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December 20, 2000

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35920

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RECEIVED  
PROFESSIONAL  
DEC 21 AM 10:13

Handwritten notes: "Umm", "1/26/2001", and a circled signature "AM".

Handwritten notes: "shd", "3570".

\* A Professional Corporation

VIA FEDERAL EXPRESS

Amir K. Gholami, REHS  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, CA 94602-6577

Re: 2585 Nicholson Street, San Leandro, California

Dear Mr. Gholami:

Pursuant to your request during our telephone conversation last Tuesday, enclosed please find an updated Risk-Based Corrective Action ("RBCA") analysis for contaminants of concern at the above-referenced property (the "Property") prepared by Versar, Inc. ("Versar"). The analysis concludes that "residual concentrations of aromatic hydrocarbons in the subsurface at the location of maximum impact do not present an actionable risk to human health." This conclusion is consistent with the finding of the RBCA analysis submitted in January 2000.

As detailed in prior reports and correspondence prepared by Versar and directed to your office, the Property has been the subject of investigation and remediation activities since approximately 1991 when two underground storage tanks were removed from the site. Samples collected during removal activities identified total petroleum hydrocarbons ("TPH") as diesel and gasoline in soil and ground water. In 1992, Hageman-Aguiar ("HA") conducted additional soil and groundwater investigation and installed a monitoring well ("MW-1") in the central portion of the Property. HA monitored the well between 1992 and 1995. In 1998, McClaren/Hart performed a limited investigation of soil and ground water at the Property and concluded that impacts from the TPH had been defined and that the contamination plume was generally stable.

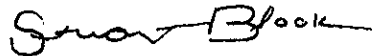
Amir K. Gholami, REHS  
December 20, 2000  
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In April 1999, at the County's request, Versar installed four additional monitoring wells at the Property. Versar has monitored the five wells on the Property quarterly since April 1999, and provided quarterly monitoring reports to the County, as requested. In addition, at the County's request, Versar has submitted reports documenting the depth and location of utilities at the Property, and the absence of any impact from those utility corridors on plume migration. Further, at the County's request, Versar has conducted semi-annual monitoring of MW-1 for TPH(d) and stoddard solvent. In January 2000, Versar performed and submitted to the County a RBCA analysis to determine whether the residual contaminants at the Property present any risk to human health. The analysis concluded that such residual concentrations do not present an actionable risk. That analysis is confirmed in the enclosed updated RBCA analysis.

As we discussed, Bank of America, the current Trustee for the Property, is deeply concerned that, notwithstanding the above work, the years of expense, and the documented lack of risk at the site, the Property has not yet been approved for closure. We thereby request that, per our discussion, you review the enclosed RBCA analysis with the appropriate State personnel as soon as possible and confirm that, based on the above work and absence of risk, no further action is required at the Property.

If you have any questions concerning these issues, please contact me at the number above. We look forward to hearing from you shortly.

Sincerely,



Stuart I. Block

SIB/pdh

Enclosures (1)

SIBLOCK/35920/17474v1

cc: (By U.S. Mail)

Janet Giannini, Bank of America

Michael Bakaldin, City of San Leandro Fire Department



Memorandum 1/26/2001  
Site  
A USES FROM S  
1 - Soil  
2 - MTRK  
3 - POTENTIAL WATER

December 14, 2000

Mr. Stuart Block  
Cox, Castle & Nicholson LLP  
505 Montgomery Street, Suite 1550  
San Francisco, California 94104

Reference: Risk-Based Corrective Action (RBCA) Analysis Update  
2585 Nicholson Street in San Leandro, California  
ES# 305582  
Versar Project No. 4422-003

Dear Mr. Block:

Per your request, Versar, Inc. (Versar) has updated our Risk-Based Corrective Action (RBCA) analysis of residual petroleum hydrocarbons at the above-referenced property (Site). The purpose for the RBCA analysis is to assess the magnitude of risk, if any, to human health associated with known Site groundwater contamination. The analysis was prepared using standard default parameters and updated existing Site data.

Versar originally performed a RBCA analysis for the Site in January 2000, as described in Versar's letter dated January 6, 2000. Subsequent to performing the analysis, unusually high groundwater levels resulted in a concentration spike in one Site monitoring well (MW-1). This updated RBCA analysis utilizes revised maximum concentration of benzene in groundwater (1,470 micrograms per liter). A commercial building is located in the predominant down-gradient direction of groundwater flow. Since benzene could be migrating off Site to the southeast, and groundwater is shallow (less than 10 feet), the RBCA analysis was performed to quantify the risk to human health, if any, from potentially completed human receptor contact pathways within the area of benzene concentrations.

