.33E-03	8.17E-06	2.72E-05	4.31E-05	6.27E-06	1.14E-04	1.36E-04	4.09E-06
SB-16-5.0	5050/750-50	5	1.91E-04	1.35E-01	2.14E-04	1.36E-05	2.45E-04	2.04E-05	2.18E-06	1.14E-02	3.27E-04	2.45E-04
SB-16-6.5	5050/750-50	6.5	1.36E-05	2.59E-02	2.53E-04	2.72E-06	1.36E-06	1.84E-05	3.13E-06	6.23E-05	4.09E-05	4.09E-06
SB-17-2.0	5050/750-50	2	8.17E-06	1.09E-02	6.03E-03	1.63E-05	3.54E-05	2.18E-05	1.50E-06	1.14E-04	2.32E-04	4.09E-06
SB-17-5.0	5050/750-50	5	5.45E-06	2.59E-02	7.39E-02	1.36E-06	1.36E-06	3.41E-07	4.09E-07	1.32E-04	4.09E-05	4.09E-06
SB-17-6.5	5050/750-50	6.5	1.36E-05	1.77E-01	5.64E-02	5.45E-06	2.45E-05	3.41E-07	4.22E-06	1.50E-04	1.91E-04	1.36E-05
SB-17-12.0	5050/750-50	12	1.36E-06	1.36E-03	2.33E-04	5.45E-06	1.36E-06	1.84E-05	5.45E-06	5.13E-05	4.09E-05	4.09E-06
SB-18-1.5	5050/750-50	1.5	5.45E-06	5.45E-03	2.14E-03	5.45E-06	1.36E-05	1.84E-05	8.17E-07	4.03E-05	2.32E-04	4.09E-06
SB-18-2.5	5050/750-50	2.5	2.18E-05	4.63E-02	6.23E-03	1.36E-06	1.06E-02	1.20E-05	1.23E-06	6.23E-04	1.50E-04	1.91E-05
SB-18-5.0	5050/750-50	5	1.09E-05	4.36E-02	2.72E-03	1.36E-06	5.72E-03	2.09E-05	1.09E-06	2.68E-04	9.53E-05	5.18E-05
SB-18-7.0	5050/750-50	7	5.45E-06	1.77E-02	4.67E-04	2.72E-06	5.45E-06	6.81E-06	2.86E-06	1.76E-03	1.23E-04	1.09E-05
SB-19-2.5	5050/750-50	2.5	8.99E-04	9.26E-01	3.11E-03	1.36E-05	8.44E-03	2.95E-05	1.63E-06	7.33E-03	1.13E-02	2.18E-04
SB-19-5.0B	5050/750-50	5	1.06E-03	6.81E-01	3.89E-04	1.36E-06	3.81E-02	6.81E-05	6.81E-08	1.32E-02	8.44E-02	1.63E-04
SB-19-10.0	5050/750-50	10	1.63E-05	5.99E-02	2.14E-03	1.36E-06	7.08E-04	6.36E-06	4.09E-06	2.31E-03	1.91E-04	3.27E-05
SB-20-2.5	5050/750-50	2.5	1.36E-06	6.81E-04	1.95E-04	1.91E-05	1.36E-06	2.27E-05	1.50E-06	3.01E-05	4.09E-05	4.09E-06

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
SB-20-9.5	5050/750-50	9.5	2.72E-05	2.59E-01	2.92E-04	1.36E-05	8.99E-03	2.50E-05	1.63E-06	7.33E-04	4.09E-05	4.09E-05
SB-20-16.0	5050/750-50	16	2.72E-06	6.81E-04	2.14E-04	2.72E-06	1.36E-06	1.09E-05	5.18E-06	4.03E-05	4.09E-05	4.09E-06
SB-21-2.5	5050/750-50	2.5	3.81E-04	1.18E+00	3.50E-04	1.63E-05	4.63E-04	1.50E-05	2.72E-06	1.83E-03	3.41E-04	1.74E-04
SB-21-7.5	5050/750-50	7.5	2.72E-06	2.72E-03	1.21E-04	2.72E-06	2.62E-04	1.14E-05	8.44E-06	6.23E-05	9.53E-05	4.09E-06
SB-21-11.5	5050/750-50	11.5	2.72E-06	6.81E-04	1.15E-04	2.72E-06	9.53E-04	1.14E-05	4.90E-06	6.23E-05	4.09E-05	4.09E-06
SB-21-17.5	5050/750-50	17.5	1.36E-06	2.72E-03	1.38E-04	5.45E-06	1.20E-03	1.75E-05	6.54E-06	6.23E-05	4.09E-05	4.09E-06
SB-21-24.5	5050/750-50	24.5	2.72E-06	4.09E-03	4.67E-05	8.17E-06	3.00E-04	3.18E-05	6.13E-06	8.07E-05	4.09E-05	4.09E-06
SB-21-34.5	5050/750-50	34.5	5.45E-06	6.81E-04	9.15E-04	5.45E-06	1.09E-05	1.07E-04	5.04E-06	1.03E-04	4.09E-05	8.17E-06
SB-21-42.0	5050/750-50	42	5.45E-06	6.81E-04	3.70E-04	1.36E-05	1.36E-06	3.41E-05	6.81E-06	1.03E-04	4.09E-05	5.45E-06
SB-21-49.5	5050/750-50	49.5	1.36E-06	9.53E-03	1.95E-04	1.09E-05	2.72E-06	1.20E-05	5.18E-06	6.97E-05	4.09E-05	4.09E-06
SS-1-2.5	5050/750-50	2.5	2.51E-04	2.59E-01	2.72E-02	1.36E-06	1.36E-06	3.41E-07	1.50E-06	1.43E-04	4.09E-05	1.85E-04
SS-2-2.0	5050/750-50	2	1.06E-04	6.27E-01	1.19E-02	2.72E-06	2.26E-04	6.13E-06	1.50E-06	3.23E-04	6.27E-04	8.17E-05
SS-3-2.0	5050/750-50	2	8.72E-05	1.36E-01	5.84E-03	2.72E-06	1.74E-04	8.40E-06	1.36E-06	6.60E-04	5.45E-04	5.99E-05
SS-4-1.5	5050/750-50	1.5	2.72E-05	4.77E-02	8.56E-03	1.09E-05	5.45E-05	2.27E-05	1.23E-06	3.08E-04	6.81E-04	1.53E-04
SS-5-1.5	5050/750-50	1.5	1.36E-05	9.53E-02	3.89E-04	1.09E-05	6.54E-05	3.41E-05	6.27E-06	1.87E-04	6.67E-04	4.09E-06
SS-6-2.0	5050/750-50	2	5.18E-04	5.04E-01	1.61E-03	2.72E-06	1.53E-03	1.88E-05	2.86E-06	8.43E-03	3.27E-03	5.45E-04
SS-7-2.0	5050/750-50	2	5.45E-06	2.04E-03	8.95E-04	2.72E-06	5.45E-06	5.90E-05	7.35E-06	1.32E-04	4.09E-05	4.09E-06
SS-8-2.0	5050/750-50	2	1.69E-04	6.81E-01	1.17E-03	8.17E-06	1.96E-04	2.02E-05	1.91E-06	1.25E-03	1.36E-03	3.00E-03
SS-10-2.5	5050/750-50	2.5	9.26E-05	1.36E-01	8.76E-04	1.36E-06	2.02E-04	1.04E-05	1.77E-06	2.53E-03	2.18E-03	1.04E-04
SS-11-2.0	5050/750-50	2	1.36E-04	2.18E-01	1.91E-04	2.72E-06	1.33E-03	2.04E-05	5.99E-06	1.36E-03	1.08E-03	1.63E-04
SS-12-2.5	5050/750-50	2.5	3.81E-05	7.63E-02	4.86E-03	2.72E-06	3.27E-04	2.95E-05	8.31E-06	4.77E-04	6.81E-04	2.45E-05
SS-13-2.0	5050/750-50	2	5.45E-06	2.04E-03	9.53E-04	5.45E-06	3.00E-05	1.93E-05	6.81E-06	9.90E-05	4.49E-04	1.63E-05
SS-13-2.5	5050/750-50	2.5	8.17E-06	2.59E-02	2.92E-03	8.17E-06	8.17E-05	2.72E-05	5.72E-06	1.28E-04	2.04E-04	1.36E-05
SS-18-2.0	5050/750-50	2	1.91E-04	8.72E-01	1.75E-03	2.72E-06	1.69E-03	2.16E-05	5.45E-06	1.69E-03	5.18E-03	8.99E-05
SS-19-2.5	5050/750-50	2.5	2.72E-06	1.23E-02	3.11E-03	8.17E-06	8.17E-06	2.50E-05	5.45E-06	1.69E-04	2.32E-04	1.09E-05
B1		5	0.00E+00	1.89E-02	1.86E-02	0.00E+00	1.20E-05	1.86E-05	3.30E-06	4.73E-04	2.18E-04	0.00E+00
B1		10	0.00E+00	1.05E-02	2.41E-03	1.20E-05	8.72E-06	3.29E-05	4.77E-06	1.14E-04	3.27E-04	0.00E+00
B2		10	0.00E+00	9.94E-03	9.36E-05	0.00E+00	1.44E-03	1.38E-05	4.75E-06	1.02E-04	6.54E-05	0.00E+00
B3		5	0.00E+00	5.72E-03	2.57E-05	7.90E-06	1.66E-04	1.36E-05	2.59E-06	3.45E-05	4.22E-05	0.00E+00
B3		10	0.00E+00	1.29E-02	2.04E-04	8.44E-06	7.90E-05	2.77E-05	9.59E-06	7.66E-05	2.18E-04	0.00E+00
B4		5	0.00E+00	1.28E-02	1.94E-04	7.35E-06	5.50E-04	1.68E-05	3.12E-06	8.10E-05	3.95E-05	0.00E+00
B4		10	0.00E+00	1.10E-02	1.26E-04	7.63E-06	1.09E-04	3.59E-05	4.52E-06	6.93E-05	6.27E-05	0.00E+00
MW1		5	5.53E-04	2.94E-02	2.00E-04	0.00E+00	1.53E-05	1.52E-05	2.44E-06	1.13E-04	2.32E-04	0.00E+00

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
MW1		10	0.00E+00	1.47E-02	2.41E-04	1.09E-05	3.00E-05	3.77E-05	4.55E-06	9.57E-05	5.86E-03	0.00E+00
MW2		5	0.00E+00	1.93E-02	5.99E-05	0.00E+00	3.08E-04	5.68E-06	5.04E-06	3.53E-04	7.49E-05	0.00E+00
MW2		10	0.00E+00	1.01E-02	1.54E-04	0.00E+00	1.05E-03	1.36E-05	4.18E-06	1.02E-04	6.81E-05	0.00E+00
MW3		10	0.00E+00	1.01E-02	2.14E-04	0.00E+00	6.54E-05	1.59E-05	4.74E-06	1.88E-04	8.72E-05	0.00E+00
MW4		10	0.00E+00	1.13E-02	1.53E-04	7.35E-06	0.00E+00	1.11E-05	5.12E-06	3.41E-05	1.50E-04	0.00E+00
CW-1	5200	6.5	1.72E-03	1.21E+00	4.67E-04	2.72E-06	5.45E-03	1.02E-04	2.59E-06	1.98E-02	6.81E-05	1.36E-04
CW-1	5200	8	4.63E-04	1.32E-01	1.56E-03	1.09E-05	5.45E-03	9.76E-05	6.81E-07	2.02E-02	6.81E-05	1.36E-05
CW-1	5200	9	6.81E-06	4.22E-02	2.14E-01	3.00E-05	7.90E-05	1.79E-04	2.32E-06	3.67E-04	6.81E-05	2.45E-04
CW-1	5200	11	6.81E-06	2.72E-03	1.05E-03	1.09E-05	2.18E-05	1.59E-05	4.49E-06	8.80E-05	6.81E-05	1.36E-05
CW-2	5200	3.5	6.81E-06	2.86E-01	3.89E-03	8.17E-06	7.90E-04	3.41E-05	6.67E-06	1.54E-03	6.81E-05	5.45E-05
CW-2	5200	5	6.81E-06	3.95E-01	3.50E-03	8.17E-06	7.63E-04	2.95E-05	4.63E-06	1.43E-03	6.81E-05	1.91E-04
CW-2	5200	7.5	6.81E-06	5.45E-03	3.70E-01	5.45E-06	5.45E-06	3.41E-04	5.45E-07	4.77E-05	6.81E-05	1.36E-05
CW-2	5200	9.5	6.81E-06	2.32E-01	6.42E-02	5.45E-06	2.72E-05	8.17E-05	6.81E-07	2.13E-04	6.81E-05	1.36E-05
CW-3	5200	3.5	1.23E-04	4.22E-01	2.14E-02	1.36E-05	1.63E-03	5.68E-05	6.67E-06	2.05E-03	6.81E-05	1.63E-04
CW-3	5200	6	6.81E-06	2.72E-03	1.40E-01	8.17E-06	3.81E-04	1.50E-04	1.36E-06	2.13E-04	6.81E-05	1.36E-05
CW-3	5200	9	6.81E-06	2.04E-02	1.46E-01	8.17E-06	5.45E-06	1.52E-04	5.45E-07	1.17E-04	6.81E-05	1.36E-05
CW-3	5200	11	6.81E-06	1.05E-01	7.98E-02	2.45E-05	5.45E-06	1.75E-04	2.72E-06	4.40E-04	6.81E-05	2.72E-05
CW-4	5200	5.5	2.04E-04	2.86E-01	2.72E-02	5.45E-06	6.27E-03	5.68E-05	2.72E-06	1.58E-02	6.81E-05	1.36E-05
CW-4	5200	7.5	6.81E-06	6.81E-04	4.28E-03	8.17E-06	5.99E-05	2.72E-05	5.58E-06	8.07E-05	6.81E-05	1.36E-05
CW-4	5200	11.5	3.54E-04	1.18E-01	2.33E-03	2.72E-06	5.45E-06	9.08E-06	8.17E-07	2.90E-04	6.81E-05	1.91E-04
CW-4	5200	12.5	1.33E-04	1.63E-01	4.48E-04	5.45E-06	1.33E-04	2.50E-05	2.32E-06	3.67E-04	6.81E-05	1.63E-04
CW-5	5200	7.5	6.81E-06	9.26E-02	5.64E-03	2.72E-06	1.39E-03	3.18E-05	3.41E-06	1.14E-03	6.81E-05	1.36E-05
CW-5	5200	11	6.81E-06	1.16E-01	8.17E-04	8.17E-06	1.33E-04	3.41E-05	3.27E-06	1.72E-03	6.81E-05	5.45E-05
CSB-1	5051/PGE	6-6.5'	5.72E-04	8.04E-01	5.06E-03	1.36E-06	1.01E-04	7.49E-05	2.04E-06	1.14E-03	2.32E+00	1.36E-05
CSB-1	5051/PGE	8-8.5'	1.36E-05	1.09E-02	1.77E-04	1.36E-06	5.45E-06	7.49E-05	4.09E-07	2.79E-04	1.23E-02	1.36E-06
CSB-3	5050	5'	1.36E-05	4.09E-03	1.75E-05	1.36E-06	5.45E-06	4.31E-05	6.81E-07	1.83E-05	4.09E-03	1.36E-06
CSB-4	5050	4'	8.17E-05	1.09E-02	1.67E-04	1.36E-06	5.45E-06	1.18E-04	1.50E-06	2.02E-04	3.68E-02	5.45E-06
CSB-5	5050/750-50	4'	8.17E-05	1.09E-02	8.17E-04	1.36E-06	5.45E-06	1.77E-04	2.18E-06	2.20E-04	5.04E-02	5.45E-06
CSB-6	5050/750-50	4'	5.45E-05	6.81E-03	1.77E-04	1.36E-06	5.45E-06	4.31E-05	9.53E-07	2.57E-05	1.23E-02	5.45E-06
CSB-8	5050	5'-5.5'	1.36E-05	7.22E-02	9.34E-05	1.36E-07	8.99E-05	3.86E-05	9.94E-07	4.03E-05	1.36E-03	1.36E-06
CSB-8	5050	10'-10.5'	5.45E-05	2.18E-03	3.11E-04	1.36E-06	2.72E-03	3.41E-05	4.77E-06	1.83E-06	6.81E-05	1.36E-06
CSB-8	5050	15'-15.5'	8.17E-05	1.10E-02	1.30E-04	1.36E-06	5.45E-06	2.27E-04	2.04E-06	1.28E-04	6.81E-04	1.36E-06
CSB-8	5050	19.5'-20'	5.45E-05	2.72E-03	5.25E-05	1.36E-06	5.45E-06	1.02E-04	1.63E-06	5.87E-05	6.81E-04	1.36E-06

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo
CSB-8	5050	20'-20.5'	2.72E-05	5.45E-03	1.42E-04	1.36E-06	5.45E-06	1.23E-04	2.45E-06	6.60E-05	6.81E-04	1.36E-06
CSB-8	5050	25'-25.5'	2.72E-05	4.09E-03	7.59E-05	1.36E-06	1.09E-05	1.14E-04	1.63E-06	5.13E-05	2.72E-03	5.45E-06
CSB-8	5050	30-30.5	5.45E-05	2.72E-03	7.00E-04	1.36E-06	2.45E-05	1.25E-04	3.13E-06	1.03E-04	6.81E-04	1.36E-06
CSB-8	5050	35'-35.5'	5.45E-05	1.36E-03	1.34E-04	1.36E-06	5.45E-06	9.99E-05	1.63E-06	8.43E-05	6.81E-04	1.36E-06
CSB-8	5050	40'-40.5'	5.45E-05	4.09E-03	4.48E-04	1.36E-06	5.45E-06	7.49E-05	2.59E-06	5.87E-05	6.81E-04	1.36E-06
CSB-8	5050	45'-45.5'	8.17E-05	6.81E-03	3.89E-04	1.36E-06	5.45E-06	1.09E-04	1.77E-06	7.70E-05	6.81E-04	1.36E-06
CSB-8	5050	50'-50.5'	5.99E-04	4.09E-03	1.65E-04	1.36E-06	5.45E-06	8.63E-05	1.36E-06	6.23E-05	6.81E-04	1.36E-06
CSB-8	5050	55'-55.5'	5.45E-05	2.72E-03	2.53E-04	1.36E-06	5.45E-06	4.99E-05	1.09E-06	5.13E-05	6.81E-04	1.36E-06
CSB-8	5050	60'-60.5'	5.45E-05	1.36E-03	1.87E-04	1.36E-06	5.45E-06	7.95E-05	1.09E-06	6.23E-05	6.81E-04	1.36E-06
CSB-9	5051	5'-5.5'	5.45E-05	4.09E-03	3.11E-04	1.36E-06	5.45E-06	9.53E-05	1.50E-06	5.87E-05	1.91E-02	1.36E-06
CSB-9	5051	10'-10.5'	1.09E-04	1.36E-02	4.28E-05	1.36E-06	5.45E-06	9.99E-05	1.36E-06	8.43E-05	4.22E-02	1.36E-06
CSB-9	5051	15'-15.5'	1.36E-05	8.17E-03	1.23E-04	1.36E-06	8.17E-05	7.26E-05	1.91E-06	5.50E-05	4.09E-02	1.36E-06
CSB-9	5051	20'-20.5'	1.36E-05	2.72E-03	2.14E-04	1.36E-06	5.45E-06	1.18E-04	1.09E-06	4.40E-05	6.81E-04	1.36E-06
CSB-9	5051	25'-25.5'	2.72E-05	6.81E-04	3.31E-05	1.36E-06	5.45E-06	8.85E-05	1.23E-06	5.87E-05	6.81E-04	1.36E-06
CSB-9	5051	30'-30.5'	5.45E-05	6.81E-04	1.48E-04	1.36E-06	5.45E-06	1.09E-04	1.23E-06	6.97E-05	6.81E-04	1.36E-06
CSB-9	5051	35'-35.5'	5.45E-05	5.45E-03	6.03E-04	1.36E-06	5.45E-06	2.11E-04	2.86E-06	8.07E-05	6.81E-04	1.36E-06
CSB-9	5051	40'-40.5'	5.45E-05	6.81E-04	1.67E-04	1.36E-06	5.45E-06	9.08E-05	1.63E-06	8.43E-05	6.81E-04	1.36E-06
CSB-9	5051	45'-45.5'	5.45E-05	4.09E-03	3.31E-04	1.36E-06	5.45E-06	9.53E-05	1.77E-06	7.70E-05	6.81E-04	1.36E-06
CSB-9	5051	50'-50.5'	5.45E-05	4.09E-03	2.14E-04	1.36E-06	5.45E-06	9.76E-05	1.36E-06	8.07E-05	6.81E-04	1.36E-06
CSB-9	5051	55'-55.5'	5.45E-05	5.45E-03	2.33E-04	1.36E-06	5.45E-06	1.32E-04	1.77E-06	8.43E-05	4.09E-03	1.36E-06
CSB-9	5051	60'-60.5'	5.45E-05	4.09E-03	7.39E-05	1.36E-06	5.45E-06	8.17E-05	8.17E-07	6.23E-05	6.81E-04	1.36E-06
CW-6	5200	6-6.5'	1.36E-05	7.76E-01	7.59E-03	1.36E-06	3.27E-03	6.81E-05	2.32E-06	4.03E-03	5.86E+00	1.12E-04
CW-7	5200	6-6.5'	1.36E-05	1.91E-01	1.03E-01	1.36E-06	1.61E-03	2.72E-05	5.18E-06	9.90E-04	7.49E+00	8.17E-06
CW-7	5200	16-16.5'	2.72E-05	6.81E-03	3.11E-04	1.36E-06	5.45E-06	1.16E-04	1.09E-06	7.33E-05	6.81E-03	2.72E-06
CW-8	5051/EBMUD	5'	8.17E-05	5.45E-03	2.72E-03	1.36E-06	1.91E-05	9.31E-05	1.23E-06	1.91E-04	1.63E-01	1.36E-05
CW-9	5051/EBMUD	5'	5.45E-05	4.09E-03	2.53E-04	1.36E-06	5.45E-06	9.53E-05	1.63E-06	5.50E-05	3.27E-02	2.72E-06
CW-10	5051/PGE	11-11.5	2.72E-05	1.50E-02	7.98E-04	1.36E-06	2.18E-05	2.27E-04	3.13E-06	1.76E-04	1.23E-02	2.72E-06
CW-12	5051/PGE	11-11.5	2.72E-05	6.81E-03	2.33E-04	1.36E-06	5.45E-06	1.32E-04	1.23E-06	7.70E-05	8.17E-03	5.45E-06
CW-13	5050	5'	5.45E-05	9.40E-03	2.45E-04	1.36E-06	5.45E-06	9.31E-05	1.50E-06	1.28E-04	3.27E-02	5.45E-06

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
B-2	5051	4	6.13E-05		1.70E-03	2.72E-05	8.51E-03	5.45E-04	3.11E-02	4.19E-01
B-3	5051	4	5.65E-04		1.67E-01	8.17E-05	3.75E-01	1.56E-04	3.50E-01	1.42E+00
B-4	5051	11.5	1.50E-03		1.70E-03	2.72E-05	2.38E-02	4.48E-03	8.95E-01	9.38E-01
BA-4	5051	2	2.72E-04		1.70E-04	1.36E-05	5.11E-03	8.76E-04	1.81E-03	1.64E-02
BA-4	5051	2	9.40E-05		6.81E-05	2.72E-06	0.00E+00	1.93E-04	4.98E-03	1.21E-02
BA-4	5051	6.5	1.04E-04		6.98E-05	2.72E-06	0.00E+00	3.39E-04	1.59E-03	9.03E-03
BA-4	5051	6.5	2.32E-04		1.70E-04	1.36E-05	5.11E-03	8.95E-04	2.14E-03	1.35E-02
BA-4	5051	8	2.18E-03		3.41E-04	1.36E-05	8.51E-04	5.25E-03	7.78E-03	2.43E-02
BA-4	5051	8	1.70E-03		6.64E-05	2.72E-06	0.00E+00	4.92E-03	1.08E-02	5.18E-02
BA-4	5051	9.5	7.76E-05		7.49E-05	3.00E-06	0.00E+00	2.72E-04	2.55E-04	2.28E-03
BA-4	5051	9.5	1.16E-04		1.70E-04	1.36E-05	8.51E-04	5.06E-04	7.78E-04	6.20E-03
BA-4	5051	12	1.01E-04		6.47E-05	2.59E-06	0.00E+00	2.08E-04	4.73E-04	1.70E-03
B-5	5051	11.5	4.77E-04		8.85E-03	5.45E-05	8.51E-03	7.98E-04	9.92E-01	1.85E+00
BA-5	5051	4	8.17E-04		1.70E-03	1.36E-05	8.51E-03	8.17E-04	4.28E-02	7.44E-02
BA-5	5051	4	7.76E-04		6.81E-05	2.72E-06	0.00E+00	4.57E-04	7.04E-02	8.72E-02
BA-5	5051	8	3.81E-04		2.04E-03	1.36E-05	8.51E-04	8.17E-04	2.92E-02	4.61E-02
BA-5	5051	8	9.67E-04		7.66E-05	3.13E-06	0.00E+00	5.62E-03	3.99E-02	6.41E-02
BA-5	5051	9	2.38E-04		1.70E-04	1.36E-05	8.51E-04	8.17E-04	1.19E-03	1.03E-02
BA-5	5051	9	1.70E-03		1.70E-04	1.36E-05	0.00E+00	5.64E-03	9.15E-03	7.59E-02
BA-5	5051	9	1.57E-04		8.34E-05	3.27E-06	0.00E+00	3.54E-04	4.07E-04	7.07E-03
BA-5	5051	10	1.43E-04		1.70E-04	1.36E-05	8.51E-04	6.03E-04	5.84E-04	8.03E-03
BA-5	5051	10	9.87E-05		8.51E-05	3.41E-06	0.00E+00	3.54E-04	1.05E-03	6.34E-03
BA-5	5051	13	1.53E-04		7.49E-05	3.00E-06	0.00E+00	2.59E-04	4.10E-02	4.34E-02
BA-5	5051	16	7.01E-04		5.45E-05	2.18E-06	0.00E+00	5.49E-04	7.20E-04	2.19E-02
B-6	5051	6.5	5.52E-04		1.70E-04	2.72E-05	8.51E-04	3.11E-03	1.52E-02	2.49E-01
B-7	5051	6.5	1.16E-04		2.89E-01	2.72E-05	8.51E-03	6.03E-04	4.86E-01	2.06E+00
B-8	5051	7.5	9.53E-05		6.47E-02	2.72E-05	4.60E-01	4.86E-05	4.48E-01	1.30E+00
B-9	5051	2	3.61E-04		6.81E-04	2.72E-05	8.51E-04	7.59E-04	1.61E-03	1.18E-02
B-9	5051	7	3.88E-04		3.41E-04	2.72E-05	3.41E-03	6.03E-04	2.14E-03	1.77E-02
B-9	5051	11.5	2.18E-04		6.81E-04	1.36E-05	8.51E-04	5.25E-04	8.56E-03	1.94E-02
B-9	5051	16.5	4.77E-04		1.70E-04	1.36E-05	5.11E-03	6.81E-04	6.62E-04	7.77E-03
B-9	5051	19.5	5.45E-04		1.70E-04	2.72E-05	8.51E-04	7.20E-04	5.84E-04	9.09E-03
B-10	5051	2	1.09E-03		1.70E-04	2.72E-05	8.51E-04	1.11E-03	4.48E-03	1.41E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
B-10	5051	6	3.47E-04		1.70E-04	2.72E-05	8.51E-04	8.17E-04	1.60E-03	6.05E-03
B-10	5051	10	8.17E-04		3.41E-04	1.36E-05	8.51E-04	9.15E-04	1.15E-01	1.44E-01
B-10	5051	13	1.50E-04		1.70E-04	1.36E-05	8.51E-04	5.45E-04	2.72E-04	7.45E-03
B-10	5051	16	6.13E-04		1.70E-04	5.45E-05	8.51E-04	7.00E-04	4.09E-04	6.19E-03
B-11	5051	0.5	1.91E-04		1.70E-03	1.09E-04	8.51E-03	2.53E-04	3.70E-02	5.29E-02
B-11	5051	5	1.77E-03		1.70E-04	5.45E-05	8.51E-04	4.48E-03	1.52E-03	8.55E-02
B-11	5051	8	3.95E-03		6.81E-04	8.17E-05	8.51E-04	1.32E-02	1.52E-02	3.93E-02
B-11	5051	12.5	2.32E-04		1.70E-04	5.45E-05	8.51E-04	5.45E-04	4.86E-04	5.26E-03
B-11	5051	16	9.53E-04		1.70E-04	2.72E-05	8.51E-04	2.33E-03	6.03E-04	1.41E-02
B-12	5051	17	4.02E-04		1.70E-04	1.36E-05	8.51E-04	6.42E-04	7.20E-04	3.36E-03
B-12	5051	20	9.53E-04		1.70E-04	5.45E-05	8.51E-04	7.39E-04	6.81E-04	5.73E-03
B-12	5051	24.5	5.99E-04		1.70E-04	5.45E-05	8.51E-04	8.95E-04	8.95E-04	4.19E-03
B-13	5051	1	3.61E-04		3.41E-04	1.36E-05	8.51E-03	7.98E-04	3.31E-03	2.02E-02
B-13	5051	13	3.13E-04		1.70E-04	1.36E-05	5.11E-03	6.62E-04	1.79E-03	1.42E-02
B-13	5051	18	4.56E-04		1.70E-04	1.36E-05	5.11E-03	1.03E-03	2.33E-03	1.61E-02
B-13	5051	22	6.06E-04		1.70E-04	1.36E-05	5.11E-03	5.45E-04	8.76E-04	7.92E-03
B-14	5051	2	4.63E-04		1.70E-04	5.45E-05	8.51E-04	8.37E-04	4.48E-03	1.51E-02
B-14	5051	7	2.32E-04		1.70E-04	5.45E-05	8.51E-04	7.20E-04	1.17E-03	1.21E-02
B-14	5051	9.5	3.34E-04		1.70E-04	1.36E-05	8.51E-04	5.84E-04	1.69E-03	7.77E-03
B-14	5051	13	2.11E-04		1.70E-04	1.36E-05	8.51E-04	5.84E-04	4.48E-04	2.94E-03
B-14	5051	16	6.33E-04		1.70E-04	1.36E-05	8.51E-04	7.59E-04	7.98E-04	8.16E-03
MWA-1	5051	1	9.53E-04		3.41E-04	1.36E-05	8.51E-03	8.95E-04	6.42E-03	3.55E-02
MWA-1	5051	1.5	3.04E-04		6.98E-05	2.86E-06	0.00E+00	3.35E-04	1.07E-02	6.71E-02
MWA-1	5051	2	2.38E-04		1.70E-04	1.36E-05	8.51E-04	6.81E-04	3.70E-03	1.09E-02
MWA-1	5051	3	1.62E-04		2.71E-04	3.27E-06	0.00E+00	2.10E-04	2.32E-02	3.74E-02
MWA-1	5051	6	1.63E-04		2.38E-03	2.72E-05	3.41E-03	2.53E-04	3.70E-02	5.37E-02
MWA-1	5051	7.5	2.38E-04		1.07E-02	2.86E-06	0.00E+00	3.60E-04	1.68E-01	2.07E-01
MWA-1	5051	8	2.18E-04		1.70E-03	1.36E-05	3.41E-03	5.64E-04	1.95E-02	6.64E-02
MWA-1	5051	8.5	3.61E-04		2.08E-01	1.36E-05	1.06E-01	2.72E-04	5.84E-01	9.54E-01
MWA-1	5051	8.5	2.07E-04		2.09E-02	2.86E-06	0.00E+00	6.54E-05	1.09E+00	1.31E+00
MWA-1	5051	9	2.59E-04		3.75E-02	5.45E-05	8.51E-03	5.46E-03	3.31E-01	2.51E+00
MWA-1	5051	10	1.16E-03		1.70E-04	1.36E-05	5.11E-03	8.17E-04	1.89E-01	2.06E-01
MWA-1	5051	10	6.14E-04		7.83E-05	3.13E-06	0.00E+00	3.76E-04	1.43E-01	1.98E-01

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
MWA-1	5051	11.5	1.36E-04		8.00E-05	3.27E-06	0.00E+00	1.50E-04	6.85E-02	7.27E-02
MWA-1	5051	13	2.71E-04		7.66E-05	3.00E-06	0.00E+00	3.29E-04	8.33E-03	1.48E-02
MWA-1	5051	14.5	3.14E-04		7.83E-05	3.13E-06	0.00E+00	2.86E-04	7.18E-04	6.36E-03
MWA-1	5051	17	2.11E-04		7.32E-05	3.00E-06	0.00E+00	2.16E-04	3.39E-04	4.72E-03
MWA-2	5051	5.5	3.62E-04		1.85E-02	1.28E-05	0.00E+00	1.50E-03	6.99E-01	1.89E+00
MWA-2	5051	6	5.92E-04		2.83E-01	1.09E-04	8.51E-03	2.72E-03	7.98E-01	2.75E+00
MWA-2	5051	9.5	9.94E-05		2.00E-04	3.30E-06	0.00E+00	2.20E-04	7.96E-03	9.21E-03
MWA-2	5051	10	1.70E-04		1.70E-04	1.36E-05	8.51E-04	5.25E-04	1.17E-02	2.11E-02
MWA-2	5051	11.5	2.66E-04		6.81E-04	1.36E-05	3.41E-03	7.00E-04	7.59E-03	2.21E-02
MWA-2	5051	11.5	1.45E-04		2.01E-04	3.27E-06	0.00E+00	2.96E-04	1.10E-02	1.59E-02
MWA-2	5051	13.5	2.71E-04		7.49E-05	3.00E-06	0.00E+00	2.26E-04	7.18E-04	1.87E-03
MWA-2	5051	14.5	4.57E-04		6.13E-05	2.45E-06	0.00E+00	5.51E-04	1.04E-03	3.36E-03
MWA-3	5051	4.5	1.63E-04		6.13E-05	2.45E-06	0.00E+00	4.13E-04	1.58E-02	1.98E-02
MWA-3	5051	5	2.04E-04		1.02E-03	1.36E-05	8.51E-03	7.00E-04	1.83E-02	4.08E-02
MWA-3	5051	9.5	1.59E-04		6.98E-05	2.86E-06	0.00E+00	3.09E-04	9.79E-02	9.98E-02
MWA-3	5051	10	1.91E-04		1.70E-04	1.36E-05	8.51E-03	1.01E-03	5.25E-02	7.99E-02
MWA-3	5051	10.5	2.47E-04		1.32E-02	1.08E-05	0.00E+00	6.81E-04	7.41E-01	9.68E-01
MWA-3	5051	11	2.59E-04		1.87E-02	8.17E-05	8.51E-03	8.95E-04	8.17E-01	1.27E+00
MWA-3	5051	11.5	4.22E-04		1.02E-01	8.17E-05	8.51E-03	1.34E-03	7.00E-01	1.75E+00
MWA-3	5051	11.5	1.23E-04		1.74E-02	9.32E-06	0.00E+00	4.24E-04	5.21E-01	9.74E-01
MWA-3	5051	12	3.00E-04		3.37E-02	1.36E-05	3.41E-03	9.15E-04	8.17E-01	1.40E+00
MWA-3	5051	12.5	2.26E-04		6.98E-05	2.72E-06	0.00E+00	6.46E-04	1.28E-01	1.40E-01
MWA-3	5051	13	2.32E-04		1.70E-04	1.36E-05	6.81E-03	6.81E-04	1.95E-01	2.21E-01
MWA-3	5051	13.5	8.24E-05		6.13E-05	2.45E-06	0.00E+00	2.35E-04	7.37E-02	7.66E-02
MWA-3	5051	15	1.16E-04		8.34E-05	3.27E-06	0.00E+00	1.56E-04	3.19E-02	3.43E-02
MW-4	5051	1	1.84E-04		1.70E-04	1.36E-05	8.51E-04	4.86E-04	5.64E-04	7.41E-03
MW-4	5051	8.5	9.53E-04		1.70E-03	1.36E-05	8.51E-03	5.45E-03	5.25E-01	5.51E-01
MW-4	5051	10.5	2.04E-03		1.70E-03	1.36E-05	8.51E-03	6.42E-03	1.05E+00	1.09E+00
MW-4	5051	14	4.02E-04		1.70E-04	1.36E-05	8.51E-04	4.86E-04	3.50E-02	3.98E-02
MW-4	5051	15.5	7.49E-04		1.70E-04	1.36E-05	8.51E-04	7.20E-04	2.14E-02	3.12E-02
MW-5	5051	1	3.61E-04		1.70E-04	1.36E-05	8.51E-04	6.03E-04	1.13E-03	7.77E-03
MW-5	5051	10.5	2.66E-04		3.41E-04	1.36E-05	8.51E-04	5.84E-04	1.61E-02	2.32E-02
MW-5	5051	13.5	3.27E-04		3.41E-04	5.45E-05	8.51E-04	8.37E-04	4.86E-02	6.18E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
MW-5	5051	17.5	4.43E-04		3.41E-04	1.36E-05	3.41E-03	5.84E-04	1.03E-03	7.01E-03
MW-6	5051	1	5.38E-04		6.81E-04	1.36E-05	5.11E-03	8.56E-04	2.53E-03	1.61E-02
MW-6	5051	7.5	2.86E-03		1.70E-03	5.45E-05	8.51E-03	7.00E-04	5.64E-01	6.02E-01
MW-6	5051	9.5	3.47E-03		1.70E-04	5.45E-05	8.51E-04	1.91E-02	3.89E-02	1.22E-01
MW-6	5051	13	3.95E-04		1.70E-04	5.45E-05	5.11E-03	7.00E-04	6.62E-04	8.35E-03
MW-6	5051	16	5.31E-04		1.70E-04	1.36E-05	1.70E-03	7.00E-04	8.76E-04	6.23E-03
MW-7	5051	1	1.77E-04		1.70E-04	1.36E-05	8.51E-04	3.89E-04	8.17E-04	9.41E-03
MW-7	5051	5.5	3.88E-04		3.41E-04	1.36E-05	3.41E-03	9.92E-04	1.34E-03	8.36E-03
MW-7	5051	10.5	5.11E-04		1.70E-04	1.36E-05	8.51E-04	8.17E-04	3.50E-03	2.87E-02
MW-7	5051	13.5	4.63E-04		1.70E-04	1.36E-05	8.51E-04	5.06E-04	3.31E-04	1.59E-02
MW-7	5051	16.5	5.72E-04		1.70E-04	1.36E-05	8.51E-04	6.03E-04	5.45E-04	6.87E-03
MW-8	5051	1	2.45E-04		1.70E-04	1.36E-05	8.51E-04	7.59E-04	1.91E-03	8.32E-03
MW-8	5051	8.5	2.04E-04		1.70E-04	1.36E-05	8.51E-04	5.64E-04	1.09E-03	5.87E-03
MW-8	5051	10	1.91E-04		1.70E-04	2.72E-05	8.51E-04	2.92E-04	1.03E-03	4.36E-03
MW-8	5051	15.5	3.75E-04		1.70E-04	1.36E-05	8.51E-04	4.48E-04	6.81E-04	3.30E-03
LF-1-2.5	5050/750-50	2.5	8.85E-05		0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-02	4.59E-01
LF-1-7.5	5050/750-50	7.5	8.85E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-01	6.23E-01
LF-1-21	5050/750-50	21	4.43E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-01	3.16E-01
LF-2-2.5	5050/750-50	2.5	3.34E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-01	2.16E-01
LF-2-5.5	5050/750-50	5.5	8.17E-05		0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.84E-03	4.58E-02
LF-2-7.5	5050/750-50	7.5	2.25E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-02	2.30E-01
LF-2-15.5	5050/750-50	15.5	4.49E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-03	1.63E-02
LF-3-2.5	5050/750-50	2.5	5.45E-05		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03	9.29E-03
LF-3-7	5050/750-50	7	1.02E-05		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-03	2.95E-02
LF-3-15	5050/750-50	15	3.54E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.45E-03	1.03E-02
LF-4-2	5050/750-50	2	2.11E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03	4.07E-03
LF-4-3.5	5050/750-50	3.5	5.58E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.92E-02	2.64E-01
LF-4-15	5050/750-50	15	6.54E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-04	5.98E-03
LF-5-2	5050/750-50	2	1.29E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-03	9.25E-03
LF-5-3.5	5050/750-50	3.5	3.41E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-02	1.88E-01
LF-5-11	5050/750-50	11	4.02E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-04	3.81E-03
LF-5-15	5050/750-50	15	6.67E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-04	8.20E-03
LF-6-2	5050/750-50	2	8.17E-05		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03	1.62E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
LF-6-9	5050/750-50	9	1.63E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-02	2.95E-01
LF-6-15.5	5050/750-50	15.5	5.58E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.39E-03	1.49E-02
LF-7-2	5050/750-50	2	1.23E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03	2.18E-01
LF-7-4	5050/750-50	4	1.43E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-03	1.99E-01
LF-7-10	5050/750-50	10	2.59E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04	6.38E-03
LF-7-15.5	5050/750-50	15.5	6.61E-04		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	7.52E-03
LF-8-2.5	5050/750-50	2.5	1.09E-04		1.70E-04	2.72E-05	5.11E-03	5.06E-04	2.92E-03	3.86E-02
LF-8-5.0	5050/750-50	5	6.74E-04		1.43E-02	2.72E-04	5.11E-03	3.50E-03	3.31E-01	1.38E+00
LF-8-10.0	5050/750-50	10	1.77E-04		1.70E-04	2.72E-05	5.11E-03	5.45E-04	2.33E-02	4.03E-02
LF-9-4.5	5050/750-50	4.5	2.25E-04		3.75E-03	2.72E-05	8.51E-04	6.81E-04	2.14E-02	7.18E-02
LF-9-11.0	5050/750-50	11	1.91E-04		2.76E-02	2.72E-05	4.26E-03	4.86E-04	1.63E-01	6.28E-01
LF-9-15.0	5050/750-50	15	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-03	4.67E-03
LF-10-3.0	5050/750-50	3	7.49E-04		1.36E-03	2.72E-05	8.51E-04	7.39E-04	5.45E-02	1.11E-01
LF-10-4.5	5050/750-50	4.5	2.86E-04		1.70E-04	2.72E-05	8.51E-04	5.45E-04	4.28E-03	1.66E-02
LF-10-7.5	5050/750-50	7.5	2.93E-04		2.04E-03	2.72E-05	8.51E-04	6.42E-04	5.84E-03	5.59E-02
LF-11-2.5	5050/750-50	2.5	1.50E-04		4.09E-03	1.09E-04	1.87E-02	6.42E-04	3.50E-02	3.35E-01
LF-11-5.0	5050/750-50	5	1.36E-04		2.21E-02	2.72E-05	6.81E-03	6.23E-04	8.76E-02	6.03E-01
LF-11-7.5	5050/750-50	7.5	4.77E-04		1.70E-04	2.72E-05	8.51E-03	5.84E-04	8.95E-02	1.03E-01
LF-11-12.5	5050/750-50	12.5	6.13E-04		1.70E-03	2.72E-05	8.51E-03	7.20E-04	3.70E-01	3.87E-01
LF-11-25.0	5050/750-50	25	5.65E-04		1.70E-04	2.72E-05	1.02E-02	7.78E-04	1.19E-03	1.49E-02
LF-12B-2.5	5050/750-50	2.5	5.11E-04		3.06E-03	2.72E-05	8.51E-04	1.03E-03	2.92E-02	6.16E-02
LF-12B-5.0	5050/750-50	5	5.38E-04		1.36E-03	2.72E-05	8.51E-04	7.78E-04	3.50E-02	1.55E-01
LF-12B-7.5	5050/750-50	7.5	1.16E-04		1.70E-04	2.72E-05	8.51E-04	4.28E-04	2.72E-02	4.63E-02
LF-12B-15.0	5050/750-50	15	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-02	2.14E-02
LF-13-2.5	5050/750-50	2.5	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E+00
LF-13-5.0	5050/750-50	5	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E+00
LF-13-7.0	5050/750-50	7	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-02
LF-14-1.5	5050/750-50	1.5	1.16E-04		1.70E-04	2.72E-05	8.51E-04	4.28E-04	1.07E-03	4.27E-03
LF-14-2-7	5050/750-50	2-7	5.92E-04		1.46E-02	8.17E-05	5.45E-02	2.53E-03	3.70E-01	2.13E+00
LF-14-12.5	5050/750-50	12.5	3.20E-04		1.70E-04	2.72E-05	5.11E-03	3.89E-04	2.33E-02	3.21E-02
LF-15-11.0	5050/750-50	11	4.70E-04		1.70E-04	2.72E-05	6.81E-03	6.03E-04	7.98E-03	1.73E-02
LF-15-13.5	5050/750-50	13.5	8.17E-04		1.70E-04	2.72E-05	5.11E-03	5.64E-04	1.11E-02	2.12E-02
LF-16-1.5-3	5050/750-50	1.5-3	1.09E-04		1.70E-04	2.72E-05	8.51E-04	3.89E-04	4.67E-03	1.19E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
LF-16-8.0	5050/750-50	8	1.57E-04		4.43E-03	1.09E-04	3.41E-03	5.64E-04	7.00E-02	3.68E-01
LF-16-13.0	5050/750-50	13	4.22E-04		1.70E-04	2.72E-05	3.41E-03	7.00E-04	1.83E-02	6.41E-02
LF-16-25.0	5050/750-50	25	4.29E-04		1.70E-04	2.72E-05	5.11E-03	4.86E-04	1.13E-03	9.02E-03
LF-17-2.5	5050/750-50	2.5	8.17E-04		1.70E-04	2.72E-05	5.11E-03	5.25E-04	4.67E-03	2.90E-02
LF-17-5.5	5050/750-50	5.5	2.04E-04		3.41E-04	2.72E-05	8.51E-04	4.09E-04	9.92E-04	1.02E-02
LF-17-12.0	5050/750-50	12	3.88E-04		1.70E-04	2.72E-05	8.51E-04	6.42E-04	5.84E-04	3.81E-03
LF-F1-1.0	5050/750-50	1	1.70E-04		1.70E-04	2.72E-05	8.51E-04	4.48E-04	3.89E-02	7.18E-02
SB-1-5.0	5050/750-50	5	1.57E-04		1.53E-02	4.09E-04	1.19E-02	7.00E-04	9.34E-02	2.47E+01
SB-1-7.0	5050/750-50	7	1.97E-04		3.41E-04	6.81E-05	5.11E-03	1.17E-04	5.25E-02	4.59E+00
SB-1-9.5	5050/750-50	9.5	5.38E-04		1.70E-04	6.81E-05	8.51E-04	5.25E-04	8.56E-03	1.86E-02
SB-2-2.5	5050/750-50	2.5	1.63E-04		1.70E-04	2.72E-05	8.51E-04	4.28E-04	1.40E-03	9.21E-03
SB-2-7.5	5050/750-50	7.5	3.41E-05		1.70E-03	2.72E-05	3.41E-02	9.73E-05	1.38E-02	8.41E-02
SB-2-12.5	5050/750-50	12.5	1.91E-04		1.70E-04	2.72E-05	8.51E-04	3.89E-04	2.92E-02	3.52E-02
SB-3-2.5	5050/750-50	2.5	2.32E-04		6.81E-04	6.81E-05	8.51E-04	6.62E-04	7.98E-03	2.62E-02
SB-3-4.5	5050/750-50	4.5	5.04E-04		1.12E-02	6.81E-05	8.51E-03	1.48E-03	5.06E-01	9.44E-01
SB-3-7.0	5050/750-50	7	1.29E-04		3.75E-03	6.81E-05	8.51E-04	5.45E-04	1.93E-01	3.92E-01
SB-3-15.0	5050/750-50	15	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-03	4.09E-03
SB-4-2.5	5050/750-50	2.5	1.09E-04		1.70E-04	6.81E-05	8.51E-04	4.67E-04	7.98E-04	8.76E-03
SB-4-7.5	5050/750-50	7.5	7.49E-05		1.70E-03	6.81E-05	8.51E-03	9.73E-05	2.92E-02	6.50E-01
SB-4-12.0	5050/750-50	12	2.52E-04		1.70E-04	6.81E-05	1.02E-02	5.84E-04	3.11E-02	4.49E-02
SB-5-9.5	5050/750-50	9.5	2.93E-04		2.38E-03	2.72E-05	8.51E-04	5.64E-04	1.79E-02	1.42E-01
SB-6-2.5	5050/750-50	2.5	4.90E-04		1.67E-02	6.81E-05	1.87E-02	1.95E-03	2.92E-01	7.38E-01
SB-6-7.0	5050/750-50	7	1.09E-04		1.70E-04	6.81E-05	6.81E-03	4.09E-04	5.64E-03	2.76E-02
SB-6-12.0	5050/750-50	12	4.09E-04		1.70E-04	6.81E-05	6.81E-03	3.89E-04	2.72E-02	3.75E-02
SB-7-2.5	5050/750-50	2.5	1.09E-04		1.70E-04	2.72E-05	8.51E-04	4.09E-04	1.13E-03	7.35E-03
SB-7-11.5	5050/750-50	11.5	2.25E-04		4.09E-03	4.36E-04	2.72E-02	8.76E-04	3.11E-01	7.81E-01
SB-7-15.0	5050/750-50	15	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-04	8.95E-04
SB-8-2.5	5050/750-50	2.5	1.16E-04		3.41E-04	2.72E-05	8.51E-04	4.48E-04	1.13E-03	6.39E-03
SB-8-5.0	5050/750-50	5	2.72E-04		1.02E-02	8.17E-05	8.51E-03	1.95E-04	1.46E-01	2.17E-01
SB-8-10.0	5050/750-50	10	3.75E-04		1.70E-04	2.72E-05	1.02E-02	7.00E-04	1.03E-02	7.98E-02
SB-9-2.5	5050/750-50	2.5	3.95E-04		1.50E-02	3.54E-04	2.38E-02	7.39E-04	1.50E-01	2.38E+00
SB-9-7.5	5050/750-50	7.5	2.72E-05		3.75E-03	1.36E-04	8.51E-04	3.31E-04	5.84E-02	4.49E-01
SB-9-12.5	5050/750-50	12.5	6.81E-04		1.70E-04	2.72E-05	8.51E-03	8.17E-04	1.83E-01	2.00E-01

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
SB-10-5.0	5050/750-50	5	2.38E-04		7.83E-03	2.72E-05	5.11E-03	5.84E-04	2.14E-01	2.41E+00
SB-10-7.0	5050/750-50	7	3.00E-04		1.70E-04	2.72E-05	8.51E-04	6.03E-04	2.72E-03	9.22E-03
SB-10-10.0	5050/750-50	10	2.93E-04		1.70E-04	2.72E-05	3.41E-03	6.81E-04	5.06E-03	1.55E-02
SB-11-2.5	5050/750-50	2.5	6.81E-05		1.70E-04	2.72E-05	8.51E-03	4.48E-04	4.09E-03	3.37E-02
SB-11-7.5	5050/750-50	7.5	3.75E-04		1.70E-04	2.72E-05	8.51E-03	5.45E-04	4.67E-04	2.95E-02
SB-11-12.5	5050/750-50	12.5	8.17E-04		1.70E-04	2.72E-05	3.41E-03	7.98E-04	2.92E-02	4.91E-02
SB-12-2.0	5050/750-50	2	4.09E-04		1.57E-02	3.00E-04	1.19E-02	4.67E-04	1.79E-01	2.13E+00
SB-12-5.0	5050/750-50	5	2.25E-04		6.13E-02	2.72E-05	1.70E-03	1.11E-03	2.33E-01	1.44E+00
SB-12-12.0	5050/750-50	12	4.70E-04		1.70E-04	2.72E-05	8.51E-04	6.23E-04	5.25E-02	6.32E-02
SB-13-2.5	5050/750-50	2.5	1.09E-03		1.84E-02	2.72E-05	8.51E-04	7.78E-04	6.03E-02	1.32E-01
SB-13-7.5	5050/750-50	7.5	3.00E-04		1.19E-02	2.72E-05	8.51E-04	4.28E-04	5.25E-02	2.14E-01
SB-13-10.0	5050/750-50	10	2.11E-04		1.70E-04	2.72E-05	8.51E-04	3.11E-04	9.73E-02	1.03E-01
SB-13-15.0	5050/750-50	15	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-02	7.00E-02
SB-14-2.0	5050/750-50	2	8.17E-05		1.70E-04	2.72E-05	8.51E-04	4.28E-04	3.89E-03	6.59E-02
SB-14-5.0	5050/750-50	5	1.91E-04		1.70E-04	2.72E-05	8.51E-04	4.09E-04	3.11E-03	1.67E-02
SB-14-10	5050/750-50	10	5.58E-04		6.81E-04	8.17E-05	8.51E-04	4.67E-04	1.85E-02	2.69E-01
SB-15-3.5	5050/750-50	3.5	2.45E-04		1.70E-04	2.72E-05	8.51E-04	8.76E-04	2.92E-02	6.33E-02
SB-15-6.0	5050/750-50	6	1.63E-04		6.81E-04	2.72E-05	8.51E-04	4.67E-04	1.11E-02	3.27E-02
SB-15-11.0	5050/750-50	11	8.17E-04		1.70E-04	2.72E-05	8.51E-04	7.98E-04	1.54E-02	2.62E-02
SB-16-5.0	5050/750-50	5	8.85E-05		1.70E-03	6.81E-05	8.51E-03	1.95E-04	4.86E-02	2.07E-01
SB-16-6.5	5050/750-50	6.5	1.36E-04		1.70E-04	3.27E-04	8.51E-04	3.11E-04	4.48E-04	2.85E-02
SB-17-2.0	5050/750-50	2	1.09E-04		6.81E-04	2.72E-05	8.51E-04	4.48E-04	1.19E-02	3.13E-02
SB-17-5.0	5050/750-50	5	2.25E-04		1.70E-04	2.72E-05	8.51E-04	2.92E-04	6.23E-04	1.02E-01
SB-17-6.5	5050/750-50	6.5	2.52E-04		1.70E-04	2.72E-05	5.11E-03	6.23E-04	3.31E-03	2.43E-01
SB-17-12.0	5050/750-50	12	4.97E-04		1.70E-04	2.72E-05	8.51E-03	4.67E-04	4.86E-04	1.19E-02
SB-18-1.5	5050/750-50	1.5	5.45E-05		1.70E-04	2.72E-05	1.02E-02	5.25E-04	1.89E-03	2.08E-02
SB-18-2.5	5050/750-50	2.5	1.70E-04		6.81E-04	2.72E-05	1.36E-02	1.56E-04	1.58E-01	2.36E-01
SB-18-5.0	5050/750-50	5	2.45E-04		1.70E-04	2.72E-05	6.81E-03	1.75E-04	1.36E-01	1.96E-01
SB-18-7.0	5050/750-50	7	8.17E-05		1.70E-04	2.72E-05	8.51E-04	3.70E-04	2.53E-03	2.41E-02
SB-19-2.5	5050/750-50	2.5	5.92E-04		3.23E-02	1.91E-04	8.51E-03	2.14E-03	6.23E-01	1.62E+00
SB-19-5.0B	5050/750-50	5	6.67E-04		3.00E-02	8.17E-05	8.51E-04	1.95E-03	1.17E+00	2.02E+00
SB-19-10.0	5050/750-50	10	1.43E-04		6.81E-04	2.72E-05	8.51E-03	4.86E-04	6.62E-02	1.41E-01
SB-20-2.5	5050/750-50	2.5	8.17E-05		1.70E-04	2.72E-05	8.51E-04	4.48E-04	8.76E-04	3.45E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
SB-20-9.5	5050/750-50	9.5	3.81E-04		1.70E-03	2.72E-05	2.04E-02	9.73E-05	7.39E-01	1.03E+00
SB-20-16.0	5050/750-50	16	2.52E-04		1.70E-04	2.72E-05	8.51E-04	4.09E-04	2.72E-03	5.44E-03
SB-21-2.5	5050/750-50	2.5	8.17E-05		1.19E-02	2.72E-05	5.11E-03	4.28E-04	1.63E-01	1.37E+00
SB-21-7.5	5050/750-50	7.5	4.70E-04		1.70E-04	2.72E-05	8.51E-03	9.15E-04	1.77E-01	1.90E-01
SB-21-11.5	5050/750-50	11.5	3.00E-04		1.70E-04	2.72E-05	8.51E-04	4.48E-04	3.70E-01	3.73E-01
SB-21-17.5	5050/750-50	17.5	5.38E-04		1.70E-04	2.72E-05	8.51E-04	5.06E-04	3.11E-01	3.18E-01
SB-21-24.5	5050/750-50	24.5	5.38E-04		1.70E-04	2.72E-05	5.11E-03	6.03E-04	2.14E-02	3.25E-02
SB-21-34.5	5050/750-50	34.5	1.02E-03		1.70E-04	2.72E-05	1.02E-02	6.62E-04	2.53E-03	1.65E-02
SB-21-42.0	5050/750-50	42	4.90E-04		1.70E-04	2.72E-05	1.53E-02	6.42E-04	1.11E-03	1.90E-02
SB-21-49.5	5050/750-50	49.5	2.45E-04		1.70E-04	2.72E-05	1.02E-02	6.42E-04	1.01E-03	2.22E-02
SS-1-2.5	5050/750-50	2.5	1.29E-04		1.02E-03	5.45E-05	8.51E-04	1.03E-03	5.25E-03	2.95E-01
SS-2-2.0	5050/750-50	2	1.36E-04		1.36E-03	2.72E-05	8.51E-04	6.62E-04	5.84E-02	7.01E-01
SS-3-2.0	5050/750-50	2	1.23E-04		1.02E-03	2.72E-05	8.51E-04	4.67E-04	4.67E-02	1.93E-01
SS-4-1.5	5050/750-50	1.5	6.13E-05		1.02E-03	2.72E-05	8.51E-04	6.81E-04	1.95E-02	7.96E-02
SS-5-1.5	5050/750-50	1.5	2.79E-04		1.70E-04	6.81E-05	8.51E-04	1.01E-03	7.39E-03	1.06E-01
SS-6-2.0	5050/750-50	2	1.91E-04		1.63E-02	6.81E-05	3.41E-03	4.86E-04	2.14E-01	7.54E-01
SS-7-2.0	5050/750-50	2	3.00E-04		1.70E-04	6.81E-05	8.51E-04	1.38E-03	1.87E-03	7.83E-03
SS-8-2.0	5050/750-50	2	1.63E-04		4.77E-03	2.72E-05	4.43E-02	7.98E-04	3.50E-01	1.09E+00
SS-10-2.5	5050/750-50	2.5	8.17E-05		1.46E-02	2.72E-05	3.41E-03	3.31E-04	7.39E-02	2.35E-01
SS-11-2.0	5050/750-50	2	2.52E-04		3.41E-03	4.36E-04	5.11E-02	6.03E-04	2.53E-01	5.31E-01
SS-12-2.5	5050/750-50	2.5	8.17E-04		2.38E-03	6.81E-05	8.51E-04	6.81E-04	3.89E-02	1.26E-01
SS-13-2.0	5050/750-50	2	2.59E-04		1.70E-04	6.81E-05	8.51E-04	7.59E-04	1.65E-02	2.23E-02
SS-13-2.5	5050/750-50	2.5	2.59E-04		1.70E-04	2.72E-05	3.41E-03	7.20E-04	2.92E-02	6.30E-02
SS-18-2.0	5050/750-50	2	4.29E-04		1.67E-02	1.63E-04	5.11E-03	5.64E-04	1.54E-01	1.06E+00
SS-19-2.5	5050/750-50	2.5	6.81E-04		1.70E-04	2.72E-05	8.51E-04	6.81E-04	3.11E-03	2.14E-02
B1		5	7.29E-05		0.00E+00	0.00E+00	0.00E+00	6.09E-04	2.88E-02	6.77E-02
B1		10	6.80E-04		0.00E+00	0.00E+00	0.00E+00	8.11E-04	2.08E-03	1.70E-02
B2		10	6.08E-04		0.00E+00	0.00E+00	0.00E+00	4.28E-04	2.90E-01	3.03E-01
B3		5	1.27E-04		0.00E+00	0.00E+00	0.00E+00	3.33E-04	3.17E-02	3.82E-02
B3		10	8.17E-04		0.00E+00	0.00E+00	0.00E+00	7.22E-04	4.11E-02	5.62E-02
B4		5	1.43E-04		0.00E+00	0.00E+00	0.00E+00	3.85E-04	6.40E-02	7.82E-02
B4		10	5.78E-04		0.00E+00	0.00E+00	0.00E+00	3.95E-04	6.81E-02	8.05E-02
MW1		5	1.67E-04		2.18E-03	0.00E+00	0.00E+00	2.78E-04	1.79E-02	5.10E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
MW1		10	6.28E-04		0.00E+00	0.00E+00	0.00E+00	6.58E-04	1.75E-02	3.97E-02
MW2		5	9.19E-05		0.00E+00	0.00E+00	0.00E+00	3.79E-04	7.39E-02	9.46E-02
MW2		10	3.73E-04		0.00E+00	0.00E+00	0.00E+00	5.37E-04	2.72E-01	2.85E-01
MW3		10	4.68E-04		0.00E+00	0.00E+00	0.00E+00	6.09E-04	2.88E-02	4.05E-02
MW4		10	5.41E-04		0.00E+00	0.00E+00	0.00E+00	3.17E-04	4.69E-04	1.30E-02
CW-1	5200	6.5	1.29E-04		1.09E-01	6.81E-04	1.70E-03	1.07E-03	7.20E-01	2.07E+00
CW-1	5200	8	3.00E-04		6.47E-03	5.45E-05	8.51E-04	4.28E-03	1.26E+00	1.44E+00
CW-1	5200	9	2.86E-03		1.70E-04	1.36E-05	3.41E-03	1.95E-02	2.33E-02	3.06E-01
CW-1	5200	11	1.70E-04		1.70E-04	1.36E-05	8.51E-04	5.84E-04	1.52E-03	7.31E-03
CW-2	5200	3.5	4.97E-04		1.74E-02	1.63E-04	1.70E-03	8.56E-04	1.69E-01	4.82E-01
CW-2	5200	5	3.27E-04		1.63E-02	1.63E-04	8.51E-04	7.98E-04	2.14E-01	6.34E-01
CW-2	5200	7.5	5.18E-04		1.70E-04	1.36E-05	8.51E-04	2.33E-03	7.59E-03	3.87E-01
CW-2	5200	9.5	5.72E-04		1.02E-03	1.36E-05	8.51E-04	3.11E-03	2.14E-02	3.23E-01
CW-3	5200	3.5	6.33E-04		2.69E-02	3.54E-04	1.36E-02	1.36E-03	1.67E-01	6.58E-01
CW-3	5200	6	4.70E-04		1.70E-04	1.36E-05	1.70E-03	2.92E-03	1.30E-01	2.79E-01
CW-3	5200	9	6.06E-04		1.70E-04	1.36E-05	1.70E-03	4.67E-03	1.15E-03	1.75E-01
CW-3	5200	11	4.09E-03		1.70E-04	1.36E-05	6.81E-03	1.52E-02	7.78E-03	2.19E-01
CW-4	5200	5.5	4.70E-04		4.09E-02	2.45E-04	6.81E-03	1.67E-03	4.48E-01	8.33E-01
CW-4	5200	7.5	5.52E-04		1.70E-04	1.36E-05	8.51E-04	6.23E-04	2.14E-02	2.88E-02
CW-4	5200	11.5	1.43E-04		1.26E-02	1.36E-04	8.51E-04	1.05E-03	1.09E-03	1.38E-01
CW-4	5200	12.5	3.00E-04		4.09E-03	8.17E-05	8.51E-04	7.78E-04	1.93E-01	3.64E-01
CW-5	5200	7.5	3.06E-04		1.02E-03	1.36E-05	8.51E-04	7.78E-04	1.58E-01	2.61E-01
CW-5	5200	11	3.20E-04		3.41E-03	3.27E-04	8.51E-04	7.98E-04	4.28E-02	1.67E-01
CSB-1	5051/PGE	6-6.5'	3.41E-06		6.81E-04	4.09E-05	8.51E-03	6.62E-04	5.25E-02	3.19E+00
CSB-1	5051/PGE	8-8.5'	3.41E-06		1.70E-04	6.81E-06	8.51E-04	4.48E-04	1.17E-03	2.64E-02
CSB-3	5050	5'	3.41E-06		1.70E-04	6.81E-06	8.51E-04	2.72E-04	3.50E-04	9.93E-03
CSB-4	5050	4'	3.41E-06		1.70E-04	6.81E-06	5.11E-03	7.78E-04	2.33E-03	5.67E-02
CSB-5	5050/750-50	4'	3.41E-06		1.70E-04	6.81E-06	6.81E-03	8.56E-04	3.50E-03	7.40E-02
CSB-6	5050/750-50	4'	3.41E-06		1.70E-04	6.81E-06	3.41E-03	6.23E-04	1.26E-03	2.49E-02
CSB-8	5050	5'-5.5'	3.41E-06		1.70E-04	6.81E-06	5.11E-03	3.70E-04	2.14E-02	1.01E-01
CSB-8	5050	10'-10.5'	3.41E-06		3.41E-04	6.81E-06	1.02E-02	4.67E-04	5.64E-04	1.70E-02
CSB-8	5050	15'-15.5'	3.41E-06		1.70E-04	6.81E-06	1.70E-02	1.69E-03	9.34E-04	3.21E-02
CSB-8	5050	19.5'-20'	3.41E-06		3.41E-04	6.81E-06	3.41E-03	4.86E-04	7.78E-04	8.70E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Ni	Pb	Sb	Se	Tl	V	Zn	Metals Total
CSB-8	5050	20'-20.5'	3.41E-06		6.81E-04	6.81E-06	1.02E-02	6.03E-04	8.95E-04	1.89E-02
CSB-8	5050	25'-25.5'	3.41E-06		1.70E-04	6.81E-06	6.81E-03	7.20E-04	6.03E-04	1.54E-02
CSB-8	5050	30-30.5	3.41E-06		1.70E-04	6.81E-06	1.36E-02	9.15E-04	1.01E-03	2.01E-02
CSB-8	5050	35'-35.5'	3.41E-06		1.70E-04	6.81E-06	1.02E-02	5.25E-04	7.00E-04	1.40E-02
CSB-8	5050	40'-40.5'	3.41E-06		1.70E-04	6.81E-06	1.02E-02	5.45E-04	6.62E-04	1.70E-02
CSB-8	5050	45'-45.5'	3.41E-06		1.70E-04	6.81E-06	1.53E-02	7.20E-04	9.34E-04	2.53E-02
CSB-8	5050	50'-50.5'	3.41E-06		1.70E-04	6.81E-06	8.51E-03	6.62E-04	5.84E-04	1.56E-02
CSB-8	5050	55'-55.5'	3.41E-06		1.70E-04	6.81E-06	8.51E-03	5.06E-04	5.84E-04	1.36E-02
CSB-8	5050	60'-60.5'	3.41E-06		3.41E-04	6.81E-06	1.02E-02	4.86E-04	7.59E-04	1.42E-02
CSB-9	5051	5'-5.5'	3.41E-06		1.70E-04	6.81E-06	1.19E-02	7.00E-04	9.15E-04	3.74E-02
CSB-9	5051	10'-10.5'	3.41E-06		1.70E-04	6.81E-06	1.36E-02	5.64E-04	1.44E-03	7.20E-02
CSB-9	5051	15'-15.5'	2.04E-05		1.70E-04	6.81E-06	8.51E-03	6.23E-04	6.23E-02	1.21E-01
CSB-9	5051	20'-20.5'	3.41E-06		1.70E-04	6.81E-06	8.51E-03	4.86E-04	2.72E-03	1.57E-02
CSB-9	5051	25'-25.5'	3.41E-06		1.70E-04	6.81E-06	6.81E-03	4.67E-04	5.84E-04	9.62E-03
CSB-9	5051	30'-30.5'	3.41E-06		3.41E-04	6.81E-06	1.02E-02	7.39E-04	7.78E-04	1.38E-02
CSB-9	5051	35'-35.5'	3.41E-06		1.70E-04	6.81E-06	1.19E-02	8.76E-04	7.78E-04	2.08E-02
CSB-9	5051	40'-40.5'	3.41E-06		1.70E-04	6.81E-06	1.02E-02	6.03E-04	6.42E-04	1.34E-02
CSB-9	5051	45'-45.5'	3.41E-06		6.81E-04	6.81E-06	1.02E-02	7.78E-04	8.76E-04	1.79E-02
CSB-9	5051	50'-50.5'	3.41E-06		1.70E-04	6.81E-06	1.02E-02	5.64E-04	6.62E-04	1.68E-02
CSB-9	5051	55'-55.5'	3.41E-06		1.70E-04	6.81E-06	1.02E-02	7.20E-04	1.42E-03	2.26E-02
CSB-9	5051	60'-60.5'	3.41E-06		1.70E-04	6.81E-06	6.81E-03	6.42E-04	7.00E-04	1.34E-02
CW-6	5200	6-6.5'	3.41E-05		2.72E-03	2.72E-04	1.02E-02	1.07E-03	4.09E-01	7.07E+00
CW-7	5200	6-6.5'	3.41E-06		1.02E-03	6.27E-05	8.51E-04	4.28E-03	1.63E+00	9.43E+00
CW-7	5200	16-16.5'	3.41E-06		6.81E-04	6.81E-06	8.51E-04	7.59E-04	7.20E-04	1.72E-02
CW-8	5051/EBMUD	5'	3.41E-06		1.70E-04	6.81E-06	1.70E-03	6.62E-04	4.28E-03	1.79E-01
CW-9	5051/EBMUD	5'	3.41E-06		1.70E-04	6.81E-06	3.41E-03	7.59E-04	1.21E-03	4.28E-02
CW-10	5051/PGE	11-11.5	3.41E-06		6.81E-04	6.81E-06	5.11E-03	9.73E-04	1.09E-03	3.64E-02
CW-12	5051/PGE	11-11.5	3.41E-06		6.81E-04	6.81E-06	3.41E-03	7.00E-04	1.09E-03	2.14E-02
CW-13	5050	5'	3.41E-06		1.70E-04	6.81E-06	3.41E-03	5.45E-04	2.00E-03	4.88E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Be	Co	Metals Total
B-2	5051	4	2.12E-02	8.47E-04	8.47E-04
B-3	5051	4	2.12E-02	2.12E-02	2.12E-02
B-4	5051	11.5	2.12E-02	1.02E-02	1.02E-02
BA-4	5051	2	2.12E-02	1.44E-02	1.44E-02
BA-4	5051	2	7.64E-03	3.66E-03	3.66E-03
BA-4	5051	6.5	9.93E-03	6.95E-03	6.95E-03
BA-4	5051	6.5	2.12E-02	8.47E-03	8.47E-03
BA-4	5051	8	4.24E-03	8.13E-03	8.13E-03
BA-4	5051	8	1.04E-02	9.99E-03	9.99E-03
BA-4	5051	9.5	7.34E-03	3.34E-03	3.34E-03
BA-4	5051	9.5	8.49E-03	3.89E-03	3.89E-03
BA-4	5051	12	6.32E-03	2.89E-03	2.89E-03
B-5	5051	11.5	2.12E-02	5.08E-03	5.08E-03
BA-5	5051	4	2.12E-02	2.79E-02	2.79E-02
BA-5	5051	4	9.25E-03	2.81E-01	2.81E-01
BA-5	5051	8	1.27E-02	7.20E-03	7.20E-03
BA-5	5051	8	1.01E-02	5.28E-03	5.28E-03
BA-5	5051	9	1.27E-02	3.39E-03	3.39E-03
BA-5	5051	9	4.24E-03	3.39E-04	3.39E-04
BA-5	5051	9	6.92E-03	3.13E-03	3.13E-03
BA-5	5051	10	1.27E-02	4.15E-03	4.15E-03
BA-5	5051	10	9.89E-03	3.17E-03	3.17E-03
BA-5	5051	13	7.34E-03	4.86E-03	4.86E-03
BA-5	5051	16	1.12E-02	1.26E-02	1.26E-02
B-6	5051	6.5	4.24E-03	8.47E-05	8.47E-05
B-7	5051	6.5	2.12E-02	1.69E-03	1.69E-03
B-8	5051	7.5	2.12E-02	1.02E-02	1.02E-02
B-9	5051	2	1.27E-02	8.13E-03	8.13E-03
B-9	5051	7	2.12E-02	6.35E-03	6.35E-03
B-9	5051	11.5	8.49E-03	6.01E-03	6.01E-03
B-9	5051	16.5	1.70E-02	5.50E-03	5.50E-03
B-9	5051	19.5	1.27E-02	8.47E-03	8.47E-03
B-10	5051	2	1.27E-02	1.52E-02	1.52E-02
B-10	5051	6	1.70E-02	6.77E-03	6.77E-03
B-10	5051	10	1.70E-02	1.19E-02	1.19E-02
B-10	5051	13	8.49E-03	4.49E-03	4.49E-03
B-10	5051	16	1.70E-02	8.47E-03	8.47E-03
B-11	5051	0.5	8.06E-02	2.54E-03	2.54E-03
B-11	5051	5	2.12E-03	8.47E-05	8.47E-05
B-11	5051	8	2.12E-03	2.46E-02	2.46E-02
B-11	5051	12.5	8.49E-03	6.26E-03	6.26E-03
B-11	5051	16	1.27E-02	2.54E-02	2.54E-02
B-12	5051	17	1.70E-02	8.30E-03	8.30E-03
B-12	5051	20	1.27E-02	1.19E-02	1.19E-02
B-12	5051	24.5	1.70E-02	1.19E-02	1.19E-02
B-13	5051	1	1.70E-02	1.02E-02	1.02E-02
B-13	5051	13	1.70E-02	9.31E-03	9.31E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Be	Co	Metals Total
B-13	5051	18	1.70E-02	1.10E-02	1.10E-02
B-13	5051	22	1.70E-02	8.13E-03	8.13E-03
B-14	5051	2	8.49E-03	1.02E-02	1.02E-02
B-14	5051	7	2.12E-02	6.86E-03	6.86E-03
B-14	5051	9.5	1.70E-02	7.87E-03	7.87E-03
B-14	5051	13	1.27E-02	4.57E-03	4.57E-03
B-14	5051	16	1.27E-02	9.31E-03	9.31E-03
MWA-1	5051	1	1.70E-02	1.27E-02	1.27E-02
MWA-1	5051	1.5	1.07E-02	6.00E-02	6.00E-02
MWA-1	5051	2	8.49E-03	6.52E-03	6.52E-03
MWA-1	5051	3	1.81E-02	3.01E-03	3.01E-03
MWA-1	5051	6	2.12E-02	3.30E-03	3.30E-03
MWA-1	5051	7.5	1.91E-02	8.97E-03	8.97E-03
MWA-1	5051	8	2.97E-02	5.84E-03	5.84E-03
MWA-1	5051	8.5	2.12E-02	2.54E-02	2.54E-02
MWA-1	5051	8.5	4.80E-03	7.48E-03	7.48E-03
MWA-1	5051	9	2.12E-03	1.69E-03	1.69E-03
MWA-1	5051	10	2.12E-02	1.44E-02	1.44E-02
MWA-1	5051	10	1.34E-02	6.63E-03	6.63E-03
MWA-1	5051	11.5	1.18E-02	5.05E-03	5.05E-03
MWA-1	5051	13	1.32E-02	4.14E-03	4.14E-03
MWA-1	5051	14.5	9.55E-03	4.55E-03	4.55E-03
MWA-1	5051	17	6.96E-03	3.60E-03	3.60E-03
MWA-2	5051	5.5	1.29E-02	3.31E-03	3.31E-03
MWA-2	5051	6	2.12E-02	4.23E-03	4.23E-03
MWA-2	5051	9.5	8.70E-03	1.70E-03	1.70E-03
MWA-2	5051	10	1.27E-02	3.56E-03	3.56E-03
MWA-2	5051	11.5	1.27E-02	6.52E-03	6.52E-03
MWA-2	5051	11.5	7.51E-03	4.57E-03	4.57E-03
MWA-2	5051	13.5	8.11E-03	5.90E-03	5.90E-03
MWA-2	5051	14.5	1.19E-02	9.40E-03	9.40E-03
MWA-3	5051	4.5	1.37E-02	5.38E-03	5.38E-03
MWA-3	5051	5	2.12E-02	7.11E-03	7.11E-03
MWA-3	5051	9.5	1.01E-02	7.83E-03	7.83E-03
MWA-3	5051	10	1.70E-02	1.19E-02	1.19E-02
MWA-3	5051	10.5	1.13E-02	2.36E-02	2.36E-02
MWA-3	5051	11	2.12E-02	1.19E-02	1.19E-02
MWA-3	5051	11.5	2.12E-02	6.77E-03	6.77E-03
MWA-3	5051	11.5	9.72E-03	2.28E-01	2.28E-01
MWA-3	5051	12	2.12E-02	2.71E-02	2.71E-02
MWA-3	5051	12.5	9.93E-03	3.89E-03	3.89E-03
MWA-3	5051	13	1.27E-02	5.25E-03	5.25E-03
MWA-3	5051	13.5	9.17E-03	2.20E-03	2.20E-03
MWA-3	5051	15	4.29E-03	3.80E-03	3.80E-03
MW-4	5051	1	8.49E-03	5.42E-03	5.42E-03
MW-4	5051	8.5	2.12E-02	5.08E-03	5.08E-03
MW-4	5051	10.5	2.12E-02	1.35E-02	1.35E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Be	Co	Metals Total
MW-4	5051	14	8.49E-03	4.74E-03	4.74E-03
MW-4	5051	15.5	1.27E-02	8.38E-03	8.38E-03
MW-5	5051	1	2.12E-02	8.30E-03	8.30E-03
MW-5	5051	10.5	1.70E-02	7.11E-03	7.11E-03
MW-5	5051	13.5	1.27E-02	1.52E-02	1.52E-02
MW-5	5051	17.5	1.27E-02	6.43E-03	6.43E-03
MW-6	5051	1	1.70E-02	1.19E-02	1.19E-02
MW-6	5051	7.5	2.12E-02	2.03E-02	2.03E-02
MW-6	5051	9.5	2.12E-03	8.47E-05	8.47E-05
MW-6	5051	13	1.27E-02	6.10E-03	6.10E-03
MW-6	5051	16	1.70E-02	8.30E-03	8.30E-03
MW-7	5051	1	8.49E-03	4.23E-03	4.23E-03
MW-7	5051	5.5	1.70E-02	1.10E-02	1.10E-02
MW-7	5051	10.5	8.49E-03	1.27E-02	1.27E-02
MW-7	5051	13.5	8.49E-03	3.13E-02	3.13E-02
MW-7	5051	16.5	1.70E-02	9.31E-03	9.31E-03
MW-8	5051	1	1.27E-02	7.79E-03	7.79E-03
MW-8	5051	8.5	1.27E-02	7.62E-03	7.62E-03
MW-8	5051	10	4.24E-03	3.22E-03	3.22E-03
MW-8	5051	15.5	1.27E-02	6.10E-03	6.10E-03
LF-1-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00
LF-1-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00
LF-1-21	5050/750-50	21	0.00E+00	0.00E+00	0.00E+00
LF-2-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00
LF-2-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	0.00E+00
LF-2-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00
LF-2-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00
LF-3-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00
LF-3-7	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00
LF-3-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00
LF-4-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00
LF-4-3.5	5050/750-50	3.5	0.00E+00	0.00E+00	0.00E+00
LF-4-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00
LF-5-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00
LF-5-3.5	5050/750-50	3.5	0.00E+00	0.00E+00	0.00E+00
LF-5-11	5050/750-50	11	0.00E+00	0.00E+00	0.00E+00
LF-5-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00
LF-6-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00
LF-6-9	5050/750-50	9	0.00E+00	0.00E+00	0.00E+00
LF-6-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00
LF-7-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00
LF-7-4	5050/750-50	4	0.00E+00	0.00E+00	0.00E+00
LF-7-10	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00
LF-7-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00
LF-8-2.5	5050/750-50	2.5	8.49E-03	7.28E-03	7.28E-03
LF-8-5.0	5050/750-50	5	2.12E-03	1.27E-04	1.27E-04
LF-8-10.0	5050/750-50	10	8.49E-03	3.81E-03	3.81E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Be	Co	Metals Total
LF-9-4.5	5050/750-50	4.5	2.12E-02	9.31E-03	9.31E-03
LF-9-11.0	5050/750-50	11	1.06E-02	1.35E-02	1.35E-02
LF-9-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00
LF-10-3.0	5050/750-50	3	2.12E-03	1.02E-02	1.02E-02
LF-10-4.5	5050/750-50	4.5	4.24E-03	1.10E-02	1.10E-02
LF-10-7.5	5050/750-50	7.5	4.24E-03	5.16E-03	5.16E-03
LF-11-2.5	5050/750-50	2.5	2.12E-03	3.64E-03	3.64E-03
LF-11-5.0	5050/750-50	5	5.09E-02	6.77E-03	6.77E-03
LF-11-7.5	5050/750-50	7.5	8.49E-03	6.26E-03	6.26E-03
LF-11-12.5	5050/750-50	12.5	2.12E-02	6.77E-03	6.77E-03
LF-11-25.0	5050/750-50	25	1.27E-02	1.02E-02	1.02E-02
LF-12B-2.5	5050/750-50	2.5	8.49E-03	8.47E-03	8.47E-03
LF-12B-5.0	5050/750-50	5	2.12E-03	7.96E-03	7.96E-03
LF-12B-7.5	5050/750-50	7.5	2.12E-03	3.89E-03	3.89E-03
LF-12B-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00
LF-13-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00
LF-13-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00
LF-13-7.0	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00
LF-14-1.5	5050/750-50	1.5	2.97E-02	7.96E-03	7.96E-03
LF-14-2-7	5050/750-50	2-7	2.12E-02	8.47E-03	8.47E-03
LF-14-12.5	5050/750-50	12.5	8.49E-03	4.23E-03	4.23E-03
LF-15-11.0	5050/750-50	11	8.49E-03	7.53E-03	7.53E-03
LF-15-13.5	5050/750-50	13.5	8.49E-03	1.10E-02	1.10E-02
LF-16-1.5-3	5050/750-50	1.5-3	2.12E-02	7.11E-03	7.11E-03
LF-16-8.0	5050/750-50	8	8.49E-03	6.94E-03	6.94E-03
LF-16-13.0	5050/750-50	13	2.12E-03	4.40E-03	4.40E-03
LF-16-25.0	5050/750-50	25	1.27E-02	7.62E-03	7.62E-03
LF-17-2.5	5050/750-50	2.5	2.12E-03	9.31E-03	9.31E-03
LF-17-5.5	5050/750-50	5.5	4.24E-03	7.37E-03	7.37E-03
LF-17-12.0	5050/750-50	12	4.24E-03	1.27E-02	1.27E-02
LF-F1-1.0	5050/750-50	1	8.49E-03	8.47E-03	8.47E-03
SB-1-5.0	5050/750-50	5	2.12E-03	1.27E-04	1.27E-04
SB-1-7.0	5050/750-50	7	2.12E-03	3.30E-03	3.30E-03
SB-1-9.5	5050/750-50	9.5	8.49E-03	1.69E-02	1.69E-02
SB-2-2.5	5050/750-50	2.5	2.55E-02	9.31E-03	9.31E-03
SB-2-7.5	5050/750-50	7.5	2.12E-03	9.31E-03	9.31E-03
SB-2-12.5	5050/750-50	12.5	4.24E-03	4.91E-03	4.91E-03
SB-3-2.5	5050/750-50	2.5	2.12E-02	8.38E-03	8.38E-03
SB-3-4.5	5050/750-50	4.5	4.24E-02	1.86E-02	1.86E-02
SB-3-7.0	5050/750-50	7	2.12E-03	3.89E-03	3.89E-03
SB-3-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00
SB-4-2.5	5050/750-50	2.5	3.82E-02	8.47E-03	8.47E-03
SB-4-7.5	5050/750-50	7.5	4.24E-02	1.35E-02	1.35E-02
SB-4-12.0	5050/750-50	12	1.27E-02	7.45E-03	7.45E-03
SB-5-9.5	5050/750-50	9.5	8.49E-03	6.94E-03	6.94E-03
SB-6-2.5	5050/750-50	2.5	2.12E-03	4.23E-03	4.23E-03
SB-6-7.0	5050/750-50	7	1.27E-02	2.79E-03	2.79E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Be	Co	Metals Total
SB-6-12.0	5050/750-50	12	8.49E-03	9.31E-03	9.31E-03
SB-7-2.5	5050/750-50	2.5	2.97E-02	6.94E-03	6.94E-03
SB-7-11.5	5050/750-50	11.5	1.06E-02	1.27E-02	1.27E-02
SB-7-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00
SB-8-2.5	5050/750-50	2.5	2.97E-02	7.37E-03	7.37E-03
SB-8-5.0	5050/750-50	5	2.12E-02	1.61E-02	1.61E-02
SB-8-10.0	5050/750-50	10	1.27E-02	7.53E-03	7.53E-03
SB-9-2.5	5050/750-50	2.5	8.49E-03	1.02E-02	1.02E-02
SB-9-7.5	5050/750-50	7.5	2.12E-03	1.44E-03	1.44E-03
SB-9-12.5	5050/750-50	12.5	2.55E-02	1.10E-02	1.10E-02
SB-10-5.0	5050/750-50	5	1.27E-02	7.28E-03	7.28E-03
SB-10-7.0	5050/750-50	7	8.49E-03	1.78E-02	1.78E-02
SB-10-10.0	5050/750-50	10	8.49E-03	9.31E-03	9.31E-03
SB-11-2.5	5050/750-50	2.5	1.27E-02	7.28E-03	7.28E-03
SB-11-7.5	5050/750-50	7.5	4.24E-03	4.66E-03	4.66E-03
SB-11-12.5	5050/750-50	12.5	1.27E-02	1.78E-02	1.78E-02
SB-12-2.0	5050/750-50	2	4.24E-03	1.02E-02	1.02E-02
SB-12-5.0	5050/750-50	5	4.67E-02	1.52E-02	1.52E-02
SB-12-12.0	5050/750-50	12	2.12E-03	3.98E-03	3.98E-03
SB-13-2.5	5050/750-50	2.5	2.12E-03	1.52E-02	1.52E-02
SB-13-7.5	5050/750-50	7.5	2.12E-03	6.94E-03	6.94E-03
SB-13-10.0	5050/750-50	10	4.24E-03	3.22E-03	3.22E-03
SB-13-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00
SB-14-2.0	5050/750-50	2	8.49E-03	6.60E-03	6.60E-03
SB-14-5.0	5050/750-50	5	2.12E-03	5.42E-03	5.42E-03
SB-14-10	5050/750-50	10	9.34E-03	8.38E-03	8.38E-03
SB-15-3.5	5050/750-50	3.5	4.24E-03	4.91E-03	4.91E-03
SB-15-6.0	5050/750-50	6	4.24E-03	5.16E-03	5.16E-03
SB-15-11.0	5050/750-50	11	1.27E-02	1.61E-02	1.61E-02
SB-16-5.0	5050/750-50	5	2.12E-02	7.62E-03	7.62E-03
SB-16-6.5	5050/750-50	6.5	4.24E-03	6.86E-03	6.86E-03
SB-17-2.0	5050/750-50	2	2.55E-02	8.13E-03	8.13E-03
SB-17-5.0	5050/750-50	5	2.12E-03	1.27E-04	1.27E-04
SB-17-6.5	5050/750-50	6.5	8.49E-03	1.27E-04	1.27E-04
SB-17-12.0	5050/750-50	12	8.49E-03	6.86E-03	6.86E-03
SB-18-1.5	5050/750-50	1.5	8.49E-03	6.86E-03	6.86E-03
SB-18-2.5	5050/750-50	2.5	2.12E-03	4.49E-03	4.49E-03
SB-18-5.0	5050/750-50	5	2.12E-03	7.79E-03	7.79E-03
SB-18-7.0	5050/750-50	7	4.24E-03	2.54E-03	2.54E-03
SB-19-2.5	5050/750-50	2.5	2.12E-02	1.10E-02	1.10E-02
SB-19-5.0B	5050/750-50	5	2.12E-03	2.54E-02	2.54E-02
SB-19-10.0	5050/750-50	10	2.12E-03	2.37E-03	2.37E-03
SB-20-2.5	5050/750-50	2.5	2.97E-02	8.47E-03	8.47E-03
SB-20-9.5	5050/750-50	9.5	2.12E-02	9.31E-03	9.31E-03
SB-20-16.0	5050/750-50	16	4.24E-03	4.06E-03	4.06E-03
SB-21-2.5	5050/750-50	2.5	2.55E-02	5.59E-03	5.59E-03
SB-21-7.5	5050/750-50	7.5	4.24E-03	4.23E-03	4.23E-03

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Be	Co	Metals Total
SB-21-11.5	5050/750-50	11.5	4.24E-03	4.23E-03	4.23E-03
SB-21-17.5	5050/750-50	17.5	8.49E-03	6.52E-03	6.52E-03
SB-21-24.5	5050/750-50	24.5	1.27E-02	1.19E-02	1.19E-02
SB-21-34.5	5050/750-50	34.5	8.49E-03	3.98E-02	3.98E-02
SB-21-42.0	5050/750-50	42	2.12E-02	1.27E-02	1.27E-02
SB-21-49.5	5050/750-50	49.5	1.70E-02	4.49E-03	4.49E-03
SS-1-2.5	5050/750-50	2.5	2.12E-03	1.27E-04	1.27E-04
SS-2-2.0	5050/750-50	2	4.24E-03	2.29E-03	2.29E-03
SS-3-2.0	5050/750-50	2	4.24E-03	3.13E-03	3.13E-03
SS-4-1.5	5050/750-50	1.5	1.70E-02	8.47E-03	8.47E-03
SS-5-1.5	5050/750-50	1.5	1.70E-02	1.27E-02	1.27E-02
SS-6-2.0	5050/750-50	2	4.24E-03	7.03E-03	7.03E-03
SS-7-2.0	5050/750-50	2	4.24E-03	2.20E-02	2.20E-02
SS-8-2.0	5050/750-50	2	1.27E-02	7.53E-03	7.53E-03
SS-10-2.5	5050/750-50	2.5	2.12E-03	3.89E-03	3.89E-03
SS-11-2.0	5050/750-50	2	4.24E-03	7.62E-03	7.62E-03
SS-12-2.5	5050/750-50	2.5	4.24E-03	1.10E-02	1.10E-02
SS-13-2.0	5050/750-50	2	8.49E-03	7.20E-03	7.20E-03
SS-13-2.5	5050/750-50	2.5	1.27E-02	1.02E-02	1.02E-02
SS-18-2.0	5050/750-50	2	4.24E-03	8.04E-03	8.04E-03
SS-19-2.5	5050/750-50	2.5	1.27E-02	9.31E-03	9.31E-03
B1		5	0.00E+00	6.94E-03	6.94E-03
B1		10	1.87E-02	1.23E-02	1.23E-02
B2		10	0.00E+00	5.16E-03	5.16E-03
B3		5	1.23E-02	5.08E-03	5.08E-03
B3		10	1.32E-02	1.03E-02	1.03E-02
B4		5	1.15E-02	6.26E-03	6.26E-03
B4		10	1.19E-02	1.34E-02	1.34E-02
MW1		5	0.00E+00	5.67E-03	5.67E-03
MW1		10	1.70E-02	1.41E-02	1.41E-02
MW2		5	0.00E+00	2.12E-03	2.12E-03
MW2		10	0.00E+00	5.08E-03	5.08E-03
MW3		10	0.00E+00	5.93E-03	5.93E-03
MW4		10	1.15E-02	4.15E-03	4.15E-03
CW-1	5200	6.5	4.24E-03	3.81E-02	3.81E-02
CW-1	5200	8	1.70E-02	3.64E-02	3.64E-02
CW-1	5200	9	4.67E-02	6.69E-02	6.69E-02
CW-1	5200	11	1.70E-02	5.93E-03	5.93E-03
CW-2	5200	3.5	1.27E-02	1.27E-02	1.27E-02
CW-2	5200	5	1.27E-02	1.10E-02	1.10E-02
CW-2	5200	7.5	8.49E-03	1.27E-01	1.27E-01
CW-2	5200	9.5	8.49E-03	3.05E-02	3.05E-02
CW-3	5200	3.5	2.12E-02	2.12E-02	2.12E-02
CW-3	5200	6	1.27E-02	5.59E-02	5.59E-02
CW-3	5200	9	1.27E-02	5.67E-02	5.67E-02
CW-3	5200	11	3.82E-02	6.52E-02	6.52E-02
CW-4	5200	5.5	8.49E-03	2.12E-02	2.12E-02