### The RBCA Assessment

Versar has performed an American Society of Testing and Materials (ASTM) RBCA assessment of aromatic hydrocarbon concentrations in soil and groundwater to characterize potential risk to commercial workers in the area of maximum benzene concentrations at the Site. This assessment is considered a conservative indication of the risk to human health in the benzene plume area. While the Site and RBCA analysis include concentrations of other aromatic hydrocarbons, benzene is considered the chemical of concern, based on its concentrations and health risk to humans. The RBCA analysis includes an assessment of the cumulative risk of multiple chemicals of concern, as well as the potential impacts of individual chemicals. The assessment includes Versar's Site-specific data and assumptions regarding contaminant exposure pathways and Site receptors.

Oct00update.wpd

• SACRAMENTO AREA OFFICE •

7844 MADISON AVENUE, SUITE 167 • FAIR OAKS, CA 95628 • TELEPHONE (916) 962-1612 FAX (916) 962-2678



Mr. Stuart Block  
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The RBCA assessment is a decision-making process for assessment and response development to subsurface contamination by petroleum compounds. The process takes into account general physical and chemical characteristics of the Site in a tiered approach to tailor assessment and remediation activities to site-specific conditions. The RBCA process utilizes risk and exposure assessment practices promulgated by the U.S. Environmental Protection Agency (USEPA).

The RBCA assessment is performed in tiers. A Tier 1 assessment is initially performed to evaluate potential risks to on-site users using a broad, conservative approach. Contaminant exposure pathways via air, soil, and ground- and surface-water matrices to on-site users are identified; and cancer and toxicity risks are derived for chemicals of concern. In addition, risk-based screening levels (RBSLs) for each pathway matrix may be developed to focus further assessment activities on areas of greater risk.

If Tier 1 cancer/toxicity risks are exceeded, or there are off-site receptors, a Tier 2 assessment is performed. The Tier 2 analysis reassesses potential cancer/toxicity risks posed by Site chemicals of concern with more site-specific data, and also derives site-specific target levels (SSTL) for cleanup of each constituent of concern in air, water or soil matrices to levels protective of prospective receptors. The Tier 2 assessment incorporates site-specific parameters in performing conservative contaminant transport analyses for soil, groundwater and air to characterize risks from chemicals of concern to on- and off-site receptors. Models for contaminant transport and attenuation can be selected based on the amount of available data regarding site physical and chemical conditions, as well as contaminant concentration data over time.

### **The Updated Site RBCA Analysis**

Versar's updated RBCA analysis utilized a Microsoft® Excel spreadsheet-based program by Groundwater Services, Inc. (GSI) called the *RBCA Tool Kit, Chemical Releases, Version 1.0a* (RBCA Tool Kit). The GSI program utilizes the formulas and guidelines of the *ASTM Provisional Guide for Risk Based Corrective Action, PS 104*, in a PC-compatible, windows-based application. Printouts generated by the RBCA Toolkit presenting and supporting Versar's RBCA analyses are presented in Attachment I.

### **Risk Assessment Parameters**

Site constituents of concern are the following: benzene, toluene, ethylbenzene, and total xylene isomers. Benzene represents the most significant potential risk since it is a carcinogen. Tier 1 and Tier 2 analyses characterize site usage as either residential or commercial, with adult or child receptors. The observed Site use is commercial. The identified receptor exposure pathway is inhalation from vapors emanating from contaminants in groundwater to indoor and outdoor air (see Figure 1, Attachment I). This pathway was selected because surface and subsurface concentrations of hydrocarbons in soil have not been identified or have been removed, surface water is not present



Mr. Stuart Block  
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in the defined area of hydrocarbons, and no drinking, agricultural, or industrial water supply wells have been identified in the area of hydrocarbons.

Versar used the ASTM RBCA Tier 1 assessment methodology to characterize the risk to human health from residual hydrocarbons in groundwater at the Site. The exposure scenarios were based on commercial Site use. The exposure pathway was determined to be volatilization to indoor and outdoor air from residual hydrocarbon concentrations in shallow groundwater. The 95 percent upper confidence level of the mean concentration of each chemical of concern at the location of highest concentrations, monitoring well MW-1, was used in the model. Conservative model defaults were used where Site-specific parameters are not known. Site-specific information used in the model included the depth to saturated soil and groundwater, soil type, and soil pH (see Figure 2). The very conservative default receptor exposure duration of 25 years (the Reasonable Maximum Exposure - RME) was used in the model. RBCA chemical exposure pathways are presented in Attachment I.