APPENDIX B-1
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Metals
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Be	Co	Metals Total
CW-4	5200	7.5	1.27E-02	1.02E-02	1.02E-02
CW-4	5200	11.5	4.24E-03	3.39E-03	3.39E-03
CW-4	5200	12.5	8.49E-03	9.31E-03	9.31E-03
CW-5	5200	7.5	4.24E-03	1.19E-02	1.19E-02
CW-5	5200	11	1.27E-02	1.27E-02	1.27E-02
CSB-1	5051/PGE	6-6.5'	2.12E-03	2.79E-02	2.79E-02
CSB-1	5051/PGE	8-8.5'	2.12E-03	2.79E-02	2.79E-02
CSB-3	5050	5'	2.12E-03	1.61E-02	1.61E-02
CSB-4	5050	4'	2.12E-03	4.40E-02	4.40E-02
CSB-5	5050/750-50	4'	2.12E-03	6.60E-02	6.60E-02
CSB-6	5050/750-50	4'	2.12E-03	1.61E-02	1.61E-02
CSB-8	5050	5'-5.5'	2.12E-04	1.44E-02	1.44E-02
CSB-8	5050	10'-10.5'	2.12E-03	1.27E-02	1.27E-02
CSB-8	5050	15'-15.5'	2.12E-03	8.47E-02	8.47E-02
CSB-8	5050	19.5'-20'	2.12E-03	3.81E-02	3.81E-02
CSB-8	5050	20'-20.5'	2.12E-03	4.57E-02	4.57E-02
CSB-8	5050	25'-25.5'	2.12E-03	4.23E-02	4.23E-02
CSB-8	5050	30-30.5	2.12E-03	4.66E-02	4.66E-02
CSB-8	5050	35'-35.5'	2.12E-03	3.72E-02	3.72E-02
CSB-8	5050	40'-40.5'	2.12E-03	2.79E-02	2.79E-02
CSB-8	5050	45'-45.5'	2.12E-03	4.06E-02	4.06E-02
CSB-8	5050	50'-50.5'	2.12E-03	3.22E-02	3.22E-02
CSB-8	5050	55'-55.5'	2.12E-03	1.86E-02	1.86E-02
CSB-8	5050	60'-60.5'	2.12E-03	2.96E-02	2.96E-02
CSB-9	5051	5'-5.5'	2.12E-03	3.56E-02	3.56E-02
CSB-9	5051	10'-10.5'	2.12E-03	3.72E-02	3.72E-02
CSB-9	5051	15'-15.5'	2.12E-03	2.71E-02	2.71E-02
CSB-9	5051	20'-20.5'	2.12E-03	4.40E-02	4.40E-02
CSB-9	5051	25'-25.5'	2.12E-03	3.30E-02	3.30E-02
CSB-9	5051	30'-30.5'	2.12E-03	4.06E-02	4.06E-02
CSB-9	5051	35'-35.5'	2.12E-03	7.87E-02	7.87E-02
CSB-9	5051	40'-40.5'	2.12E-03	3.39E-02	3.39E-02
CSB-9	5051	45'-45.5'	2.12E-03	3.56E-02	3.56E-02
CSB-9	5051	50'-50.5'	2.12E-03	3.64E-02	3.64E-02
CSB-9	5051	55'-55.5'	2.12E-03	4.91E-02	4.91E-02
CSB-9	5051	60'-60.5'	2.12E-03	3.05E-02	3.05E-02
CW-6	5200	6-6.5'	2.12E-03	2.54E-02	2.54E-02
CW-7	5200	6-6.5'	2.12E-03	1.02E-02	1.02E-02
CW-7	5200	16-16.5'	2.12E-03	4.32E-02	4.32E-02
CW-8	5051/EBMU	5'	2.12E-03	3.47E-02	3.47E-02
CW-9	5051/EBMU	5'	2.12E-03	3.56E-02	3.56E-02
CW-10	5051/PGE	11-11.5	2.12E-03	8.47E-02	8.47E-02
CW-12	5051/PGE	11-11.5	2.12E-03	4.91E-02	4.91E-02
CW-13	5050	5'	2.12E-03	3.47E-02	3.47E-02

APPENDIX B-2
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Semivolatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(g,h,i)perylene	Bis(2-ethylhexyl)phthalate	Dibenzofuran	2,4-Dimethylphenol
LF-8-5.0	5050/750-50	5	4.79E-05	0.00E+00	3.19E-06	3.19E-06	3.19E-06	0.00E+00	6.84E-07	3.42E-06	0.00E+00
LF-8-7.5	5050/750-50	7.5	6.20E-04	0.00E+00	4.13E-04	2.67E-04	7.14E-05	0.00E+00	3.34E-06	2.70E-04	0.00E+00
LF-9-4.5	5050/750-50	4.5	1.92E-05	0.00E+00	1.35E-06	1.32E-06	2.97E-06	0.00E+00	1.61E-06	2.05E-06	0.00E+00
LF-14-12.5	5050/750-50	12.5	9.30E-06	0.00E+00	6.20E-07	6.20E-07	6.20E-07	0.00E+00	1.33E-07	6.64E-07	0.00E+00
SB-1-7.0	5050/750-50	7	1.86E-04	0.00E+00	3.19E-06	3.19E-06	3.19E-06	0.00E+00	6.84E-07	3.42E-06	0.00E+00
SB-2-15	5050/750-50	15	9.30E-06	0.00E+00	6.20E-07	6.20E-07	6.20E-07	0.00E+00	1.33E-07	6.64E-07	0.00E+00
SB-15-6.0	5050/750-50	6	9.30E-06	0.00E+00	6.20E-07	6.20E-07	6.20E-07	0.00E+00	1.33E-07	6.64E-07	0.00E+00
SB-17-6.5	5050/750-50	6.5	2.09E-05	0.00E+00	6.20E-07	6.20E-07	6.20E-07	0.00E+00	1.33E-07	6.64E-07	0.00E+00
SB-18-7.0	5050/750-50	7	9.30E-06	0.00E+00	6.20E-07	6.20E-07	6.20E-07	0.00E+00	2.66E-07	6.64E-07	0.00E+00
SB-19-7.5	5050/750-50	5	9.30E-06	0.00E+00	6.20E-07	6.20E-07	6.20E-07	0.00E+00	1.33E-07	6.64E-07	0.00E+00
SB-19-10.0	5050/750-50	10	2.34E-05	0.00E+00	1.56E-06	1.56E-06	1.56E-06	0.00E+00	3.34E-07	1.67E-06	0.00E+00
SB-20-9.5	5050/750-50	9.5	9.30E-06	0.00E+00	6.20E-07	6.20E-07	6.20E-07	0.00E+00	1.33E-07	6.64E-07	0.00E+00
CW-2	5200	9.5	0.00E+00	2.82E-04	7.51E-05	1.50E-04	3.01E-04	1.13E-03	0.00E+00	2.01E-05	4.03E-06
CW-4	5200	5.5	0.00E+00	5.64E-06	2.25E-06	6.01E-06	1.09E-05	4.51E-05	0.00E+00	1.61E-06	8.05E-08
CW-4	5200	7.5	0.00E+00	5.64E-06	3.76E-07	3.76E-07	3.76E-07	5.64E-06	0.00E+00	4.03E-07	8.05E-08
CW-4	5200	11.5	0.00E+00	3.27E-03	7.51E-04	9.02E-03	5.64E-04	2.20E-03	0.00E+00	6.44E-04	4.83E-06
CW-4	5200	12.5	0.00E+00	3.38E-04	7.89E-04	2.63E-04	1.50E-04	1.13E-04	0.00E+00	4.43E-04	4.03E-07
CW-5	5200	7.5	0.00E+00	5.64E-06	3.76E-07	3.76E-07	3.76E-07	5.64E-06	0.00E+00	4.03E-07	1.05E-05
CW-5	5200	11	0.00E+00	3.38E-04	1.16E-03	7.14E-04	2.25E-04	3.38E-04	0.00E+00	5.64E-04	4.03E-07

APPENDIX B-2
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Semivolatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Fluoranthene	Fluorene	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Naphthalene	Phenanthrene	Phenol	Pyrene
LF-8-5.0	5050/750-50	5	3.42E-07	3.42E-07	0.00E+00	0.00E+00	0.00E+00	6.84E-07	6.84E-07	2.28E-08	4.56E-07
LF-8-7.5	5050/750-50	7.5	4.43E-05	3.54E-05	0.00E+00	0.00E+00	0.00E+00	2.17E-05	1.29E-04	1.11E-07	3.70E-05
LF-9-4.5	5050/750-50	4.5	9.66E-07	2.54E-07	0.00E+00	0.00E+00	0.00E+00	8.86E-07	2.42E-06	4.43E-09	1.02E-06
LF-14-12.5	5050/750-50	12.5	6.64E-08	6.64E-08	0.00E+00	0.00E+00	0.00E+00	1.33E-07	1.33E-07	4.43E-09	8.86E-08
SB-1-7.0	5050/750-50	7	3.42E-07	3.42E-07	0.00E+00	0.00E+00	0.00E+00	6.84E-07	6.84E-07	2.28E-08	4.56E-07
SB-2-15	5050/750-50	15	6.64E-08	6.64E-08	0.00E+00	0.00E+00	0.00E+00	1.33E-07	1.33E-07	4.43E-09	8.86E-08
SB-15-6.0	5050/750-50	6	6.64E-08	6.64E-08	0.00E+00	0.00E+00	0.00E+00	1.33E-07	1.33E-07	4.43E-09	8.86E-08
SB-17-6.5	5050/750-50	6.5	6.64E-08	6.64E-08	0.00E+00	0.00E+00	0.00E+00	1.33E-07	1.33E-07	4.43E-09	8.86E-08
SB-18-7.0	5050/750-50	7	6.64E-08	6.64E-08	0.00E+00	0.00E+00	0.00E+00	1.33E-07	1.33E-07	4.43E-09	8.86E-08
SB-19-7.5	5050/750-50	5	6.64E-08	6.64E-08	0.00E+00	0.00E+00	0.00E+00	1.33E-07	1.33E-07	4.43E-09	8.86E-08
SB-19-10.0	5050/750-50	10	1.67E-07	1.67E-07	0.00E+00	0.00E+00	0.00E+00	3.34E-07	3.34E-07	1.11E-08	2.23E-07
SB-20-9.5	5050/750-50	9.5	5.23E-07	6.64E-08	0.00E+00	0.00E+00	0.00E+00	1.33E-07	5.23E-07	4.43E-09	7.51E-07
CW-2	5200	9.5	6.44E-05	8.05E-06	1.61E-05	1.61E-06	1.61E-05	2.42E-05	8.05E-05	1.34E-07	1.45E-04
CW-4	5200	5.5	2.01E-06	1.61E-07	6.44E-07	3.22E-08	3.22E-07	8.86E-07	4.03E-06	2.68E-09	4.29E-06
CW-4	5200	7.5	4.03E-08	4.03E-08	8.05E-08	3.22E-08	3.22E-07	1.61E-07	8.05E-08	2.68E-09	5.37E-08
CW-4	5200	11.5	2.17E-04	1.41E-04	3.78E-04	2.25E-06	3.54E-05	9.66E-04	1.05E-03	5.37E-08	3.22E-04
CW-4	5200	12.5	6.84E-05	5.64E-05	2.33E-04	1.61E-07	1.61E-06	2.58E-04	3.70E-04	1.34E-08	8.59E-05
CW-5	5200	7.5	4.03E-08	4.03E-08	8.05E-08	9.66E-07	1.29E-06	8.05E-08	8.05E-08	2.68E-09	5.37E-08
CW-5	5200	11	1.01E-04	9.26E-05	2.01E-04	1.61E-07	1.61E-06	3.78E-04	5.56E-04	1.34E-07	1.50E-04

APPENDIX B-2
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Semivolatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	SVOC Total
LF-8-5.0	5050/750-50	5	6.41E-05
LF-8-7.5	5050/750-50	7.5	1.91E-03
LF-9-4.5	5050/750-50	4.5	3.40E-05
LF-14-12.5	5050/750-50	12.5	1.24E-05
SB-1-7.0	5050/750-50	7	2.02E-04
SB-2-15	5050/750-50	15	1.24E-05
SB-15-6.0	5050/750-50	6	1.24E-05
SB-17-6.5	5050/750-50	6.5	2.40E-05
SB-18-7.0	5050/750-50	7	1.26E-05
SB-19-7.5	5050/750-50	5	1.24E-05
SB-19-10.0	5050/750-50	10	3.13E-05
SB-20-9.5	5050/750-50	9.5	1.40E-05
CW-2	5200	9.5	2.32E-03
CW-4	5200	5.5	8.40E-05
CW-4	5200	7.5	1.37E-05
CW-4	5200	11.5	1.96E-02
CW-4	5200	12.5	3.17E-03
CW-5	5200	7.5	2.59E-05
CW-5	5200	11	4.83E-03

APPENDIX B-2
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Semivolatile Organic Compounds
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	Anthracene	Benzo(a)anthracene	Bis(2-ethylhexyl)phthalate	Dibenzofuran	2,4-Dimethylphenol	Fluoranthene
LF-8-5.0	5050/750-50	5	6.95E-05	0.00E+00	4.63E-06	4.63E-06	4.63E-06	8.27E-06	4.96E-06	0.00E+00	4.96E-07
LF-8-7.5	5050/750-50	7.5	8.99E-04	0.00E+00	5.99E-04	3.87E-04	1.04E-04	4.04E-05	3.91E-04	0.00E+00	6.42E-05
LF-9-4.5	5050/750-50	4.5	2.78E-05	0.00E+00	1.96E-06	1.91E-06	4.30E-06	1.95E-05	2.98E-06	0.00E+00	1.40E-06
LF-14-12.5	5050/750-50	12.5	1.35E-05	0.00E+00	8.99E-07	8.99E-07	8.99E-07	1.61E-06	9.63E-07	0.00E+00	9.63E-08
SB-1-7.0	5050/750-50	7	2.70E-04	0.00E+00	4.63E-06	4.63E-06	4.63E-06	8.27E-06	4.96E-06	0.00E+00	4.96E-07
SB-2-15	5050/750-50	15	1.35E-05	0.00E+00	8.99E-07	8.99E-07	8.99E-07	1.61E-06	9.63E-07	0.00E+00	9.63E-08
SB-15-6.0	5050/750-50	6	1.35E-05	0.00E+00	8.99E-07	8.99E-07	8.99E-07	1.61E-06	9.63E-07	0.00E+00	9.63E-08
SB-17-6.5	5050/750-50	6.5	3.02E-05	0.00E+00	8.99E-07	8.99E-07	8.99E-07	1.61E-06	9.63E-07	0.00E+00	9.63E-08
SB-18-7.0	5050/750-50	7	1.35E-05	0.00E+00	8.99E-07	8.99E-07	8.99E-07	3.21E-06	9.63E-07	0.00E+00	9.63E-08
SB-19-7.5	5050/750-50	5	1.35E-05	0.00E+00	8.99E-07	8.99E-07	8.99E-07	1.61E-06	9.63E-07	0.00E+00	9.63E-08
SB-19-10.0	5050/750-50	10	3.39E-05	0.00E+00	2.26E-06	2.26E-06	2.26E-06	4.04E-06	2.42E-06	0.00E+00	2.42E-07
SB-20-9.5	5050/750-50	9.5	1.35E-05	0.00E+00	8.99E-07	8.99E-07	8.99E-07	1.61E-06	9.63E-07	0.00E+00	7.59E-07
CW-2	5200	9.5	0.00E+00	4.09E-04	1.09E-04	2.18E-04	4.36E-04	0.00E+00	2.92E-05	5.84E-06	9.34E-05
CW-4	5200	5.5	0.00E+00	8.17E-06	3.27E-06	8.72E-06	1.58E-05	0.00E+00	2.33E-06	1.17E-07	2.92E-06
CW-4	5200	7.5	0.00E+00	8.17E-06	5.45E-07	5.45E-07	5.45E-07	0.00E+00	5.84E-07	1.17E-07	5.84E-08
CW-4	5200	11.5	0.00E+00	4.74E-03	1.09E-03	1.31E-02	8.17E-04	0.00E+00	9.34E-04	7.00E-06	3.15E-04
CW-4	5200	12.5	0.00E+00	4.90E-04	1.14E-03	3.81E-04	2.18E-04	0.00E+00	6.42E-04	5.84E-07	9.92E-05
CW-5	5200	7.5	0.00E+00	8.17E-06	5.45E-07	5.45E-07	5.45E-07	0.00E+00	5.84E-07	1.52E-05	5.84E-08
CW-5	5200	11	0.00E+00	4.90E-04	1.69E-03	1.04E-03	3.27E-04	0.00E+00	8.17E-04	5.84E-07	1.46E-04

APPENDIX B-2
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Semivolatile Organic Compounds
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Fluorene	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Naphthalene	Phenanthrene	Phenol	Pyrene	SVOC Total
LF-8-5.0	5050/750-50	5	4.96E-07	0.00E+00	0.00E+00	0.00E+00	9.92E-07	9.92E-07	3.31E-08	6.62E-07	1.00E-04
LF-8-7.5	5050/750-50	7.5	5.14E-05	0.00E+00	0.00E+00	0.00E+00	3.15E-05	1.87E-04	1.61E-07	5.37E-05	2.81E-03
LF-9-4.5	5050/750-50	4.5	3.68E-07	0.00E+00	0.00E+00	0.00E+00	1.28E-06	3.50E-06	6.42E-09	1.48E-06	6.64E-05
LF-14-12.5	5050/750-50	12.5	9.63E-08	0.00E+00	0.00E+00	0.00E+00	1.93E-07	1.93E-07	6.42E-09	1.28E-07	1.95E-05
SB-1-7.0	5050/750-50	7	4.96E-07	0.00E+00	0.00E+00	0.00E+00	9.92E-07	9.92E-07	3.31E-08	6.62E-07	3.00E-04
SB-2-15	5050/750-50	15	9.63E-08	0.00E+00	0.00E+00	0.00E+00	1.93E-07	1.93E-07	6.42E-09	1.28E-07	1.95E-05
SB-15-6.0	5050/750-50	6	9.63E-08	0.00E+00	0.00E+00	0.00E+00	1.93E-07	1.93E-07	6.42E-09	1.28E-07	1.95E-05
SB-17-6.5	5050/750-50	6.5	9.63E-08	0.00E+00	0.00E+00	0.00E+00	1.93E-07	1.93E-07	6.42E-09	1.28E-07	3.62E-05
SB-18-7.0	5050/750-50	7	9.63E-08	0.00E+00	0.00E+00	0.00E+00	1.93E-07	1.93E-07	6.42E-09	1.28E-07	2.11E-05
SB-19-7.5	5050/750-50	5	9.63E-08	0.00E+00	0.00E+00	0.00E+00	1.93E-07	1.93E-07	6.42E-09	1.28E-07	1.95E-05
SB-19-10.0	5050/750-50	10	2.42E-07	0.00E+00	0.00E+00	0.00E+00	4.84E-07	4.84E-07	1.61E-08	3.23E-07	4.90E-05
SB-20-9.5	5050/750-50	9.5	9.63E-08	0.00E+00	0.00E+00	0.00E+00	1.93E-07	7.59E-07	6.42E-09	1.09E-06	2.17E-05
CW-2	5200	9.5	1.17E-05	2.33E-05	2.33E-06	2.33E-05	3.50E-05	1.17E-04	1.95E-07	2.10E-04	1.72E-03
CW-4	5200	5.5	2.33E-07	9.34E-07	4.67E-08	4.67E-07	1.28E-06	5.84E-06	3.89E-09	6.23E-06	5.64E-05
CW-4	5200	7.5	5.84E-08	1.17E-07	4.67E-08	4.67E-07	2.33E-07	1.17E-07	3.89E-09	7.78E-08	1.17E-05
CW-4	5200	11.5	2.04E-04	5.49E-04	3.27E-06	5.14E-05	1.40E-03	1.52E-03	7.78E-08	4.67E-04	2.52E-02
CW-4	5200	12.5	8.17E-05	3.39E-04	2.33E-07	2.33E-06	3.74E-04	5.37E-04	1.95E-08	1.25E-04	4.43E-03
CW-5	5200	7.5	5.84E-08	1.17E-07	1.40E-06	1.87E-06	1.17E-07	1.17E-07	3.89E-09	7.78E-08	2.94E-05
CW-5	5200	11	1.34E-04	2.92E-04	2.33E-07	2.33E-06	5.49E-04	8.06E-04	1.95E-07	2.18E-04	6.51E-03

APPENDIX B-2
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Semivolatile Organic Compounds
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(g,h,i)perylene	Bis(2-ethylhexyl)phthalate	Dibenzofuran
LF-8-5.0	5050/750-50	5	2.39E-04	0.00E+00	6.85E-07	6.85E-07	6.85E-07	0.00E+00	9.35E-06	5.14E-05
LF-8-7.5	5050/750-50	7.5	3.09E-03	0.00E+00	8.87E-05	5.72E-05	1.53E-05	0.00E+00	4.56E-05	4.05E-03
LF-9-4.5	5050/750-50	4.5	9.56E-05	0.00E+00	2.90E-07	2.82E-07	6.37E-07	0.00E+00	2.20E-05	3.08E-05
LF-14-12.5	5050/750-50	12.5	4.64E-05	0.00E+00	1.33E-07	1.33E-07	1.33E-07	0.00E+00	1.81E-06	9.98E-06
SB-1-7.0	5050/750-50	7	9.28E-04	0.00E+00	6.85E-07	6.85E-07	6.85E-07	0.00E+00	9.35E-06	5.14E-05
SB-2-15	5050/750-50	15	4.64E-05	0.00E+00	1.33E-07	1.33E-07	1.33E-07	0.00E+00	1.81E-06	9.98E-06
SB-15-6.0	5050/750-50	6	4.64E-05	0.00E+00	1.33E-07	1.33E-07	1.33E-07	0.00E+00	1.81E-06	9.98E-06
SB-17-6.5	5050/750-50	6.5	1.04E-04	0.00E+00	1.33E-07	1.33E-07	1.33E-07	0.00E+00	1.81E-06	9.98E-06
SB-18-7.0	5050/750-50	7	4.64E-05	0.00E+00	1.33E-07	1.33E-07	1.33E-07	0.00E+00	3.63E-06	9.98E-06
SB-19-7.5	5050/750-50	5	4.64E-05	0.00E+00	1.33E-07	1.33E-07	1.33E-07	0.00E+00	1.81E-06	9.98E-06
SB-19-10.0	5050/750-50	10	1.17E-04	0.00E+00	3.35E-07	3.35E-07	3.35E-07	0.00E+00	4.56E-06	2.51E-05
SB-20-9.5	5050/750-50	9.5	4.64E-05	0.00E+00	1.33E-07	1.33E-07	1.33E-07	0.00E+00	1.81E-06	9.98E-06
CW-2	5200	9.5	0.00E+00	1.41E-03	1.61E-05	3.23E-05	6.45E-05	5.63E-03	0.00E+00	3.02E-04
CW-4	5200	5.5	0.00E+00	2.81E-05	4.84E-07	1.29E-06	2.34E-06	2.25E-04	0.00E+00	2.42E-05
CW-4	5200	7.5	0.00E+00	2.81E-05	8.06E-08	8.06E-08	8.06E-08	2.81E-05	0.00E+00	6.05E-06
CW-4	5200	11.5	0.00E+00	1.63E-02	1.61E-04	1.94E-03	1.21E-04	1.10E-02	0.00E+00	9.68E-03
CW-4	5200	12.5	0.00E+00	1.69E-03	1.69E-04	5.64E-05	3.23E-05	5.63E-04	0.00E+00	6.65E-03
CW-5	5200	7.5	0.00E+00	2.81E-05	8.06E-08	8.06E-08	8.06E-08	2.81E-05	0.00E+00	6.05E-06
CW-5	5200	11	0.00E+00	1.69E-03	2.50E-04	1.53E-04	4.84E-05	1.69E-03	0.00E+00	8.47E-03

APPENDIX B-2
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Semivolatile Organic Compounds
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	2,4-Dimethylphenol	Fluoranthene	Fluorene	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Naphthalene	Phenanthrene
LF-8-5.0	5050/750-50	5	0.00E+00	5.14E-06	5.14E-06	0.00E+00	0.00E+00	0.00E+00	2.39E-04	2.39E-04
LF-8-7.5	5050/750-50	7.5	0.00E+00	6.65E-04	5.32E-04	0.00E+00	0.00E+00	0.00E+00	7.59E-03	4.50E-02
LF-9-4.5	5050/750-50	4.5	0.00E+00	1.45E-05	3.81E-06	0.00E+00	0.00E+00	0.00E+00	3.09E-04	8.44E-04
LF-14-12.5	5050/750-50	12.5	0.00E+00	9.98E-07	9.98E-07	0.00E+00	0.00E+00	0.00E+00	4.64E-05	4.64E-05
SB-1-7.0	5050/750-50	7	0.00E+00	5.14E-06	5.14E-06	0.00E+00	0.00E+00	0.00E+00	2.39E-04	2.39E-04
SB-2-15	5050/750-50	15	0.00E+00	9.98E-07	9.98E-07	0.00E+00	0.00E+00	0.00E+00	4.64E-05	4.64E-05
SB-15-6.0	5050/750-50	6	0.00E+00	9.98E-07	9.98E-07	0.00E+00	0.00E+00	0.00E+00	4.64E-05	4.64E-05
SB-17-6.5	5050/750-50	6.5	0.00E+00	9.98E-07	9.98E-07	0.00E+00	0.00E+00	0.00E+00	4.64E-05	4.64E-05
SB-18-7.0	5050/750-50	7	0.00E+00	9.98E-07	9.98E-07	0.00E+00	0.00E+00	0.00E+00	4.64E-05	4.64E-05
SB-19-7.5	5050/750-50	5	0.00E+00	9.98E-07	9.98E-07	0.00E+00	0.00E+00	0.00E+00	4.64E-05	4.64E-05
SB-19-10.0	5050/750-50	10	0.00E+00	2.51E-06	2.51E-06	0.00E+00	0.00E+00	0.00E+00	1.17E-04	1.17E-04
SB-20-9.5	5050/750-50	9.5	0.00E+00	7.86E-06	9.98E-07	0.00E+00	0.00E+00	0.00E+00	4.64E-05	1.83E-04
CW-2	5200	9.5	6.05E-05	9.68E-04	1.21E-04	5.63E-03	2.42E-05	2.42E-04	8.44E-03	2.81E-02
CW-4	5200	5.5	1.21E-06	3.02E-05	2.42E-06	2.25E-04	4.84E-07	4.84E-06	3.09E-04	1.41E-03
CW-4	5200	7.5	1.21E-06	6.05E-07	6.05E-07	2.81E-05	4.84E-07	4.84E-06	5.63E-05	2.81E-05
CW-4	5200	11.5	7.26E-05	3.27E-03	2.12E-03	1.32E-01	3.39E-05	5.32E-04	3.38E-01	3.66E-01
CW-4	5200	12.5	6.05E-06	1.03E-03	8.47E-04	8.16E-02	2.42E-06	2.42E-05	9.00E-02	1.29E-01
CW-5	5200	7.5	1.57E-04	6.05E-07	6.05E-07	2.81E-05	1.45E-05	1.94E-05	2.81E-05	2.81E-05
CW-5	5200	11	6.05E-06	1.51E-03	1.39E-03	7.03E-02	2.42E-06	2.42E-05	1.32E-01	1.94E-01

APPENDIX B-2
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Semivolatile Organic Compounds
Inhalation Route of Exposure

Well/Boring Name	Property	Sample Depth	Phenol	Pyrene	SVOC Total
LF-8-5.0	5050/750-50	5	3.43E-07	6.85E-06	7.97E-04
LF-8-7.5	5050/750-50	7.5	1.67E-06	5.56E-04	6.17E-02
LF-9-4.5	5050/750-50	4.5	6.65E-08	1.53E-05	1.34E-03
LF-14-12.5	5050/750-50	12.5	6.65E-08	1.33E-06	1.55E-04
SB-1-7.0	5050/750-50	7	3.43E-07	6.85E-06	1.49E-03
SB-2-15	5050/750-50	15	6.65E-08	1.33E-06	1.55E-04
SB-15-6.0	5050/750-50	6	6.65E-08	1.33E-06	1.55E-04
SB-17-6.5	5050/750-50	6.5	6.65E-08	1.33E-06	2.12E-04
SB-18-7.0	5050/750-50	7	6.65E-08	1.33E-06	1.57E-04
SB-19-7.5	5050/750-50	5	6.65E-08	1.33E-06	1.55E-04
SB-19-10.0	5050/750-50	10	1.67E-07	3.35E-06	3.89E-04
SB-20-9.5	5050/750-50	9.5	6.65E-08	1.13E-05	3.08E-04
CW-2	5200	9.5	2.02E-06	2.18E-03	5.32E-02
CW-4	5200	5.5	4.03E-08	6.45E-05	2.33E-03
CW-4	5200	7.5	4.03E-08	8.06E-07	1.84E-04
CW-4	5200	11.5	8.06E-07	4.84E-03	8.85E-01
CW-4	5200	12.5	2.02E-07	1.29E-03	3.13E-01
CW-5	5200	7.5	4.03E-08	8.06E-07	3.40E-04
CW-5	5200	11	2.02E-06	2.26E-03	4.14E-01

APPENDIX B-3
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Volatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Benzene	Ethylbenzene	Toluene	Xylenes	o-Xylene	p,m-Xylenes	Acetone
LF-1-5.5	5050/750-50	5.5	1.88E-07	1.13E-08	2.82E-09	2.82E-10	0.00E+00	0.00E+00	0.00E+00
LF-1-10.5	5050/750-50	10.5	1.88E-07	1.13E-08	2.82E-09	8.45E-10	0.00E+00	0.00E+00	0.00E+00
LF-13-7.0	5050/750-50	7.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
LF-14-1.5	5050/750-50	1.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
LF-14-4.5	5050/750-50	4.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
LF-15-11.0	5050/750-50	11.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-1-7.0	5050/750-50	7.0	1.65E-05	5.07E-07	4.28E-07	6.20E-08	0.00E+00	0.00E+00	0.00E+00
SB-17-5.0	5050/750-50	5.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-17-6.5	5050/750-50	6.5	1.62E-05	3.95E-07	2.48E-07	1.07E-07	0.00E+00	0.00E+00	0.00E+00
SB-17-9.5	5050/750-50	9.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-18-7.0	5050/750-50	7.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-19-7.5	5050/750-50	7.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-19-10	5050/750-50	10.0	9.39E-07	5.64E-08	2.82E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-20-9.5	5050/750-50	9.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-21-10	5050/750-50	10.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SS-20-2.0	5050/750-50	2.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CW-2	5200	9.5	9.39E-05	5.64E-06	1.41E-06	0.00E+00	1.41E-07	1.41E-07	1.13E-05
CW-4	5200	5.5	9.39E-07	5.64E-08	1.41E-08	0.00E+00	1.41E-09	1.41E-09	7.89E-08
CW-4	5200	7.5	9.39E-07	5.64E-08	1.41E-08	0.00E+00	1.41E-09	1.41E-09	1.13E-07
CW-4	5200	11.5	5.64E-05	1.35E-06	7.89E-08	0.00E+00	2.76E-08	6.20E-08	1.13E-07
CW-4	5200	12.5	5.64E-04	4.51E-05	8.45E-06	0.00E+00	1.69E-06	3.38E-06	5.64E-05
CW-5	5200	7.5	7.51E-04	9.02E-05	6.76E-05	0.00E+00	6.20E-06	1.07E-05	5.64E-05
CW-5	5200	11.0	5.64E-04	3.38E-05	8.45E-06	0.00E+00	1.69E-06	2.25E-06	5.64E-05
CSB-3	5050	5'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CSB-4	5050	4'	9.39E-07	5.64E-08	1.41E-08	3.95E-09	0.00E+00	0.00E+00	0.00E+00
CSB-5	750-50	4'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CSB-6	750-50	4'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CW-8	5051/EBMUD	5'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CW-9	5051/EBMUD	5'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CW-13	5050	5'	9.39E-08	5.64E-09	1.41E-09	1.41E-10	0.00E+00	0.00E+00	0.00E+00

APPENDIX B-3
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Volatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Methylene Chloride	Naphthalene	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total
LF-1-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-07
LF-1-10.5	5050/750-50	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-07
LF-13-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
LF-14-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
LF-14-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
LF-15-11.0	5050/750-50	11.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-1-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-05
SB-17-5.0	5050/750-50	5.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-17-6.5	5050/750-50	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-05
SB-17-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-18-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-19-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-19-10	5050/750-50	10.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-06
SB-20-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-21-10	5050/750-50	10.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SS-20-2.0	5050/750-50	2.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CW-2	5200	9.5	1.32E-05	5.52E-04	1.41E-06	1.41E-06	1.41E-06	6.82E-04
CW-4	5200	5.5	1.32E-07	1.69E-06	1.41E-08	1.41E-08	1.41E-08	2.96E-06
CW-4	5200	7.5	4.70E-08	6.20E-07	1.41E-08	1.41E-08	1.41E-08	1.83E-06
CW-4	5200	11.5	1.13E-07	5.07E-07	1.41E-08	1.41E-08	1.41E-08	5.87E-05
CW-4	5200	12.5	2.82E-05	1.35E-02	8.45E-06	3.38E-05	1.69E-05	1.43E-02
CW-5	5200	7.5	2.82E-05	1.18E-01	3.38E-05	9.02E-05	3.95E-05	1.20E-01
CW-5	5200	11.0	2.82E-05	1.47E-02	8.45E-06	2.25E-05	8.45E-06	1.54E-02
CSB-3	5050	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CSB-4	5050	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CSB-5	750-50	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CSB-6	750-50	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CW-8	5051/EBMUD	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CW-9	5051/EBMUD	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CW-13	5050	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-07

APPENDIX B-3
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Volatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Benzene	Ethylbenzene	Toluene	Xylenes	o-Xylene	p,m-Xylenes	Acetone
LF-1-5.5	5050/750-50	5.5	1.88E-07	1.13E-08	2.82E-09	2.82E-10	0.00E+00	0.00E+00	0.00E+00
LF-1-10.5	5050/750-50	10.5	1.88E-07	1.13E-08	2.82E-09	8.45E-10	0.00E+00	0.00E+00	0.00E+00
LF-13-7.0	5050/750-50	7.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
LF-14-1.5	5050/750-50	1.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
LF-14-4.5	5050/750-50	4.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
LF-15-11.0	5050/750-50	11.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-1-7.0	5050/750-50	7.0	1.65E-05	5.07E-07	4.28E-07	6.20E-08	0.00E+00	0.00E+00	0.00E+00
SB-17-5.0	5050/750-50	5.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-17-6.5	5050/750-50	6.5	1.62E-05	3.95E-07	2.48E-07	1.07E-07	0.00E+00	0.00E+00	0.00E+00
SB-17-9.5	5050/750-50	9.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-18-7.0	5050/750-50	7.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-19-7.5	5050/750-50	7.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-19-10	5050/750-50	10.0	9.39E-07	5.64E-08	2.82E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-20-9.5	5050/750-50	9.5	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SB-21-10	5050/750-50	10.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
SS-20-2.0	5050/750-50	2.0	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CW-2	5200	9.5	9.39E-05	5.64E-06	1.41E-06	0.00E+00	1.41E-07	1.41E-07	1.13E-05
CW-4	5200	5.5	9.39E-07	5.64E-08	1.41E-08	0.00E+00	1.41E-09	1.41E-09	7.89E-08
CW-4	5200	7.5	9.39E-07	5.64E-08	1.41E-08	0.00E+00	1.41E-09	1.41E-09	1.13E-07
CW-4	5200	11.5	5.64E-05	1.35E-06	7.89E-08	0.00E+00	2.76E-08	6.20E-08	1.13E-07
CW-4	5200	12.5	5.64E-04	4.51E-05	8.45E-06	0.00E+00	1.69E-06	3.38E-06	5.64E-05
CW-5	5200	7.5	7.51E-04	9.02E-05	6.76E-05	0.00E+00	6.20E-06	1.07E-05	5.64E-05
CW-5	5200	11.0	5.64E-04	3.38E-05	8.45E-06	0.00E+00	1.69E-06	2.25E-06	5.64E-05
CSB-3	5050	5'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CSB-4	5050	4'	9.39E-07	5.64E-08	1.41E-08	3.95E-09	0.00E+00	0.00E+00	0.00E+00
CSB-5	750-50	4'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CSB-6	750-50	4'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CW-8	5051/EBMUD	5'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CW-9	5051/EBMUD	5'	9.39E-07	5.64E-08	1.41E-08	1.41E-09	0.00E+00	0.00E+00	0.00E+00
CW-13	5050	5'	9.39E-08	5.64E-09	1.41E-09	1.41E-10	0.00E+00	0.00E+00	0.00E+00

APPENDIX B-3
ESTIMATED NONCARCINOGENIC HAZARDS
Construction Scenario
Volatile Organic Compounds
Oral Route of Exposure

Well/Boring Name	Property	Sample Depth	Methylene Chloride	Naphthalene	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total
LF-1-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-07
LF-1-10.5	5050/750-50	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-07
LF-13-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
LF-14-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
LF-14-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
LF-15-11.0	5050/750-50	11.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-1-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-05
SB-17-5.0	5050/750-50	5.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-17-6.5	5050/750-50	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-05
SB-17-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-18-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-19-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-19-10	5050/750-50	10.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-06
SB-20-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SB-21-10	5050/750-50	10.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
SS-20-2.0	5050/750-50	2.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CW-2	5200	9.5	1.32E-05	5.52E-04	1.41E-06	1.41E-06	1.41E-06	6.82E-04
CW-4	5200	5.5	1.32E-07	1.69E-06	1.41E-08	1.41E-08	1.41E-08	2.96E-06
CW-4	5200	7.5	4.70E-08	6.20E-07	1.41E-08	1.41E-08	1.41E-08	1.83E-06
CW-4	5200	11.5	1.13E-07	5.07E-07	1.41E-08	1.41E-08	1.41E-08	5.87E-05
CW-4	5200	12.5	2.82E-05	1.35E-02	8.45E-06	3.38E-05	1.69E-05	1.43E-02
CW-5	5200	7.5	2.82E-05	1.18E-01	3.38E-05	9.02E-05	3.95E-05	1.20E-01
CW-5	5200	11.0	2.82E-05	1.47E-02	8.45E-06	2.25E-05	8.45E-06	1.54E-02
CSB-3	5050	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CSB-4	5050	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CSB-5	750-50	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CSB-6	750-50	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CW-8	5051/EBMUD	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CW-9	5051/EBMUD	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06
CW-13	5050	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-07

APPENDIX B-3
ESTIMATED NONCARCINOGENIC HAZARDS Construction Scenario
Volatile Organic Compounds
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Benzene	Ethylbenzene	Toluene	Xylenes	o-Xylene	p,m-Xylenes	Acetone	Methylene Chloride
LF-1-5.5	5050/750-50	5.5	2.27E-07	1.36E-08	3.41E-09	3.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-1-10.5	5050/750-50	10.5	2.27E-07	1.36E-08	3.41E-09	1.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-7.0	5050/750-50	7.0	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-1.5	5050/750-50	1.5	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-4.5	5050/750-50	4.5	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-15-11.0	5050/750-50	11.0	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-1-7.0	5050/750-50	7.0	2.00E-05	6.13E-07	5.18E-07	7.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-5.0	5050/750-50	5.0	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-6.5	5050/750-50	6.5	1.95E-05	4.77E-07	3.00E-07	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-9.5	5050/750-50	9.5	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-7.0	5050/750-50	7.0	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-7.5	5050/750-50	7.5	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-10	5050/750-50	10.0	1.14E-06	6.81E-08	3.41E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-20-9.5	5050/750-50	9.5	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-10	5050/750-50	10.0	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-20-2.0	5050/750-50	2.0	1.14E-06	6.81E-08	1.70E-08	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-2	5200	9.5	1.14E-04	6.81E-06	1.70E-06	0.00E+00	1.70E-07	1.70E-07	1.36E-05	1.59E-05
CW-4	5200	5.5	1.14E-06	6.81E-08	1.70E-08	0.00E+00	1.70E-09	1.70E-09	9.53E-08	1.59E-07
CW-4	5200	7.5	1.14E-06	6.81E-08	1.70E-08	0.00E+00	1.70E-09	1.70E-09	1.36E-07	5.68E-08
CW-4	5200	11.5	6.81E-05	1.63E-06	9.53E-08	0.00E+00	3.34E-08	7.49E-08	1.36E-07	1.36E-07
CW-4	5200	12.5	6.81E-04	5.45E-05	1.02E-05	0.00E+00	2.04E-06	4.09E-06	6.81E-05	3.41E-05
CW-5	5200	7.5	9.08E-04	1.09E-04	8.17E-05	0.00E+00	7.49E-06	1.29E-05	6.81E-05	3.41E-05
CW-5	5200	11.0	6.81E-04	4.09E-05	1.02E-05	0.00E+00	2.04E-06	2.72E-06	6.81E-05	3.41E-05
CSB-3	5050	5'	3.41E-09	3.41E-09	1.70E-09	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-4	5050	4'	3.41E-09	3.41E-09	1.70E-09	4.77E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-5	750-50	4'	3.41E-09	3.41E-09	1.70E-09	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-6	750-50	4'	3.41E-09	3.41E-09	1.70E-09	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-8	5051/EBMUD	5'	3.41E-09	3.41E-09	1.70E-09	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-9	5051/EBMUD	5'	3.41E-09	3.41E-09	1.70E-09	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-13	5050	5'	3.41E-10	3.41E-10	1.70E-10	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX B-3
ESTIMATED NONCARCINOGENIC HAZARDS Construction Scenario
Volatile Organic Compounds
Dermal Route of Exposure

Well/Boring Name	Property	Sample Depth	Naphthalene	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total
LF-1-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-07
LF-1-10.5	5050/750-50	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-07
LF-13-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
LF-14-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
LF-14-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
LF-15-11.0	5050/750-50	11.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
SB-1-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05
SB-17-5.0	5050/750-50	5.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
SB-17-6.5	5050/750-50	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-05
SB-17-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
SB-18-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
SB-19-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
SB-19-10	5050/750-50	10.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-06
SB-20-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
SB-21-10	5050/750-50	10.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
SS-20-2.0	5050/750-50	2.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-06
CW-2	5200	9.5	6.67E-04	1.70E-06	1.70E-06	1.70E-06	8.24E-04
CW-4	5200	5.5	2.04E-06	1.70E-08	1.70E-08	1.70E-08	3.57E-06
CW-4	5200	7.5	7.49E-07	1.70E-08	1.70E-08	1.70E-08	2.22E-06
CW-4	5200	11.5	6.13E-07	1.70E-08	1.70E-08	1.70E-08	7.09E-05
CW-4	5200	12.5	1.63E-02	1.02E-05	4.09E-05	2.04E-05	1.73E-02
CW-5	5200	7.5	1.43E-01	4.09E-05	1.09E-04	4.77E-05	1.44E-01
CW-5	5200	11.0	1.77E-02	1.02E-05	2.72E-05	1.02E-05	1.86E-02
CSB-3	5050	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-08
CSB-4	5050	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-08
CSB-5	750-50	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-08
CSB-6	750-50	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-08
CW-8	5051/EBMUD	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-08
CW-9	5051/EBMUD	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-08
CW-13	5050	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-09

APPENDIX B-3
ESTIMATED NONCARCINOGENIC HAZARD
Construction Scenario
Volatile Organic Compounds
Inhalation Route of Exposure

Well/Boring Name	property	Sample Depth	Benzene	Ethylbenzene	Toluene	Acetone	Methylene Chloride	Naphthalene	Styrene
LF-1-5.5	5050/750-50	5.5	6.33E-04	3.57E-06	6.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-1-10.5	5050/750-50	10.5	6.33E-04	3.57E-06	6.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-7.0	5050/750-50	7.0	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-1.5	5050/750-50	1.5	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-4.5	5050/750-50	4.5	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-15-11.0	5050/750-50	11.0	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-1-7.0	5050/750-50	7.0	5.57E-02	1.61E-04	9.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-5.0	5050/750-50	5.0	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-6.5	5050/750-50	6.5	5.44E-02	1.25E-04	5.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-9.5	5050/750-50	9.5	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-7.0	5050/750-50	7.0	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-7.5	5050/750-50	7.5	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-10	5050/750-50	10.0	3.16E-03	1.79E-05	6.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-20-9.5	5050/750-50	9.5	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-10	5050/750-50	10.0	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-20-2.0	5050/750-50	2.0	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-2	5.20E+03	9.5	3.16E-01	1.79E-03	3.23E-03	1.20E-02	2.08E-03	1.13E+00	3.56E-04
CW-4	5.20E+03	5.5	3.16E-03	1.79E-05	3.23E-05	8.43E-05	2.08E-05	3.45E-03	3.56E-06
CW-4	5.20E+03	7.5	3.16E-03	1.79E-05	3.23E-05	1.20E-04	7.44E-06	1.26E-03	3.56E-06
CW-4	5.20E+03	11.5	1.90E-01	4.29E-04	1.81E-04	1.20E-04	1.79E-05	1.03E-03	3.56E-06
CW-4	5.20E+03	12.5	1.90E+00	1.43E-02	1.94E-02	6.02E-02	4.47E-03	2.76E+01	2.14E-03
CW-5	5.20E+03	7.5	2.53E+00	2.86E-02	1.55E-01	6.02E-02	4.47E-03	2.41E+02	8.54E-03
CW-5	5.20E+03	11.0	1.90E+00	1.07E-02	1.94E-02	6.02E-02	4.47E-03	2.99E+01	2.14E-03
CSB-3	5.05E+03	5'	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-4	5.05E+03	4'	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-5	750-50	4'	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-6	750-50	4'	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-8	5051/EBMUD	5'	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-9	5051/EBMUD	5'	3.16E-03	1.79E-05	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-13	5.05E+03	5'	3.16E-04	1.79E-06	3.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX B-3
ESTIMATED NONCARCINOGENIC HAZARD
Construction Scenario
Volatile Organic Compounds
Inhalation Route of Exposure

Well/Boring Name	property	Sample Depth	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total
LF-1-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	6.43E-04
LF-1-10.5	5050/750-50	10.5	0.00E+00	0.00E+00	6.43E-04
LF-13-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	3.21E-03
LF-14-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	3.21E-03
LF-14-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	3.21E-03
LF-15-11.0	5050/750-50	11.0	0.00E+00	0.00E+00	3.21E-03
SB-1-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	5.68E-02
SB-17-5.0	5050/750-50	5.0	0.00E+00	0.00E+00	3.21E-03
SB-17-6.5	5050/750-50	6.5	0.00E+00	0.00E+00	5.51E-02
SB-17-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	3.21E-03
SB-18-7.0	5050/750-50	7.0	0.00E+00	0.00E+00	3.21E-03
SB-19-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	3.21E-03
SB-19-10	5050/750-50	10.0	0.00E+00	0.00E+00	3.25E-03
SB-20-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	3.21E-03
SB-21-10	5050/750-50	10.0	0.00E+00	0.00E+00	3.21E-03
SS-20-2.0	5050/750-50	2.0	0.00E+00	0.00E+00	3.21E-03
CW-2	5.20E+03	9.5	7.60E-02	7.60E-02	1.61E+00
CW-4	5.20E+03	5.5	7.60E-04	7.60E-04	8.29E-03
CW-4	5.20E+03	7.5	7.60E-04	7.60E-04	6.13E-03
CW-4	5.20E+03	11.5	7.60E-04	7.60E-04	1.93E-01
CW-4	5.20E+03	12.5	1.83E+00	9.13E-01	3.23E+01
CW-5	5.20E+03	7.5	4.87E+00	2.13E+00	2.51E+02
CW-5	5.20E+03	11.0	1.22E+00	4.56E-01	3.35E+01
CSB-3	5.05E+03	5'	0.00E+00	0.00E+00	3.21E-03
CSB-4	5.05E+03	4'	0.00E+00	0.00E+00	3.21E-03
CSB-5	750-50	4'	0.00E+00	0.00E+00	3.21E-03
CSB-6	750-50	4'	0.00E+00	0.00E+00	3.21E-03
CW-8	5051/EBMUD	5'	0.00E+00	0.00E+00	3.21E-03
CW-9	5051/EBMUD	5'	0.00E+00	0.00E+00	3.21E-03
CW-13	5.05E+03	5'	0.00E+00	0.00E+00	3.21E-04

APPENDIX C

ESTIMATED CARCINOGENIC RISKS SUMMARIES BY PROPERTY

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Metals			
			oral	dermal	inhlation	Total
LF-9-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-3-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-7-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-17-12.0	5050/750-50	12	1.90E-08	5.21E-09	2.62E-08	5.04E-08
SB-20-16.0	5050/750-50	16	1.90E-08	5.21E-09	2.62E-08	5.04E-08
LF-15-11.0	5050/750-50	11	2.59E-08	6.05E-09	2.91E-08	6.11E-08
LF-4-2	5050/750-50	2	1.21E-08	4.38E-09	6.22E-08	7.87E-08
SB-21-34.5	5050/750-50	34.5	2.59E-08	6.05E-09	4.73E-08	7.92E-08
CSB-8	5050	35'-35.5'	2.76E-08	9.17E-09	5.33E-08	9.01E-08
CSB-8	5050	60'-60.5'	2.76E-08	9.17E-09	5.33E-08	9.01E-08
SB-21-42.0	5050/750-50	42	4.67E-08	8.56E-09	3.78E-08	9.31E-08
SB-17-12.0	5050/750-50	12	3.80E-08	1.04E-08	4.99E-08	9.83E-08
LF-11-25.0	5050/750-50	25	4.49E-08	1.13E-08	5.28E-08	1.09E-07
LF-16-25.0	5050/750-50	25	4.49E-08	1.13E-08	5.54E-08	1.12E-07
SB-20-2.5	5050/750-50	2.5	6.05E-08	1.02E-08	4.36E-08	1.14E-07
LF-14-1.5	5050/750-50	1.5	6.05E-08	1.02E-08	5.14E-08	1.22E-07
SS-7-2.0	5050/750-50	2	4.32E-08	1.40E-08	7.55E-08	1.33E-07
SB-4-12.0	5050/750-50	12	5.70E-08	1.56E-08	7.35E-08	1.46E-07
LF-14-12.5	5050/750-50	12.5	2.59E-08	6.05E-09	7.32E-08	1.05E-07
LF-5-11	5050/750-50	11	4.83E-08	1.75E-08	8.81E-08	1.54E-07
CSB-8	5050	19.5'-20'	5.18E-08	1.79E-08	9.47E-08	1.64E-07
CSB-8	5050	55'-55.5'	5.18E-08	1.79E-08	9.47E-08	1.64E-07
SS-13-2.0	5050/750-50	2	5.01E-08	1.48E-08	1.25E-07	1.90E-07
CSB-8	5050	30-30.5	5.18E-08	1.79E-08	1.31E-07	2.01E-07
LF-15-13.5	5050/750-50	13.5	6.22E-08	1.92E-08	1.30E-07	2.12E-07
LF-3-15	5050/750-50	15	7.25E-08	2.63E-08	1.30E-07	2.28E-07
LF-4-15	5050/750-50	15	7.25E-08	2.63E-08	1.30E-07	2.28E-07
SB-8-2.5	5050/750-50	2.5	9.68E-08	2.34E-08	1.08E-07	2.29E-07
CSB-8	5050	40'-40.5'	7.59E-08	2.67E-08	1.36E-07	2.39E-07
CSB-8	5050	50'-50.5'	7.59E-08	2.67E-08	1.36E-07	2.39E-07
SB-10-7.0	5050/750-50	7	8.63E-08	2.79E-08	1.33E-07	2.47E-07
CSB-8	5050	25'-25.5'	7.59E-08	2.67E-08	1.47E-07	2.49E-07
SB-6-12.0	5050/750-50	12	5.01E-08	1.48E-08	2.18E-07	2.83E-07
SB-2-12.5	5050/750-50	12.5	7.94E-08	2.71E-08	1.48E-07	2.55E-07

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Metals			
			oral	dermal	inhlation	Total
LF-7-10	5050/750-50	10	9.66E-08	3.50E-08	1.71E-07	3.03E-07
LF-7-15.5	5050/750-50	15.5	9.66E-08	3.50E-08	1.76E-07	3.08E-07
SB-7-2.5	5050/750-50	2.5	1.21E-07	3.21E-08	1.55E-07	3.08E-07
CSB-8	5050	20'-20.5'	1.00E-07	3.54E-08	1.78E-07	3.13E-07
SB-10-10.0	5050/750-50	10	1.10E-07	3.67E-08	1.74E-07	3.21E-07
LF-16-1.5-3	5050/750-50	1.5-3	8.29E-08	2.17E-08	2.22E-07	3.26E-07
SB-18-1.5	5050/750-50	1.5	1.10E-07	3.67E-08	1.98E-07	3.45E-07
SB-2-2.5	5050/750-50	2.5	1.38E-07	4.00E-08	1.86E-07	3.64E-07
LF-5-15	5050/750-50	15	1.21E-07	4.38E-08	2.13E-07	3.77E-07
SB-15-11.0	5050/750-50	11	1.17E-07	3.75E-08	2.26E-07	3.81E-07
LF-6-15.5	5050/750-50	15.5	1.21E-07	4.38E-08	2.23E-07	3.87E-07
CSB-8	5050	45'-45.5'	1.24E-07	4.42E-08	2.19E-07	3.88E-07
LF-5-2	5050/750-50	2	1.21E-07	4.38E-08	2.28E-07	3.93E-07
LF-3-2.5	5050/750-50	2.5	1.21E-07	4.38E-08	2.28E-07	3.93E-07
CSB-6	5050/750-50	4'	1.24E-07	4.42E-08	2.19E-07	3.88E-07
SB-4-2.5	5050/750-50	2.5	1.59E-07	4.26E-08	1.95E-07	3.96E-07
LF-2-15.5	5050/750-50	15.5	1.21E-07	4.38E-08	2.38E-07	4.03E-07
SB-1-9.5	5050/750-50	9.5	1.35E-07	4.55E-08	2.23E-07	4.04E-07
LF-17-5.5	5050/750-50	5.5	1.28E-07	4.46E-08	2.36E-07	4.08E-07
SB-13-10.0	5050/750-50	10	5.52E-08	1.83E-08	3.50E-07	4.24E-07
CW-13	5050	5'	1.70E-07	6.08E-08	2.98E-07	5.29E-07
LF-10-4.5	5050/750-50	4.5	1.76E-07	6.21E-08	3.14E-07	5.52E-07
SB-21-49.5	5050/750-50	49.5	1.97E-07	6.46E-08	3.07E-07	5.68E-07
SB-12-12.0	5050/750-50	12	1.48E-07	5.30E-08	4.06E-07	6.07E-07
SB-14-5.0	5050/750-50	5	1.97E-07	7.05E-08	3.49E-07	6.16E-07
CSB-8	5050	15'-15.5'	1.99E-07	7.13E-08	3.48E-07	6.18E-07
CSB-5	5050/750-50	4'	1.97E-07	7.05E-08	3.44E-07	6.11E-07
B1	5050/750-50	10	2.16E-07	7.11E-08	3.49E-07	6.36E-07
MW4	5050/750-50	10	2.19E-07	7.49E-08	3.52E-07	6.46E-07
SB-21-7.5	5050/750-50	7.5	5.52E-08	1.83E-08	5.83E-07	6.57E-07
B3	5050/750-50	5	1.22E-07	3.92E-08	4.99E-07	6.59E-07
MW3	5050/750-50	10	1.79E-07	6.48E-08	4.31E-07	6.75E-07
SB-6-7.0	5050/750-50	7	1.66E-07	5.50E-08	4.91E-07	7.11E-07
SS-19-2.5	5050/750-50	2.5	2.38E-07	8.13E-08	3.97E-07	7.17E-07
SB-17-2.0	5050/750-50	2	2.35E-07	7.51E-08	4.17E-07	7.26E-07
SB-3-2.5	5050/750-50	2.5	2.28E-07	7.42E-08	4.65E-07	7.68E-07

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Metals			
			oral	dermal	inhlation	Total
LF-6-2	5050/750-50	2	2.42E-07	8.76E-08	4.46E-07	7.75E-07
LF-11-7.5	5050/750-50	7.5	6.22E-08	1.92E-08	7.11E-07	7.92E-07
SB-21-24.5	5050/750-50	24.5	9.32E-08	2.88E-08	7.03E-07	8.25E-07
SB-11-12.5	5050/750-50	12.5	2.62E-07	9.01E-08	4.80E-07	8.33E-07
B4	5050/750-50	10	2.15E-07	7.33E-08	5.51E-07	8.40E-07
B3	5050/750-50	10	2.51E-07	8.58E-08	5.53E-07	8.90E-07
MW1	5050/750-50	10	2.89E-07	9.79E-08	5.16E-07	9.03E-07
LF-7-4	5050/750-50	4	2.90E-07	1.05E-07	5.18E-07	9.13E-07
LF-17-2.5	5050/750-50	2.5	2.93E-07	1.05E-07	5.35E-07	9.34E-07
SB-15-6.0	5050/750-50	6	2.73E-07	9.72E-08	5.21E-07	8.91E-07
SB-18-7.0	5050/750-50	7	3.21E-07	1.15E-07	5.52E-07	9.88E-07
SB-11-7.5	5050/750-50	7.5	3.45E-07	1.23E-07	5.86E-07	1.05E-06
B1	5050/750-50	5	3.36E-07	1.22E-07	5.99E-07	1.06E-06
SB-11-2.5	5050/750-50	2.5	3.59E-07	1.25E-07	6.15E-07	1.10E-06
LF-12B-2.5	5050/750-50	2.5	2.80E-07	9.80E-08	7.47E-07	1.12E-06
LF-12B-7.5	5050/750-50	7.5	2.45E-07	8.80E-08	7.94E-07	1.13E-06
SB-16-6.5	5050/750-50	6.5	4.66E-07	1.67E-07	7.93E-07	1.43E-06
SB-17-5.0	5050/750-50	5	4.62E-07	1.67E-07	7.92E-07	1.42E-06
SB-15-3.5	5050/750-50	3.5	4.18E-07	1.50E-07	9.00E-07	1.47E-06
LF-3-7	5050/750-50	7	3.38E-07	1.23E-07	1.10E-06	1.56E-06
SS-13-2.5	5050/750-50	2.5	4.80E-07	1.69E-07	9.52E-07	1.60E-06
LF-8-2.5	5050/750-50	2.5	5.21E-07	1.86E-07	9.02E-07	1.61E-06
MW1	5050/750-50	5	5.22E-07	1.89E-07	9.25E-07	1.64E-06
MW2	5050/750-50	5	3.43E-07	1.24E-07	1.17E-06	1.64E-06
SB-9-12.5	5050/750-50	12.5	1.38E-07	4.00E-08	1.53E-06	1.71E-06
SB-2-7.5	5050/750-50	7.5	5.11E-07	1.84E-07	1.03E-06	1.72E-06
B4	5050/750-50	5	2.46E-07	8.46E-08	1.44E-06	1.77E-06
SB-21-11.5	5050/750-50	11.5	1.90E-08	5.21E-09	1.84E-06	1.86E-06
LF-F1-1.0	5050/750-50	1	4.97E-07	1.77E-07	1.22E-06	1.90E-06
LF-10-7.5	5050/750-50	7.5	6.59E-07	2.37E-07	1.13E-06	2.02E-06
LF-1-21	5050/750-50	21	4.83E-08	1.75E-08	2.05E-06	2.12E-06
LF-16-13.0	5050/750-50	13	6.56E-07	2.37E-07	1.26E-06	2.15E-06
SB-21-17.5	5050/750-50	17.5	6.22E-08	1.92E-08	2.37E-06	2.45E-06
MW2	5050/750-50	10	1.79E-07	6.48E-08	2.30E-06	2.55E-06
LF-11-12.5	5050/750-50	12.5	1.07E-07	3.05E-08	2.42E-06	2.56E-06
SB-8-5.0	5050/750-50	5	7.35E-07	2.58E-07	1.58E-06	2.57E-06

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Metals			
			oral	dermal	inhlation	Total
LF-2-5.5	5050/750-50	5.5	7.00E-07	2.54E-07	1.72E-06	2.68E-06
SS-4-1.5	5050/750-50	1.5	8.73E-07	3.10E-07	1.57E-06	2.75E-06
SB-13-2.5	5050/750-50	2.5	8.01E-07	2.89E-07	1.69E-06	2.78E-06
LF-9-4.5	5050/750-50	4.5	7.59E-07	2.67E-07	1.56E-06	2.59E-06
LF-10-3.0	5050/750-50	3	8.97E-07	3.24E-07	1.81E-06	3.03E-06
SB-8-10.0	5050/750-50	10	1.04E-06	3.70E-07	1.75E-06	3.16E-06
B2	5050/750-50	10	1.76E-07	6.39E-08	3.04E-06	3.28E-06
SB-14-2.0	5050/750-50	2	1.05E-06	3.78E-07	1.86E-06	3.29E-06
LF-8-10.0	5050/750-50	10	1.83E-07	6.30E-08	6.02E-07	8.48E-07
LF-13-7.0	5050/750-50	7	1.28E-06	4.64E-07	2.20E-06	3.94E-06
LF-4-3.5	5050/750-50	3.5	8.21E-07	2.98E-07	2.96E-06	4.08E-06
CSB-8	5050	5'-5.5'	1.28E-06	4.64E-07	2.37E-06	4.11E-06
LF-7-2	5050/750-50	2	1.52E-06	5.52E-07	2.62E-06	4.69E-06
SB-19-10.0	5050/750-50	10	1.07E-06	3.86E-07	3.17E-06	4.63E-06
SS-12-2.5	5050/750-50	2.5	1.36E-06	4.91E-07	2.95E-06	4.80E-06
CSB-8	5050	10'-10.5'	4.21E-08	1.44E-08	5.25E-06	5.31E-06
SS-5-1.5	5050/750-50	1.5	1.72E-06	6.16E-07	3.04E-06	5.37E-06
LF-12B-5.0	5050/750-50	5	1.69E-06	6.13E-07	3.24E-06	5.54E-06
LF-1-7.5	5050/750-50	7.5	2.66E-07	9.63E-08	6.16E-06	6.52E-06
SB-5-9.5	5050/750-50	9.5	2.09E-06	7.55E-07	3.69E-06	6.54E-06
LF-2-2.5	5050/750-50	2.5	1.30E-06	4.73E-07	5.35E-06	7.13E-06
LF-5-3.5	5050/750-50	3.5	2.34E-06	8.49E-07	4.54E-06	7.73E-06
SS-3-2.0	5050/750-50	2	2.42E-06	8.76E-07	4.48E-06	7.78E-06
SS-10-2.5	5050/750-50	2.5	2.42E-06	8.76E-07	4.53E-06	7.83E-06
SB-16-5.0	5050/750-50	5	2.43E-06	8.71E-07	4.59E-06	7.88E-06
SB-13-7.5	5050/750-50	7.5	2.42E-06	8.76E-07	4.60E-06	7.89E-06
SB-17-6.5	5050/750-50	6.5	3.15E-06	1.14E-06	5.44E-06	9.74E-06
SB-3-7.0	5050/750-50	7	3.39E-06	1.23E-06	6.58E-06	1.12E-05
LF-2-7.5	5050/750-50	7.5	3.86E-06	1.40E-06	6.68E-06	1.19E-05
SB-18-5.0	5050/750-50	5	7.76E-07	2.81E-07	1.22E-05	1.33E-05
SB-14-10	5050/750-50	10	4.36E-06	1.58E-06	7.54E-06	1.35E-05
SS-1-2.5	5050/750-50	2.5	4.59E-06	1.66E-06	7.88E-06	1.41E-05
SS-11-2.0	5050/750-50	2	3.87E-06	1.40E-06	9.18E-06	1.45E-05
LF-6-9	5050/750-50	9	4.83E-06	1.75E-06	8.86E-06	1.54E-05
LF-16-8.0	5050/750-50	8	5.09E-06	1.84E-06	9.34E-06	1.63E-05
LF-11-2.5	5050/750-50	2.5	4.83E-06	1.75E-06	9.69E-06	1.63E-05

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Metals			
			oral	dermal	inhlation	Total
LF-1-2.5	5050/750-50	2.5	6.52E-06	2.36E-06	1.22E-05	2.11E-05
SB-6-2.5	5050/750-50	2.5	6.53E-06	2.36E-06	1.28E-05	2.17E-05
SB-18-2.5	5050/750-50	2.5	8.25E-07	2.98E-07	2.16E-05	2.27E-05
LF-9-11.0	5050/750-50	11	7.51E-06	2.72E-06	1.37E-05	2.40E-05
SB-7-11.5	5050/750-50	11.5	7.51E-06	2.72E-06	1.37E-05	2.40E-05
SS-6-2.0	5050/750-50	2	8.94E-06	3.24E-06	1.82E-05	3.04E-05
SB-20-9.5	5050/750-50	9.5	4.62E-06	1.67E-06	2.50E-05	3.13E-05
LF-11-5.0	5050/750-50	5	8.54E-06	3.07E-06	2.02E-05	3.19E-05
SB-3-4.5	5050/750-50	4.5	6.83E-06	2.46E-06	2.41E-05	3.34E-05
SB-4-7.5	5050/750-50	7.5	1.07E-05	3.86E-06	1.96E-05	3.41E-05
SS-2-2.0	5050/750-50	2	1.11E-05	4.03E-06	1.95E-05	3.47E-05
SS-8-2.0	5050/750-50	2	1.21E-05	4.38E-06	2.11E-05	3.76E-05
SS-18-2.0	5050/750-50	2	1.55E-05	5.60E-06	2.98E-05	5.08E-05
LF-8-5.0	5050/750-50	5	1.59E-05	5.78E-06	3.07E-05	5.24E-05
SB-12-5.0	5050/750-50	5	2.01E-05	7.28E-06	3.58E-05	6.32E-05
SB-9-7.5	5050/750-50	7.5	6.28E-06	2.28E-06	5.64E-05	6.50E-05
SB-21-2.5	5050/750-50	2.5	2.11E-05	7.62E-06	3.70E-05	6.57E-05
SB-19-2.5	5050/750-50	2.5	1.65E-05	5.96E-06	4.43E-05	6.67E-05
LF-13-2.5	5050/750-50	2.5	2.42E-05	8.76E-06	4.15E-05	7.44E-05
LF-14-2-7	5050/750-50	2-7	2.90E-05	1.05E-05	5.75E-05	9.71E-05
SB-12-2.0	5050/750-50	2	3.38E-05	1.23E-05	6.14E-05	1.08E-04
SB-19-5.0B	5050/750-50	5	1.21E-05	4.38E-06	9.33E-05	1.10E-04
SB-10-5.0	5050/750-50	5	3.87E-05	1.40E-05	6.68E-05	1.20E-04
SB-9-2.5	5050/750-50	2.5	3.87E-05	1.40E-05	6.91E-05	1.22E-04
LF-13-5.0	5050/750-50	5	6.28E-05	2.28E-05	1.08E-04	1.93E-04
SB-1-7.0	5050/750-50	7	7.97E-05	2.89E-05	1.37E-04	2.46E-04
SB-1-5.0	5050/750-50	5	4.35E-04	1.58E-04	7.49E-04	1.34E-03

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	SVOCs			
			oral	dermal	inhlation	total
LF-9-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-3-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-7-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-17-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-20-16.0	5050/750-50	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-15-11.0	5050/750-50	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-4-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-34.5	5050/750-50	34.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	35'-35.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	60'-60.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-42.0	5050/750-50	42	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-11-25.0	5050/750-50	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-16-25.0	5050/750-50	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-20-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-7-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-4-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-12.5	5050/750-50	12.5	3.86E-08	0.00E+00	8.29E-09	4.69E-08
LF-5-11	5050/750-50	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	19.5'-20'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	55'-55.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-13-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	30-30.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-15-13.5	5050/750-50	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-3-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-4-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-8-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	40'-40.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	50'-50.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-10-7.0	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	25'-25.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-6-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-2-12.5	5050/750-50	12.5	3.86E-08	0.00E+00	8.29E-09	4.69E-08

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	SVOCs			
			oral	dermal	inhlation	total
LF-7-10	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-7-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-7-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	20'-20.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-10-10.0	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-16-1.5-3	5050/750-50	1.5-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-2-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-5-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-15-11.0	5050/750-50	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-6-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	45'-45.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-5-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-3-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-6	5050/750-50	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-4-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-2-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-1-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-17-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-10.0	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-13	5050	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-10-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-49.5	5050/750-50	49.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-12-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-14-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	15'-15.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-5	5050/750-50	4'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B1	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW4	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B3	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW3	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-6-7.0	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-19-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-3-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	SVOCs			
			oral	dermal	inhlation	total
LF-6-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-11-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-24.5	5050/750-50	24.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-11-12.5	5050/750-50	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B4	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B3	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW1	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-7-4	5050/750-50	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-17-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-15-6.0	5050/750-50	6	3.86E-08	0.00E+00	8.29E-09	4.69E-08
SB-18-7.0	5050/750-50	7	3.86E-08	0.00E+00	8.29E-09	4.69E-08
SB-11-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B1	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-11-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-16-6.5	5050/750-50	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-15-3.5	5050/750-50	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-3-7	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-13-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-8-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW1	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW2	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-9-12.5	5050/750-50	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-2-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B4	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-11.5	5050/750-50	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-F1-1.0	5050/750-50	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-10-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-1-21	5050/750-50	21	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-16-13.0	5050/750-50	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-17.5	5050/750-50	17.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW2	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-11-12.5	5050/750-50	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-8-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	SVOCs			
			oral	dermal	inhlation	total
LF-2-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-4-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-9-4.5	5050/750-50	4.5	2.55E-07	0.00E+00	5.48E-08	3.10E-07
LF-10-3.0	5050/750-50	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-8-10.0	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B2	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-14-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-8-10.0	5050/750-50	10	2.33E-06	0.00E+00	5.01E-07	2.83E-06
LF-13-7.0	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-4-3.5	5050/750-50	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	5'-5.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-7-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-10.0	5050/750-50	10	9.71E-08	0.00E+00	2.08E-08	1.18E-07
SS-12-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	10'-10.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-5-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-1-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-5-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-2-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-5-3.5	5050/750-50	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-3-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-10-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-16-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-6.5	5050/750-50	6.5	3.86E-08	0.00E+00	8.29E-09	4.69E-08
SB-3-7.0	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-2-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-14-10	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-1-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-11-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-6-9	5050/750-50	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-16-8.0	5050/750-50	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-11-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	SVOCs			
			oral	dermal	inhlation	total
LF-1-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-6-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-9-11.0	5050/750-50	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-7-11.5	5050/750-50	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-6-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-20-9.5	5050/750-50	9.5	1.59E-07	0.00E+00	3.42E-08	1.94E-07
LF-11-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-3-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-4-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-2-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-8-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-18-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-8-5.0	5050/750-50	5	1.99E-07	0.00E+00	4.27E-08	2.42E-07
SB-12-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-9-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-2-7	5050/750-50	2-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-12-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-5.0B	5050/750-50	5	3.86E-08	0.00E+00	8.29E-09	4.69E-08
SB-10-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-9-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-1-7.0	5050/750-50	7	1.99E-07	0.00E+00	4.27E-08	2.42E-07
SB-1-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	VOCs			
			oral	dermal	inhlation	total
LF-9-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-3-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-7-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-15.0	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-17-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-20-16.0	5050/750-50	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-15-11.0	5050/750-50	11	4.03E-12	4.86E-12	7.68E-09	7.69E-09
LF-4-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-34.5	5050/750-50	34.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	35'-35.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	60'-60.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-42.0	5050/750-50	42	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-12.0	5050/750-50	12	4.03E-12	4.86E-12	7.68E-09	7.69E-09
LF-11-25.0	5050/750-50	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-16-25.0	5050/750-50	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-20-2.5	5050/750-50	2.5	4.03E-12	4.86E-12	7.68E-09	7.69E-09
LF-14-1.5	5050/750-50	1.5	4.03E-12	4.86E-12	7.68E-09	7.69E-09
SS-7-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-4-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-12.5	5050/750-50	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-5-11	5050/750-50	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	19.5'-20'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	55'-55.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-13-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	30-30.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-15-13.5	5050/750-50	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-3-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-4-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-8-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	40'-40.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	50'-50.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-10-7.0	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	25'-25.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-6-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-2-12.5	5050/750-50	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	VOCs			
			oral	dermal	inhlation	total
LF-7-10	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-7-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-7-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	20'-20.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-10-10.0	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-16-1.5-3	5050/750-50	1.5-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-2-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-5-15	5050/750-50	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-15-11.0	5050/750-50	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-6-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	45'-45.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-5-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-3-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-6	5050/750-50	4'	4.03E-12	4.86E-12	7.68E-09	7.69E-09
SB-4-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-2-15.5	5050/750-50	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-1-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-17-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-10.0	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-13	5050	5'	4.03E-13	4.86E-13	7.68E-10	7.69E-10
LF-10-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-49.5	5050/750-50	49.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-12-12.0	5050/750-50	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-14-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	15'-15.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-5	5050/750-50	4'	4.03E-12	4.86E-12	7.68E-09	7.69E-09
B1	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW4	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B3	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW3	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-6-7.0	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-19-2.5	5050/750-50	2.5	4.03E-12	4.86E-12	7.68E-09	7.69E-09
SB-17-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-3-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	VOCs			
			oral	dermal	inhlation	total
LF-6-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-11-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-24.5	5050/750-50	24.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-11-12.5	5050/750-50	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B4	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B3	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW1	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-7-4	5050/750-50	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-17-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-15-6.0	5050/750-50	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-7.0	5050/750-50	7	4.03E-12	4.86E-12	7.68E-09	7.69E-09
SB-11-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B1	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-11-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-16-6.5	5050/750-50	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-5.0	5050/750-50	5	4.03E-12	4.86E-12	7.68E-09	7.69E-09
SB-15-3.5	5050/750-50	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-3-7	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-13-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-8-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW1	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW2	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-9-12.5	5050/750-50	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-2-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B4	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-11.5	5050/750-50	11.5	4.03E-12	4.86E-12	7.68E-09	7.69E-09
LF-F1-1.0	5050/750-50	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-10-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-1-21	5050/750-50	21	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-16-13.0	5050/750-50	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-17.5	5050/750-50	17.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW2	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-11-12.5	5050/750-50	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-8-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	VOCs			
			oral	dermal	inhlation	total
LF-2-5.5	5050/750-50	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-4-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-9-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-10-3.0	5050/750-50	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-8-10.0	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B2	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-14-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-8-10.0	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-7.0	5050/750-50	7	4.03E-12	4.86E-12	7.68E-09	7.69E-09
LF-4-3.5	5050/750-50	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	5'-5.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-7-2	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-10.0	5050/750-50	10	4.03E-12	4.86E-12	7.68E-09	7.69E-09
SS-12-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-8	5050	10'-10.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-5-1.5	5050/750-50	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-12B-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-1-7.5	5050/750-50	7.5	8.05E-13	9.73E-13	1.54E-09	1.54E-09
SB-5-9.5	5050/750-50	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-2-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-5-3.5	5050/750-50	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-3-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-10-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-16-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-13-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-17-6.5	5050/750-50	6.5	6.92E-11	8.37E-11	1.32E-07	1.32E-07
SB-3-7.0	5050/750-50	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-2-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-14-10	5050/750-50	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-1-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-11-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-6-9	5050/750-50	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-16-8.0	5050/750-50	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-11-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	VOCs			
			oral	dermal	inhlation	total
LF-1-2.5	5050/750-50	2.5	8.05E-13	9.73E-13	1.54E-09	1.54E-09
SB-6-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-18-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-9-11.0	5050/750-50	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-7-11.5	5050/750-50	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-6-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-20-9.5	5050/750-50	9.5	4.03E-12	4.86E-12	7.68E-09	7.69E-09
LF-11-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-3-4.5	5050/750-50	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-4-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-2-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-8-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SS-18-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-8-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-12-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-9-7.5	5050/750-50	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-21-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-14-2-7	5050/750-50	2-7	4.03E-12	4.86E-12	7.68E-09	7.69E-09
SB-12-2.0	5050/750-50	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-19-5.0B	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-10-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-9-2.5	5050/750-50	2.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LF-13-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-1-7.0	5050/750-50	7	7.09E-11	8.56E-11	1.35E-07	1.35E-07
SB-1-5.0	5050/750-50	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Grand Total
LF-9-15.0	5050/750-50	15	0.00E+00
LF-12B-15.0	5050/750-50	15	0.00E+00
SB-3-15.0	5050/750-50	15	0.00E+00
SB-7-15.0	5050/750-50	15	0.00E+00
SB-13-15.0	5050/750-50	15	0.00E+00
LF-17-12.0	5050/750-50	12	5.04E-08
SB-20-16.0	5050/750-50	16	5.04E-08
LF-15-11.0	5050/750-50	11	6.88E-08
LF-4-2	5050/750-50	2	7.87E-08
SB-21-34.5	5050/750-50	34.5	7.92E-08
CSB-8	5050	35'-35.5'	9.01E-08
CSB-8	5050	60'-60.5'	9.01E-08
SB-21-42.0	5050/750-50	42	9.31E-08
SB-17-12.0	5050/750-50	12	1.06E-07
LF-11-25.0	5050/750-50	25	1.09E-07
LF-16-25.0	5050/750-50	25	1.12E-07
SB-20-2.5	5050/750-50	2.5	1.22E-07
LF-14-1.5	5050/750-50	1.5	1.30E-07
SS-7-2.0	5050/750-50	2	1.33E-07
SB-4-12.0	5050/750-50	12	1.46E-07
LF-14-12.5	5050/750-50	12.5	1.52E-07
LF-5-11	5050/750-50	11	1.54E-07
CSB-8	5050	19.5'-20'	1.64E-07
CSB-8	5050	55'-55.5'	1.64E-07
SS-13-2.0	5050/750-50	2	1.90E-07
CSB-8	5050	30-30.5	2.01E-07
LF-15-13.5	5050/750-50	13.5	2.12E-07
LF-3-15	5050/750-50	15	2.28E-07
LF-4-15	5050/750-50	15	2.28E-07
SB-8-2.5	5050/750-50	2.5	2.29E-07
CSB-8	5050	40'-40.5'	2.39E-07
CSB-8	5050	50'-50.5'	2.39E-07
SB-10-7.0	5050/750-50	7	2.47E-07
CSB-8	5050	25'-25.5'	2.49E-07
SB-6-12.0	5050/750-50	12	2.83E-07
SB-2-12.5	5050/750-50	12.5	3.01E-07

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Grand Total
LF-7-10	5050/750-50	10	3.03E-07
LF-7-15.5	5050/750-50	15.5	3.08E-07
SB-7-2.5	5050/750-50	2.5	3.08E-07
CSB-8	5050	20'-20.5'	3.13E-07
SB-10-10.0	5050/750-50	10	3.21E-07
LF-16-1.5-3	5050/750-50	1.5-3	3.26E-07
SB-18-1.5	5050/750-50	1.5	3.45E-07
SB-2-2.5	5050/750-50	2.5	3.64E-07
LF-5-15	5050/750-50	15	3.77E-07
SB-15-11.0	5050/750-50	11	3.81E-07
LF-6-15.5	5050/750-50	15.5	3.87E-07
CSB-8	5050	45'-45.5'	3.88E-07
LF-5-2	5050/750-50	2	3.93E-07
LF-3-2.5	5050/750-50	2.5	3.93E-07
CSB-6	5050/750-50	4'	3.95E-07
SB-4-2.5	5050/750-50	2.5	3.96E-07
LF-2-15.5	5050/750-50	15.5	4.03E-07
SB-1-9.5	5050/750-50	9.5	4.04E-07
LF-17-5.5	5050/750-50	5.5	4.08E-07
SB-13-10.0	5050/750-50	10	4.24E-07
CW-13	5050	5'	5.30E-07
LF-10-4.5	5050/750-50	4.5	5.52E-07
SB-21-49.5	5050/750-50	49.5	5.68E-07
SB-12-12.0	5050/750-50	12	6.07E-07
SB-14-5.0	5050/750-50	5	6.16E-07
CSB-8	5050	15'-15.5'	6.18E-07
CSB-5	5050/750-50	4'	6.18E-07
B1	5050/750-50	10	6.36E-07
MW4	5050/750-50	10	6.46E-07
SB-21-7.5	5050/750-50	7.5	6.57E-07
B3	5050/750-50	5	6.59E-07
MW3	5050/750-50	10	6.75E-07
SB-6-7.0	5050/750-50	7	7.11E-07
SS-19-2.5	5050/750-50	2.5	7.25E-07
SB-17-2.0	5050/750-50	2	7.26E-07
SB-3-2.5	5050/750-50	2.5	7.68E-07

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Grand Total
LF-6-2	5050/750-50	2	7.75E-07
LF-11-7.5	5050/750-50	7.5	7.92E-07
SB-21-24.5	5050/750-50	24.5	8.25E-07
SB-11-12.5	5050/750-50	12.5	8.33E-07
B4	5050/750-50	10	8.40E-07
B3	5050/750-50	10	8.90E-07
MW1	5050/750-50	10	9.03E-07
LF-7-4	5050/750-50	4	9.13E-07
LF-17-2.5	5050/750-50	2.5	9.34E-07
SB-15-6.0	5050/750-50	6	9.38E-07
SB-18-7.0	5050/750-50	7	1.04E-06
SB-11-7.5	5050/750-50	7.5	1.05E-06
B1	5050/750-50	5	1.06E-06
SB-11-2.5	5050/750-50	2.5	1.10E-06
LF-12B-2.5	5050/750-50	2.5	1.12E-06
LF-12B-7.5	5050/750-50	7.5	1.13E-06
SB-16-6.5	5050/750-50	6.5	1.43E-06
SB-17-5.0	5050/750-50	5	1.43E-06
SB-15-3.5	5050/750-50	3.5	1.47E-06
LF-3-7	5050/750-50	7	1.56E-06
SS-13-2.5	5050/750-50	2.5	1.60E-06
LF-8-2.5	5050/750-50	2.5	1.61E-06
MW1	5050/750-50	5	1.64E-06
MW2	5050/750-50	5	1.64E-06
SB-9-12.5	5050/750-50	12.5	1.71E-06
SB-2-7.5	5050/750-50	7.5	1.72E-06
B4	5050/750-50	5	1.77E-06
SB-21-11.5	5050/750-50	11.5	1.87E-06
LF-F1-1.0	5050/750-50	1	1.90E-06
LF-10-7.5	5050/750-50	7.5	2.02E-06
LF-1-21	5050/750-50	21	2.12E-06
LF-16-13.0	5050/750-50	13	2.15E-06
SB-21-17.5	5050/750-50	17.5	2.45E-06
MW2	5050/750-50	10	2.55E-06
LF-11-12.5	5050/750-50	12.5	2.56E-06
SB-8-5.0	5050/750-50	5	2.57E-06

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Grand Total
LF-2-5.5	5050/750-50	5.5	2.68E-06
SS-4-1.5	5050/750-50	1.5	2.75E-06
SB-13-2.5	5050/750-50	2.5	2.78E-06
LF-9-4.5	5050/750-50	4.5	2.90E-06
LF-10-3.0	5050/750-50	3	3.03E-06
SB-8-10.0	5050/750-50	10	3.16E-06
B2	5050/750-50	10	3.28E-06
SB-14-2.0	5050/750-50	2	3.29E-06
LF-8-10.0	5050/750-50	10	3.68E-06
LF-13-7.0	5050/750-50	7	3.95E-06
LF-4-3.5	5050/750-50	3.5	4.08E-06
CSB-8	5050	5'-5.5'	4.11E-06
LF-7-2	5050/750-50	2	4.69E-06
SB-19-10.0	5050/750-50	10	4.75E-06
SS-12-2.5	5050/750-50	2.5	4.80E-06
CSB-8	5050	10'-10.5'	5.31E-06
SS-5-1.5	5050/750-50	1.5	5.37E-06
LF-12B-5.0	5050/750-50	5	5.54E-06
LF-1-7.5	5050/750-50	7.5	6.52E-06
SB-5-9.5	5050/750-50	9.5	6.54E-06
LF-2-2.5	5050/750-50	2.5	7.13E-06
LF-5-3.5	5050/750-50	3.5	7.73E-06
SS-3-2.0	5050/750-50	2	7.78E-06
SS-10-2.5	5050/750-50	2.5	7.83E-06
SB-16-5.0	5050/750-50	5	7.88E-06
SB-13-7.5	5050/750-50	7.5	7.89E-06
SB-17-6.5	5050/750-50	6.5	9.92E-06
SB-3-7.0	5050/750-50	7	1.12E-05
LF-2-7.5	5050/750-50	7.5	1.19E-05
SB-18-5.0	5050/750-50	5	1.33E-05
SB-14-10	5050/750-50	10	1.35E-05
SS-1-2.5	5050/750-50	2.5	1.41E-05
SS-11-2.0	5050/750-50	2	1.45E-05
LF-6-9	5050/750-50	9	1.54E-05
LF-16-8.0	5050/750-50	8	1.63E-05
LF-11-2.5	5050/750-50	2.5	1.63E-05

APPENDIX C-1
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	Property	Sample Depth	Grand Total
LF-1-2.5	5050/750-50	2.5	2.11E-05
SB-6-2.5	5050/750-50	2.5	2.17E-05
SB-18-2.5	5050/750-50	2.5	2.27E-05
LF-9-11.0	5050/750-50	11	2.40E-05
SB-7-11.5	5050/750-50	11.5	2.40E-05
SS-6-2.0	5050/750-50	2	3.04E-05
SB-20-9.5	5050/750-50	9.5	3.15E-05
LF-11-5.0	5050/750-50	5	3.19E-05
SB-3-4.5	5050/750-50	4.5	3.34E-05
SB-4-7.5	5050/750-50	7.5	3.41E-05
SS-2-2.0	5050/750-50	2	3.47E-05
SS-8-2.0	5050/750-50	2	3.76E-05
SS-18-2.0	5050/750-50	2	5.08E-05
LF-8-5.0	5050/750-50	5	5.27E-05
SB-12-5.0	5050/750-50	5	6.32E-05
SB-9-7.5	5050/750-50	7.5	6.50E-05
SB-21-2.5	5050/750-50	2.5	6.57E-05
SB-19-2.5	5050/750-50	2.5	6.67E-05
LF-13-2.5	5050/750-50	2.5	7.44E-05
LF-14-2-7	5050/750-50	2-7	9.71E-05
SB-12-2.0	5050/750-50	2	1.08E-04
SB-19-5.0B	5050/750-50	5	1.10E-04
SB-10-5.0	5050/750-50	5	1.20E-04
SB-9-2.5	5050/750-50	2.5	1.22E-04
LF-13-5.0	5050/750-50	5	1.93E-04
SB-1-7.0	5050/750-50	7	2.46E-04
SB-1-5.0	5050/750-50	5	1.34E-03

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	Metals oral	dermal	inhlation	Total
B-11	5051	5	9.50E-09	2.61E-09	1.70E-08	2.91E-08
CSB-9	5051	25'-25.5'	1.55E-08	4.80E-09	3.25E-08	5.29E-08
CSB-9	5051	30'-30.5'	1.55E-08	4.80E-09	3.25E-08	5.29E-08
CSB-9	5051	40'-40.5'	1.55E-08	4.80E-09	3.25E-08	5.29E-08
B-14	5051	13	2.68E-08	4.70E-09	2.43E-08	5.58E-08
MW-8	5051	15.5	2.68E-08	4.70E-09	2.43E-08	5.58E-08
MW-5	5051	17.5	2.68E-08	4.70E-09	2.43E-08	5.58E-08
BA-4	5051	12	1.72E-08	3.76E-09	4.15E-08	6.25E-08
B-9	5051	16.5	3.37E-08	5.54E-09	2.72E-08	6.64E-08
B-12	5051	17	3.37E-08	5.54E-09	2.72E-08	6.64E-08
B-13	5051	22	3.37E-08	5.54E-09	2.72E-08	6.64E-08
B-12	5051	24.5	3.37E-08	5.54E-09	2.72E-08	6.64E-08
MWA-2	5051	13.5	1.59E-08	2.56E-09	5.16E-08	7.01E-08
MW-4	5051	14	2.83E-08	6.93E-09	3.59E-08	7.11E-08
MW-6	5051	13	3.53E-08	7.76E-09	3.88E-08	8.18E-08
MW-7	5051	5.5	4.22E-08	8.60E-09	4.17E-08	9.25E-08
MWA-2	5051	9.5	1.69E-08	2.68E-09	7.94E-08	9.90E-08
BA-4	5051	9.5	3.31E-08	9.12E-09	6.32E-08	1.05E-07
BA-5	5051	9	3.83E-08	1.22E-08	6.20E-08	1.13E-07
BA-5	5051	13	3.40E-08	9.44E-09	7.35E-08	1.17E-07
MW-8	5051	10	3.35E-08	1.05E-08	7.96E-08	1.24E-07
B-12	5051	20	4.98E-08	1.30E-08	6.36E-08	1.26E-07
MWA-3	5051	15	3.74E-08	1.19E-08	8.22E-08	1.31E-07
BA-4	5051	8	3.83E-08	1.22E-08	9.31E-08	1.44E-07
MWA-2	5051	14.5	3.17E-08	6.81E-09	1.10E-07	1.48E-07
B-10	5051	6	6.15E-08	1.56E-08	7.48E-08	1.52E-07
MW-6	5051	16	6.15E-08	1.56E-08	7.48E-08	1.52E-07
MWA-3	5051	13.5	4.90E-08	1.42E-08	8.89E-08	1.52E-07
CSB-9	5051	20'-20.5'	5.18E-08	1.79E-08	9.47E-08	1.64E-07
MW-8	5051	8.5	6.43E-08	1.83E-08	8.85E-08	1.71E-07
B-11	5051	12.5	6.22E-08	1.92E-08	9.39E-08	1.75E-07
BA-4	5051	9.5	6.46E-08	2.01E-08	9.81E-08	1.83E-07
BA-5	5051	9	7.63E-08	2.26E-08	1.09E-07	2.08E-07
BA-5	5051	10	7.43E-08	2.31E-08	1.32E-07	2.30E-07
MW-8	5051	1	8.36E-08	2.53E-08	1.22E-07	2.31E-07
MWA-1	5051	17	7.49E-08	2.44E-08	1.39E-07	2.39E-07
CSB-9	5051	5'-5.5'	7.59E-08	2.67E-08	1.36E-07	2.39E-07
CSB-9	5051	45'-45.5'	7.59E-08	2.67E-08	1.36E-07	2.39E-07
CSB-9	5051	50'-50.5'	7.59E-08	2.67E-08	1.36E-07	2.39E-07
CSB-9	5051	60'-60.5'	7.59E-08	2.67E-08	1.36E-07	2.39E-07
B-11	5051	8	7.83E-08	2.76E-08	1.35E-07	2.41E-07
B-14	5051	9.5	9.05E-08	2.61E-08	1.25E-07	2.41E-07
MW-7	5051	16.5	9.05E-08	2.61E-08	1.25E-07	2.41E-07
MWA-3	5051	4.5	2.84E-08	4.89E-09	2.13E-07	2.46E-07