### **Findings**

The results of the Tier 1 RBCA analysis indicate that the selected cancer risk threshold of one-in-a-million ( $1 \times 10^{-6}$ ) is not exceeded for outdoor air (result is  $6.4 \times 10^{-10}$ ) and indoor air (result is  $1.7 \times 10^{-7}$ ) as a result of inhaling volatilized benzene at the location of maximum groundwater concentrations at the Site. The cumulative risk of toxic effects from inhaling volatilized chemicals of concern at the Site are less than the Hazard Index of 1.0. for outdoor air (result is  $3.6 \times 10^{-5}$ ) and indoor air (result is  $9.6 \times 10^{-3}$ ). The RBCA worksheets for the indoor and outdoor exposure scenarios are presented in Attachment I.

### **Conclusion**

Versar finds that the residual concentrations of aromatic hydrocarbons in the subsurface at the location of maximum impact do not present an actionable risk to human health. This finding is consistent with the previous RBCA analysis performed in January 2000.

### **References**

- Groundwater Services, Inc. (GSI). *RBCA Tool Kit for Chemical Releases, Version 1.0a*. 1998.
- U.S. Department of Agriculture, Soil Conservation Service. *Soil Survey of Alameda County, California, Western Part*. 1980. 273-058/6
- Versar, Inc.. *Monitoring Well Installation and Groundwater Monitoring Report (draft)*. Prepared for Bank of America, N.T. & S.A.. Project No. 4422-002. October 2000.



Mr. Stuart Block  
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### Statement of Limitations

The conclusions presented above are based on the agreed-upon scope of work outlined in the beginning of this report. Versar makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others and used by Versar. It is possible that information exists beyond the scope of this investigation. Also, changes in Site use may have occurred sometime in the past due to variations in rainfall, temperature, water usage, economic, agricultural, or other factors. Additional information that was not found or available to Versar at the time of the writing of this report may result in a modification of the conclusions presented. This report is not a legal opinion.

The services performed by Versar have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty expressed or implied is made.

This RBCA assessment was prepared by Versar on behalf of Bank of America. Mr. Tim Berger, Registered Geologist, prepared the report, and Mr. Scott Allin, Registered Environmental Assessor, reviewed the report.

Prepared by:

Tim Berger R.G. 5225  
Supervising Geologist  
Versar - Pacific Region

Reviewed by:

Scott Allin, R.E.A. 076223  
Senior Program Manager  
Versar - Pacific Region

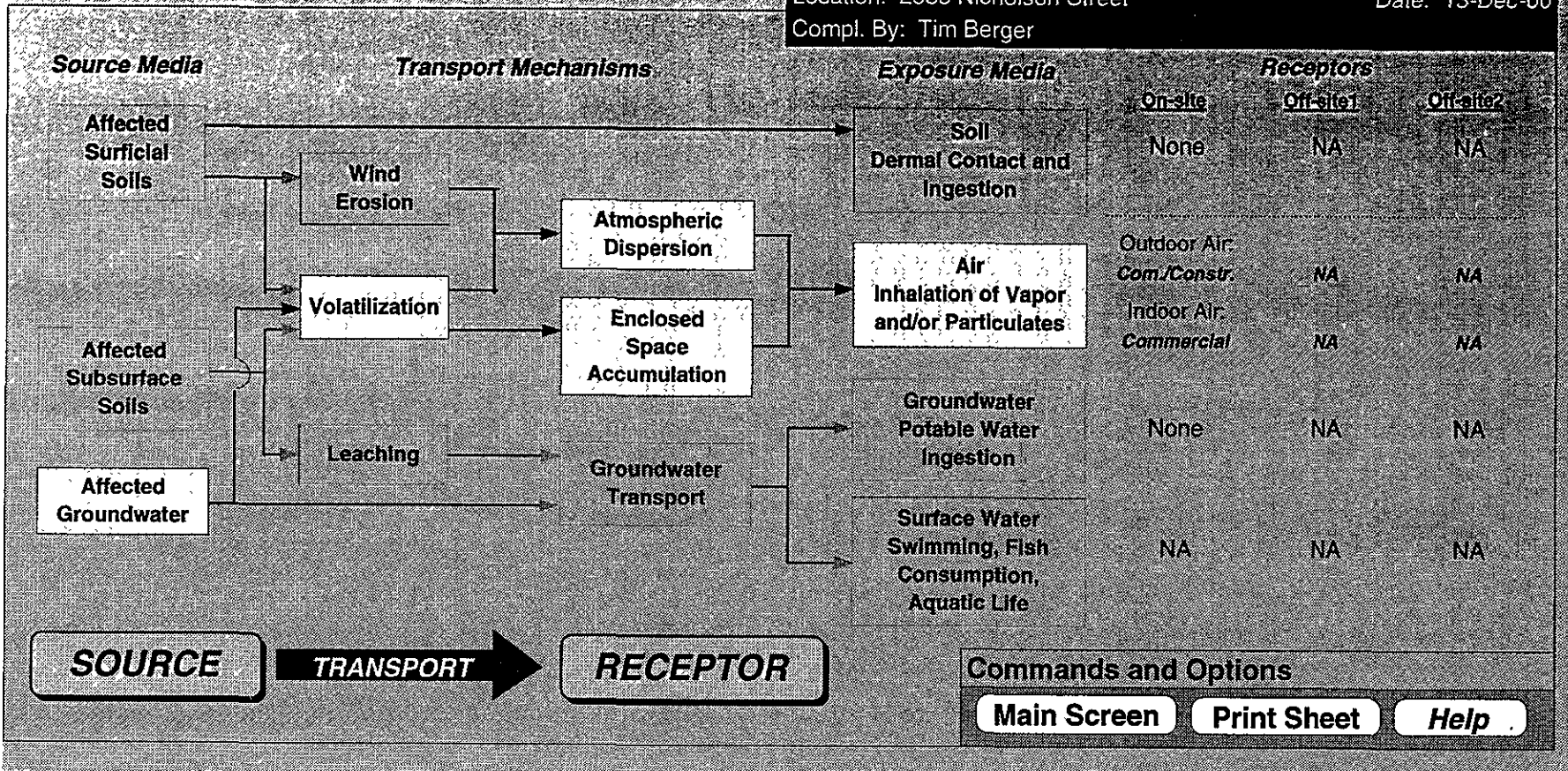
Attachment I - RBCA Toolkit Printout

cc: Ms. Donna Proffitt (Bank of America)  
Ms. Janet Giannini (Bank of America)

**ATTACHMENT I**  
**RBCA Toolkit Printout**

# Exposure Pathway Flowchart

Site Name: Bank of America - San Leandro, California Job ID: 4422-003  
 Location: 2585 Nicholson Street Date: 13-Dec-00  
 Compl. By: Tim Berger





# Site-Specific Soil Parameters

Site Name: Bank of America - San Leandro, California

Job ID: 4422-003

Location: 2585 Nicholson Street

Date: 13-Dec-07

Compl. By: Tim Berger

## 1. Soil-Source Zone Characteristics

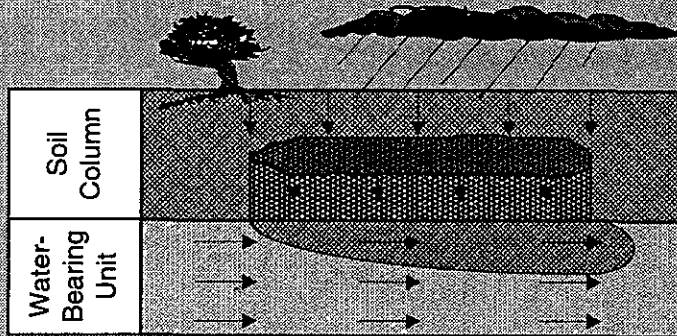
### Hydrogeology

General Case Construction

Depth to water-bearing unit  (ft)  
 Capillary zone thickness  (ft)  
 Soil column thickness  (ft)

### Affected Soil Zone

Depth to top of affected soils  (ft)  
 Depth to base of affected soils  (ft)  
 Affected soil area  (ft<sup>2</sup>)  
 Length of affected soil parallel to assumed wind direction  (ft)  
 Length of affected soil parallel to assumed GW flow direction  (ft)



## 2. Surface Soil Column

Vadose Zone Capillary Fringe

### Predominant USCS Soil Type

CL: Silty Clay

or

Total porosity  (-)  
 Volumetric water content  (-)  (-)  
 Volumetric air content  (-)  (-)  
 Dry bulk density  (kg/L)  
 Vertical hydraulic conductivity  (cm/d)  
 Vapor permeability  (ft<sup>2</sup>)  
 Capillary zone thickness  (ft)