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	Metals oral	dermal	inhlation	Total
CW-9	5051/EBMUD	5'	7.59E-08	2.67E-08	1.36E-07	2.39E-07
MWA-1	5051	11.5	8.05E-08	2.46E-08	1.45E-07	2.50E-07
MWA-1	5051	2	8.39E-08	2.71E-08	1.57E-07	2.68E-07
B-14	5051	16	9.81E-08	3.05E-08	1.47E-07	2.75E-07
MW-5	5051	1	1.07E-07	3.05E-08	1.44E-07	2.82E-07
BA-4	5051	6.5	1.07E-07	3.05E-08	1.44E-07	2.82E-07
BA-5	5051	10	1.00E-07	3.14E-08	1.51E-07	2.83E-07
MW-4	5051	1	1.01E-07	3.32E-08	1.60E-07	2.94E-07
BA-5	5051	8	6.67E-08	2.02E-08	2.16E-07	3.03E-07
B-10	5051	13	1.06E-07	3.49E-08	1.69E-07	3.09E-07
MW-4	5051	15.5	1.10E-07	3.49E-08	1.67E-07	3.12E-07
CSB-9	5051	35'-35.5'	1.00E-07	3.54E-08	1.78E-07	3.13E-07
CSB-9	5051	55'-55.5'	1.00E-07	3.54E-08	1.78E-07	3.13E-07
MWA-1	5051	14.5	9.79E-08	3.17E-08	1.86E-07	3.16E-07
MWA-2	5051	11.5	2.72E-08	6.88E-09	2.87E-07	3.21E-07
BA-5	5051	9	9.56E-08	3.19E-08	1.98E-07	3.26E-07
BA-4	5051	6.5	9.08E-08	2.90E-08	2.12E-07	3.31E-07
B-13	5051	13	1.22E-07	3.75E-08	1.79E-07	3.38E-07
B-10	5051	2	1.20E-07	3.84E-08	1.84E-07	3.42E-07
B-13	5051	1	1.24E-07	3.84E-08	1.83E-07	3.45E-07
CW-8	5051/EBMUD	5'	1.00E-07	3.54E-08	2.04E-07	3.39E-07
B-9	5051	19.5	1.25E-07	4.02E-08	1.92E-07	3.57E-07
B-10	5051	16	7.84E-08	2.17E-08	2.59E-07	3.60E-07
BA-5	5051	16	1.03E-07	3.29E-08	2.24E-07	3.60E-07
MW-6	5051	1	1.29E-07	4.01E-08	1.91E-07	3.60E-07
BA-4	5051	8	6.19E-08	1.83E-08	2.81E-07	3.61E-07
MWA-1	5051	13	1.17E-07	3.72E-08	2.28E-07	3.83E-07
CW-12	5051/PGE	11-11.5	1.24E-07	4.42E-08	2.19E-07	3.88E-07
MW-7	5051	1	1.32E-07	4.46E-08	2.14E-07	3.91E-07
B-13	5051	18	1.36E-07	4.27E-08	2.14E-07	3.93E-07
BA-4	5051	2	1.22E-07	4.13E-08	2.31E-07	3.94E-07
B-14	5051	2	1.32E-07	4.46E-08	2.35E-07	4.12E-07
B-9	5051	2	1.46E-07	4.80E-08	2.30E-07	4.24E-07
B-9	5051	11.5	1.30E-07	4.37E-08	2.51E-07	4.25E-07
MWA-2	5051	10	1.46E-07	4.80E-08	2.35E-07	4.29E-07
MW-5	5051	10.5	1.00E-07	2.96E-08	3.33E-07	4.63E-07
BA-4	5051	2	1.67E-07	5.23E-08	2.48E-07	4.68E-07
MWA-3	5051	9.5	2.42E-08	4.80E-09	4.82E-07	5.11E-07
B-11	5051	16	1.75E-07	5.85E-08	2.79E-07	5.13E-07
B-14	5051	7	1.84E-07	5.85E-08	2.77E-07	5.20E-07
B-4	5051	11.5	1.80E-07	5.67E-08	3.15E-07	5.51E-07
MW-6	5051	9.5	1.60E-07	5.73E-08	3.38E-07	5.56E-07
BA-5	5051	8	1.05E-07	3.32E-08	4.18E-07	5.57E-07
B-9	5051	7	2.11E-07	6.81E-08	3.22E-07	6.01E-07
CSB-9	5051	15'-15.5'	1.48E-07	5.30E-08	4.06E-07	6.07E-07
CSB-1	5051/PGE	8-8.5'	1.97E-07	7.05E-08	3.44E-07	6.11E-07

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	Metals			
			oral	dermal	inhlation	Total
MW-5	5051	13.5	2.02E-07	6.82E-08	3.51E-07	6.21E-07
MWA-2	5051	11.5	1.22E-07	3.93E-08	4.73E-07	6.35E-07
MWA-3	5051	5	1.96E-07	6.28E-08	4.01E-07	6.60E-07
MWA-1	5051	1	2.09E-07	6.90E-08	3.90E-07	6.68E-07
B-11	5051	0.5	1.44E-07	2.03E-08	5.94E-07	7.58E-07
CSB-9	5051	10'-10.5'	2.45E-07	8.80E-08	4.26E-07	7.59E-07
MWA-3	5051	12.5	2.11E-07	7.25E-08	4.88E-07	7.72E-07
MW-7	5051	13.5	2.48E-07	8.66E-08	4.44E-07	7.79E-07
CW-10	5051/PGE	11-11.5	2.69E-07	9.67E-08	4.99E-07	8.65E-07
MW-4	5051	10.5	2.76E-07	9.17E-08	5.85E-07	9.53E-07
MW-7	5051	10.5	3.04E-07	1.07E-07	5.60E-07	9.71E-07
MWA-1	5051	6	1.94E-07	6.20E-08	7.75E-07	1.03E-06
BA-5	5051	4	2.76E-07	9.17E-08	7.04E-07	1.07E-06
MWA-1	5051	3	2.48E-07	8.27E-08	7.75E-07	1.11E-06
MWA-1	5051	8	3.14E-07	1.02E-07	7.30E-07	1.15E-06
MWA-3	5051	10	3.18E-07	1.08E-07	7.79E-07	1.20E-06
BA-5	5051	4	2.01E-07	6.92E-08	9.83E-07	1.25E-06
MWA-3	5051	13	3.35E-07	1.16E-07	8.12E-07	1.26E-06
MWA-1	5051	7.5	3.45E-07	1.18E-07	1.18E-06	1.65E-06
MW-6	5051	7.5	3.24E-07	1.09E-07	1.24E-06	1.67E-06
B-6	5051	6.5	5.62E-07	2.02E-07	1.20E-06	1.96E-06
B-10	5051	10	4.62E-07	1.61E-07	1.43E-06	2.06E-06
MW-4	5051	8.5	8.78E-08	2.34E-08	3.01E-06	3.12E-06
MWA-1	5051	1.5	9.72E-07	3.48E-07	1.82E-06	3.14E-06
MWA-1	5051	10	9.69E-07	3.46E-07	2.67E-06	3.98E-06
MWA-1	5051	10	1.58E-07	4.88E-08	4.11E-06	4.32E-06
MWA-1	5051	8.5	1.60E-07	4.97E-08	1.01E-05	1.03E-05
MWA-3	5051	10.5	3.57E-06	1.29E-06	7.95E-06	1.28E-05
B-2	5051	4	6.56E-06	2.37E-06	1.18E-05	2.07E-05
MWA-3	5051	11	7.04E-06	2.54E-06	1.37E-05	2.33E-05
MWA-3	5051	11.5	7.19E-06	2.60E-06	1.39E-05	2.37E-05
MWA-1	5051	8.5	3.03E-06	1.10E-06	2.39E-05	2.80E-05
MWA-3	5051	12	9.21E-06	3.33E-06	1.86E-05	3.12E-05
B-3	5051	4	8.97E-06	3.24E-06	2.99E-05	4.21E-05
CSB-1	5051/PGE	6-6.5'	1.43E-05	5.17E-06	2.47E-05	4.41E-05
MWA-3	5051	11.5	1.60E-05	5.78E-06	2.87E-05	5.04E-05
B-8	5051	7.5	5.35E-06	1.93E-06	4.80E-05	5.53E-05
MWA-2	5051	5.5	1.95E-05	7.06E-06	4.11E-05	6.76E-05
B-7	5051	6.5	2.25E-05	8.15E-06	4.08E-05	7.14E-05
MWA-2	5051	6	2.90E-05	1.05E-05	5.91E-05	9.86E-05
MWA-1	5051	9	3.62E-05	1.31E-05	6.47E-05	1.14E-04
B-5	5051	11.5	1.21E-05	4.38E-06	1.30E-04	1.46E-04

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	SVOCs oral	dermal	inhlation	total
B-11	5051	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	25'-25.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	30'-30.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	40'-40.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-8	5051	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-5	5051	17.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	16.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-12	5051	17	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-13	5051	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-12	5051	24.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	14	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-8	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-12	5051	20	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	14.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	20'-20.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-8	5051	8.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-11	5051	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-8	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	17	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	5'-5.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	45'-45.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	50'-50.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	60'-60.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-11	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	16.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	SVOCs oral	dermal	inhlation	total
CW-9	5051/EBMUD	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-5	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	35'-35.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	55'-55.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	14.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-13	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-13	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-8	5051/EBMUD	5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	19.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-12	5051/PGE	11-11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-13	5051	18	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-5	5051	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-11	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-4	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	15'-15.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-1	5051/PGE	8-8.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	SVOCs oral	dermal	inhlation	total
MW-5	5051	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-11	5051	0.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	10'-10.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-10	5051/PGE	11-11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-6	5051	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	8.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	8.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-2	5051	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	8.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-3	5051	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-1	5051/PGE	6-6.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-8	5051	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-7	5051	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-5	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	VOCs oral	dermal	inhlation	total
B-11	5051	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	25'-25.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	30'-30.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	40'-40.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-8	5051	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-5	5051	17.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	16.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-12	5051	17	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-13	5051	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-12	5051	24.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	14	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-8	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-12	5051	20	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	14.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	20'-20.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-8	5051	8.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-11	5051	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-8	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	17	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	5'-5.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	45'-45.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	50'-50.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	60'-60.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-11	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	16.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	4.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	VOCs oral	dermal	inhlation	total
CW-9	5051/EBMUD	5'	4.03E-12	4.86E-12	7.68E-09	7.69E-09
MWA-1	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-5	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	15.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	35'-35.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	55'-55.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	14.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-13	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-13	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-8	5051/EBMUD	5'	4.03E-12	4.86E-12	7.68E-09	7.69E-09
B-9	5051	19.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-12	5051/PGE	11-11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-13	5051	18	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-5	5051	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-4	5051	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-11	5051	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-14	5051	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-4	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	9.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-9	5051	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	15'-15.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-1	5051/PGE	8-8.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	VOCs oral	dermal	inhlation	total
MW-5	5051	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-11	5051	0.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-9	5051	10'-10.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	12.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	13.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-10	5051/PGE	11-11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-7	5051	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-5	5051	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-6	5051	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-6	5051	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-10	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MW-4	5051	8.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	1.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	8.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	10.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-2	5051	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	8.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-3	5051	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CSB-1	5051/PGE	6-6.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-3	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-8	5051	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	5.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-7	5051	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-2	5051	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MWA-1	5051	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B-5	5051	11.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	Grand Total
B-11	5051	5	2.91E-08
CSB-9	5051	25'-25.5'	5.29E-08
CSB-9	5051	30'-30.5'	5.29E-08
CSB-9	5051	40'-40.5'	5.29E-08
B-14	5051	13	5.58E-08
MW-8	5051	15.5	5.58E-08
MW-5	5051	17.5	5.58E-08
BA-4	5051	12	6.25E-08
B-9	5051	16.5	6.64E-08
B-12	5051	17	6.64E-08
B-13	5051	22	6.64E-08
B-12	5051	24.5	6.64E-08
MWA-2	5051	13.5	7.01E-08
MW-4	5051	14	7.11E-08
MW-6	5051	13	8.18E-08
MW-7	5051	5.5	9.25E-08
MWA-2	5051	9.5	9.90E-08
BA-4	5051	9.5	1.05E-07
BA-5	5051	9	1.13E-07
BA-5	5051	13	1.17E-07
MW-8	5051	10	1.24E-07
B-12	5051	20	1.26E-07
MWA-3	5051	15	1.31E-07
BA-4	5051	8	1.44E-07
MWA-2	5051	14.5	1.48E-07
B-10	5051	6	1.52E-07
MW-6	5051	16	1.52E-07
MWA-3	5051	13.5	1.52E-07
CSB-9	5051	20'-20.5'	1.64E-07
MW-8	5051	8.5	1.71E-07
B-11	5051	12.5	1.75E-07
BA-4	5051	9.5	1.83E-07
BA-5	5051	9	2.08E-07
BA-5	5051	10	2.30E-07
MW-8	5051	1	2.31E-07
MWA-1	5051	17	2.39E-07
CSB-9	5051	5'-5.5'	2.39E-07
CSB-9	5051	45'-45.5'	2.39E-07
CSB-9	5051	50'-50.5'	2.39E-07
CSB-9	5051	60'-60.5'	2.39E-07
B-11	5051	8	2.41E-07
B-14	5051	9.5	2.41E-07
MW-7	5051	16.5	2.41E-07
MWA-3	5051	4.5	2.46E-07

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	Grand Total
CW-9	5051/EBMUD	5'	2.47E-07
MWA-1	5051	11.5	2.50E-07
MWA-1	5051	2	2.68E-07
B-14	5051	16	2.75E-07
MW-5	5051	1	2.82E-07
BA-4	5051	6.5	2.82E-07
BA-5	5051	10	2.83E-07
MW-4	5051	1	2.94E-07
BA-5	5051	8	3.03E-07
B-10	5051	13	3.09E-07
MW-4	5051	15.5	3.12E-07
CSB-9	5051	35'-35.5'	3.13E-07
CSB-9	5051	55'-55.5'	3.13E-07
MWA-1	5051	14.5	3.16E-07
MWA-2	5051	11.5	3.21E-07
BA-5	5051	9	3.26E-07
BA-4	5051	6.5	3.31E-07
B-13	5051	13	3.38E-07
B-10	5051	2	3.42E-07
B-13	5051	1	3.45E-07
CW-8	5051/EBMUD	5'	3.47E-07
B-9	5051	19.5	3.57E-07
B-10	5051	16	3.60E-07
BA-5	5051	16	3.60E-07
MW-6	5051	1	3.60E-07
BA-4	5051	8	3.61E-07
MWA-1	5051	13	3.83E-07
CW-12	5051/PGE	11-11.5	3.88E-07
MW-7	5051	1	3.91E-07
B-13	5051	18	3.93E-07
BA-4	5051	2	3.94E-07
B-14	5051	2	4.12E-07
B-9	5051	2	4.24E-07
B-9	5051	11.5	4.25E-07
MWA-2	5051	10	4.29E-07
MW-5	5051	10.5	4.63E-07
BA-4	5051	2	4.68E-07
MWA-3	5051	9.5	5.11E-07
B-11	5051	16	5.13E-07
B-14	5051	7	5.20E-07
B-4	5051	11.5	5.51E-07
MW-6	5051	9.5	5.56E-07
BA-5	5051	8	5.57E-07
B-9	5051	7	6.01E-07
CSB-9	5051	15'-15.5'	6.07E-07
CSB-1	5051/PGE	8-8.5'	6.11E-07

APPENDIX C-2
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	Property	Sample Depth	Grand Total
MW-5	5051	13.5	6.21E-07
MWA-2	5051	11.5	6.35E-07
MWA-3	5051	5	6.60E-07
MWA-1	5051	1	6.68E-07
B-11	5051	0.5	7.58E-07
CSB-9	5051	10'-10.5'	7.59E-07
MWA-3	5051	12.5	7.72E-07
MW-7	5051	13.5	7.79E-07
CW-10	5051/PGE	11-11.5	8.65E-07
MW-4	5051	10.5	9.53E-07
MW-7	5051	10.5	9.71E-07
MWA-1	5051	6	1.03E-06
BA-5	5051	4	1.07E-06
MWA-1	5051	3	1.11E-06
MWA-1	5051	8	1.15E-06
MWA-3	5051	10	1.20E-06
BA-5	5051	4	1.25E-06
MWA-3	5051	13	1.26E-06
MWA-1	5051	7.5	1.65E-06
MW-6	5051	7.5	1.67E-06
B-6	5051	6.5	1.96E-06
B-10	5051	10	2.06E-06
MW-4	5051	8.5	3.12E-06
MWA-1	5051	1.5	3.14E-06
MWA-1	5051	10	3.98E-06
MWA-1	5051	10	4.32E-06
MWA-1	5051	8.5	1.03E-05
MWA-3	5051	10.5	1.28E-05
B-2	5051	4	2.07E-05
MWA-3	5051	11	2.33E-05
MWA-3	5051	11.5	2.37E-05
MWA-1	5051	8.5	2.80E-05
MWA-3	5051	12	3.12E-05
B-3	5051	4	4.21E-05
CSB-1	5051/PGE	6-6.5'	4.41E-05
MWA-3	5051	11.5	5.04E-05
B-8	5051	7.5	5.53E-05
MWA-2	5051	5.5	6.76E-05
B-7	5051	6.5	7.14E-05
MWA-2	5051	6	9.86E-05
MWA-1	5051	9	1.14E-04
B-5	5051	11.5	1.46E-04

APPENDIX C-3
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5200

Well/Boring Name	Property	Sample Depth	Metals			
			oral	dermal	inhlation	Total
CW-1	5200	11	7.60E-08	2.09E-08	1.36E-07	2.33E-07
CW-4	5200	7.5	3.28E-08	6.89E-09	1.43E-07	1.83E-07
CW-2	5200	7.5	1.10E-07	3.67E-08	1.82E-07	3.29E-07
CW-7	5200	16-16.5'	1.24E-07	4.42E-08	2.19E-07	3.88E-07
CW-3	5200	6	6.91E-08	2.00E-08	8.17E-07	9.06E-07
CW-3	5200	9	3.83E-07	1.34E-07	6.41E-07	1.16E-06
CW-1	5200	9	8.25E-07	2.81E-07	1.47E-06	2.57E-06
CW-3	5200	11	1.92E-06	6.82E-07	3.23E-06	5.83E-06
CW-7	5200	6-6.5'	3.39E-06	1.23E-06	8.86E-06	1.35E-05
CW-5	5200	7.5	1.65E-06	5.96E-07	5.47E-06	7.71E-06
CW-2	5200	3.5	5.09E-06	1.84E-06	1.02E-05	1.72E-05
CW-1	5200	8	2.37E-06	8.53E-07	1.44E-05	1.76E-05
CW-4	5200	12.5	2.91E-06	1.05E-06	5.24E-06	9.20E-06
CW-5	5200	11	2.07E-06	7.47E-07	3.79E-06	6.61E-06
CW-2	5200	5	7.03E-06	2.54E-06	1.35E-05	2.31E-05
CW-3	5200	3.5	7.52E-06	2.72E-06	1.60E-05	2.62E-05
CW-4	5200	5.5	5.09E-06	1.84E-06	2.06E-05	2.76E-05
CW-2	5200	9.5	4.12E-06	1.49E-06	7.11E-06	1.27E-05
CW-4	5200	11.5	2.11E-06	7.63E-07	3.62E-06	6.49E-06
CW-6	5200	6-6.5'	1.38E-05	4.99E-06	2.99E-05	4.86E-05
CW-1	5200	6.5	2.15E-05	7.79E-06	4.73E-05	7.66E-05

APPENDIX C-3
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5200

Well/Boring Name	Property	Sample Depth	SVOCs			
			oral	dermal	inhlation	total
CW-1	5200	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-4	5200	7.5	6.21E-08	2.10E-11	1.33E-08	7.54E-08
CW-2	5200	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-7	5200	16-16.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-3	5200	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-3	5200	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-1	5200	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-3	5200	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-7	5200	6-6.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-5	5200	7.5	6.21E-08	2.10E-11	1.33E-08	7.54E-08
CW-2	5200	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-1	5200	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-4	5200	12.5	3.56E-06	1.05E-10	7.63E-07	4.32E-06
CW-5	5200	11	7.89E-06	1.05E-10	1.69E-06	9.59E-06
CW-2	5200	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-3	5200	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-4	5200	5.5	6.95E-07	2.10E-11	1.49E-07	8.44E-07
CW-2	5200	9.5	1.69E-05	4.20E-09	3.63E-06	2.05E-05
CW-4	5200	11.5	2.75E-05	4.20E-10	5.90E-06	3.34E-05
CW-6	5200	6-6.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-1	5200	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-3
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5200

Well/Boring Name	Property	Sample Depth	VOCs			
			oral	dermal	inhlation	total
CW-1	5200	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-4	5200	7.5	5.15E-12	6.23E-12	8.00E-09	8.01E-09
CW-2	5200	7.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-7	5200	16-16.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-3	5200	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-3	5200	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-1	5200	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-3	5200	11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-7	5200	6-6.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-5	5200	7.5	3.90E-09	4.71E-09	6.34E-06	6.34E-06
CW-2	5200	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-1	5200	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-4	5200	12.5	3.09E-09	3.74E-09	4.80E-06	4.81E-06
CW-5	5200	11	3.09E-09	3.74E-09	4.80E-06	4.81E-06
CW-2	5200	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-3	5200	3.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-4	5200	5.5	5.60E-12	6.77E-12	8.57E-09	8.59E-09
CW-2	5200	9.5	5.60E-10	6.77E-10	8.57E-07	8.59E-07
CW-4	5200	11.5	2.43E-10	2.93E-10	4.62E-07	4.62E-07
CW-6	5200	6-6.5'	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CW-1	5200	6.5	0.00E+00	0.00E+00	0.00E+00	0.00E+00

APPENDIX C-3
SUMMARY OF CARCINOGENIC RISK
CONSTRUCTION SCENARIO
Property 5200

Well/Boring Name	Property	Sample Depth	Grand Total
CW-1	5200	11	2.33E-07
CW-4	5200	7.5	2.67E-07
CW-2	5200	7.5	3.29E-07
CW-7	5200	16-16.5'	3.88E-07
CW-3	5200	6	9.06E-07
CW-3	5200	9	1.16E-06
CW-1	5200	9	2.57E-06
CW-3	5200	11	5.83E-06
CW-7	5200	6-6.5'	1.35E-05
CW-5	5200	7.5	1.41E-05
CW-2	5200	3.5	1.72E-05
CW-1	5200	8	1.76E-05
CW-4	5200	12.5	1.83E-05
CW-5	5200	11	2.10E-05
CW-2	5200	5	2.31E-05
CW-3	5200	3.5	2.62E-05
CW-4	5200	5.5	2.84E-05
CW-2	5200	9.5	3.41E-05
CW-4	5200	11.5	4.03E-05
CW-6	5200	6-6.5'	4.86E-05
CW-1	5200	6.5	7.66E-05

APPENDIX D

ESTIMATED NONCARCINOGENIC HAZARDS SUMMARIES BY PROPERTY

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	Metals Oral	Metals Dermal	Metals Inhalation	Metals Total
LF-F1-1.0	5050/750-50	1.0	0.4593	0.0718	0.0085	0.5396
LF-14-1.5	5050/750-50	1.5	0.0320	0.0043	0.0080	0.0443
SB-18-1.5	5050/750-50	1.5	0.1430	0.0208	0.0069	0.1706
SS-4-1.5	5050/750-50	1.5	0.3997	0.0796	0.0085	0.4878
SS-5-1.5	5050/750-50	1.5	0.3602	0.1065	0.0127	0.4794
LF-4-2	5050/750-50	2.0	0.0315	0.0041	0.0000	0.0356
LF-5-2	5050/750-50	2.0	0.0398	0.0093	0.0000	0.0491
LF-6-2	5050/750-50	2.0	0.0605	0.0162	0.0000	0.0768
LF-7-2	5050/750-50	2.0	1.3284	0.2177	0.0000	1.5462
SB-12-2.0	5050/750-50	2.0	7.2347	2.1295	0.0102	9.3743
SB-14-2.0	5050/750-50	2.0	0.2250	0.0659	0.0066	0.2975
SB-17-2.0	5050/750-50	2.0	0.2019	0.0313	0.0081	0.2414
SS-2-2.0	5050/750-50	2.0	2.3630	0.7012	0.0023	3.0665
SS-3-2.0	5050/750-50	2.0	0.8568	0.1928	0.0031	1.0527
SS-6-2.0	5050/750-50	2.0	3.5766	0.7544	0.0070	4.3380
SS-7-2.0	5050/750-50	2.0	0.0540	0.0078	0.0220	0.0838
SS-8-2.0	5050/750-50	2.0	5.2651	1.0884	0.0075	6.3611
SS-11-2.0	5050/750-50	2.0	3.2910	0.5309	0.0076	3.8296
SS-13-2.0	5050/750-50	2.0	0.1753	0.0223	0.0072	0.2048
SS-18-2.0	5050/750-50	2.0	4.0804	1.0590	0.0080	5.1474
LF-16-1.5-3	5050/750-50	1.5-3	0.0882	0.0119	0.0071	0.1072
LF-1-2.5	5050/750-50	2.5	1.8087	0.4588	0.0000	2.2675
LF-2-2.5	5050/750-50	2.5	1.5036	0.2160	0.0000	1.7196
LF-3-2.5	5050/750-50	2.5	0.0401	0.0093	0.0000	0.0494
LF-8-2.5	5050/750-50	2.5	0.1623	0.0386	0.0073	0.2081
LF-11-2.5	5050/750-50	2.5	1.3279	0.3354	0.0036	1.6670
LF-12B-2.5	5050/750-50	2.5	0.4380	0.0616	0.0085	0.5081
LF-13-2.5	5050/750-50	2.5	4.0794	1.4010	0.0000	5.4803
LF-17-2.5	5050/750-50	2.5	0.1510	0.0290	0.0093	0.1893
SB-2-2.5	5050/750-50	2.5	0.0463	0.0092	0.0093	0.0648
SB-3-2.5	5050/750-50	2.5	0.1612	0.0262	0.0084	0.1958
SB-4-2.5	5050/750-50	2.5	0.0426	0.0088	0.0085	0.0598
SB-6-2.5	5050/750-50	2.5	4.1378	0.7375	0.0042	4.8796
SB-7-2.5	5050/750-50	2.5	0.0387	0.0074	0.0069	0.0530
SB-8-2.5	5050/750-50	2.5	0.0380	0.0064	0.0074	0.0518
SB-9-2.5	5050/750-50	2.5	7.7809	2.3800	0.0102	10.1711
SB-11-2.5	5050/750-50	2.5	0.1750	0.0337	0.0073	0.2161
SB-13-2.5	5050/750-50	2.5	0.8567	0.1320	0.0152	1.0040
SB-18-2.5	5050/750-50	2.5	2.4910	0.2362	0.0045	2.7317
SB-19-2.5	5050/750-50	2.5	8.9588	1.6240	0.0110	10.5937
SB-20-2.5	5050/750-50	2.5	0.0249	0.0035	0.0085	0.0368
SB-21-2.5	5050/750-50	2.5	4.8310	1.3696	0.0056	6.2061
SS-1-2.5	5050/750-50	2.5	1.0136	0.2950	0.0001	1.3088
SS-10-2.5	5050/750-50	2.5	1.2053	0.2346	0.0039	1.4438
SS-12-2.5	5050/750-50	2.5	0.6499	0.1264	0.0110	0.7874
SS-13-2.5	5050/750-50	2.5	0.3850	0.0630	0.0102	0.4582
SS-19-2.5	5050/750-50	2.5	0.1097	0.0214	0.0093	0.1404
LF-10-3.0	5050/750-50	3.0	0.6532	0.1112	0.0102	0.7746
LF-4-3.5	5050/750-50	3.5	1.9875	0.2637	0.0000	2.2511
LF-5-3.5	5050/750-50	3.5	0.8504	0.1884	0.0000	1.0388
SB-15-3.5	5050/750-50	3.5	0.4039	0.0633	0.0049	0.4722
CSB-4	5050	4'	0.4092	0.0567	0.0440	0.5098

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	Metals Oral	Metals Dermal	Metals Inhalation	Metals Total
LF-7-4	5050/750-50	4.0	1.5609	0.1994	0.0000	1.7603
CSB-5	5050/750-50	4'	0.5523	0.0740	0.0660	0.6923
CSB-6	5050/750-50	4'	0.1685	0.0249	0.0161	0.2095
LF-9-4.5	5050/750-50	4.5	0.3806	0.0718	0.0093	0.4617
LF-10-4.5	5050/750-50	4.5	0.0853	0.0166	0.0110	0.1128
SB-3-4.5	5050/750-50	4.5	6.1973	0.9442	0.0186	7.1602
LF-14-2-7	5050/750-50	2-7	8.9012	2.1284	0.0085	11.0381
CSB-3	5050	5'	0.0600	0.0099	0.0161	0.0860
CW-13	5050	5'	0.3521	0.0488	0.0347	0.4355
LF-8-5.0	5050/750-50	5.0	6.5610	1.3764	0.0001	7.9375
LF-11-5.0	5050/750-50	5.0	2.5814	0.6028	0.0068	3.1909
LF-12B-5.0	5050/750-50	5.0	0.7732	0.1554	0.0080	0.9366
LF-13-5.0	5050/750-50	5.0	9.8432	3.5502	0.0000	13.3934
SB-1-5.0	5050/750-50	5.0	69.2051	24.6930	0.0001	93.8982
SB-8-5.0	5050/750-50	5.0	1.5915	0.2169	0.0161	1.8245
SB-10-5.0	5050/750-50	5.0	7.9521	2.4114	0.0073	10.3708
SB-12-5.0	5050/750-50	5.0	5.7522	1.4421	0.0152	7.2095
SB-14-5.0	5050/750-50	5.0	0.0783	0.0167	0.0054	0.1004
SB-16-5.0	5050/750-50	5.0	0.9847	0.2067	0.0076	1.1990
SB-17-5.0	5050/750-50	5.0	0.7030	0.1022	0.0001	0.8054
SB-18-5.0	5050/750-50	5.0	1.8086	0.1961	0.0078	2.0125
SB-19-5.0B	5050/750-50	5.0	15.7960	2.0195	0.0254	17.8408
B1	5050/750-50	5.0	0.4567	0.0677	0.0069	0.5313
B3	5050/750-50	5.0	0.2969	0.0382	0.0051	0.3401
B4	5050/750-50	5.0	0.6178	0.0782	0.0063	0.7023
MW1	5050/750-50	5.0	0.2612	0.0510	0.0057	0.3179
MW2	5050/750-50	5.0	0.6988	0.0946	0.0021	0.7954
CSB-8	5050	5'-5.5'	0.4434	0.1009	0.0144	0.5586
LF-2-5.5	5050/750-50	5.5	0.1817	0.0458	0.0000	0.2276
LF-17-5.5	5050/750-50	5.5	0.0480	0.0102	0.0074	0.0655
SB-15-6.0	5050/750-50	6.0	0.1900	0.0327	0.0052	0.2278
SB-16-6.5	5050/750-50	6.5	0.0934	0.0285	0.0069	0.1287
SB-17-6.5	5050/750-50	6.5	1.0391	0.2434	0.0001	1.2826
LF-3-7	5050/750-50	7.0	0.1590	0.0295	0.0000	0.1884
LF-13-7.0	5050/750-50	7.0	0.2012	0.0724	0.0000	0.2737
SB-1-7.0	5050/750-50	7.0	13.1972	4.5895	0.0033	17.7901
SB-3-7.0	5050/750-50	7.0	2.2252	0.3923	0.0039	2.6214
SB-6-7.0	5050/750-50	7.0	0.1928	0.0276	0.0028	0.2232
SB-10-7.0	5050/750-50	7.0	0.0539	0.0092	0.0178	0.0809
SB-18-7.0	5050/750-50	7.0	0.1023	0.0241	0.0025	0.1290
LF-1-7.5	5050/750-50	7.5	5.2976	0.6231	0.0000	5.9208
LF-2-7.5	5050/750-50	7.5	0.6999	0.2296	0.0000	0.9295
LF-10-7.5	5050/750-50	7.5	0.2599	0.0559	0.0052	0.3209
LF-11-7.5	5050/750-50	7.5	0.8612	0.1029	0.0063	0.9704
LF-12B-7.5	5050/750-50	7.5	0.3231	0.0463	0.0039	0.3734
SB-2-7.5	5050/750-50	7.5	0.5439	0.0841	0.0093	0.6372
SB-4-7.5	5050/750-50	7.5	2.1204	0.6496	0.0135	2.7836
SB-9-7.5	5050/750-50	7.5	3.5514	0.4495	0.0014	4.0023
SB-11-7.5	5050/750-50	7.5	0.1392	0.0295	0.0047	0.1734
SB-13-7.5	5050/750-50	7.5	1.0358	0.2138	0.0069	1.2566
SB-21-7.5	5050/750-50	7.5	1.5806	0.1905	0.0042	1.7753
LF-16-8.0	5050/750-50	8.0	1.4906	0.3679	0.0069	1.8654

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	Metals Oral	Metals Dermal	Metals Inhalation	Metals Total
LF-6-9	5050/750-50	9.0	0.9580	0.2947	0.0000	1.2527
SB-1-9.5	5050/750-50	9.5	0.1170	0.0186	0.0169	0.1526
SB-5-9.5	5050/750-50	9.5	0.5296	0.1415	0.0069	0.6780
SB-20-9.5	5050/750-50	9.5	7.7740	1.0310	0.0093	8.8143
LF-7-10	5050/750-50	10.0	0.0229	0.0064	0.0000	0.0293
LF-8-10.0	5050/750-50	10.0	0.2933	0.0403	0.0038	0.3374
SB-8-10.0	5050/750-50	10.0	0.3449	0.0798	0.0075	0.4323
SB-10-10.0	5050/750-50	10.0	0.0982	0.0155	0.0093	0.1230
SB-13-10.0	5050/750-50	10.0	0.8459	0.1028	0.0032	0.9519
SB-14-10	5050/750-50	10.0	0.8754	0.2689	0.0084	1.1526
SB-19-10.0	5050/750-50	10.0	0.8919	0.1413	0.0024	1.0356
B1	5050/750-50	10.0	0.0833	0.0170	0.0123	0.1125
B2	5050/750-50	10.0	2.5569	0.3026	0.0052	2.8647
B3	5050/750-50	10.0	0.3992	0.0562	0.0103	0.4657
B4	5050/750-50	10.0	0.6136	0.0805	0.0134	0.7075
MW1	5050/750-50	10.0	0.2498	0.0397	0.0141	0.3036
MW2	5050/750-50	10.0	2.3794	0.2848	0.0051	2.6692
MW3	5050/750-50	10.0	0.2847	0.0405	0.0059	0.3311
MW4	5050/750-50	10.0	0.0452	0.0130	0.0041	0.0623
CSB-8	5050	10'-10.5'	0.3314	0.0170	0.0127	0.3611
LF-5-11	5050/750-50	11.0	0.0167	0.0038	0.0000	0.0206
LF-9-11.0	5050/750-50	11.0	2.9003	0.6278	0.0135	3.5416
LF-15-11.0	5050/750-50	11.0	0.1395	0.0173	0.0075	0.1643
SB-15-11.0	5050/750-50	11.0	0.1885	0.0262	0.0161	0.2307
SB-7-11.5	5050/750-50	11.5	4.1721	0.7815	0.0127	4.9663
SB-21-11.5	5050/750-50	11.5	3.1572	0.3734	0.0042	3.5348
LF-17-12.0	5050/750-50	12.0	0.0279	0.0038	0.0127	0.0444
SB-4-12.0	5050/750-50	12.0	0.3600	0.0449	0.0074	0.4123
SB-6-12.0	5050/750-50	12.0	0.3053	0.0375	0.0093	0.3522
SB-12-12.0	5050/750-50	12.0	0.4841	0.0632	0.0040	0.5513
SB-17-12.0	5050/750-50	12.0	0.0909	0.0119	0.0069	0.1097
LF-11-12.5	5050/750-50	12.5	3.2697	0.3870	0.0068	3.6635
LF-14-12.5	5050/750-50	12.5	0.2640	0.0321	0.0042	0.3004
SB-2-12.5	5050/750-50	12.5	0.2698	0.0352	0.0049	0.3099
SB-9-12.5	5050/750-50	12.5	1.6763	0.1998	0.0110	1.8871
SB-11-12.5	5050/750-50	12.5	0.3331	0.0491	0.0178	0.3999
LF-16-13.0	5050/750-50	13.0	0.3327	0.0641	0.0044	0.4012
LF-15-13.5	5050/750-50	13.5	0.1619	0.0212	0.0110	0.1941
LF-3-15	5050/750-50	15.0	0.0633	0.0103	0.0000	0.0736
LF-4-15	5050/750-50	15.0	0.0271	0.0060	0.0000	0.0331
LF-5-15	5050/750-50	15.0	0.0305	0.0082	0.0000	0.0387
LF-9-15.0	5050/750-50	15.0	0.0386	0.0047	0.0000	0.0433
LF-12B-15.0	5050/750-50	15.0	0.1771	0.0214	0.0000	0.1985
SB-3-15.0	5050/750-50	15.0	0.0338	0.0041	0.0000	0.0379
SB-7-15.0	5050/750-50	15.0	0.0074	0.0009	0.0000	0.0083
SB-13-15.0	5050/750-50	15.0	0.5797	0.0700	0.0000	0.6498
CSB-8	5050	15'-15.5'	0.2054	0.0321	0.0847	0.3222
LF-2-15.5	5050/750-50	15.5	0.0985	0.0163	0.0000	0.1148
LF-6-15.5	5050/750-50	15.5	0.0862	0.0149	0.0000	0.1011
LF-7-15.5	5050/750-50	15.5	0.0326	0.0075	0.0000	0.0401
SB-20-16.0	5050/750-50	16.0	0.0413	0.0054	0.0041	0.0508
SB-21-17.5	5050/750-50	17.5	2.7028	0.3176	0.0065	3.0269

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	Metals Oral	Metals Dermal	Metals Inhalation	Metals Total
CSB-8	5050	19.5'-20'	0.0574	0.0087	0.0381	0.1042
CSB-8	5050	20'-20.5'	0.1268	0.0189	0.0457	0.1914
LF-1-21	5050/750-50	21.0	2.6748	0.3157	0.0000	2.9905
SB-21-24.5	5050/750-50	24.5	0.2684	0.0325	0.0119	0.3127
LF-11-25.0	5050/750-50	25.0	0.1159	0.0149	0.0102	0.1410
LF-16-25.0	5050/750-50	25.0	0.0673	0.0090	0.0076	0.0840
CSB-8	5050	25'-25.5'	0.1058	0.0154	0.0423	0.1635
CSB-8	5050	30-30.5	0.1535	0.0201	0.0466	0.2202
SB-21-34.5	5050/750-50	34.5	0.1337	0.0165	0.0398	0.1900
CSB-8	5050	35'-35.5'	0.1091	0.0140	0.0372	0.1604
CSB-8	5050	40'-40.5'	0.1187	0.0170	0.0279	0.1636
SB-21-42.0	5050/750-50	42.0	0.1538	0.0190	0.0127	0.1855
CSB-8	5050	45'-45.5'	0.1723	0.0253	0.0406	0.2383
SB-21-49.5	5050/750-50	49.5	0.1312	0.0222	0.0045	0.1579
CSB-8	5050	50'-50.5'	0.1072	0.0156	0.0322	0.1550
CSB-8	5050	55'-55.5'	0.0980	0.0136	0.0186	0.1302
CSB-8	5050	60'-60.5'	0.1108	0.0142	0.0296	0.1547

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	SVOCs Oral	SVOCs Dermal	SVOCs Inhalation	SVOCs Total
LF-F1-1.0	5050/750-50	1.0	0.0000	0.0000	0.0000	0.0000
LF-14-1.5	5050/750-50	1.5	0.0000	0.0000	0.0000	0.0000
SB-18-1.5	5050/750-50	1.5	0.0000	0.0000	0.0000	0.0000
SS-4-1.5	5050/750-50	1.5	0.0000	0.0000	0.0000	0.0000
SS-5-1.5	5050/750-50	1.5	0.0000	0.0000	0.0000	0.0000
LF-4-2	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
LF-5-2	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
LF-6-2	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
LF-7-2	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SB-12-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SB-14-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SB-17-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-2-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-3-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-6-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-7-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-8-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-11-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-13-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-18-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
LF-16-1.5-3	5050/750-50	1.5-3	0.0000	0.0000	0.0000	0.0000
LF-1-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-2-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-3-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-8-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-11-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-12B-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-13-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-17-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-2-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-3-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-4-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-6-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-7-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-8-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-9-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-11-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-13-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-18-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-19-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-20-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-21-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-1-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-10-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-12-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-13-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-19-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-10-3.0	5050/750-50	3.0	0.0000	0.0000	0.0000	0.0000
LF-4-3.5	5050/750-50	3.5	0.0000	0.0000	0.0000	0.0000
LF-5-3.5	5050/750-50	3.5	0.0000	0.0000	0.0000	0.0000
SB-15-3.5	5050/750-50	3.5	0.0000	0.0000	0.0000	0.0000
CSB-4	5050	4'	0.0000	0.0000	0.0000	0.0000

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	SVOCs Oral	SVOCs Dermal	SVOCs Inhalation	SVOCs Total
LF-7-4	5050/750-50	4.0	0.0000	0.0000	0.0000	0.0000
CSB-5	5050/750-50	4'	0.0000	0.0000	0.0000	0.0000
CSB-6	5050/750-50	4'	0.0000	0.0000	0.0000	0.0000
LF-9-4.5	5050/750-50	4.5	0.0000	0.0001	0.0013	0.0014
LF-10-4.5	5050/750-50	4.5	0.0000	0.0000	0.0000	0.0000
SB-3-4.5	5050/750-50	4.5	0.0000	0.0000	0.0000	0.0000
LF-14-2-7	5050/750-50	2-7	0.0000	0.0000	0.0000	0.0000
CSB-3	5050	5'	0.0000	0.0000	0.0000	0.0000
CW-13	5050	5'	0.0000	0.0000	0.0000	0.0000
LF-8-5.0	5050/750-50	5.0	0.0001	0.0001	0.0008	0.0010
LF-11-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
LF-12B-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
LF-13-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-1-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-8-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-10-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-12-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-14-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-16-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-17-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-18-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-19-5.0B	5050/750-50	5.0	0.0000	0.0000	0.0002	0.0002
B1	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
B3	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
B4	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
MW1	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
MW2	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	5'-5.5'	0.0000	0.0000	0.0000	0.0000
LF-2-5.5	5050/750-50	5.5	0.0000	0.0000	0.0000	0.0000
LF-17-5.5	5050/750-50	5.5	0.0000	0.0000	0.0000	0.0000
SB-15-6.0	5050/750-50	6.0	0.0000	0.0000	0.0002	0.0002
SB-16-6.5	5050/750-50	6.5	0.0000	0.0000	0.0000	0.0000
SB-17-6.5	5050/750-50	6.5	0.0000	0.0000	0.0002	0.0003
LF-3-7	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
LF-13-7.0	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
SB-1-7.0	5050/750-50	7.0	0.0002	0.0003	0.0015	0.0020
SB-3-7.0	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
SB-6-7.0	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
SB-10-7.0	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
SB-18-7.0	5050/750-50	7.0	0.0000	0.0000	0.0002	0.0002
LF-1-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-2-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-10-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-11-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-12B-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-2-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-4-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-9-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-11-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-13-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-21-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-16-8.0	5050/750-50	8.0	0.0000	0.0000	0.0000	0.0000

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	SVOCs Oral	SVOCs Dermal	SVOCs Inhalation	SVOCs Total
LF-6-9	5050/750-50	9.0	0.0000	0.0000	0.0000	0.0000
SB-1-9.5	5050/750-50	9.5	0.0000	0.0000	0.0000	0.0000
SB-5-9.5	5050/750-50	9.5	0.0000	0.0000	0.0000	0.0000
SB-20-9.5	5050/750-50	9.5	0.0000	0.0000	0.0003	0.0003
LF-7-10	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
LF-8-10.0	5050/750-50	10.0	0.0019	0.0028	0.0617	0.0664
SB-8-10.0	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-10-10.0	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-13-10.0	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-14-10	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-19-10.0	5050/750-50	10.0	0.0000	0.0000	0.0004	0.0005
B1	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
B2	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
B3	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
B4	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
MW1	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
MW2	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
MW3	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
MW4	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	10'-10.5'	0.0000	0.0000	0.0000	0.0000
LF-5-11	5050/750-50	11.0	0.0000	0.0000	0.0000	0.0000
LF-9-11.0	5050/750-50	11.0	0.0000	0.0000	0.0000	0.0000
LF-15-11.0	5050/750-50	11.0	0.0000	0.0000	0.0000	0.0000
SB-15-11.0	5050/750-50	11.0	0.0000	0.0000	0.0000	0.0000
SB-7-11.5	5050/750-50	11.5	0.0000	0.0000	0.0000	0.0000
SB-21-11.5	5050/750-50	11.5	0.0000	0.0000	0.0000	0.0000
LF-17-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
SB-4-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
SB-6-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
SB-12-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
SB-17-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
LF-11-12.5	5050/750-50	12.5	0.0000	0.0000	0.0000	0.0000
LF-14-12.5	5050/750-50	12.5	0.0000	0.0000	0.0002	0.0002
SB-2-12.5	5050/750-50	12.5	0.0000	0.0000	0.0002	0.0002
SB-9-12.5	5050/750-50	12.5	0.0000	0.0000	0.0000	0.0000
SB-11-12.5	5050/750-50	12.5	0.0000	0.0000	0.0000	0.0000
LF-16-13.0	5050/750-50	13.0	0.0000	0.0000	0.0000	0.0000
LF-15-13.5	5050/750-50	13.5	0.0000	0.0000	0.0000	0.0000
LF-3-15	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
LF-4-15	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
LF-5-15	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
LF-9-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
LF-12B-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
SB-3-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
SB-7-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
SB-13-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	15'-15.5'	0.0000	0.0000	0.0000	0.0000
LF-2-15.5	5050/750-50	15.5	0.0000	0.0000	0.0000	0.0000
LF-6-15.5	5050/750-50	15.5	0.0000	0.0000	0.0000	0.0000
LF-7-15.5	5050/750-50	15.5	0.0000	0.0000	0.0000	0.0000
SB-20-16.0	5050/750-50	16.0	0.0000	0.0000	0.0000	0.0000
SB-21-17.5	5050/750-50	17.5	0.0000	0.0000	0.0000	0.0000

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	SVOCs Oral	SVOCs Dermal	SVOCs Inhalation	SVOCs Total
CSB-8	5050	19.5'-20'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	20'-20.5'	0.0000	0.0000	0.0000	0.0000
LF-1-21	5050/750-50	21.0	0.0000	0.0000	0.0000	0.0000
SB-21-24.5	5050/750-50	24.5	0.0000	0.0000	0.0000	0.0000
LF-11-25.0	5050/750-50	25.0	0.0000	0.0000	0.0000	0.0000
LF-16-25.0	5050/750-50	25.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	25'-25.5'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	30-30.5	0.0000	0.0000	0.0000	0.0000
SB-21-34.5	5050/750-50	34.5	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	35'-35.5'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	40'-40.5'	0.0000	0.0000	0.0000	0.0000
SB-21-42.0	5050/750-50	42.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	45'-45.5'	0.0000	0.0000	0.0000	0.0000
SB-21-49.5	5050/750-50	49.5	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	50'-50.5'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	55'-55.5'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	60'-60.5'	0.0000	0.0000	0.0000	0.0000

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	VOCs Oral	VOCs Dermal	VOCs Inhalation	VOCs Total
LF-F1-1.0	5050/750-50	1.0	0.0000	0.0000	0.0000	0.0000
LF-14-1.5	5050/750-50	1.5	0.0000	0.0000	0.0032	0.0032
SB-18-1.5	5050/750-50	1.5	0.0000	0.0000	0.0000	0.0000
SS-4-1.5	5050/750-50	1.5	0.0000	0.0000	0.0000	0.0000
SS-5-1.5	5050/750-50	1.5	0.0000	0.0000	0.0000	0.0000
LF-4-2	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
LF-5-2	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
LF-6-2	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
LF-7-2	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SB-12-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SB-14-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SB-17-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-2-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-3-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-6-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-7-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-8-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-11-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-13-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
SS-18-2.0	5050/750-50	2.0	0.0000	0.0000	0.0000	0.0000
LF-16-1.5-3	5050/750-50	1.5-3	0.0000	0.0000	0.0000	0.0000
LF-1-2.5	5050/750-50	2.5	0.0000	0.0000	0.0006	0.0006
LF-2-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-3-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-8-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-11-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-12B-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-13-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
LF-17-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-2-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-3-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-4-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-6-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-7-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-8-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-9-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-11-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-13-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-18-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-19-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SB-20-2.5	5050/750-50	2.5	0.0000	0.0000	0.0032	0.0032
SB-21-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-1-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-10-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-12-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-13-2.5	5050/750-50	2.5	0.0000	0.0000	0.0000	0.0000
SS-19-2.5	5050/750-50	2.5	0.0000	0.0000	0.0032	0.0032
LF-10-3.0	5050/750-50	3.0	0.0000	0.0000	0.0000	0.0000
LF-4-3.5	5050/750-50	3.5	0.0000	0.0000	0.0000	0.0000
LF-5-3.5	5050/750-50	3.5	0.0000	0.0000	0.0000	0.0000
SB-15-3.5	5050/750-50	3.5	0.0000	0.0000	0.0000	0.0000
CSB-4	5050	4'	0.0000	0.0000	0.0032	0.0032

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	VOCs Oral	VOCs Dermal	VOCs Inhalation	VOCs Total
LF-7-4	5050/750-50	4.0	0.0000	0.0000	0.0000	0.0000
CSB-5	5050/750-50	4'	0.0000	0.0000	0.0032	0.0032
CSB-6	5050/750-50	4'	0.0000	0.0000	0.0032	0.0032
LF-9-4.5	5050/750-50	4.5	0.0000	0.0000	0.0000	0.0000
LF-10-4.5	5050/750-50	4.5	0.0000	0.0000	0.0000	0.0000
SB-3-4.5	5050/750-50	4.5	0.0000	0.0000	0.0000	0.0000
LF-14-2-7	5050/750-50	2-7	0.0000	0.0000	0.0032	0.0032
CSB-3	5050	5'	0.0000	0.0000	0.0032	0.0032
CW-13	5050	5'	0.0000	0.0000	0.0003	0.0003
LF-8-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
LF-11-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
LF-12B-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
LF-13-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-1-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-8-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-10-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-12-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-14-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-16-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-17-5.0	5050/750-50	5.0	0.0000	0.0000	0.0032	0.0032
SB-18-5.0	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
SB-19-5.0B	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
B1	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
B3	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
B4	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
MW1	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
MW2	5050/750-50	5.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	5'-5.5'	0.0000	0.0000	0.0000	0.0000
LF-2-5.5	5050/750-50	5.5	0.0000	0.0000	0.0000	0.0000
LF-17-5.5	5050/750-50	5.5	0.0000	0.0000	0.0000	0.0000
SB-15-6.0	5050/750-50	6.0	0.0000	0.0000	0.0000	0.0000
SB-16-6.5	5050/750-50	6.5	0.0000	0.0000	0.0000	0.0000
SB-17-6.5	5050/750-50	6.5	0.0000	0.0000	0.0551	0.0551
LF-3-7	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
LF-13-7.0	5050/750-50	7.0	0.0000	0.0000	0.0032	0.0032
SB-1-7.0	5050/750-50	7.0	0.0000	0.0000	0.0568	0.0568
SB-3-7.0	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
SB-6-7.0	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
SB-10-7.0	5050/750-50	7.0	0.0000	0.0000	0.0000	0.0000
SB-18-7.0	5050/750-50	7.0	0.0000	0.0000	0.0032	0.0032
LF-1-7.5	5050/750-50	7.5	0.0000	0.0000	0.0006	0.0006
LF-2-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-10-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-11-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-12B-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-2-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-4-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-9-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-11-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-13-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
SB-21-7.5	5050/750-50	7.5	0.0000	0.0000	0.0000	0.0000
LF-16-8.0	5050/750-50	8.0	0.0000	0.0000	0.0000	0.0000

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	VOCs Oral	VOCs Dermal	VOCs Inhalation	VOCs Total
LF-6-9	5050/750-50	9.0	0.0000	0.0000	0.0000	0.0000
SB-1-9.5	5050/750-50	9.5	0.0000	0.0000	0.0000	0.0000
SB-5-9.5	5050/750-50	9.5	0.0000	0.0000	0.0000	0.0000
SB-20-9.5	5050/750-50	9.5	0.0000	0.0000	0.0032	0.0032
LF-7-10	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
LF-8-10.0	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-8-10.0	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-10-10.0	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-13-10.0	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-14-10	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
SB-19-10.0	5050/750-50	10.0	0.0000	0.0000	0.0032	0.0032
B1	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
B2	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
B3	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
B4	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
MW1	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
MW2	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
MW3	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
MW4	5050/750-50	10.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	10'-10.5'	0.0000	0.0000	0.0000	0.0000
LF-5-11	5050/750-50	11.0	0.0000	0.0000	0.0000	0.0000
LF-9-11.0	5050/750-50	11.0	0.0000	0.0000	0.0000	0.0000
LF-15-11.0	5050/750-50	11.0	0.0000	0.0000	0.0032	0.0032
SB-15-11.0	5050/750-50	11.0	0.0000	0.0000	0.0000	0.0000
SB-7-11.5	5050/750-50	11.5	0.0000	0.0000	0.0000	0.0000
SB-21-11.5	5050/750-50	11.5	0.0000	0.0000	0.0032	0.0032
LF-17-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
SB-4-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
SB-6-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
SB-12-12.0	5050/750-50	12.0	0.0000	0.0000	0.0000	0.0000
SB-17-12.0	5050/750-50	12.0	0.0000	0.0000	0.0032	0.0032
LF-11-12.5	5050/750-50	12.5	0.0000	0.0000	0.0000	0.0000
LF-14-12.5	5050/750-50	12.5	0.0000	0.0000	0.0000	0.0000
SB-2-12.5	5050/750-50	12.5	0.0000	0.0000	0.0000	0.0000
SB-9-12.5	5050/750-50	12.5	0.0000	0.0000	0.0000	0.0000
SB-11-12.5	5050/750-50	12.5	0.0000	0.0000	0.0000	0.0000
LF-16-13.0	5050/750-50	13.0	0.0000	0.0000	0.0000	0.0000
LF-15-13.5	5050/750-50	13.5	0.0000	0.0000	0.0000	0.0000
LF-3-15	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
LF-4-15	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
LF-5-15	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
LF-9-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
LF-12B-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
SB-3-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
SB-7-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
SB-13-15.0	5050/750-50	15.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	15'-15.5'	0.0000	0.0000	0.0000	0.0000
LF-2-15.5	5050/750-50	15.5	0.0000	0.0000	0.0000	0.0000
LF-6-15.5	5050/750-50	15.5	0.0000	0.0000	0.0000	0.0000
LF-7-15.5	5050/750-50	15.5	0.0000	0.0000	0.0000	0.0000
SB-20-16.0	5050/750-50	16.0	0.0000	0.0000	0.0000	0.0000
SB-21-17.5	5050/750-50	17.5	0.0000	0.0000	0.0000	0.0000

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	VOCs Oral	VOCs Dermal	VOCs Inhalation	VOCs Total
CSB-8	5050	19.5'-20'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	20'-20.5'	0.0000	0.0000	0.0000	0.0000
LF-1-21	5050/750-50	21.0	0.0000	0.0000	0.0000	0.0000
SB-21-24.5	5050/750-50	24.5	0.0000	0.0000	0.0000	0.0000
LF-11-25.0	5050/750-50	25.0	0.0000	0.0000	0.0000	0.0000
LF-16-25.0	5050/750-50	25.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	25'-25.5'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	30-30.5	0.0000	0.0000	0.0000	0.0000
SB-21-34.5	5050/750-50	34.5	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	35'-35.5'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	40'-40.5'	0.0000	0.0000	0.0000	0.0000
SB-21-42.0	5050/750-50	42.0	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	45'-45.5'	0.0000	0.0000	0.0000	0.0000
SB-21-49.5	5050/750-50	49.5	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	50'-50.5'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	55'-55.5'	0.0000	0.0000	0.0000	0.0000
CSB-8	5050	60'-60.5'	0.0000	0.0000	0.0000	0.0000

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	Total
LF-F1-1.0	5050/750-50	1.0	0.5396
LF-14-1.5	5050/750-50	1.5	0.0475
SB-18-1.5	5050/750-50	1.5	0.1706
SS-4-1.5	5050/750-50	1.5	0.4878
SS-5-1.5	5050/750-50	1.5	0.4794
LF-4-2	5050/750-50	2.0	0.0356
LF-5-2	5050/750-50	2.0	0.0491
LF-6-2	5050/750-50	2.0	0.0768
LF-7-2	5050/750-50	2.0	1.5462
SB-12-2.0	5050/750-50	2.0	9.3743
SB-14-2.0	5050/750-50	2.0	0.2975
SB-17-2.0	5050/750-50	2.0	0.2414
SS-2-2.0	5050/750-50	2.0	3.0665
SS-3-2.0	5050/750-50	2.0	1.0527
SS-6-2.0	5050/750-50	2.0	4.3380
SS-7-2.0	5050/750-50	2.0	0.0838
SS-8-2.0	5050/750-50	2.0	6.3611
SS-11-2.0	5050/750-50	2.0	3.8296
SS-13-2.0	5050/750-50	2.0	0.2048
SS-18-2.0	5050/750-50	2.0	5.1474
LF-16-1.5-3	5050/750-50	1.5-3	0.1072
LF-1-2.5	5050/750-50	2.5	2.2681
LF-2-2.5	5050/750-50	2.5	1.7196
LF-3-2.5	5050/750-50	2.5	0.0494
LF-8-2.5	5050/750-50	2.5	0.2081
LF-11-2.5	5050/750-50	2.5	1.6670
LF-12B-2.5	5050/750-50	2.5	0.5081
LF-13-2.5	5050/750-50	2.5	5.4803
LF-17-2.5	5050/750-50	2.5	0.1893
SB-2-2.5	5050/750-50	2.5	0.0648
SB-3-2.5	5050/750-50	2.5	0.1958
SB-4-2.5	5050/750-50	2.5	0.0598
SB-6-2.5	5050/750-50	2.5	4.8796
SB-7-2.5	5050/750-50	2.5	0.0530
SB-8-2.5	5050/750-50	2.5	0.0518
SB-9-2.5	5050/750-50	2.5	10.1711
SB-11-2.5	5050/750-50	2.5	0.2161
SB-13-2.5	5050/750-50	2.5	1.0040
SB-18-2.5	5050/750-50	2.5	2.7317
SB-19-2.5	5050/750-50	2.5	10.5937
SB-20-2.5	5050/750-50	2.5	0.0401
SB-21-2.5	5050/750-50	2.5	6.2061
SS-1-2.5	5050/750-50	2.5	1.3088
SS-10-2.5	5050/750-50	2.5	1.4438
SS-12-2.5	5050/750-50	2.5	0.7874
SS-13-2.5	5050/750-50	2.5	0.4582
SS-19-2.5	5050/750-50	2.5	0.1436
LF-10-3.0	5050/750-50	3.0	0.7746
LF-4-3.5	5050/750-50	3.5	2.2511
LF-5-3.5	5050/750-50	3.5	1.0388
SB-15-3.5	5050/750-50	3.5	0.4722
CSB-4	5050	4'	0.5130

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	Total
LF-7-4	5050/750-50	4.0	1.7603
CSB-5	5050/750-50	4'	0.6955
CSB-6	5050/750-50	4'	0.2127
LF-9-4.5	5050/750-50	4.5	0.4631
LF-10-4.5	5050/750-50	4.5	0.1128
SB-3-4.5	5050/750-50	4.5	7.1602
LF-14-2-7	5050/750-50	2-7	11.0413
CSB-3	5050	5'	0.0893
CW-13	5050	5'	0.4358
LF-8-5.0	5050/750-50	5.0	7.9384
LF-11-5.0	5050/750-50	5.0	3.1909
LF-12B-5.0	5050/750-50	5.0	0.9366
LF-13-5.0	5050/750-50	5.0	13.3934
SB-1-5.0	5050/750-50	5.0	93.8982
SB-8-5.0	5050/750-50	5.0	1.8245
SB-10-5.0	5050/750-50	5.0	10.3708
SB-12-5.0	5050/750-50	5.0	7.2095
SB-14-5.0	5050/750-50	5.0	0.1004
SB-16-5.0	5050/750-50	5.0	1.1990
SB-17-5.0	5050/750-50	5.0	0.8086
SB-18-5.0	5050/750-50	5.0	2.0125
SB-19-5.0B	5050/750-50	5.0	17.8410
B1	5050/750-50	5.0	0.5313
B3	5050/750-50	5.0	0.3401
B4	5050/750-50	5.0	0.7023
MW1	5050/750-50	5.0	0.3179
MW2	5050/750-50	5.0	0.7954
CSB-8	5050	5'-5.5'	0.5586
LF-2-5.5	5050/750-50	5.5	0.2276
LF-17-5.5	5050/750-50	5.5	0.0655
SB-15-6.0	5050/750-50	6.0	0.2280
SB-16-6.5	5050/750-50	6.5	0.1287
SB-17-6.5	5050/750-50	6.5	1.3380
LF-3-7	5050/750-50	7.0	0.1884
LF-13-7.0	5050/750-50	7.0	0.2769
SB-1-7.0	5050/750-50	7.0	17.8489
SB-3-7.0	5050/750-50	7.0	2.6214
SB-6-7.0	5050/750-50	7.0	0.2232
SB-10-7.0	5050/750-50	7.0	0.0809
SB-18-7.0	5050/750-50	7.0	0.1324
LF-1-7.5	5050/750-50	7.5	5.9214
LF-2-7.5	5050/750-50	7.5	0.9295
LF-10-7.5	5050/750-50	7.5	0.3209
LF-11-7.5	5050/750-50	7.5	0.9704
LF-12B-7.5	5050/750-50	7.5	0.3734
SB-2-7.5	5050/750-50	7.5	0.6372
SB-4-7.5	5050/750-50	7.5	2.7836
SB-9-7.5	5050/750-50	7.5	4.0023
SB-11-7.5	5050/750-50	7.5	0.1734
SB-13-7.5	5050/750-50	7.5	1.2566
SB-21-7.5	5050/750-50	7.5	1.7753
LF-16-8.0	5050/750-50	8.0	1.8654

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	Total
LF-6-9	5050/750-50	9.0	1.2527
SB-1-9.5	5050/750-50	9.5	0.1526
SB-5-9.5	5050/750-50	9.5	0.6780
SB-20-9.5	5050/750-50	9.5	8.8179
LF-7-10	5050/750-50	10.0	0.0293
LF-8-10.0	5050/750-50	10.0	0.4038
SB-8-10.0	5050/750-50	10.0	0.4323
SB-10-10.0	5050/750-50	10.0	0.1230
SB-13-10.0	5050/750-50	10.0	0.9519
SB-14-10	5050/750-50	10.0	1.1526
SB-19-10.0	5050/750-50	10.0	1.0393
B1	5050/750-50	10.0	0.1125
B2	5050/750-50	10.0	2.8647
B3	5050/750-50	10.0	0.4657
B4	5050/750-50	10.0	0.7075
MW1	5050/750-50	10.0	0.3036
MW2	5050/750-50	10.0	2.6692
MW3	5050/750-50	10.0	0.3311
MW4	5050/750-50	10.0	0.0623
CSB-8	5050	10'-10.5'	0.3611
LF-5-11	5050/750-50	11.0	0.0206
LF-9-11.0	5050/750-50	11.0	3.5416
LF-15-11.0	5050/750-50	11.0	0.1675
SB-15-11.0	5050/750-50	11.0	0.2307
SB-7-11.5	5050/750-50	11.5	4.9663
SB-21-11.5	5050/750-50	11.5	3.5380
LF-17-12.0	5050/750-50	12.0	0.0444
SB-4-12.0	5050/750-50	12.0	0.4123
SB-6-12.0	5050/750-50	12.0	0.3522
SB-12-12.0	5050/750-50	12.0	0.5513
SB-17-12.0	5050/750-50	12.0	0.1129
LF-11-12.5	5050/750-50	12.5	3.6635
LF-14-12.5	5050/750-50	12.5	0.3006
SB-2-12.5	5050/750-50	12.5	0.3101
SB-9-12.5	5050/750-50	12.5	1.8871
SB-11-12.5	5050/750-50	12.5	0.3999
LF-16-13.0	5050/750-50	13.0	0.4012
LF-15-13.5	5050/750-50	13.5	0.1941
LF-3-15	5050/750-50	15.0	0.0736
LF-4-15	5050/750-50	15.0	0.0331
LF-5-15	5050/750-50	15.0	0.0387
LF-9-15.0	5050/750-50	15.0	0.0433
LF-12B-15.0	5050/750-50	15.0	0.1985
SB-3-15.0	5050/750-50	15.0	0.0379
SB-7-15.0	5050/750-50	15.0	0.0083
SB-13-15.0	5050/750-50	15.0	0.6498
CSB-8	5050	15'-15.5'	0.3222
LF-2-15.5	5050/750-50	15.5	0.1148
LF-6-15.5	5050/750-50	15.5	0.1011
LF-7-15.5	5050/750-50	15.5	0.0401
SB-20-16.0	5050/750-50	16.0	0.0508
SB-21-17.5	5050/750-50	17.5	3.0269

APPENDIX D-1
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5050/750-50th

Well/Boring Name	property	Sample Depth	Total
CSB-8	5050	19.5'-20'	0.1042
CSB-8	5050	20'-20.5'	0.1914
LF-1-21	5050/750-50	21.0	2.9905
SB-21-24.5	5050/750-50	24.5	0.3127
LF-11-25.0	5050/750-50	25.0	0.1410
LF-16-25.0	5050/750-50	25.0	0.0840
CSB-8	5050	25'-25.5'	0.1635
CSB-8	5050	30-30.5	0.2202
SB-21-34.5	5050/750-50	34.5	0.1900
CSB-8	5050	35'-35.5'	0.1604
CSB-8	5050	40'-40.5'	0.1636
SB-21-42.0	5050/750-50	42.0	0.1855
CSB-8	5050	45'-45.5'	0.2383
SB-21-49.5	5050/750-50	49.5	0.1579
CSB-8	5050	50'-50.5'	0.1550
CSB-8	5050	55'-55.5'	0.1302
CSB-8	5050	60'-60.5'	0.1547

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	Metals Oral	Metals Dermal	Metals Inhalation	Metals Total
B-11	5051	0.5	0.4544	0.0529	0.0025	0.5099
B-13	5051	1.0	0.1373	0.0202	0.0102	0.1676
MWA-1	5051	1.0	0.2398	0.0355	0.0127	0.2880
MW-4	5051	1.0	0.0345	0.0074	0.0054	0.0473
MW-5	5051	1.0	0.0420	0.0078	0.0083	0.0580
MW-6	5051	1.0	0.1023	0.0161	0.0119	0.1303
MW-7	5051	1.0	0.0412	0.0094	0.0042	0.0549
MW-8	5051	1.0	0.0495	0.0083	0.0078	0.0656
MWA-1	5051	1.5	0.2653	0.0671	0.0600	0.3924
BA-4	5051	2.0	0.0944	0.0164	0.0144	0.1252
BA-4	5051	2.0	0.0672	0.0121	0.0037	0.0830
B-9	5051	2.0	0.0584	0.0118	0.0081	0.0783
B-10	5051	2.0	0.0864	0.0141	0.0152	0.1157
B-14	5051	2.0	0.0889	0.0151	0.0102	0.1141
MWA-1	5051	2.0	0.0695	0.0109	0.0065	0.0869
MWA-1	5051	3.0	0.2568	0.0374	0.0030	0.2972
B-2	5051	4.0	1.4620	0.4191	0.0008	1.8819
B-3	5051	4.0	9.5562	1.4220	0.0212	10.9994
BA-5	5051	4.0	0.5510	0.0744	0.0279	0.6533
BA-5	5051	4.0	0.6894	0.0872	0.2811	1.0576
MWA-3	5051	4.5	0.1697	0.0198	0.0054	0.1949
B-11	5051	5.0	0.7058	0.0855	0.0001	0.7914
MWA-3	5051	5.0	0.2914	0.0408	0.0071	0.3393
CW-8	5051/EBMUD	5'	1.4514	0.1788	0.0347	1.6650
CW-9	5051/EBMUD	5'	0.3320	0.0428	0.0356	0.4104
CSB-9	5051	5'-5.5'	0.2874	0.0374	0.0356	0.3603
MWA-2	5051	5.5	9.8741	1.8887	0.0033	11.7661
MW-7	5051	5.5	0.0648	0.0084	0.0110	0.0842
B-10	5051	6.0	0.0398	0.0061	0.0068	0.0526
MWA-1	5051	6.0	0.4137	0.0537	0.0033	0.4707
MWA-2	5051	6.0	14.0702	2.7456	0.0042	16.8201
CSB-1	5051/PGE	6-6.5'	21.9611	3.1885	0.0279	25.1775
BA-4	5051	6.5	0.0545	0.0090	0.0070	0.0705
BA-4	5051	6.5	0.0896	0.0135	0.0085	0.1115
B-6	5051	6.5	1.8998	0.2493	0.0001	2.1493
B-7	5051	6.5	10.1524	2.0609	0.0017	12.2150
B-9	5051	7.0	0.0917	0.0177	0.0063	0.1158
B-14	5051	7.0	0.0538	0.0121	0.0069	0.0727
B-8	5051	7.5	10.5987	1.2966	0.0102	11.9055
MWA-1	5051	7.5	1.6423	0.2073	0.0090	1.8585
MW-6	5051	7.5	4.9163	0.6015	0.0203	5.5382
BA-4	5051	8.0	0.1924	0.0243	0.0081	0.2248
BA-4	5051	8.0	0.4224	0.0518	0.0100	0.4842
BA-5	5051	8.0	0.3658	0.0461	0.0072	0.4192
BA-5	5051	8.0	0.5194	0.0641	0.0053	0.5888
B-11	5051	8.0	0.3023	0.0393	0.0246	0.3662
MWA-1	5051	8.0	0.4767	0.0664	0.0058	0.5490
CSB-1	5051/PGE	8-8.5'	0.1584	0.0264	0.0279	0.2127
MWA-1	5051	8.5	8.2383	0.9536	0.0254	9.2174
MWA-1	5051	8.5	10.6229	1.3086	0.0075	11.9390
MW-4	5051	8.5	4.6585	0.5512	0.0051	5.2147
MW-8	5051	8.5	0.0353	0.0059	0.0076	0.0487
BA-5	5051	9.0	0.0679	0.0103	0.0034	0.0816
BA-5	5051	9.0	0.6189	0.0759	0.0003	0.6951
BA-5	5051	9.0	0.0342	0.0071	0.0031	0.0444

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	Metals Oral	Metals Dermal	Metals Inhalation	Metals Total
MWA-1	5051	9.0	9.6280	2.5134	0.0017	12.1431
BA-4	5051	9.5	0.0132	0.0023	0.0033	0.0188
BA-4	5051	9.5	0.0357	0.0062	0.0039	0.0458
B-14	5051	9.5	0.0450	0.0078	0.0079	0.0606
MWA-2	5051	9.5	0.0781	0.0092	0.0017	0.0890
MWA-3	5051	9.5	0.8416	0.0998	0.0078	0.9492
MW-6	5051	9.5	0.9624	0.1219	0.0001	1.0843
BA-5	5051	10.0	0.0419	0.0080	0.0041	0.0541
BA-5	5051	10.0	0.0353	0.0063	0.0032	0.0448
B-10	5051	10.0	1.0816	0.1439	0.0119	1.2374
MWA-1	5051	10.0	1.8158	0.2057	0.0144	2.0358
MWA-1	5051	10.0	1.3876	0.1984	0.0066	1.5926
MWA-2	5051	10.0	0.1357	0.0211	0.0036	0.1603
MWA-3	5051	10.0	0.5814	0.0799	0.0119	0.6731
MW-8	5051	10.0	0.0290	0.0044	0.0032	0.0366
CSB-9	5051	10'-10.5'	0.5211	0.0720	0.0372	0.6303
MWA-3	5051	10.5	6.9788	0.9680	0.0236	7.9704
MW-4	5051	10.5	8.9298	1.0874	0.0135	10.0307
MW-5	5051	10.5	0.1772	0.0232	0.0071	0.2075
MW-7	5051	10.5	0.1499	0.0287	0.0127	0.1914
MWA-3	5051	11.0	8.3880	1.2688	0.0119	9.6686
CW-10	5051/PGE	11-11.5	0.2199	0.0364	0.0847	0.3409
CW-12	5051/PGE	11-11.5	0.1395	0.0214	0.0491	0.2100
B-4	5051	11.5	7.7173	0.9377	0.0102	8.6652
B-5	5051	11.5	15.8326	1.8523	0.0051	17.6900
B-9	5051	11.5	0.1263	0.0194	0.0060	0.1518
MWA-1	5051	11.5	0.5834	0.0727	0.0050	0.6611
MWA-2	5051	11.5	0.1623	0.0221	0.0065	0.1909
MWA-2	5051	11.5	0.1366	0.0159	0.0046	0.1570
MWA-3	5051	11.5	9.5747	1.7501	0.0068	11.3316
MWA-3	5051	11.5	5.8878	0.9738	0.2277	7.0894
BA-4	5051	12.0	0.0129	0.0017	0.0029	0.0174
MWA-3	5051	12.0	8.8074	1.3958	0.0271	10.2302
B-11	5051	12.5	0.0287	0.0053	0.0063	0.0402
MWA-3	5051	12.5	1.1068	0.1404	0.0039	1.2511
BA-5	5051	13.0	0.3535	0.0434	0.0049	0.4017
B-10	5051	13.0	0.0333	0.0074	0.0045	0.0452
B-13	5051	13.0	0.0883	0.0142	0.0093	0.1118
B-14	5051	13.0	0.0226	0.0029	0.0046	0.0301
MWA-1	5051	13.0	0.0949	0.0148	0.0041	0.1138
MWA-3	5051	13.0	1.7393	0.2207	0.0052	1.9653
MW-6	5051	13.0	0.0648	0.0083	0.0061	0.0792
MWA-2	5051	13.5	0.0163	0.0019	0.0059	0.0240
MWA-3	5051	13.5	0.6242	0.0766	0.0022	0.7030
MW-5	5051	13.5	0.4561	0.0618	0.0152	0.5331
MW-7	5051	13.5	0.0604	0.0159	0.0313	0.1076
MW-4	5051	14.0	0.3251	0.0398	0.0047	0.3696
MWA-1	5051	14.5	0.0285	0.0064	0.0045	0.0394
MWA-2	5051	14.5	0.0271	0.0034	0.0094	0.0399
MWA-3	5051	15.0	0.2753	0.0343	0.0038	0.3133
CSB-9	5051	15'-15.5'	0.9622	0.1210	0.0271	1.1103
MW-4	5051	15.5	0.2305	0.0312	0.0084	0.2701
MW-8	5051	15.5	0.0256	0.0033	0.0061	0.0350
BA-5	5051	16.0	0.1580	0.0219	0.0126	0.1926
B-10	5051	16.0	0.0417	0.0062	0.0085	0.0564

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	Metals Oral	Metals Dermal	Metals Inhalation	Metals Total
B-11	5051	16.0	0.0688	0.0141	0.0254	0.1083
B-14	5051	16.0	0.0437	0.0082	0.0093	0.0612
MW-6	5051	16.0	0.0413	0.0062	0.0083	0.0558
B-9	5051	16.5	0.0627	0.0078	0.0055	0.0759
MW-7	5051	16.5	0.0375	0.0069	0.0093	0.0537
B-12	5051	17.0	0.0262	0.0034	0.0083	0.0378
MWA-1	5051	17.0	0.0203	0.0047	0.0036	0.0286
MW-5	5051	17.5	0.0563	0.0070	0.0064	0.0697
B-13	5051	18.0	0.0998	0.0161	0.0110	0.1269
B-9	5051	19.5	0.0431	0.0091	0.0085	0.0606
B-12	5051	20.0	0.0386	0.0057	0.0119	0.0562
CSB-9	5051	20'-20.5'	0.1154	0.0157	0.0440	0.1751
B-13	5051	22.0	0.0639	0.0079	0.0081	0.0799
B-12	5051	24.5	0.0330	0.0042	0.0119	0.0491
CSB-9	5051	25'-25.5'	0.0763	0.0096	0.0330	0.1189
CSB-9	5051	30'-30.5'	0.1112	0.0138	0.0406	0.1656
CSB-9	5051	35'-35.5'	0.1428	0.0208	0.0787	0.2424
CSB-9	5051	40'-40.5'	0.1076	0.0134	0.0339	0.1549
CSB-9	5051	45'-45.5'	0.1260	0.0179	0.0356	0.1794
CSB-9	5051	50'-50.5'	0.1173	0.0168	0.0364	0.1705
CSB-9	5051	55'-55.5'	0.1573	0.0226	0.0491	0.2289
CSB-9	5051	60'-60.5'	0.0886	0.0134	0.0305	0.1325

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	SVOCs Oral	SVOCs Dermal	SVOCs Inhalation	SVOCs Total
B-11	5051	0.5	0.0000	0.0000	0.0000	0.0000
B-13	5051	1.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-4	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-5	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-6	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-7	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-8	5051	1.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	1.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	2.0	0.0000	0.0000	0.0000	0.0000
BA-4	5051	2.0	0.0000	0.0000	0.0000	0.0000
B-9	5051	2.0	0.0000	0.0000	0.0000	0.0000
B-10	5051	2.0	0.0000	0.0000	0.0000	0.0000
B-14	5051	2.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	2.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	3.0	0.0000	0.0000	0.0000	0.0000
B-2	5051	4.0	0.0000	0.0000	0.0000	0.0000
B-3	5051	4.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	4.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	4.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	4.5	0.0000	0.0000	0.0000	0.0000
B-11	5051	5.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	5.0	0.0000	0.0000	0.0000	0.0000
CW-8	5051/EBMUD	5'	0.0000	0.0000	0.0000	0.0000
CW-9	5051/EBMUD	5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	5'-5.5'	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	5.5	0.0000	0.0000	0.0000	0.0000
MW-7	5051	5.5	0.0000	0.0000	0.0000	0.0000
B-10	5051	6.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	6.0	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	6.0	0.0000	0.0000	0.0000	0.0000
CSB-1	5051/PGE	6-6.5'	0.0000	0.0000	0.0000	0.0000
BA-4	5051	6.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	6.5	0.0000	0.0000	0.0000	0.0000
B-6	5051	6.5	0.0000	0.0000	0.0000	0.0000
B-7	5051	6.5	0.0000	0.0000	0.0000	0.0000
B-9	5051	7.0	0.0000	0.0000	0.0000	0.0000
B-14	5051	7.0	0.0000	0.0000	0.0000	0.0000
B-8	5051	7.5	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	7.5	0.0000	0.0000	0.0000	0.0000
MW-6	5051	7.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	8.0	0.0000	0.0000	0.0000	0.0000
BA-4	5051	8.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	8.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	8.0	0.0000	0.0000	0.0000	0.0000
B-11	5051	8.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	8.0	0.0000	0.0000	0.0000	0.0000
CSB-1	5051/PGE	8-8.5'	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	8.5	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	8.5	0.0000	0.0000	0.0000	0.0000
MW-4	5051	8.5	0.0000	0.0000	0.0000	0.0000
MW-8	5051	8.5	0.0000	0.0000	0.0000	0.0000
BA-5	5051	9.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	9.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	9.0	0.0000	0.0000	0.0000	0.0000

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	SVOCs Oral	SVOCs Dermal	SVOCs Inhalation	SVOCs Total
MWA-1	5051	9.0	0.0000	0.0000	0.0000	0.0000
BA-4	5051	9.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	9.5	0.0000	0.0000	0.0000	0.0000
B-14	5051	9.5	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	9.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	9.5	0.0000	0.0000	0.0000	0.0000
MW-6	5051	9.5	0.0000	0.0000	0.0000	0.0000
BA-5	5051	10.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	10.0	0.0000	0.0000	0.0000	0.0000
B-10	5051	10.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	10.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	10.0	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	10.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	10.0	0.0000	0.0000	0.0000	0.0000
MW-8	5051	10.0	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	10'-10.5'	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	10.5	0.0000	0.0000	0.0000	0.0000
MW-4	5051	10.5	0.0000	0.0000	0.0000	0.0000
MW-5	5051	10.5	0.0000	0.0000	0.0000	0.0000
MW-7	5051	10.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	11.0	0.0000	0.0000	0.0000	0.0000
CW-10	5051/PGE	11-11.5	0.0000	0.0000	0.0000	0.0000
CW-12	5051/PGE	11-11.5	0.0000	0.0000	0.0000	0.0000
B-4	5051	11.5	0.0000	0.0000	0.0000	0.0000
B-5	5051	11.5	0.0000	0.0000	0.0000	0.0000
B-9	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	11.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	12.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	12.0	0.0000	0.0000	0.0000	0.0000
B-11	5051	12.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	12.5	0.0000	0.0000	0.0000	0.0000
BA-5	5051	13.0	0.0000	0.0000	0.0000	0.0000
B-10	5051	13.0	0.0000	0.0000	0.0000	0.0000
B-13	5051	13.0	0.0000	0.0000	0.0000	0.0000
B-14	5051	13.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	13.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	13.0	0.0000	0.0000	0.0000	0.0000
MW-6	5051	13.0	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	13.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	13.5	0.0000	0.0000	0.0000	0.0000
MW-5	5051	13.5	0.0000	0.0000	0.0000	0.0000
MW-7	5051	13.5	0.0000	0.0000	0.0000	0.0000
MW-4	5051	14.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	14.5	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	14.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	15.0	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	15'-15.5'	0.0000	0.0000	0.0000	0.0000
MW-4	5051	15.5	0.0000	0.0000	0.0000	0.0000
MW-8	5051	15.5	0.0000	0.0000	0.0000	0.0000
BA-5	5051	16.0	0.0000	0.0000	0.0000	0.0000
B-10	5051	16.0	0.0000	0.0000	0.0000	0.0000

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	SVOCs Oral	SVOCs Dermal	SVOCs Inhalation	SVOCs Total
B-11	5051	16.0	0.0000	0.0000	0.0000	0.0000
B-14	5051	16.0	0.0000	0.0000	0.0000	0.0000
MW-6	5051	16.0	0.0000	0.0000	0.0000	0.0000
B-9	5051	16.5	0.0000	0.0000	0.0000	0.0000
MW-7	5051	16.5	0.0000	0.0000	0.0000	0.0000
B-12	5051	17.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	17.0	0.0000	0.0000	0.0000	0.0000
MW-5	5051	17.5	0.0000	0.0000	0.0000	0.0000
B-13	5051	18.0	0.0000	0.0000	0.0000	0.0000
B-9	5051	19.5	0.0000	0.0000	0.0000	0.0000
B-12	5051	20.0	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	20'-20.5'	0.0000	0.0000	0.0000	0.0000
B-13	5051	22.0	0.0000	0.0000	0.0000	0.0000
B-12	5051	24.5	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	25'-25.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	30'-30.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	35'-35.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	40'-40.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	45'-45.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	50'-50.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	55'-55.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	60'-60.5'	0.0000	0.0000	0.0000	0.0000

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	VOCs Oral	VOCs Dermal	VOCs Inhalation	VOCs Total
B-11	5051	0.5	0.0000	0.0000	0.0000	0.0000
B-13	5051	1.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-4	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-5	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-6	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-7	5051	1.0	0.0000	0.0000	0.0000	0.0000
MW-8	5051	1.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	1.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	2.0	0.0000	0.0000	0.0000	0.0000
BA-4	5051	2.0	0.0000	0.0000	0.0000	0.0000
B-9	5051	2.0	0.0000	0.0000	0.0000	0.0000
B-10	5051	2.0	0.0000	0.0000	0.0000	0.0000
B-14	5051	2.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	2.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	3.0	0.0000	0.0000	0.0000	0.0000
B-2	5051	4.0	0.0000	0.0000	0.0000	0.0000
B-3	5051	4.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	4.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	4.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	4.5	0.0000	0.0000	0.0000	0.0000
B-11	5051	5.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	5.0	0.0000	0.0000	0.0000	0.0000
CW-8	5051/EBMUD	5'	0.0000	0.0000	0.0032	0.0032
CW-9	5051/EBMUD	5'	0.0000	0.0000	0.0032	0.0032
CSB-9	5051	5'-5.5'	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	5.5	0.0000	0.0000	0.0000	0.0000
MW-7	5051	5.5	0.0000	0.0000	0.0000	0.0000
B-10	5051	6.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	6.0	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	6.0	0.0000	0.0000	0.0000	0.0000
CSB-1	5051/PGE	6-6.5'	0.0000	0.0000	0.0000	0.0000
BA-4	5051	6.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	6.5	0.0000	0.0000	0.0000	0.0000
B-6	5051	6.5	0.0000	0.0000	0.0000	0.0000
B-7	5051	6.5	0.0000	0.0000	0.0000	0.0000
B-9	5051	7.0	0.0000	0.0000	0.0000	0.0000
B-14	5051	7.0	0.0000	0.0000	0.0000	0.0000
B-8	5051	7.5	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	7.5	0.0000	0.0000	0.0000	0.0000
MW-6	5051	7.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	8.0	0.0000	0.0000	0.0000	0.0000
BA-4	5051	8.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	8.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	8.0	0.0000	0.0000	0.0000	0.0000
B-11	5051	8.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	8.0	0.0000	0.0000	0.0000	0.0000
CSB-1	5051/PGE	8-8.5'	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	8.5	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	8.5	0.0000	0.0000	0.0000	0.0000
MW-4	5051	8.5	0.0000	0.0000	0.0000	0.0000
MW-8	5051	8.5	0.0000	0.0000	0.0000	0.0000
BA-5	5051	9.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	9.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	9.0	0.0000	0.0000	0.0000	0.0000

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	VOCs Oral	VOCs Dermal	VOCs Inhalation	VOCs Total
MWA-1	5051	9.0	0.0000	0.0000	0.0000	0.0000
BA-4	5051	9.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	9.5	0.0000	0.0000	0.0000	0.0000
B-14	5051	9.5	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	9.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	9.5	0.0000	0.0000	0.0000	0.0000
MW-6	5051	9.5	0.0000	0.0000	0.0000	0.0000
BA-5	5051	10.0	0.0000	0.0000	0.0000	0.0000
BA-5	5051	10.0	0.0000	0.0000	0.0000	0.0000
B-10	5051	10.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	10.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	10.0	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	10.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	10.0	0.0000	0.0000	0.0000	0.0000
MW-8	5051	10.0	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	10'-10.5'	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	10.5	0.0000	0.0000	0.0000	0.0000
MW-4	5051	10.5	0.0000	0.0000	0.0000	0.0000
MW-5	5051	10.5	0.0000	0.0000	0.0000	0.0000
MW-7	5051	10.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	11.0	0.0000	0.0000	0.0000	0.0000
CW-10	5051/PGE	11-11.5	0.0000	0.0000	0.0000	0.0000
CW-12	5051/PGE	11-11.5	0.0000	0.0000	0.0000	0.0000
B-4	5051	11.5	0.0000	0.0000	0.0000	0.0000
B-5	5051	11.5	0.0000	0.0000	0.0000	0.0000
B-9	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	11.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	11.5	0.0000	0.0000	0.0000	0.0000
BA-4	5051	12.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	12.0	0.0000	0.0000	0.0000	0.0000
B-11	5051	12.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	12.5	0.0000	0.0000	0.0000	0.0000
BA-5	5051	13.0	0.0000	0.0000	0.0000	0.0000
B-10	5051	13.0	0.0000	0.0000	0.0000	0.0000
B-13	5051	13.0	0.0000	0.0000	0.0000	0.0000
B-14	5051	13.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	13.0	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	13.0	0.0000	0.0000	0.0000	0.0000
MW-6	5051	13.0	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	13.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	13.5	0.0000	0.0000	0.0000	0.0000
MW-5	5051	13.5	0.0000	0.0000	0.0000	0.0000
MW-7	5051	13.5	0.0000	0.0000	0.0000	0.0000
MW-4	5051	14.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	14.5	0.0000	0.0000	0.0000	0.0000
MWA-2	5051	14.5	0.0000	0.0000	0.0000	0.0000
MWA-3	5051	15.0	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	15'-15.5'	0.0000	0.0000	0.0000	0.0000
MW-4	5051	15.5	0.0000	0.0000	0.0000	0.0000
MW-8	5051	15.5	0.0000	0.0000	0.0000	0.0000
BA-5	5051	16.0	0.0000	0.0000	0.0000	0.0000
B-10	5051	16.0	0.0000	0.0000	0.0000	0.0000

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SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
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Well/Boring Name	property	Sample Depth	VOCs Oral	VOCs Dermal	VOCs Inhalation	VOCs Total
B-11	5051	16.0	0.0000	0.0000	0.0000	0.0000
B-14	5051	16.0	0.0000	0.0000	0.0000	0.0000
MW-6	5051	16.0	0.0000	0.0000	0.0000	0.0000
B-9	5051	16.5	0.0000	0.0000	0.0000	0.0000
MW-7	5051	16.5	0.0000	0.0000	0.0000	0.0000
B-12	5051	17.0	0.0000	0.0000	0.0000	0.0000
MWA-1	5051	17.0	0.0000	0.0000	0.0000	0.0000
MW-5	5051	17.5	0.0000	0.0000	0.0000	0.0000
B-13	5051	18.0	0.0000	0.0000	0.0000	0.0000
B-9	5051	19.5	0.0000	0.0000	0.0000	0.0000
B-12	5051	20.0	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	20'-20.5'	0.0000	0.0000	0.0000	0.0000
B-13	5051	22.0	0.0000	0.0000	0.0000	0.0000
B-12	5051	24.5	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	25'-25.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	30'-30.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	35'-35.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	40'-40.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	45'-45.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	50'-50.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	55'-55.5'	0.0000	0.0000	0.0000	0.0000
CSB-9	5051	60'-60.5'	0.0000	0.0000	0.0000	0.0000

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SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	Total
B-11	5051	0.5	0.5099
B-13	5051	1.0	0.1676
MWA-1	5051	1.0	0.2880
MW-4	5051	1.0	0.0473
MW-5	5051	1.0	0.0580
MW-6	5051	1.0	0.1303
MW-7	5051	1.0	0.0549
MW-8	5051	1.0	0.0656
MWA-1	5051	1.5	0.3924
BA-4	5051	2.0	0.1252
BA-4	5051	2.0	0.0830
B-9	5051	2.0	0.0783
B-10	5051	2.0	0.1157
B-14	5051	2.0	0.1141
MWA-1	5051	2.0	0.0869
MWA-1	5051	3.0	0.2972
B-2	5051	4.0	1.8819
B-3	5051	4.0	10.9994
BA-5	5051	4.0	0.6533
BA-5	5051	4.0	1.0576
MWA-3	5051	4.5	0.1949
B-11	5051	5.0	0.7914
MWA-3	5051	5.0	0.3393
CW-8	5051/EBMUD	5'	1.6682
CW-9	5051/EBMUD	5'	0.4136
CSB-9	5051	5'-5.5'	0.3603
MWA-2	5051	5.5	11.7661
MW-7	5051	5.5	0.0842
B-10	5051	6.0	0.0526
MWA-1	5051	6.0	0.4707
MWA-2	5051	6.0	16.8201
CSB-1	5051/PGE	6-6.5'	25.1775
BA-4	5051	6.5	0.0705
BA-4	5051	6.5	0.1115
B-6	5051	6.5	2.1493
B-7	5051	6.5	12.2150
B-9	5051	7.0	0.1158
B-14	5051	7.0	0.0727
B-8	5051	7.5	11.9055
MWA-1	5051	7.5	1.8585
MW-6	5051	7.5	5.5382
BA-4	5051	8.0	0.2248
BA-4	5051	8.0	0.4842
BA-5	5051	8.0	0.4192
BA-5	5051	8.0	0.5888
B-11	5051	8.0	0.3662
MWA-1	5051	8.0	0.5490
CSB-1	5051/PGE	8-8.5'	0.2127
MWA-1	5051	8.5	9.2174
MWA-1	5051	8.5	11.9390
MW-4	5051	8.5	5.2147
MW-8	5051	8.5	0.0487
BA-5	5051	9.0	0.0816
BA-5	5051	9.0	0.6951
BA-5	5051	9.0	0.0444

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SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
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Well/Boring Name	property	Sample Depth	Total
MWA-1	5051	9.0	12.1431
BA-4	5051	9.5	0.0188
BA-4	5051	9.5	0.0458
B-14	5051	9.5	0.0606
MWA-2	5051	9.5	0.0890
MWA-3	5051	9.5	0.9492
MW-6	5051	9.5	1.0843
BA-5	5051	10.0	0.0541
BA-5	5051	10.0	0.0448
B-10	5051	10.0	1.2374
MWA-1	5051	10.0	2.0358
MWA-1	5051	10.0	1.5926
MWA-2	5051	10.0	0.1603
MWA-3	5051	10.0	0.6731
MW-8	5051	10.0	0.0366
CSB-9	5051	10'-10.5'	0.6303
MWA-3	5051	10.5	7.9704
MW-4	5051	10.5	10.0307
MW-5	5051	10.5	0.2075
MW-7	5051	10.5	0.1914
MWA-3	5051	11.0	9.6686
CW-10	5051/PGE	11-11.5	0.3409
CW-12	5051/PGE	11-11.5	0.2100
B-4	5051	11.5	8.6652
B-5	5051	11.5	17.6900
B-9	5051	11.5	0.1518
MWA-1	5051	11.5	0.6611
MWA-2	5051	11.5	0.1909
MWA-2	5051	11.5	0.1570
MWA-3	5051	11.5	11.3316
MWA-3	5051	11.5	7.0894
BA-4	5051	12.0	0.0174
MWA-3	5051	12.0	10.2302
B-11	5051	12.5	0.0402
MWA-3	5051	12.5	1.2511
BA-5	5051	13.0	0.4017
B-10	5051	13.0	0.0452
B-13	5051	13.0	0.1118
B-14	5051	13.0	0.0301
MWA-1	5051	13.0	0.1138
MWA-3	5051	13.0	1.9653
MW-6	5051	13.0	0.0792
MWA-2	5051	13.5	0.0240
MWA-3	5051	13.5	0.7030
MW-5	5051	13.5	0.5331
MW-7	5051	13.5	0.1076
MW-4	5051	14.0	0.3696
MWA-1	5051	14.5	0.0394
MWA-2	5051	14.5	0.0399
MWA-3	5051	15.0	0.3133
CSB-9	5051	15'-15.5'	1.1103
MW-4	5051	15.5	0.2701
MW-8	5051	15.5	0.0350
BA-5	5051	16.0	0.1926
B-10	5051	16.0	0.0564

APPENDIX D-2
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5051

Well/Boring Name	property	Sample Depth	Total
B-11	5051	16.0	0.1083
B-14	5051	16.0	0.0612
MW-6	5051	16.0	0.0558
B-9	5051	16.5	0.0759
MW-7	5051	16.5	0.0537
B-12	5051	17.0	0.0378
MWA-1	5051	17.0	0.0286
MW-5	5051	17.5	0.0697
B-13	5051	18.0	0.1269
B-9	5051	19.5	0.0606
B-12	5051	20.0	0.0562
CSB-9	5051	20'-20.5'	0.1751
B-13	5051	22.0	0.0799
B-12	5051	24.5	0.0491
CSB-9	5051	25'-25.5'	0.1189
CSB-9	5051	30'-30.5'	0.1656
CSB-9	5051	35'-35.5'	0.2424
CSB-9	5051	40'-40.5'	0.1549
CSB-9	5051	45'-45.5'	0.1794
CSB-9	5051	50'-50.5'	0.1705
CSB-9	5051	55'-55.5'	0.2289
CSB-9	5051	60'-60.5'	0.1325

APPENDIX D-3
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5200

Well/Boring Name	property	Sample Depth	Metals Oral	Metals Dermal	Metals Inhalation	Metals Total
CW-2	5200	3.5	2.4722	0.4823	0.0127	2.9671
CW-3	5200	3.5	3.2374	0.6580	0.0212	3.9165
CW-2	5200	5.0	3.1204	0.6335	0.0110	3.7649
CW-4	5200	5.5	5.7843	0.8332	0.0212	6.6387
CW-3	5200	6.0	2.3248	0.2793	0.0559	2.6600
CW-6	5200	6-6.5'	54.4798	7.0711	0.0254	61.5763
CW-7	5200	6-6.5'	77.0951	9.4283	0.0102	86.5336
CW-1	5200	6.5	10.8689	2.0724	0.0381	12.9794
CW-2	5200	7.5	3.1740	0.3871	0.1270	3.6881
CW-4	5200	7.5	0.2394	0.0288	0.0102	0.2784
CW-5	5200	7.5	1.7565	0.2615	0.0119	2.0299
CW-1	5200	8.0	11.5664	1.4366	0.0364	13.0394
CW-1	5200	9.0	2.3094	0.3065	0.0669	2.6828
CW-3	5200	9.0	1.3363	0.1750	0.0567	1.5681
CW-2	5200	9.5	1.3989	0.3231	0.0305	1.7525
CW-1	5200	11.0	0.0471	0.0073	0.0059	0.0603
CW-3	5200	11.0	1.2379	0.2194	0.0652	1.5225
CW-5	5200	11.0	0.7543	0.1671	0.0127	0.9342
CW-4	5200	11.5	0.4856	0.1376	0.0034	0.6266
CW-4	5200	12.5	2.1166	0.3635	0.0093	2.4894
CW-7	5200	16-16.5'	0.1050	0.0172	0.0432	0.1654

APPENDIX D-3
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5200

Well/Boring Name	property	Sample Depth	SVOCs Oral	SVOCs Dermal	SVOCs Inhalation	SVOCs Total
CW-2	5200	3.5	0.0000	0.0000	0.0000	0.0000
CW-3	5200	3.5	0.0000	0.0000	0.0000	0.0000
CW-2	5200	5.0	0.0000	0.0000	0.0000	0.0000
CW-4	5200	5.5	0.0001	0.0001	0.0023	0.0025
CW-3	5200	6.0	0.0000	0.0000	0.0000	0.0000
CW-6	5200	6-6.5'	0.0000	0.0000	0.0000	0.0000
CW-7	5200	6-6.5'	0.0000	0.0000	0.0000	0.0000
CW-1	5200	6.5	0.0000	0.0000	0.0000	0.0000
CW-2	5200	7.5	0.0000	0.0000	0.0000	0.0000
CW-4	5200	7.5	0.0000	0.0000	0.0002	0.0002
CW-5	5200	7.5	0.0000	0.0000	0.0003	0.0004
CW-1	5200	8.0	0.0000	0.0000	0.0000	0.0000
CW-1	5200	9.0	0.0000	0.0000	0.0000	0.0000
CW-3	5200	9.0	0.0000	0.0000	0.0000	0.0000
CW-2	5200	9.5	0.0023	0.0017	0.0532	0.0573
CW-1	5200	11.0	0.0000	0.0000	0.0000	0.0000
CW-3	5200	11.0	0.0000	0.0000	0.0000	0.0000
CW-5	5200	11.0	0.0048	0.0065	0.4141	0.4254
CW-4	5200	11.5	0.0196	0.0252	0.8854	0.9301
CW-4	5200	12.5	0.0032	0.0044	0.3133	0.3209
CW-7	5200	16-16.5'	0.0000	0.0000	0.0000	0.0000

APPENDIX D-3
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5200

Well/Boring Name	property	Sample Depth	VOCs Oral	VOCs Dermal	VOCs Inhalation	VOCs Total
CW-2	5200	3.5	0.0000	0.0000	0.0000	0.0000
CW-3	5200	3.5	0.0000	0.0000	0.0000	0.0000
CW-2	5200	5.0	0.0000	0.0000	0.0000	0.0000
CW-4	5200	5.5	0.0000	0.0000	0.0083	0.0083
CW-3	5200	6.0	0.0000	0.0000	0.0000	0.0000
CW-6	5200	6-6.5'	0.0000	0.0000	0.0000	0.0000
CW-7	5200	6-6.5'	0.0000	0.0000	0.0000	0.0000
CW-1	5200	6.5	0.0000	0.0000	0.0000	0.0000
CW-2	5200	7.5	0.0000	0.0000	0.0000	0.0000
CW-4	5200	7.5	0.0000	0.0000	0.0061	0.0061
CW-5	5200	7.5	0.1195	0.1444	251.0276	251.2916
CW-1	5200	8.0	0.0000	0.0000	0.0000	0.0000
CW-1	5200	9.0	0.0000	0.0000	0.0000	0.0000
CW-3	5200	9.0	0.0000	0.0000	0.0000	0.0000
CW-2	5200	9.5	0.0007	0.0008	1.6137	1.6152
CW-1	5200	11.0	0.0000	0.0000	0.0000	0.0000
CW-3	5200	11.0	0.0000	0.0000	0.0000	0.0000
CW-5	5200	11.0	0.0154	0.0186	33.5359	33.5699
CW-4	5200	11.5	0.0001	0.0001	0.1931	0.1932
CW-4	5200	12.5	0.0143	0.0173	32.3066	32.3382
CW-7	5200	16-16.5'	0.0000	0.0000	0.0000	0.0000

APPENDIX D-3
SUMMARY OF NONCARCINOGENIC HAZARD
CONSTRUCTION SCENARIO
Property 5200

Well/Boring Name	property	Sample Depth	Total
CW-2	5200	3.5	2.9671
CW-3	5200	3.5	3.9165
CW-2	5200	5.0	3.7649
CW-4	5200	5.5	6.6495
CW-3	5200	6.0	2.6600
CW-6	5200	6-6.5'	61.5763
CW-7	5200	6-6.5'	86.5336
CW-1	5200	6.5	12.9794
CW-2	5200	7.5	3.6881
CW-4	5200	7.5	0.2848
CW-5	5200	7.5	253.3219
CW-1	5200	8.0	13.0394
CW-1	5200	9.0	2.6828
CW-3	5200	9.0	1.5681
CW-2	5200	9.5	3.4249
CW-1	5200	11.0	0.0603
CW-3	5200	11.0	1.5225
CW-5	5200	11.0	34.9295
CW-4	5200	11.5	1.7499
CW-4	5200	12.5	35.1485
CW-7	5200	16-16.5'	0.1654

APPENDIX E

ESTIMATION OF INDOOR AIR CONCENTRATIONS AND POTENTIAL HEALTH IMPACTS

APPENDIX E

Appendix E calculates the carcinogenic risks and noncarcinogenic risks associated with the intrusion of vapors from groundwater and soil to indoor air.

Table E-1 presents the groundwater data that was used in this assessment. Soil data are presented in Table E-2 and Table E-3. In each media, the 95% upper confidence level for sitewide data were selected for analysis.

Table E-4 provides the equations utilized to calculate the indoor air volatilization factors. Chemical specific parameters were selected from the following sources:

U.S. EPA. 1996. *Soil Screening Guidance**Error! Bookmark not defined.**: Technical Background Document.* Office of Solid Waste and Emergency Response. Washington D.C. EPA/540/R-95/128. May, 1996.

U.S. EPA. 1986. *Superfund Public Health Evaluation Manual. Appendix A.* OSWER Directive 9285.4-1. EPA 540/1-86/060.

Table E-5 presents the calculation of carcinogenic risks and hazards.

APPENDIX E
TABLE E-1
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
DATA USED FOR RISK ASSESSMENT
(concentrations expressed in mg/L)

Sample ID	Date Sampled	Property	Benzene			Ethyl-Benzene			Toluene			Total Xylenes	
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
LF-1	04-Nov-91	5050	<	0.0005	0.0003	<	0.005	0.0025	<	0.005	0.0025	<	0.01	0.0050
LF-1	20-Aug-97	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0003	0.0003		0.0005	0.0005
LF-1	11-Dec-97	5050		0.0011	0.0011	<	0.0003	0.0002		0.0003	0.0003	<	0.0004	0.0002
LF-1	25-Mar-98	5050		0.0004	0.0004	<	0.0003	0.0002	<	0.0003	0.0002		0.0005	0.0005
LF-1	17-Jun-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-1	09-Sep-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-1	10-Dec-98	5050		0.0004	0.0004	<	0.0003	0.0002		0.0004	0.0004		0.0006	0.0006
LF-2	04-Nov-91	5050	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.01	0.0050
LF-2	20-Aug-97	5050	NA			NA			NA			NA		
LF-2	19-Dec-97	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0005	0.0005		0.0007	0.0007
LF-2	24-Mar-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-2	18-Jun-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-2	10-Sep-98	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0007	0.0007		0.0006	0.0006
LF-2	10-Dec-98	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0003	0.0003		0.0004	0.0004
LF-3	04-Nov-91	5050	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.01	0.0050
LF-3	25-May-94	5050	NA			NA			NA			NA		
LF-103 (dup)	25-May-94	5050	NA			NA			NA			NA		
LF-3	23-Sep-94	5050	NA			NA			NA			NA		
LF-103 (dup)	23-Sep-94	5050	NA			NA			NA			NA		
LF-3	20-Dec-94	5050	<	0.0005	0.0003	<	0.0005	0.0003	<	0.0005	0.0003	<	0.002	0.0010
LF-103 (dup)	20-Dec-94	5050	<	0.0005	0.0003	<	0.0005	0.0003	<	0.0005	0.0003	<	0.002	0.0010
LF-3	15-Mar-95	5050	<	0.0005	0.0003	<	0.0005	0.0003	<	0.0005	0.0003	<	0.002	0.0010
LF-3	07-Sep-95	5050	<	0.0005	0.0003	<	0.0005	0.0003	<	0.0005	0.0003	<	0.002	0.0010
LF-3	20-Aug-97	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.004	0.0020
LF-3	19-Dec-97	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-3	25-Mar-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-3	18-Jun-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-3	10-Sep-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-3	10-Dec-98	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0004	0.0004	<	0.0004	0.0002
LF-4	04-Nov-91	5050	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.01	0.0050
LF-4	24-Mar-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002		0.005	0.0050
LF-4	18-Jun-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002		0.0052	0.0052
LF-4	10-Sep-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002		0.0042	0.0042
LF-4	10-Dec-98	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0005	0.0005		0.0058	0.0058
LF-5	04-Nov-91	5050	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.01	0.0050
LF-5	20-Aug-97	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-5	11-Dec-97	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0003	0.0003	<	0.0004	0.0002
LF-5	25-Mar-98	5050	NA			NA			NA			NA		

APPENDIX E
TABLE E-1
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
DATA USED FOR RISK ASSESSMENT
(concentrations expressed in mg/L)

Sample ID	Date Sampled	Property	Benzene			Ethyl-Benzene			Toluene			Total Xylenes	
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
LF-5	18-Jun-98	5050	NA			NA			NA			NA		
LF-5	09-Sep-98	5050	NA			NA			NA			NA		
LF-5	09-Dec-98	5050	NA			NA			NA			NA		
LF-6	04-Nov-91	5050	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.01	0.0050
LF-7	04-Nov-91	5050	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.01	0.0050
LF-7	24-Mar-98	5050	NA			NA			NA			NA		
LF-7	18-Jun-98	5050	NA			NA			NA			NA		
LF-7	10-Sep-98	5050	NA			NA			NA			NA		
LF-7	10-Dec-98	5050	NA			NA			NA			NA		
LF-8	28-Oct-93	5050	NA			NA			NA			NA		
LF-8	24-May-94	5050	NA			NA			NA			NA		
LF-8	23-Sep-94	5050	NA			NA			NA			NA		
LF-8	20-Dec-94	5050		0.003	0.0030		0.0065	0.0065		0.0009	0.0009		0.004	0.0040
LF-8	15-Mar-95	5050		0.002	0.0020		0.003	0.0030		0.0006	0.0006		0.003	0.0030
LF-8	09-Jun-95	5050		0.001	0.0010		0.003	0.0030		0.0006	0.0006		0.003	0.0030
LF-8	07-Sep-95	5050		0.001	0.0010		0.003	0.0030		0.0006	0.0006		0.003	0.0030
LF-8	18-Dec-95	5050		0.001	0.0010		0.003	0.0030		0.0006	0.0006		0.003	0.0030
LF-8	20-Aug-97	5050	<	0.0004	0.0002		0.0009	0.0009		0.0004	0.0004		0.0036	0.0036
LF-8	19-Dec-97	5050		0.0019	0.0019		0.0022	0.0022		0.0008	0.0008		0.0033	0.0033
LF-8	24-Mar-98	5050		0.0007	0.0007		0.0019	0.0019		0.0006	0.0006		0.0018	0.0018
LF-8	18-Jun-98	5050	<	0.0004	0.0002		0.0024	0.0024		0.0006	0.0006		0.0021	0.0021
LF-8	10-Sep-98	5050		0.0004	0.0004		0.0016	0.0016		0.001	0.0010		0.0013	0.0013
LF-8	10-Dec-98	5050		0.001	0.0010		0.0019	0.0019		0.001	0.0010		0.0019	0.0019
LF-9	01-Nov-91	5050	NA			NA			NA			NA		
LF-109 (dup)	01-Nov-91	5050	NA			NA			NA			NA		
LF-9	23-Sep-94	5050	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.01	0.0050
LF-9	10-Dec-98	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0009	0.0009		0.0006	0.0006
LF-10	24-Mar-98	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0005	0.0005	<	0.0004	0.0002
LF-10	18-Jun-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-10	09-Sep-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-10	10-Dec-98	5050	<	0.0004	0.0002	<	0.0003	0.0002		0.0005	0.0005		0.0004	0.0004
LF-11	28-Oct-93	5050	NA			NA			NA			NA		
LF-11	19-Dec-97	5050		0.0004	0.0004	<	0.0003	0.0002		0.0004	0.0004	<	0.0004	0.0002
LF-11	25-Mar-98	5050	NA			NA			NA			NA		
LF-11	17-Jun-98	5050	NA			NA			NA			NA		
LF-11	09-Sep-98	5050	NA			NA			NA			NA		
LF-11	10-Dec-98	5050	NA			NA			NA			NA		
LF-12	19-Dec-97	5050		0.0005	0.0005	<	0.0003	0.0002		0.0004	0.0004	<	0.0004	0.0002

APPENDIX E
TABLE E-1
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
DATA USED FOR RISK ASSESSMENT
(concentrations expressed in mg/L)

Sample ID	Date Sampled	Property	Benzene			Ethyl-Benzene			Toluene			Total Xylenes	
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
LF-13	06-Dec-93	5050	<	0.0005	0.0003	<	0.0005	0.0003	<	0.0005	0.0003	<	0.002	0.0010
LF-113 (dup)	06-Dec-93	5050	<	0.0005	0.0003	<	0.0005	0.0003	<	0.0005	0.0003	<	0.002	0.0010
LF-13	20-Aug-97	5050		0.0011	0.0011		0.0006	0.0006	<	0.0003	0.0002		0.0005	0.0005
LF-13	19-Dec-97	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-13	24-Mar-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-13	18-Jun-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-13	10-Sep-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-13	10-Dec-98	5050		0.0005	0.0005	<	0.0003	0.0002		0.0006	0.0006		0.0005	0.0005
LF-14	21-Sep-94	5050	NA			NA			NA			NA		
LF-14	19-Dec-94	5050		0.001	0.0010	<	0.0005	0.0003		0.002	0.0020		0.012	0.0120
LF-14	15-Mar-95	5050		0.001	0.0010	<	0.0005	0.0003		0.0006	0.0006		0.015	0.0150
LF-14	08-Sep-95	5050		0.0009	0.0009	<	0.0005	0.0003		0.0007	0.0007		0.002	0.0020
LF-14	20-Aug-97	5050		0.0011	0.0011	<	0.0003	0.0002		0.0012	0.0012		0.002	0.0020
LF-14	19-Dec-97	5050		0.001	0.0010	<	0.0003	0.0002		0.0003	0.0003	<	0.0004	0.0002
LF-14	25-Mar-98	5050		0.0011	0.0011	<	0.0003	0.0002		0.0009	0.0009		0.0015	0.0015
LF-14	17-Jun-98	5050		0.001	0.0010	<	0.0003	0.0002		0.0007	0.0007		0.0013	0.0013
LF-14	10-Sep-98	5050		0.0009	0.0009	<	0.0003	0.0002		0.0012	0.0012		0.0015	0.0015
LF-14	10-Dec-98	5050		0.0012	0.0012		0.019	0.0190		0.0009	0.0009		0.0028	0.0028
LF-15	25-Mar-98	5050	NA			NA			NA			NA		
LF-15	17-Jun-98	5050	NA			NA			NA			NA		
LF-15	11-Sep-98	5050	NA			NA			NA			NA		
LF-15	10-Dec-98	5050	NA			NA			NA			NA		
LF-16	20-Aug-97	5050		0.0006	0.0006	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-16	19-Dec-97	5050		0.0008	0.0008	<	0.0003	0.0002		0.0003	0.0003	<	0.0004	0.0002
LF-16	25-Mar-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-16	17-Jun-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-16	10-Sep-98	5050	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
LF-16	10-Dec-98	5050		0.0005	0.0005		0.0003	0.0003		0.0007	0.0007		0.0012	0.0012
LFMW-1	24-Mar-98	5050/750-50	NA			NA			NA			NA		
LFMW-1	17-Jun-98	5050/750-50	NA			NA			NA			NA		
LFMW-2	05-Nov-91	5050/750-50	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.01	0.0050
LFMW-2	24-Mar-98	5050/750-50	NA			NA			NA			NA		
LFMW-2	18-Jun-98	5050/750-50	NA			NA			NA			NA		
LFMW-3	19-Dec-97	5050/750-50		0.0009	0.0009	<	0.0003	0.0002		0.0008	0.0008		0.0005	0.0005
LFMW-3	24-Mar-98	5050/750-50	NA			NA			NA			NA		
LFMW-3	18-Jun-98	5050/750-50	NA			NA			NA			NA		
LFMW-3	09-Sep-98	5050/750-50	NA			NA			NA			NA		
LFMW-3	10-Dec-98	5050/750-50	NA			NA			NA			NA		

APPENDIX E
TABLE E-1
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
DATA USED FOR RISK ASSESSMENT
(concentrations expressed in mg/L)

Sample ID	Date Sampled	Property	Benzene			Ethyl-Benzene			Toluene			Total Xylenes	
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
MWA-1	27-Apr-98	5051		0.0009	0.0009	<	0.0003	0.0002		0.0004	0.0004	<	0.0004	0.0002
MWA-1	19-Jun-98	5051		0.0008	0.0008	<	0.0003	0.0002		0.0003	0.0003	<	0.0004	0.0002
MWA-1	11-Sep-98	5051		0.0011	0.0011	<	0.0003	0.0002		0.0010	0.0010	<	0.0004	0.0002
MWA-1	09-Dec-98	5051		0.0014	0.0014		0.0029	0.0029		0.0007	0.0007		0.0156	0.0156
MWA-2	27-Apr-98	5051	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
MWA-2	19-Jun-98	5051	<	0.0004	0.0002		0.0004	0.0004		0.0004	0.0004		0.0006	0.0006
MWA-2	10-Sep-98	5051	<	0.0004	0.0002		0.0005	0.0005		0.0008	0.0008		0.0005	0.0005
MWA-2	09-Dec-98	5051	<	0.0004	0.0002		0.0003	0.0003		0.0003	0.0003		0.0006	0.0006
MW-6	27-Apr-98	5051	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
MW-6	19-Jun-98	5051	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
MW-6	11-Sep-98	5051	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
MW-6	08-Dec-98	5051	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-1	19-Aug-97	5200		0.0006	0.0006	<	0.0003	0.0002	<	0.0003	0.0002		0.0024	0.0024
CW-1	11-Dec-97	5200	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-1	25-Mar-98	5200	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-1	19-Jun-98	5200	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-1	10-Sep-98	5200	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-1	04-Dec-98	5200	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-2	19-Aug-97	5200		0.0008	0.0008	<	0.0003	0.0002	<	0.0003	0.0002		0.0004	0.0004
CW-2	11-Dec-97	5200		0.0008	0.0008	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-2	25-Mar-98	5200		0.0006	0.0006	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-2	19-Jun-98	5200		0.0005	0.0005	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-2	10-Sep-98	5200		0.0005	0.0005	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-2	04-Dec-98	5200		0.0008	0.0008	<	0.0003	0.0002		0.0004	0.0004		0.0004	0.0004
CW-3	19-Aug-97	5200		0.0044	0.0044	<	0.0015	0.0008		0.0021	0.0021		0.0043	0.0043
CW-3*	11-Dec-97	5200		0.0049	0.0049	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-3	25-Mar-98	5200		0.0039	0.0039		0.0003	0.0003		0.0008	0.0008		0.0015	0.0015
CW-3	19-Jun-98	5200		0.0042	0.0042	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-3	10-Sep-98	5200		0.0051	0.0051	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-3	04-Dec-98	5200		0.0067	0.0067	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-4	19-Aug-97	5200		0.14	0.1400		0.21	0.2100		0.092	0.0920		0.51	0.5100
CW-4	11-Dec-97	5200		0.087	0.0870		0.19	0.1900		0.066	0.0660		0.51	0.5100
CW-4	25-Mar-98	5200		0.06	0.0600		0.15	0.1500		0.063	0.0630		0.44	0.4400
CW-4	19-Jun-98	5200		0.078	0.0780		0.14	0.1400		0.059	0.0590		0.38	0.3800
CW-4	10-Sep-98	5200		0.11	0.1100		0.19	0.1900		0.066	0.0660		0.48	0.4800
CW-4	04-Dec-98	5200		0.14	0.1400		0.20	0.2000		0.067	0.0670		0.52	0.5200
CW-5	19-Aug-97	5200		0.12	0.1200		0.16	0.1600		0.24	0.2400		0.45	0.4500
CW-5*	11-Dec-97	5200		0.087	0.0870		0.14	0.1400		0.18	0.1800		0.4	0.4000

APPENDIX E
TABLE E-1
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
DATA USED FOR RISK ASSESSMENT
(concentrations expressed in mg/L)

Sample ID	Date Sampled	Property	Benzene			Ethyl-Benzene			Toluene			Total Xylenes	
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
CW-5	25-Mar-98	5200		0.14	0.1400		0.16	0.1600		0.25	0.2500		0.44	0.4400
CW-5	19-Jun-98	5200		0.13	0.1300		0.14	0.1400		0.21	0.2100		0.4	0.4000
CW-5	10-Sep-98	5200		0.15	0.1500		0.18	0.1800		0.27	0.2700		0.5	0.5000
CW-5	04-Dec-98	5200		0.10	0.1000		0.16	0.1600		0.20	0.2000		0.44	0.4400
CW-6	04-Dec-98	5200	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-7-D3	29-Sep-98	5200	NA			NA			NA			NA		
CW-7-D4	29-Sep-98	5200	<	0.0005	0.0003	<	0.001	0.0003	<	0.0005	0.0003	<	0.0005	0.0003
CW-7	04-Dec-98	5200	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-8	11-Sep-98	5200	<	0.0004	0.0002		0.0004	0.0004		0.0007	0.0007		0.0004	0.0004
CW-8	08-Dec-98	5200	<	0.0004	0.0002		0.0004	0.0004		0.0003	0.0003		0.0009	0.0009
CW-13	11-Sep-98	5200	<	0.0004	0.0002	<	0.0003	0.0002	<	0.0003	0.0002	<	0.0004	0.0002
CW-13	08-Dec-98	5200	<	0.0004	0.0002		0.0004	0.0004		0.0004	0.0004		0.0014	0.0014
	Number of samples				127			127			127			127
	Number of nondetections				69			93			64			68
	Number of detections				58			34			63			59
	Percent detected				45.7%			26.8%			49.6%			46.5%
	Minimum				0.00015			0.00015			0.00015			0.00020
	Maximum				0.15000			0.21000			0.27000			0.52000
	Average				0.01133			0.01661			0.01438			0.04455
	Standard deviation				0.03374			0.04978			0.04980			0.13416
	n-1				126			126			126			126
	$t_{0.95}$				1.65704			1.65704			1.65704			1.65704
	95% confidence interval				0.00498			0.00735			0.00735			0.01980
	95% Upper Confidence Level				0.01631			0.02396			0.02173			0.06435
	Concentration for Risk Assessment				0.01631			0.02396			0.02173			0.06435

APPENDIX E
TABLE E-2
VOLATILE ORGANIC COMPOUND DATA IN SOIL
USED IN THE ASSESSMENT OF POTENTIAL IMPACTS TO INDOOR AIR
(concentrations expressed in mg/kg)

Well/Boring Name	Property	Sample Depth	Benzene			Ethylbenzene			Toluene			Xylenes	
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
LF-1-5.5	5050/750-50	5.5	<	0.001	0.0005	<	0.001	0.0010	<	0.001	0.0005	<	0.001	0.0005
LF-1-10.5	5050/750-50	10.5	<	0.001	0.0005	<	0.001	0.0010	<	0.001	0.0005	<	0.003	0.0015
LF-8-5.0	5050/750-50	5.0												
LF-8-7.5	5050/750-50	7.5												
LF-9-4.5	5050/750-50	4.5												
LF-13-7.0	5050/750-50	7.0	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
LF-14-1.5	5050/750-50	1.5	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
LF-14-4.5	5050/750-50	4.5	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
LF-14-12.5	5050/750-50	12.5												
LF-15-11.0	5050/750-50	11.0	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
SB-1-7.0	5050/750-50	7.0		0.044	0.0440		0.045	0.0450		0.076	0.0760		0.11	0.1100
SB-2-15	5050/750-50	15.0												
SB-15-6.0	5050/750-50	6.0												
SB-17-5.0	5050/750-50	5.0	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
SB-17-6.5	5050/750-50	6.5		0.043	0.0430		0.035	0.0350		0.044	0.0440		0.19	0.1900
SB-17-9.5	5050/750-50	9.5	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
SB-18-7.0	5050/750-50	7.0	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
SB-19-7.5	5050/750-50	5.0												
SB-19-7.5	5050/750-50	7.5	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
SB-19-10	5050/750-50	10.0	<	0.005	0.0025	<	0.005	0.0050		0.005	0.0050	<	0.005	0.0025
SB-20-9.5	5050/750-50	9.5	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
SB-21-10	5050/750-50	10.0	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
SS-20-2.0	5050/750-50	2.0	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	6.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	8.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	9.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	11.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	3.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	5.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	7.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025

APPENDIX E
TABLE E-2
VOLATILE ORGANIC COMPOUND DATA IN SOIL
USED IN THE ASSESSMENT OF POTENTIAL IMPACTS TO INDOOR AIR
(concentrations expressed in mg/kg)

Well/Boring Name	Property	Sample Depth	Benzene			Ethylbenzene			Toluene			Xylenes	
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
CW-2	5200	9.5	<	0.5	0.2500	<	0.5	0.5000	<	0.5	0.2500	<	0.005	0.0025
CW-3	5200	3.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	6.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	9.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	11.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-4	5200	5.5	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
CW-4	5200	7.5	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
CW-4	5200	11.5		0.15	0.1500		0.12	0.1200		0.014	0.0140	<	0.005	0.0025
CW-4	5200	12.5	<	3	1.5000		4	4.0000	<	3	1.5000	<	0.005	0.0025
CW-5	5200	7.5	<	4	2.0000		8	8.0000		12	12.0000	<	0.005	0.0025
CW-5	5200	11.0	<	3	1.5000		3	3.0000	<	3	1.5000	<	0.005	0.0025
CSB-6	750-50	4'	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
CW-8	5051/EBMUD	5'	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
CW-9	5051/EBMUD	5'	<	0.005	0.0025	<	0.005	0.0050	<	0.005	0.0025	<	0.005	0.0025
CW-13	5050	5'	<	0.0005	0.0003	<	0.001	0.0005	<	0.001	0.0003	<	0.001	0.0003
		Number of samples			38			38			38			38
		Number of nondetections			35			32			33			36
		Number of detections			3			6			5			2
		Percent detected			7.9%			15.8%			13.2%			5.3%
		Minimum			0.00			0.00			0.00			0.00
		Maximum			2.00			8.00			12.00			0.19
		Average			0.15			0.42			0.41			0.01
		Standard deviation			0.46			1.49			1.96			0.03
		n-1			37.00			37.00			37.00			37.00
		$t_{0.95}$			1.69			1.69			1.69			1.69
		95% confidence interval			0.13			0.41			0.54			0.01
		95% Upper Confidence Level			0.27			0.83			0.95			0.02
		Concentration for Risk Assessment			0.27			0.83			0.95			0.02

APPENDIX E
TABLE E-2
VOLATILE ORGANIC COMPOUND DATA IN SOIL
USED IN THE ASSESSMENT OF POTENTIAL IMPACTS TO INDOOR AIR
(concentrations expressed in mg/kg)

Well/Boring Name	Property	Sample Depth	o-Xylene			p,m-Xylenes			Acetone			Methylene Chloride		
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
LF-1-5.5	5050/750-50	5.5												
LF-1-10.5	5050/750-50	10.5												
LF-8-5.0	5050/750-50	5.0												
LF-8-7.5	5050/750-50	7.5												
LF-9-4.5	5050/750-50	4.5												
LF-13-7.0	5050/750-50	7.0												
LF-14-1.5	5050/750-50	1.5												
LF-14-4.5	5050/750-50	4.5												
LF-14-12.5	5050/750-50	12.5												
LF-15-11.0	5050/750-50	11.0												
SB-1-7.0	5050/750-50	7.0												
SB-2-15	5050/750-50	15.0												
SB-15-6.0	5050/750-50	6.0												
SB-17-5.0	5050/750-50	5.0												
SB-17-6.5	5050/750-50	6.5												
SB-17-9.5	5050/750-50	9.5												
SB-18-7.0	5050/750-50	7.0												
SB-19-7.5	5050/750-50	5.0												
SB-19-7.5	5050/750-50	7.5												
SB-19-10	5050/750-50	10.0												
SB-20-9.5	5050/750-50	9.5												
SB-21-10	5050/750-50	10.0												
SS-20-2.0	5050/750-50	2.0												
CW-1	5200	6.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	8.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	9.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	11.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	3.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	5.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	7.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025

APPENDIX E
TABLE E-2
VOLATILE ORGANIC COMPOUND DATA IN SOIL
USED IN THE ASSESSMENT OF POTENTIAL IMPACTS TO INDOOR AIR
(concentrations expressed in mg/kg)

Well/Boring Name	Property	Sample Depth	o-Xylene qual	o-Xylene dat	o-Xylene RAdat	p,m-Xylenes qual	p,m-Xylenes dat	p,m-Xylenes RAdat	Acetone qual	Acetone dat	Acetone RAdat	Methylene Chloride qual	Methylene Chloride dat	Methylene Chloride RAdat
CW-2	5200	9.5	<	0.5	0.2500	<	0.5	0.2500	<	2	1.0000		0.7	0.7000
CW-3	5200	3.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	6.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	9.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	11.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-4	5200	5.5	<	0.005	0.0025	<	0.005	0.0025		0.007	0.0070		0.007	0.0070
CW-4	5200	7.5	<	0.005	0.0025	<	0.005	0.0025	<	0.02	0.0100	<	0.005	0.0025
CW-4	5200	11.5		0.049	0.0490		0.11	0.1100	<	0.02	0.0100		0.006	0.0060
CW-4	5200	12.5		3	3.0000		6	6.0000	<	10	5.0000	<	3	1.5000
CW-5	5200	7.5		11	11.0000		19	19.0000	<	10	5.0000	<	3	1.5000
CW-5	5200	11.0		3	3.0000		4	4.0000	<	10	5.0000	<	3	1.5000
CSB-6	750-50	4'	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-8	5051/EBMUD	5'	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-9	5051/EBMUD	5'	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-13	5050	5'	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
		Number of samples			22			22			22			22
		Number of nondetections			18			18			21			19
		Number of detections			4			4			1			3
		Percent detected			18.2%			18.2%			4.5%			13.6%
		Minimum			0.00			0.00			0.00			0.00
		Maximum			11.00			19.00			5.00			1.50
		Average			0.79			1.34			0.73			0.24
		Standard deviation			2.44			4.22			1.75			0.53
		n-1			21.00			21.00			21.00			21.00
		$t_{0.95}$			1.72			1.72			1.72			1.72
		95% confidence interval			0.92			1.58			0.66			0.20
		95% Upper Confidence Level			1.71			2.92			1.39			0.44
		Concentration for Risk Assessment			1.71			2.92			1.39			0.44

APPENDIX E
TABLE E-2
VOLATILE ORGANIC COMPOUND DATA IN SOIL
USED IN THE ASSESSMENT OF POTENTIAL IMPACTS TO INDOOR AIR
(concentrations expressed in mg/kg)

Well/Boring Name	Property	Sample Depth	qual	Naphthalene dat	Naphthalene RAdat	qual	Styrene dat	Styrene RAdat	qual	1,2,4-Trimethylbenzene dat	1,2,4-Trimethylbenzene RAdat	qual	1,3,5-Trimethylbenzene dat	1,3,5-Trimethylbenzene RAdat
LF-1-5.5	5050/750-50	5.5												
LF-1-10.5	5050/750-50	10.5												
LF-8-5.0	5050/750-50	5.0	<	1.70	0.85									
LF-8-7.5	5050/750-50	7.5		27.00	27.00									
LF-9-4.5	5050/750-50	4.5		1.10	1.10									
LF-13-7.0	5050/750-50	7.0												
LF-14-1.5	5050/750-50	1.5												
LF-14-4.5	5050/750-50	4.5												
LF-14-12.5	5050/750-50	12.5	<	0.33	0.1650									
LF-15-11.0	5050/750-50	11.0												
SB-1-7.0	5050/750-50	7.0												
SB-2-15	5050/750-50	15.0	<	0.33	0.1650									
SB-15-6.0	5050/750-50	6.0	<	0.33	0.1650									
SB-17-5.0	5050/750-50	5.0												
SB-17-6.5	5050/750-50	6.5												
SB-17-9.5	5050/750-50	9.5												
SB-18-7.0	5050/750-50	7.0												
SB-19-7.5	5050/750-50	5.0	<	0.33	0.1650									
SB-19-7.5	5050/750-50	7.5												
SB-19-10	5050/750-50	10.0												
SB-20-9.5	5050/750-50	9.5												
SB-21-10	5050/750-50	10.0												
SS-20-2.0	5050/750-50	2.0												
CW-1	5200	6.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	8.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	9.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-1	5200	11.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	3.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	5.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-2	5200	7.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025

APPENDIX E
TABLE E-2
VOLATILE ORGANIC COMPOUND DATA IN SOIL
USED IN THE ASSESSMENT OF POTENTIAL IMPACTS TO INDOOR AIR
(concentrations expressed in mg/kg)

Well/Boring Name	Property	Sample Depth		Naphthalene dat	RAdat		Styrene dat	RAdat		1,2,4-Trimethylbenzene dat	RAdat		1,3,5-Trimethylbenzene dat	RAdat
CW-2	5200	9.5		9.8	9.8000	<	0.5	0.2500	<	0.5	0.2500	<	0.5	0.2500
CW-3	5200	3.5	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	6.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	9.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-3	5200	11.0	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-4	5200	5.5		0.03	0.0300	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-4	5200	7.5		0.011	0.0110	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-4	5200	11.5		0.009	0.0090	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-4	5200	12.5		240	240.0000	<	3	1.5000		6	6.0000		3	3.0000
CW-5	5200	7.5		2100	2100.0000		6	6.0000		16	16.0000		7	7.0000
CW-5	5200	11.0		260	260.0000	<	3	1.5000		4	4.0000	<	3	1.5000
CSB-6	750-50	4'	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-8	5051/EBMUD	5'	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-9	5051/EBMUD	5'	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
CW-13	5050	5'	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025	<	0.005	0.0025
		Number of samples			29			22			22			22
		Number of nondetections			20			21			19			20
		Number of detections			9			1			3			2
		Percent detected			31.0%			4.5%			13.6%			9.1%
		Minimum			0.00			0.00			0.00			0.00
		Maximum			2100.00			6.00			16.00			7.00
		Average			91.02			0.42			1.20			0.54
		Standard deviation			391.69			1.32			3.63			1.60
		n-1			28.00			21.00			21.00			21.00
		$t_{0.95}$			1.70			1.72			1.72			1.72
		95% confidence interval			125.92			0.50			1.36			0.60
		95% Upper Confidence Level			216.94			0.92			2.56			1.14
		Concentration for Risk Assessment			216.94			0.92			2.56			1.14

APPENDIX E
TABLE E-3
SEMI-VOLATILE ORGANIC COMPOUND DATA IN SOIL
USED IN THE ASSESSMENT OF POTENTIAL IMPACTS TO INDOOR AIR
(concentrations expressed in mg/kg)

Well/Boring Name	property	Sample Depth	Acenaphthene			Anthracene			Fluorene			Pyrene	
			qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat	qual	dat	RAdat
LF-8-5.0	5050/750-50	5.0	<	1.70	0.85	<	1.70	0.85	<	1.70	0.85	<	1.70	0.85
LF-8-7.5	5050/750-50	7.5		110.00	110.00		71.00	71.00		88.00	88.00		69.00	69.00
LF-9-4.5	5050/750-50	4.5		0.36	0.36		0.35	0.35		0.63	0.63		1.90	1.90
LF-14-12.5	5050/750-50	12.5	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17
SB-1-7.0	5050/750-50	7.0	<	1.70	0.85	<	1.70	0.85	<	1.70	0.85	<	1.70	0.85
SB-2-15	5050/750-50	15.0	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17
SB-15-6.0	5050/750-50	6.0	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17
SB-17-6.5	5050/750-50	6.5	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17
SB-18-7.0	5050/750-50	7.0	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17
SB-19-7.5	5050/750-50	5.0	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17
SB-19-10.0	5050/750-50	10.0	<	0.83	0.42	<	0.83	0.42	<	0.83	0.42	<	0.83	0.42
SB-20-9.5	5050/750-50	9.5	<	0.33	0.17	<	0.33	0.17	<	0.33	0.17		1.40	1.40
CW-2	5200	9.5		20.00	20.00		40.00	40.00		20.00	20.00		270.00	270.00
CW-4	5200	5.5		0.60	0.60		1.60	1.60		0.40	0.40		8.00	8.00
CW-4	5200	7.5	<	0.20	0.10	<	0.20	0.10	<	0.20	0.10	<	0.20	0.10
CW-4	5200	11.5		200.00	200.00		2400.00	2400.00		350.00	350.00		600.00	600.00
CW-4	5200	12.5		210.00	210.00		70.00	70.00		140.00	140.00		160.00	160.00
CW-5	5200	7.5	<	0.20	0.10	<	0.20	0.10	<	0.20	0.10	<	0.20	0.10
CW-5	5200	11.0		310.00	310.00		190.00	190.00		230.00	230.00		280.00	280.00
	19	Number of samples		19			19			19			19	
		Number of nondetections		12			12			12			11	
		Number of detections		7			7			7			8	
		Percent detected		36.8%			36.8%			36.8%			42.1%	
		Minimum		0.10			0.10			0.10			0.10	
		Maximum		310.00			2400.00			350.00			600.00	
		Average		44.97			146.13			43.82			73.35	
		Standard deviation		92.58			547.82			96.23			156.26	
		n-1		18.00			18.00			18.00			18.00	
		$t_{0.95}$		1.73			1.73			1.73			1.73	
		95% confidence interval		37.84			223.91			39.33			63.87	
		5% Upper Confidence Level		82.81			370.03			83.15			137.22	
		Concentration for Risk Assessment		82.81			370.03			83.15			137.22	

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

The following equations were utilized to calculate the volatilization factors for the assessment of potential impacts to indoor air. These equations are take from American Society for Testing and Materials (ASTM). 1995. *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites*. (Standard Guide) E 1739-95. November, 1995. Table E-4 lists the constituent specific variables used to calculate the volatilization factors.

Groundwater to Enclosed Space Vapors Volatilization Factor

$$VF_{wesp}\left[\frac{(mg/m^3-air)}{(mg/L-H_2O)}\right]=\frac{H\left[\frac{D_{ws}^{eff}/L_{GW}}{ER\times L_B}\right]}{1+\left[\frac{D_{ws}^{eff}/L_{GW}}{ER\times L_B}\right]+\left[\frac{D_{ws}^{eff}/L_{GW}}{D_{crack}^{eff}/L_{crack}}\right]}\times 10^3\,\frac{L}{m^3}$$

Subsurface to Enclosed Space Vapors Volatilization Factor

$$VF_{sesp}\left[\frac{mg/m^3-air}{mg/kg-soil}\right]=\frac{\frac{H\rho_s}{\left[\theta_{ws}+k_s\rho_s+H\theta_{as}\right]}\left[\frac{D_s^{eff}/L_S}{ER\times L_B}\right]}{1+\left[\frac{D_s^{eff}/L_S}{ER\times L_B}\right]+\left[\frac{D_s^{eff}/L_S}{\left(D_{crack}^{eff}/L_{crack}\right)\eta}\right]}\times 10^3\,\frac{cm^3-kg}{m^3-g}$$

Effective Diffusion Coefficient in Soil Based on Vapor Phase Concentration

$$D_s^{eff}\left[\frac{cm^2}{s}\right]=D^{air}\frac{\theta_{as}^{3.33}}{\theta_T^2}+D^{wat}\frac{1}{H}\frac{\theta_{ws}^{3.33}}{\theta_T^2}$$

Effective Diffusion Coefficient Through Foundation Cracks

$$D_{crack}^{eff}\left[\frac{cm^2}{s}\right]=D^{air}\frac{\theta_{acrack}^{3.33}}{\theta_T^2}+D^{wat}\frac{1}{H}\frac{\theta_{wcrack}^{3.33}}{\theta_T^2}$$

Effective Diffusion Coefficient Through Capillary Fringe

$$D_{cap}^{eff}\left[\frac{cm^2}{s}\right]=D^{air}\frac{\theta_{acap}^{3.33}}{\theta_T^2}+D^{wat}\frac{1}{H}\frac{\theta_{wcap}^{3.33}}{\theta_T^2}$$

Effective Diffusion Coefficient Between Groundwater and Soil Surface

$$D_{ws}^{eff}\left[\frac{cm^2}{s}\right]=\left(h_{cap}+h_v\right)\left[\frac{h_{cap}}{D_{cap}^{eff}}+\frac{h_v}{D_s^{eff}}\right]^{-1}$$

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defaults	
				Benzene
VF_{sesp}	$(mg/m^3\text{-air})/(mg/kg\text{-soil})$	Volatilization Factor - Soil to enclosed space vapor	calc	1.08E-03
VF_{wesp}	$(mg/m^3\text{-air})/(mg/L\text{-air})$	Volatilization Factor - Groundwater to enclosed space vapor	calc	7.54E-04
H	$cm^3\text{-}H_2O/cm^3\text{-air}$	Henry's law constant	chemical-specific	2.27E-01
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	$cm^3\text{-}H_2O/cm^3\text{-soil}$	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	$cm^3\text{-}H_2O/g\text{-soil}$	soil water sorption coefficient	calc (foc x koc)	5.89E-01
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	5.89E+01
θ_{as}	$cm^3\text{-air}/cm^3\text{-soil}$	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	6.87E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	6.87E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	$cm^2\text{-cracks}/cm^2\text{-total area}$	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	8.80E-02
θ_t	$cm^3/cm^3\text{-soil}$	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	9.80E-06
θ_{acrack}	$cm^3\text{-air}/cm^3$ total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	$cm^3\text{-}H_2O/cm^3$ total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.29E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	2.43E-02
θ_{acap}	$cm^3\text{-air}/cm^3\text{-soil}$	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Ethylbenzene
VF_{sesp}	$(mg/m^3\text{-air})/(mg/kg\text{-soil})$	Volatilization Factor - Soil to enclosed space vapor	calc	2.42E-04
VF_{wesp}	$(mg/m^3\text{-air})/(mg/L\text{-air})$	Volatilization Factor - Groundwater to enclosed space vapor	calc	9.10E-04
H	$cm^3\text{-}H_2O/cm^3\text{-air}$	Henry's law constant	chemical-specific	3.22E-01
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	$cm^3\text{-}H_2O/cm^3\text{-soil}$	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	$cm^3\text{-}H_2O/g\text{-soil}$	soil water sorption coefficient	calc (foc x koc)	3.63E+00
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	3.63E+02
θ_{as}	$cm^3\text{-air}/cm^3\text{-soil}$	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	5.85E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	5.85E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	$cm^2\text{-cracks}/cm^2\text{-total area}$	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	7.50E-02
θ_t	$cm^3/cm^3\text{-soil}$	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	7.80E-06
θ_{acrack}	$cm^3\text{-air}/cm^3$ total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	$cm^3\text{-}H_2O/cm^3$ total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.52E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	2.07E-02
θ_{acap}	$cm^3\text{-air}/cm^3\text{-soil}$	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Toluene
VF_{sesp}	$(mg/m^3\text{-air})/(mg/kg\text{-soil})$	Volatilization Factor - Soil to enclosed space vapor	calc	4.59E-04
VF_{wesp}	$(mg/m^3\text{-air})/(mg/L\text{-air})$	Volatilization Factor - Groundwater to enclosed space vapor	calc	8.89E-04
H	$cm^3\text{-}H_2O/cm^3\text{-air}$	Henry's law constant	chemical-specific	2.71E-01
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	$cm^3\text{-}H_2O/cm^3\text{-soil}$	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	$cm^3\text{-}H_2O/g\text{-soil}$	soil water sorption coefficient	calc (foc x koc)	1.82E+00
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	1.82E+02
θ_{as}	$cm^3\text{-air}/cm^3\text{-soil}$	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	6.79E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	6.79E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	$cm^2\text{-cracks}/cm^2\text{-total area}$	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	8.70E-02
θ_t	$cm^3/cm^3\text{-soil}$	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	8.60E-06
θ_{acrack}	$cm^3\text{-air}/cm^3$ total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	$cm^3\text{-}H_2O/cm^3$ total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.31E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	2.40E-02
θ_{acap}	$cm^3\text{-air}/cm^3\text{-soil}$	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Xylenes
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	2.27E-05
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	5.71E-05
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	2.19E-01
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	2.40E+00
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	2.40E+02
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	5.39E-04
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	5.39E-04
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	6.90E-03
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	7.80E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.65E+08
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	1.91E-03
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Acetone
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	4.48E-04
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	3.44E-05
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	1.58E-03
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	5.75E-03
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	5.75E-01
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	4.49E-02
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	4.49E-02
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	5.75E-01
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	1.14E-05
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.98E+06
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	1.59E-01
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Methylene Chloride
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	1.69E-03
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	3.41E-04
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	8.95E-02
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	1.17E-01
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	1.17E+01
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	7.88E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	7.88E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	1.01E-01
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	1.17E-05
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.13E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	2.79E-02
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Naphthalene
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	2.18E-06
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	4.39E-05
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	1.97E-02
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	2.00E+01
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	2.00E+03
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	4.61E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	4.61E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	5.90E-02
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	7.50E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.93E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	1.63E-02
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Styrene
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	3.83E-05
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	3.02E-04
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	1.13E-01
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	7.76E+00
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	7.76E+02
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	5.54E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	5.54E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	7.10E-02
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	8.00E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.60E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	1.96E-02
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	1,2,4-Trimethylbenzene
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	4.59E-04
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	8.89E-04
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	2.71E-01
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	1.82E+00
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	1.82E+02
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	6.79E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	6.79E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	8.70E-02
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	8.60E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.31E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	2.40E-02
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	1,3,5-Trimethylbenzene
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	4.59E-04
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	8.89E-04
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	2.71E-01
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	1.82E+00
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	1.82E+02
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	6.79E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	6.79E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	8.70E-02
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	8.60E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	1.31E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	2.40E-02
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Acenaphthene
VF_{esp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	1.42E-07
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	1.01E-05
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	6.34E-03
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	7.08E+01
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	7.08E+03
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	3.29E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	3.29E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	4.21E-02
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	7.69E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	2.70E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	1.16E-02
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Anthracene
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	1.11E-08
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	3.27E-06
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	2.66E-03
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	2.95E+02
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	2.95E+04
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	2.55E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	2.55E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	3.24E-02
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	7.74E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	3.49E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	8.96E-03
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Fluorene
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	2.59E-08
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	3.58E-06
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	2.60E-03
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	1.38E+02
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	1.38E+04
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	2.85E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	2.85E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	3.63E-02
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	7.88E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	3.12E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	1.00E-02
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-4
CALCULATION OF INDOOR AIR VOLATILIZATION FACTORS

			ASTM Industrial Defa	Pyrene
VF_{sesp}	(mg/m^3-air)/(mg/kg-soil)	Volatilization Factor - Soil to enclosed space vapor	calc	4.57E-10
VF_{wesp}	(mg/m^3-air)/(mg/L-air)	Volatilization Factor - Groundwater to enclosed space vapor	calc	4.82E-07
H	cm^3-H_2O/cm^3-air	Henry's law constant	chemical-specific	4.50E-04
ρ_s	g-soil/cm3-soil	soil bulk density	1.70E+00	1.70E+00
θ_{ws}	cm^3-H_2O/cm^3-soil	Volumetric water content in vadose zone soil (water filled porosity)	1.20E-01	1.20E-01
k_s	cm^3-H_2O/g-soil	soil water sorption coefficient	calc (foc x koc)	1.05E+03
f_{oc}	g-C/g-soil	fraction organic carbon	1.00E-02	1.00E-02
k_{oc}	cm3-H2O/g-C	carbon-water sorption coefficient	chemical-specific	1.05E+05
θ_{as}	cm^3-air/cm^3-soil	Volumetric air content in vadose zone soil (air filled porosity)	2.60E-01	2.60E-01
D^{eff}_s	cm^2/s	Effective diffusion coefficient in soil based on vapor phase concentration	calc	2.22E-03
L_s	cm	Depth to subsurface sources	1.00E+02	1.00E+02
ER	L/s	Enclosed space air exchange (s^{-1})	2.30E-04	2.30E-04
L_b	cm	Enclosed space volume/infiltration area ratio, cm	3.00E+02	3.00E+02
D^{eff}_{crack}	cm^2/s	Effective diffusion coefficient through foundation cracks	calc	2.22E-03
L_{crack}	cm	Enclosed space foundation or wall thickness	3.00E+01	3.00E+01
η	cm^2-cracks/cm^2-total area	Areal fraction of cracks in foundations/walls	1.00E-03	1.00E-03
D_{air}	cm^2/s	Diffusion coefficient in air	chemical-specific	2.72E-02
θ_t	cm^3/cm^3-soil	Total soil porosity	3.80E-01	3.80E-01
D_{wat}	cm^2/s	Diffusion coefficient in water	chemical-specific	7.24E-06
θ_{acrack}	cm^3-air/cm^3 total removal	Volumetric air content in foundation/wall cracks	2.60E-01	2.60E-01
θ_{wcrack}	cm^3-H_2O/cm^3 total volume	Volumetric water content in foundation/wall cracks	1.20E-01	1.20E-01
D^{eff}_{ws}	cm^2/s	Effective diffusion between groundwater and soil surface	calc	4.01E+07
D^{eff}_{cap}	cm^2/s	Effective diffusion through capillary fringe	calc	7.61E-03
θ_{acap}	cm^3-air/cm^3-soil	Volumetric air content in capillary fringe soils	3.80E-01	3.80E-01
h_{cap}	cm	Thickness of capillary fringe	5.00E+00	5.00E+00
h_v	cm	Thickness of vadose zone	2.95E+02	2.95E+02
L_{GW}	cm	Depth to groundwater	1.50E+01	1.50E+01

APPENDIX E
TABLE E-5
CALCULATION OF CARCINOGENIC RISKS AND NONCARCINOGENIC HAZARDS
INDOOR AIR
INDUSTRIAL SCENARIO

Constituent	Concentrations	Volatilization Factors	Concentration in Indoor Air	Lifetime Pathway Exposure Factor	Daily Pathway Exposure Factor	Liftime Average Daily Intake	Daily Average Daily Intake	Inhalation Slope Factor	Inhalation Reference Dose	Carcinogenic Risk	Non Carcinogenic Hazard
	C	VF	$C_{aindoor}$	IPEF	dPEF	IADI	dADI	SFi	RfDi	Risk	Hazard
	Tables E-1,E 2, E-3	Table E-4	C*VF	Table 3	Table 3	Caindoor * IPEF	Caindoor *dPEF	Table 4	Table 4	IADI*SFi	dADI*RfDi
Groundwater											
mg/L											
Benzene	1.63E-02	7.54E-04	1.23E-05	3.63E-02	1.02E-01	4.47E-07	1.25E-06	1.00E-01	1.70E-03	4.47E-08	7.36E-04
Ethylbenzene	2.40E-02	9.10E-04	2.18E-05	3.63E-02	1.02E-01	7.93E-07	2.22E-06		2.90E-01	0.00E+00	7.65E-06
Toluene	2.17E-02	8.89E-04	1.93E-05	3.63E-02	1.02E-01	7.02E-07	1.97E-06		1.10E-01	0.00E+00	1.79E-05
Xylenes	6.44E-02	5.71E-05	3.67E-06	3.63E-02	1.02E-01	1.33E-07	3.74E-07			0.00E+00	
Soil											
mg/kg											
Acenaphthene	8.28E+01	1.42E-07	1.17E-05	3.63E-02	1.02E-01	4.27E-07	1.20E-06		6.00E-02		1.99E-05
Anthracene	3.70E+02	1.11E-08	4.09E-06	3.63E-02	1.02E-01	1.49E-07	4.16E-07		3.00E-01	0.00E+00	1.39E-06
Fluorene	8.31E+01	2.59E-08	2.15E-06	3.63E-02	1.02E-01	7.82E-08	2.19E-07		4.00E-02	0.00E+00	5.47E-06
Pyrene	1.37E+02	4.57E-10	6.27E-08	3.63E-02	1.02E-01	2.28E-09	6.39E-09		3.00E-02	0.00E+00	2.13E-07
Benzene	2.73E-01	1.08E-03	2.96E-04	3.63E-02	1.02E-01	1.08E-05	3.01E-05	1.00E-01	1.70E-03	1.08E-06	1.77E-02
Ethylbenzene	8.31E-01	2.42E-04	2.01E-04	3.63E-02	1.02E-01	7.31E-06	2.05E-05		2.90E-01	0.00E+00	7.05E-05
Toluene	9.51E-01	4.59E-04	4.36E-04	3.63E-02	1.02E-01	1.59E-05	4.44E-05		1.10E-01	0.00E+00	4.03E-04
Xylenes	1.97E-02	2.27E-05	4.48E-07	3.63E-02	1.02E-01	1.63E-08	4.56E-08			0.00E+00	
o-Xylene	1.71E+00	2.27E-05	3.87E-05	3.63E-02	1.02E-01	1.41E-06	3.94E-06			0.00E+00	
p,m-Xylenes	2.92E+00	2.27E-05	6.63E-05	3.63E-02	1.02E-01	2.41E-06	6.75E-06			0.00E+00	
Acetone	1.39E+00	4.48E-04	6.21E-04	3.63E-02	1.02E-01	2.26E-05	6.32E-05		1.00E-01	0.00E+00	6.32E-04
Methylene Chloride	4.39E-01	1.69E-03	7.41E-04	3.63E-02	1.02E-01	2.69E-05	7.54E-05	3.50E-03	8.57E-01	9.43E-08	8.80E-05
Naphthalene	2.17E+02	2.18E-06	4.73E-04	3.63E-02	1.02E-01	1.72E-05	4.81E-05		8.60E-04	0.00E+00	5.60E-02
Styrene	9.18E-01	3.83E-05	3.52E-05	3.63E-02	1.02E-01	1.28E-06	3.58E-06		2.90E-01	0.00E+00	1.23E-05
1,2,4-Trimethylbenzene	2.56E+00	4.59E-04	1.17E-03	3.63E-02	1.02E-01	4.26E-05	1.19E-04		2.00E-01	0.00E+00	5.97E-04
1,3,5-Trimethylbenzene	1.14E+00	4.59E-04	5.22E-04	3.63E-02	1.02E-01	1.90E-05	5.31E-05		2.00E-01	0.00E+00	2.66E-04
									TOTALS	**1.21E-06**	**7.66E-02**

APPENDIX F

EVALUATION OF LEAD IN SOIL AND DTSC LEADSPREAD RESULTS

APPENDIX F

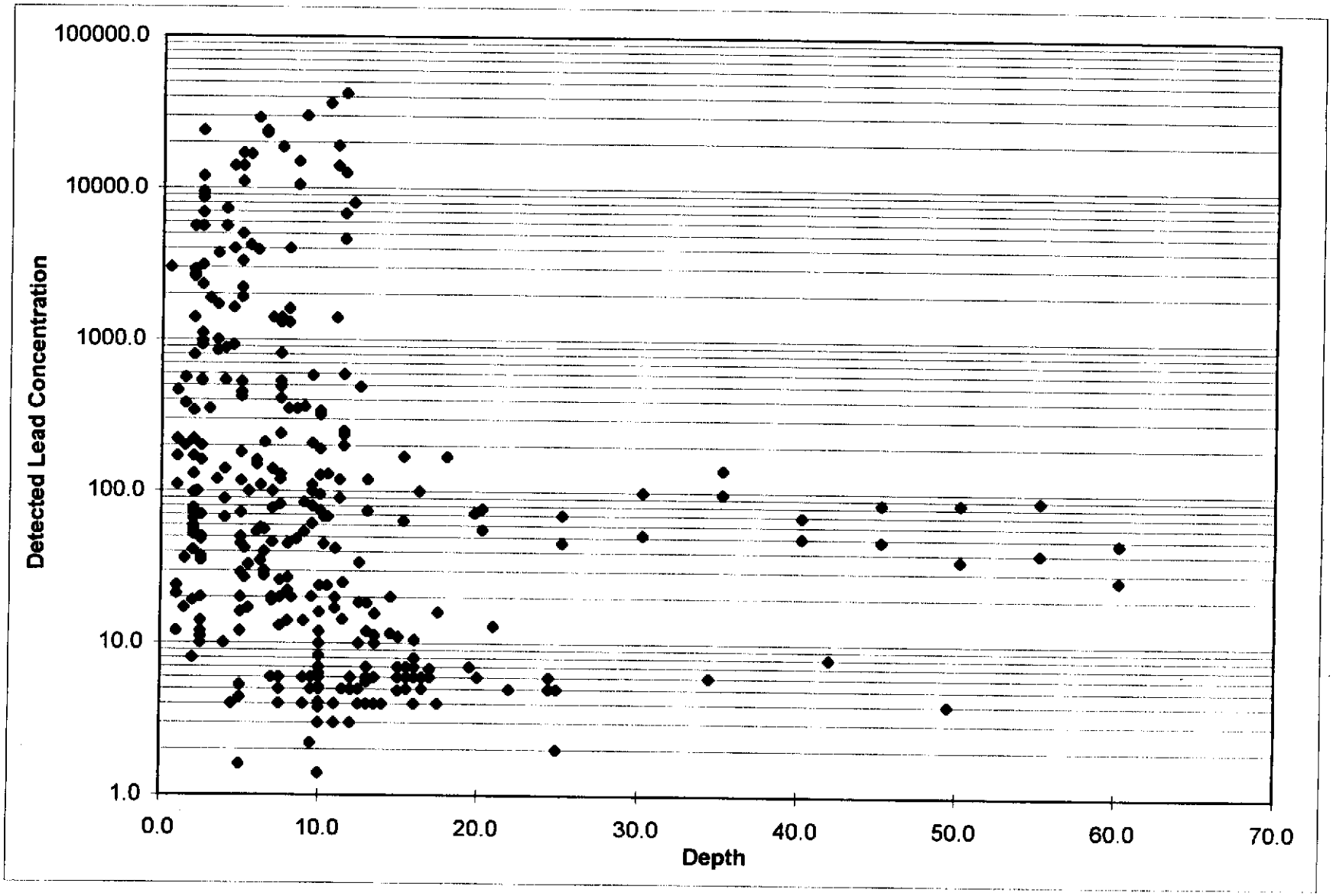
Appendix F provides an assessment of potential lead impacts to public health, based on the excavation scenario described in the HRA document.

Table F-1 demonstrates the calculation of a lead concentration in soil that would result in a blood lead level concentration of less than 10 $\mu g_{lead}/dl_{blood}$, under the assumed excavation scenario at the 95th percentile, as calculated using the DTSC Leadspread exposure model. Using the Leadspread model, a concentration of 315 mg_{lead}/kg_{soil} was calculated.

Figure F-1 is provided to demonstrate the distribution of lead concentrations relative to depth. The higher concentrations at the shallower depths may be indicative of lead detection within historic waste depositions.

Table F-2 provides a point by point comparison of detected lead concentrations to the 315 mg/kg calculated concentration.

APPENDIX F
FIGURE F-1
DISTRIBUTION OF DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES



APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth	Pb qual	Pb dat	RAdat	Do concentrations "pass" or "fail" Leadspread value of: 315
B-11	5051	0.5		3000.00	3000.00	Fail
B-13	5051	1.0		110.00	110.00	Pass
MWA-1	5051	1.0		170.00	170.00	Pass
MW-4	5051	1.0		12.00	12.00	Pass
MW-5	5051	1.0		21.00	21.00	Pass
MW-6	5051	1.0		110.00	110.00	Pass
MW-7	5051	1.0		24.00	24.00	Pass
MW-8	5051	1.0		220.00	220.00	Pass
LF-F1-1.0	5050/750-50	1.0		460.00	460.00	Fail
MWA-1	5051	1.5		380.00	380.00	Fail
LF-14-1.5	5050/750-50	1.5		17.00	17.00	Pass
SB-18-1.5	5050/750-50	1.5		36.00	36.00	Pass
SS-4-1.5	5050/750-50	1.5		560.00	560.00	Fail
SS-5-1.5	5050/750-50	1.5		200.00	200.00	Pass
BA-4	5051	2.0		66.00	66.00	Pass
BA-4	5051	2.0		796.00	796.00	Fail
B-9	5051	2.0		73.00	73.00	Pass
B-10	5051	2.0		98.00	98.00	Pass
B-14	5051	2.0		170.00	170.00	Pass
MWA-1	5051	2.0		130.00	130.00	Pass
LF-4-2	5050/750-50	2.0		77.00	77.00	Pass
LF-5-2	5050/750-50	2.0		8.00	8.00	Pass
LF-6-2	5050/750-50	2.0		19.00	19.00	Pass
LF-7-2	5050/750-50	2.0		52.00	52.00	Pass
SB-12-2.0	5050/750-50	2.0		5600.00	5600.00	Fail
SB-14-2.0	5050/750-50	2.0		41.00	41.00	Pass
SB-17-2.0	5050/750-50	2.0		59.00	59.00	Pass
SS-2-2.0	5050/750-50	2.0		340.00	340.00	Fail
SS-3-2.0	5050/750-50	2.0		1400.00	1400.00	Fail
SS-6-2.0	5050/750-50	2.0		2600.00	2600.00	Fail
SS-7-2.0	5050/750-50	2.0		8.00	8.00	Pass
SS-8-2.0	5050/750-50	2.0		2900.00	2900.00	Fail
SS-11-2.0	5050/750-50	2.0		220.00	220.00	Pass
SS-13-2.0	5050/750-50	2.0		56.00	56.00	Pass
SS-18-2.0	5050/750-50	2.0		2700.00	2700.00	Fail
LF-16-1.5-3	5050/750-50	1.5-3		100.00	100.00	Pass
LF-1-2.5	5050/750-50	2.5		8600.00	8600.00	Fail
LF-2-2.5	5050/750-50	2.5		24000.00	24000.00	Fail

APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth	qual	Pb dat	RAdat	Do concentrations "pass" or "fail" Leadspread value of: 315
LF-3-2.5	5050/750-50	2.5		20.00	20.00	Pass
LF-8-2.5	5050/750-50	2.5		37.00	37.00	Pass
LF-11-2.5	5050/750-50	2.5		3100.00	3100.00	Fail
LF-12B-2.5	5050/750-50	2.5		980.00	980.00	Fail
LF-13-2.5	5050/750-50	2.5	NA			
LF-17-2.5	5050/750-50	2.5		70.00	70.00	Pass
SB-2-2.5	5050/750-50	2.5		11.00	11.00	Pass
SB-3-2.5	5050/750-50	2.5		160.00	160.00	Pass
SB-4-2.5	5050/750-50	2.5		14.00	14.00	Pass
SB-6-2.5	5050/750-50	2.5		9400.00	9400.00	Fail
SB-7-2.5	5050/750-50	2.5		35.00	35.00	Pass
SB-8-2.5	5050/750-50	2.5		12.00	12.00	Pass
SB-9-2.5	5050/750-50	2.5		2300.00	2300.00	Fail
SB-11-2.5	5050/750-50	2.5		540.00	540.00	Fail
SB-13-2.5	5050/750-50	2.5		1100.00	1100.00	Fail
SB-18-2.5	5050/750-50	2.5		920.00	920.00	Fail
SB-19-2.5	5050/750-50	2.5		12000.00	12000.00	Fail
SB-20-2.5	5050/750-50	2.5		10.00	10.00	Pass
SB-21-2.5	5050/750-50	2.5		6900.00	6900.00	Fail
SS-1-2.5	5050/750-50	2.5		50.00	50.00	Pass
SS-10-2.5	5050/750-50	2.5		5600.00	5600.00	Fail
SS-12-2.5	5050/750-50	2.5		530.00	530.00	Fail
SS-13-2.5	5050/750-50	2.5		200.00	200.00	Pass
SS-19-2.5	5050/750-50	2.5		48.00	48.00	Pass
MWA-1	5051	3.0		1870.00	1870.00	Fail
LF-10-3.0	5050/750-50	3.0		350.00	350.00	Fail
LF-4-3.5	5050/750-50	3.5		850.00	850.00	Fail
LF-5-3.5	5050/750-50	3.5		1000.00	1000.00	Fail
SB-15-3.5	5050/750-50	3.5		120.00	120.00	Pass
CW-2	5200	3.5		1700.00	1700.00	Fail
CW-3	5200	3.5		3700.00	3700.00	Fail
B-2	5051	4.0		5600.00	5600.00	Fail
B-3	5051	4.0		7300.00	7300.00	Fail
BA-5	5051	4.0		540.00	540.00	Fail
BA-5	5051	4.0		883.00	883.00	Fail
LF-7-4	5050/750-50	4.0		67.00	67.00	Pass
CSB-4	5050	4'		89.00	89.00	Pass
CSB-5	5050/750-50	4'		140.00	140.00	Pass

APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth	Pb qual	Pb dat	Pb RAdat	Do concentrations "pass" or "fail" Leadspread value of: 315
CSB-6	5050/750-50	4'		10.00	10.00	Pass
MWA-3	5051	4.5		1620.00	1620.00	Fail
LF-9-4.5	5050/750-50	4.5		920.00	920.00	Fail
LF-10-4.5	5050/750-50	4.5		4.00	4.00	Pass
LF-14-2-7	5050/750-50	2-7		14000.00	14000.00	Fail
SB-3-4.5	5050/750-50	4.5		4000.00	4000.00	Fail
B-11	5051	5.0		16.00	16.00	Pass
MWA-3	5051	5.0		3300.00	3300.00	Fail
LF-8-5.0	5050/750-50	5.0		5000.00	5000.00	Fail
LF-11-5.0	5050/750-50	5.0		14000.00	14000.00	Fail
LF-12B-5.0	5050/750-50	5.0		420.00	420.00	Fail
LF-13-5.0	5050/750-50	5.0	NA			
SB-1-5.0	5050/750-50	5.0		450.00	450.00	Fail
SB-8-5.0	5050/750-50	5.0		14000.00	14000.00	Fail
SB-10-5.0	5050/750-50	5.0		2200.00	2200.00	Fail
SB-12-5.0	5050/750-50	5.0		17000.00	17000.00	Fail
SB-14-5.0	5050/750-50	5.0		20.00	20.00	Pass
SB-16-5.0	5050/750-50	5.0		180.00	180.00	Pass
SB-17-5.0	5050/750-50	5.0		29.00	29.00	Pass
SB-18-5.0	5050/750-50	5.0		72.00	72.00	Pass
SB-19-5.0B	5050/750-50	5.0		11000.00	11000.00	Fail
B1	5050/750-50	5.0		5.30	5.30	Pass
B3	5050/750-50	5.0		4.40	4.40	Pass
B4	5050/750-50	5.0		12.00	12.00	Pass
MW1	5050/750-50	5.0		527.00	527.00	Fail
MW2	5050/750-50	5.0		1.60	1.60	Pass
CW-2	5200	5.0		1900.00	1900.00	Fail
CSB-3	5050	5'		20.00	20.00	Pass
CW-8	5051/EBMUD	5'		45.00	45.00	Pass
CW-9	5051/EBMUD	5'		50.00	50.00	Pass
CW-13	5050	5'		117.00	117.00	Pass
CSB-8	5050	5'-5.5'		27.00	27.00	Pass
CSB-9	5051	5'-5.5'		42.00	42.00	Pass
MWA-2	5051	5.5		16700.00	16700.00	Fail
MW-7	5051	5.5		33.00	33.00	Pass
LF-2-5.5	5050/750-50	5.5	<	200.00	100.00	Pass
LF-17-5.5	5050/750-50	5.5		17.00	17.00	Pass
CW-4	5200	5.5		4200.00	4200.00	Fail

APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth		Pb		Do concentrations "pass" or "fail" Leadspread value of:
			qual	dat	RAdat	315
B-10	5051	6.0		54.00	54.00	Pass
MWA-1	5051	6.0		3900.00	3900.00	Fail
MWA-2	5051	6.0		29000.00	29000.00	Fail
SB-15-6.0	5050/750-50	6.0		160.00	160.00	Pass
CW-3	5200	6.0		150.00	150.00	Pass
CSB-1	5051/PGE	6-6.5'		35.00	35.00	Pass
CW-6	5200	6-6.5'		57.00	57.00	Pass
CW-7	5200	6-6.5'		110.00	110.00	Pass
BA-4	5051	6.5		27.70	27.70	Pass
BA-4	5051	6.5		30.00	30.00	Pass
B-6	5051	6.5		56.00	56.00	Pass
B-7	5051	6.5		24000.00	24000.00	Fail
SB-16-6.5	5050/750-50	6.5		40.00	40.00	Pass
SB-17-6.5	5050/750-50	6.5		210.00	210.00	Pass
CW-1	5200	6.5		23000.00	23000.00	Fail
B-9	5051	7.0		140.00	140.00	Pass
B-14	5051	7.0		20.00	20.00	Pass
LF-3-7	5050/750-50	7.0	<	200.00	100.00	Pass
LF-13-7.0	5050/750-50	7.0	NA			
SB-1-7.0	5050/750-50	7.0		77.00	77.00	Pass
SB-3-7.0	5050/750-50	7.0		1400.00	1400.00	Fail
SB-6-7.0	5050/750-50	7.0		19.00	19.00	Pass
SB-10-7.0	5050/750-50	7.0		6.00	6.00	Pass
SB-18-7.0	5050/750-50	7.0		46.00	46.00	Pass
B-8	5051	7.5		1400.00	1400.00	Fail
MWA-1	5051	7.5		18600.00	18600.00	Fail
MW-6	5051	7.5		1300.00	1300.00	Fail
LF-1-7.5	5050/750-50	7.5		120.00	120.00	Pass
LF-2-7.5	5050/750-50	7.5		530.00	530.00	Fail
LF-10-7.5	5050/750-50	7.5		130.00	130.00	Pass
LF-11-7.5	5050/750-50	7.5		5.00	5.00	Pass
LF-12B-7.5	5050/750-50	7.5		82.00	82.00	Pass
SB-2-7.5	5050/750-50	7.5		20.00	20.00	Pass
SB-4-7.5	5050/750-50	7.5		410.00	410.00	Fail
SB-9-7.5	5050/750-50	7.5		240.00	240.00	Pass
SB-11-7.5	5050/750-50	7.5		4.00	4.00	Pass
SB-13-7.5	5050/750-50	7.5		490.00	490.00	Fail
SB-21-7.5	5050/750-50	7.5		6.00	6.00	Pass

APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth	qual	Pb dat	RAdat	Do concentrations "pass" or "fail" Leadspread value of: 315
CW-2	5200	7.5		13.00	13.00	Pass
CW-4	5200	7.5		26.00	26.00	Pass
CW-5	5200	7.5		810.00	810.00	Fail
BA-4	5051	8.0		27.00	27.00	Pass
BA-4	5051	8.0		22.20	22.20	Pass
BA-5	5051	8.0		350.00	350.00	Fail
BA-5	5051	8.0		45.10	45.10	Pass
B-11	5051	8.0		14.00	14.00	Pass
MWA-1	5051	8.0		1600.00	1600.00	Fail
LF-16-8.0	5050/750-50	8.0		1300.00	1300.00	Fail
CW-1	5200	8.0		4000.00	4000.00	Fail
CSB-1	5051/PGE	8-8.5'		20.00	20.00	Pass
MWA-1	5051	8.5		15000.00	15000.00	Fail
MWA-1	5051	8.5		10500.00	10500.00	Fail
MW-4	5051	8.5		350.00	350.00	Fail
MW-8	5051	8.5		48.00	48.00	Pass
BA-5	5051	9.0		4.00	4.00	Pass
BA-5	5051	9.0		84.00	84.00	Pass
BA-5	5051	9.0		5.92	5.92	Pass
MWA-1	5051	9.0		30000.00	30000.00	Fail
LF-6-9	5050/750-50	9.0		360.00	360.00	Fail
CW-1	5200	9.0		54.00	54.00	Pass
CW-3	5200	9.0		14.00	14.00	Pass
BA-4	5051	9.5	<	4.40	2.20	Pass
BA-4	5051	9.5		5.00	5.00	Pass
B-14	5051	9.5		61.00	61.00	Pass
MWA-2	5051	9.5		20.10	20.10	Pass
MWA-3	5051	9.5		207.00	207.00	Pass
MW-6	5051	9.5		80.00	80.00	Pass
SB-1-9.5	5050/750-50	9.5		6.00	6.00	Pass
SB-5-9.5	5050/750-50	9.5		580.00	580.00	Fail
SB-20-9.5	5050/750-50	9.5		100.00	100.00	Pass
CW-2	5200	9.5		110.00	110.00	Pass
BA-5	5051	10.0		5.00	5.00	Pass
BA-5	5051	10.0		6.40	6.40	Pass
B-10	5051	10.0		340.00	340.00	Fail
MWA-1	5051	10.0		75.00	75.00	Pass
MWA-1	5051	10.0		128.00	128.00	Pass

APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth	Pb qual	Pb dat	RAdat	Do concentrations "pass" or "fail" Leadspread value of: 315
MWA-2	5051	10.0		10.00	10.00	Pass
MWA-3	5051	10.0		95.00	95.00	Pass
MW-8	5051	10.0		7.00	7.00	Pass
LF-7-10	5050/750-50	10.0		5.00	5.00	Pass
LF-8-10.0	5050/750-50	10.0		16.00	16.00	Pass
SB-8-10.0	5050/750-50	10.0		24.00	24.00	Pass
SB-10-10.0	5050/750-50	10.0		6.00	6.00	Pass
SB-13-10.0	5050/750-50	10.0		12.00	12.00	Pass
SB-14-10	5050/750-50	10.0		190.00	190.00	Pass
SB-19-10.0	5050/750-50	10.0		320.00	320.00	Fail
B1	5050/750-50	10.0		3.00	3.00	Pass
B2	5050/750-50	10.0		1.40	1.40	Pass
B3	5050/750-50	10.0		3.80	3.80	Pass
B4	5050/750-50	10.0		5.20	5.20	Pass
MW1	5050/750-50	10.0		8.30	8.30	Pass
MW2	5050/750-50	10.0		4.10	4.10	Pass
MW3	5050/750-50	10.0		6.00	6.00	Pass
MW4	5050/750-50	10.0		3.80	3.80	Pass
CSB-8	5050	10'-10.5'		68.00	68.00	Pass
CSB-9	5051	10'-10.5'		45.00	45.00	Pass
MWA-3	5051	10.5		36300.00	36300.00	Fail
MW-4	5051	10.5		24.00	24.00	Pass
MW-5	5051	10.5		68.00	68.00	Pass
MW-7	5051	10.5		130.00	130.00	Pass
MWA-3	5051	11.0		19000.00	19000.00	Fail
LF-5-11	5050/750-50	11.0		4.00	4.00	Pass
LF-9-11.0	5050/750-50	11.0		14000.00	14000.00	Fail
LF-15-11.0	5050/750-50	11.0		3.00	3.00	Pass
SB-15-11.0	5050/750-50	11.0		20.00	20.00	Pass
CW-1	5200	11.0		17.00	17.00	Pass
CW-3	5200	11.0		42.00	42.00	Pass
CW-5	5200	11.0		1400.00	1400.00	Fail
CW-10	5051/PGE	11-11.5		120.00	120.00	Pass
CW-12	5051/PGE	11-11.5		90.00	90.00	Pass
B-4	5051	11.5		25.00	25.00	Pass
B-5	5051	11.5		6800.00	6800.00	Fail
B-9	5051	11.5		590.00	590.00	Fail
MWA-1	5051	11.5		14.30	14.30	Pass

APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth	qual	Pb dat	RAdat	Do concentrations "pass" or "fail" Leadspread value of: 315
MWA-2	5051	11.5		250.00	250.00	Pass
MWA-2	5051	11.5		236.00	236.00	Pass
MWA-3	5051	11.5		42000.00	42000.00	Fail
MWA-3	5051	11.5		12600.00	12600.00	Fail
SB-7-11.5	5050/750-50	11.5		4600.00	4600.00	Fail
SB-21-11.5	5050/750-50	11.5		5.00	5.00	Pass
CW-4	5200	11.5		200.00	200.00	Pass
BA-4	5051	12.0		4.97	4.97	Pass
MWA-3	5051	12.0		8000.00	8000.00	Fail
LF-17-12.0	5050/750-50	12.0		5.00	5.00	Pass
SB-4-12.0	5050/750-50	12.0		6.00	6.00	Pass
SB-6-12.0	5050/750-50	12.0		3.00	3.00	Pass
SB-12-12.0	5050/750-50	12.0		5.00	5.00	Pass
SB-17-12.0	5050/750-50	12.0		3.00	3.00	Pass
B-11	5051	12.5		4.00	4.00	Pass
MWA-3	5051	12.5		18.50	18.50	Pass
LF-11-12.5	5050/750-50	12.5	<	10.00	5.00	Pass
LF-14-12.5	5050/750-50	12.5		10.00	10.00	Pass
SB-2-12.5	5050/750-50	12.5		4.00	4.00	Pass
SB-9-12.5	5050/750-50	12.5		5.00	5.00	Pass
SB-11-12.5	5050/750-50	12.5		34.00	34.00	Pass
CW-4	5200	12.5		490.00	490.00	Fail
BA-5	5051	13.0		5.59	5.59	Pass
B-10	5051	13.0		4.00	4.00	Pass
B-13	5051	13.0		74.00	74.00	Pass
B-14	5051	13.0		6.00	6.00	Pass
MWA-1	5051	13.0		18.40	18.40	Pass
MWA-3	5051	13.0		12.00	12.00	Pass
MW-6	5051	13.0		7.00	7.00	Pass
LF-16-13.0	5050/750-50	13.0		120.00	120.00	Pass
MWA-2	5051	13.5		15.60	15.60	Pass
MWA-3	5051	13.5		11.30	11.30	Pass
MW-5	5051	13.5		10.00	10.00	Pass
MW-7	5051	13.5		4.00	4.00	Pass
LF-15-13.5	5050/750-50	13.5		6.00	6.00	Pass
MW-4	5051	14.0		4.00	4.00	Pass
MWA-1	5051	14.5		11.60	11.60	Pass
MWA-2	5051	14.5		20.10	20.10	Pass

APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth	qual	Pb dat	RAdat	Do concentrations "pass" or "fail" Leadspread value of: 315
MWA-3	5051	15.0		4.90	4.90	Pass
LF-3-15	5050/750-50	15.0		7.00	7.00	Pass
LF-4-15	5050/750-50	15.0		11.00	11.00	Pass
LF-5-15	5050/750-50	15.0		6.00	6.00	Pass
LF-9-15.0	5050/750-50	15.0	NA		0.00	
LF-12B-15.0	5050/750-50	15.0	NA			
SB-3-15.0	5050/750-50	15.0	NA		0.00	
SB-7-15.0	5050/750-50	15.0	NA		0.00	
SB-13-15.0	5050/750-50	15.0	NA		0.00	
CSB-8	5050	15'-15.5'		170.00	170.00	Pass
CSB-9	5051	15'-15.5'		64.00	64.00	Pass
MW-4	5051	15.5		6.00	6.00	Pass
MW-8	5051	15.5		5.00	5.00	Pass
LF-2-15.5	5050/750-50	15.5		6.00	6.00	Pass
LF-6-15.5	5050/750-50	15.5		6.00	6.00	Pass
LF-7-15.5	5050/750-50	15.5		7.00	7.00	Pass
BA-5	5051	16.0		10.50	10.50	Pass
B-10	5051	16.0		4.00	4.00	Pass
B-11	5051	16.0		8.00	8.00	Pass
B-14	5051	16.0		6.00	6.00	Pass
MW-6	5051	16.0		7.00	7.00	Pass
SB-20-16.0	5050/750-50	16.0		4.00	4.00	Pass
CW-7	5200	16-16.5'		100.00	100.00	Pass
B-9	5051	16.5		5.00	5.00	Pass
MW-7	5051	16.5		6.00	6.00	Pass
B-12	5051	17.0		6.00	6.00	Pass
MWA-1	5051	17.0		6.79	6.79	Pass
MW-5	5051	17.5		16.00	16.00	Pass
SB-21-17.5	5050/750-50	17.5		4.00	4.00	Pass
B-13	5051	18.0		170.00	170.00	Pass
B-9	5051	19.5		7.00	7.00	Pass
CSB-8	5050	19.5'-20'		72.00	72.00	Pass
B-12	5051	20.0		6.00	6.00	Pass
CSB-8	5050	20'-20.5'		77.00	77.00	Pass
CSB-9	5051	20'-20.5'		56.00	56.00	Pass
LF-1-21	5050/750-50	21.0		13.00	13.00	Pass
B-13	5051	22.0		5.00	5.00	Pass
B-12	5051	24.5		6.00	6.00	Pass

APPENDIX F
TABLE F-2
DETECTED LEAD CONCENTRATIONS
ALL PROPERTIES

Well/Boring Name	Property	Sample Depth	Pb qual	Pb dat	RAdat	Do concentrations "pass" or "fail" Leadspread value of: 315
SB-21-24.5	5050/750-50	24.5		5.00	5.00	Pass
LF-11-25.0	5050/750-50	25.0		2.00	2.00	Pass
LF-16-25.0	5050/750-50	25.0		5.00	5.00	Pass
CSB-8	5050	25'-25.5'		46.00	46.00	Pass
CSB-9	5051	25'-25.5'		70.00	70.00	Pass
CSB-8	5050	30-30.5		99.00	99.00	Pass
CSB-9	5051	30'-30.5'		52.00	52.00	Pass
SB-21-34.5	5050/750-50	34.5		6.00	6.00	Pass
CSB-8	5050	35'-35.5'		140.00	140.00	Pass
CSB-9	5051	35'-35.5'		97.00	97.00	Pass
CSB-8	5050	40'-40.5'		50.00	50.00	Pass
CSB-9	5051	40'-40.5'		69.00	69.00	Pass
SB-21-42.0	5050/750-50	42.0		8.00	8.00	Pass
CSB-8	5050	45'-45.5'		84.00	84.00	Pass
CSB-9	5051	45'-45.5'		48.00	48.00	Pass
SB-21-49.5	5050/750-50	49.5		4.00	4.00	Pass
CSB-8	5050	50'-50.5'		36.00	36.00	Pass
CSB-9	5051	50'-50.5'		85.00	85.00	Pass
CSB-8	5050	55'-55.5'		40.00	40.00	Pass
CSB-9	5051	55'-55.5'		89.00	89.00	Pass
CSB-8	5050	60'-60.5'		47.00	47.00	Pass
CSB-9	5051	60'-60.5'		27.00	27.00	Pass

SUMMARY STATISTICS

Number of Samples that "Pass"	232
Number of Samples that "Fail"	86
Percentage of Samples that "Fail"	27%

Gas/BTEX

Clayton

6920 Koll Center Parkway
Suite 216
Pleasanton, CA 94566-4756

Attn: Karen Dahl

Phone: (925) 426-2600 Fax: (925) 426-0172

Project #: 9911010

Project:

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
CW-3	Water	11/04/1999	1

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-11-0091

To: **Clayton**

Attn.: Karen Dahl

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX

Sample ID:	**CW-3**	Lab Sample ID:	**1999-11-0091-001**
Project:	9911010	Received:	11/04/1999 14:20
		Extracted:	11/11/1999 20:25
Sampled:	11/04/1999	QC-Batch:	1999/11/11-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/11/1999 20:25	
Benzene	10	0.50	ug/L	1.00	11/11/1999 20:25	
Toluene	0.76	0.50	ug/L	1.00	11/11/1999 20:25	
Ethyl benzene	ND	0.50	ug/L	1.00	11/11/1999 20:25	
Xylene(s)	ND	0.50	ug/L	1.00	11/11/1999 20:25	
Surrogate(s)						
Trifluorotoluene	92.4	58-124	%	1.00	11/11/1999 20:25	
4-Bromofluorobenzene-FID	71.4	50-150	%	1.00	11/11/1999 20:25	

To: **Clayton**

Attn.: Karen Dahl

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX

Method Blank | **Water** | **QC Batch # 1999/11/11-01.01**

MB: 1999/11/11-01.01-001

Date Extracted: 11/11/1999 04:36

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	11/11/1999 04:36	
Benzene	ND	0.5	ug/L	11/11/1999 04:36	
Toluene	ND	0.5	ug/L	11/11/1999 04:36	
Ethyl benzene	ND	0.5	ug/L	11/11/1999 04:36	
Xylene(s)	ND	0.5	ug/L	11/11/1999 04:36	
Surrogate(s)					
Trifluorotoluene	69.0	58-124	%	11/11/1999 04:36	
4-Bromofluorobenzene-FID	55.4	50-150	%	11/11/1999 04:36	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-11-0091

To: **Clayton**

Attn: Karen Dahl

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 1999/11/11-01.01**

LCS: 1999/11/11-01.01-002 Extracted: 11/11/1999 05:04 Analyzed: 11/11/1999 05:04

LCSD: 1999/11/11-01.01-003 Extracted: 11/11/1999 05:32 Analyzed: 11/11/1999 05:32

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	525	624	500	500	105.0	124.8	17.2	75-125	20		
Benzene	113	116	100.0	100.0	113.0	116.0	2.6	77-123	20		
Toluene	114	117	100.0	100.0	114.0	117.0	2.6	78-122	20		
Ethyl benzene	112	115	100.0	100.0	112.0	115.0	2.6	70-130	20		
Xylene(s)	329	337	300	300	109.7	112.3	2.3	75-125	20		
Surrogate(s)											
Trifluorotoluene	544	544	500	500	108.8	108.8		58-124			
4-Bromofluorobenzene-FI	377	461	500	500	75.4	92.2		50-150			

Clayton LABORATORY SERVICES

REQUEST FOR LABORATORY ANALYTICAL SERVICES

IMPORTANT
Date Results Requested: 5DAY
Rush Charges Authorized? ☐ Yes ☐ No
☐ Phone or ☐ Fax Results

Page 1 of 1

For Clayton Use Only
Clayton Lab Project No.: 9911010

REPORT RESULTS TO
Name: DON ASHTON
Company: CLAYTON GROUP SERVICES
Mailing Address: 6920 KOLL CENTER PKWAY #216
City, State, Zip: PLEASANTON CA 94566
Telephone No.: 925-426-2679
FAX No.: 925-426-9100
Client Job No.: 70-97203.0030
Dept.:

SEND INVOICE TO
Purchase Order No.:
Name:
Company:
Dept.:
Address:
City, State, Zip:

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)

Samples are: (check if applicable)
☐ Drinking Water
☑ Groundwater
☐ Wastewater

* Explanation of Preservative

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.*)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPHG/BTEX	FOR LAB USE ONLY
CW-3	11/4/99	1030	GW		3	X	

CHAIN OF CUSTODY
Collected by: MARC MULHAREY (print) — Collector's Signature: [signature]
Relinquished by: [signature] — Date/Time 11/4/99 1230 — Received by: [signature] — Date/Time 11/4/99 2:45
Relinquished by: — Date/Time — Received by: — Date/Time
Method of Shipment: — Received at Lab by: — Date/Time
Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature MUST Accompany Request)

Please return completed form and samples to one of the Clayton Group Services, Inc. labs listed below:

Detroit Regional Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5687
(248) 344-1770
FAX (248) 344-2655

Atlanta Regional Lab
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
FAX (770) 423-4990

Seattle Regional Lab
4636 E. Marginal Way S., Suite 215
Seattle, WA 98134
(800) 568-7755
(206) 763-7364
FAX (206) 763-4189

DISTRIBUTION:
White = Clayton Laboratory
Yellow = Clayton Accounting
Pink = Client Copy

6/97 20K