### Net Rainfall Infiltration

Net infiltration estimate  (cm/yr)

or

Average annual precipitation  (cm/yr)

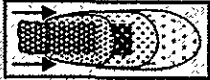
### Partitioning Parameters

Fraction organic carbon  (-)  
 Soil/water pH  (-)

## 3. Commands and Options

# Exposure Pathway Identification

## 1. Groundwater Exposure ?



**Groundwater Ingestion/  
Surface Water Impact**

Receptor: None ▼ [ ] ▼ [ ] ▼  
 Type: On-site [ ] Off-site1 [ ] Off-site2 [ ]

Source Media:

- Affected Groundwater
- Affected Soils Leaching to Groundwater

Distance to GW receptors

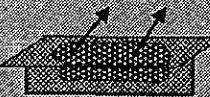
0			(ft)
On-site	Off-site1	Off-site2	
0			(ft)

**GW Discharge to Surface Water Exposure**



- Swimming
  - Fish Consumption
  - Aquatic Life Protection
- 

## 2. Surface Soil Exposure ?



**Direct Ingestion  
and Dermal Contact**

Receptor: None ▼ [ ]  
 Type: On-site [ ] No off-site receptors [ ]

Construction Worker

Site Name: Bank of America - San Leandro, California

Location: 2585 Nicholson Street

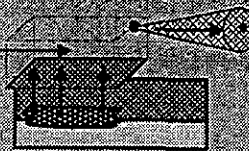
Compl. By: Tim Berger

Job ID: 4422-003

Date: 13-Dec-00

## 3. Air Exposure ?

**Volatilization and Particulates  
to Outdoor Air Inhalation**



Receptor: Com. ▼ [ ] ▼ [ ] ▼  
 Type: On-site [ ] Off-site1 [ ] Off-site2 [ ]  
 0 (ft)

Construction worker

- Affected Soils--Volatilization to Ambient Outdoor Air
- Affected Groundwater--Volatilization to Ambient Outdoor Air
- Affected Surface Soils--Particulates to Ambient Outdoor Air



**Volatilization to  
Indoor Air Inhalation**

Receptor: Com. ▼ [ ]  
 Type: On-site [ ] No off-site receptors [ ]

- Affected Soils--Volatilization to Enclosed Space
- Affected Groundwater--Volatilization to Enclosed Space

## 4. Commands and Options

- [Main Screen](#)
- [Print Sheet](#)
- [Set Units](#)
- [Help](#)
- Exposure Factors & Target Risks
- Exposure Flowchart

**RBCA SITE ASSESSMENT**

**TIER 1 EXPOSURE CONCENTRATION AND INTAKE CALCULATION**

**OUTDOOR AIR EXPOSURE PATHWAYS**  (CHECKED IF PATHWAY IS ACTIVE)

GROUNDWATER: VAPOR

INHALATION

Exposure Concentration

Constituents of Concern	1) Source Medium	2) NAF Value (m <sup>3</sup> /L) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m <sup>3</sup> ) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 ft)	Off-site 1 (0 ft)	Off-site 2 (0 ft)	On-site (0 ft)	Off-site 1 (0 ft)	Off-site 2 (0 ft)
		Commercial	NA	NA	Commercial	NA	NA
Benzene	3.6E-1	1.2E+6			3.1E-7		
Toluene	1.2E-1	1.2E+6			1.0E-7		
Ethylbenzene	1.3E-1	1.4E+6			9.4E-8		
Xylene (mixed isomers)	5.4E-1	1.3E+6			4.2E-7		

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: Bank of America - San Leandro, California

Site Location: 2585 Nicholson Street

Completed By: Tim Berger

Date Completed: 13-Dec-00

Job ID: 4422-003

**RBCA SITE ASSESSMENT**

**TIER 1 EXPOSURE CONCENTRATION AND INTAKE CALCULATION**

**OUTDOOR AIR EXPOSURE PATHWAYS**

GROUNDWATER: VAPOR

INHALATION (cont'd)

Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m <sup>3</sup> ) (3) X (4)		
	On-site (0 ft)	Off-site 1 (0 ft)	Off-site 2 (0 ft)	On-site (0 ft)	Off-site 1 (0 ft)	Off-site 2 (0 ft)
	Commercial	NA	NA	Commercial	NA	NA
Benzene	2.4E-1			7.7E-8		
Toluene	6.8E-1			6.8E-8		
Ethylbenzene	6.8E-1			6.4E-8		
Xylene (mixed isomers)	6.8E-1			2.9E-7		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: Bank of America - San Leandro, California

Date Completed: 13-Dec-00

Site Location: 2585 Nicholson Street

Job ID: 4422-003

Completed By: Tim Berger

**RBCA SITE ASSESSMENT**

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**TIER 1 EXPOSURE CONCENTRATION AND INTAKE CALCULATION**

**OUTDOOR AIR EXPOSURE PATHWAYS**

**TOTAL PATHWAY EXPOSURE (mg/m<sup>3</sup>)**  
*(Sum average exposure concentrations  
 from soil and groundwater routes.)*

Constituents of Concern	On-site (0 ft)		Off-site 1 (0 ft)	Off-site 2 (0 ft)
	Commercial	Construction Worker	NA	NA
Benzene	7.7E-8			
Toluene	6.8E-8			
Ethylbenzene	6.4E-8			
Xylene (mixed isomers)	2.9E-7			

Site Name: Bank of America - San Leandro, California  
 Site Location: 2585 Nicholson Street  
 Completed By: Tim Berger

Date Completed: 13-Dec-00  
 Job ID: 4422-003

**RBCA SITE ASSESSMENT**

**TIER 1 PATHWAY RISK CALCULATION**

**OUTDOOR AIR EXPOSURE PATHWAYS**  (CHECKED IF PATHWAYS ARE ACTIVE)

**CARCINOGENIC RISK**

Constituents of Concern	(1) EPA Carcinogenic Classification	(2) Total Carcinogenic Exposure (mg/m <sup>3</sup> )			(3) Inhalation Unit Risk Factor (µg/m <sup>3</sup> ) <sup>-1</sup>	(4) Individual COC Risk (2) x (3) x 1000				
		On-site (0 ft)		Off-site 1 (0 ft)		Off-site 2 (0 ft)	On-site (0 ft)		Off-site 1 (0 ft)	Off-site 2 (0 ft)
		Commercial	Construction Worker	NA		NA	Commercial	Construction Worker	NA	NA
Benzene	A	7.7E-8			8.3E-6	6.4E-10				
Toluene	D									
Ethylbenzene	D									
Xylene (mixed isomers)	D									

**Total Pathway Carcinogenic Risk = 6.4E-10**

Site Name: Bank of America - San Leandro, California  
 Site Location: 2585 Nicholson Street

Completed By: Tim Berger  
 Date Completed: 13-Dec-00

Job ID: 4422-003

**RBCA SITE ASSESSMENT**

**TIER 1 PATHWAY RISK CALCULATION**

**OUTDOOR AIR EXPOSURE PATHWAYS**  (CHECKED IF PATHWAYS ARE ACTIVE)

**TOXIC EFFECTS**

Constituents of Concern	(5) Total Toxicant Exposure (mg/m <sup>3</sup> )				(6) Inhalation Reference Conc. (mg/m <sup>3</sup> )	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 ft)		Off-site 1 (0 ft)	Off-site 2 (0 ft)		On-site (0 ft)		Off-site 1 (0 ft)	Off-site 2 (0 ft)
	Commercial	Construction Worker	NA	NA		Commercial	Construction Worker	NA	NA
Benzene	2.2E-7				6.0E-3	3.6E-5			
Toluene	6.8E-8				4.0E-1	1.7E-7			
Ethylbenzene	6.4E-8				1.0E+0	6.4E-8			
Xylene (mixed isomers)	2.9E-7				7.0E+0	4.1E-8			

**Total Pathway Hazard Index =** **3.6E-5**

Site Name: Bank of America - San Leandro, California  
 Site Location: 2585 Nicholson Street

Completed By: Tim Berger  
 Date Completed: 13-Dec-00

Job ID: 4422-003

**RBCA SITE ASSESSMENT**

**TIER 1 EXPOSURE CONCENTRATION AND INTAKE CALCULATION**

**INDOOR AIR EXPOSURE PATHWAYS**

(CHECKED IF PATHWAY IS ACTIVE)

GROUNDWATER: VAPOR INTRUSION  
INTO ON-SITE BUILDINGS

Exposure Concentration

Constituents of Concern	1) Source Medium	2) NAF Value (m <sup>3</sup> /L) Receptor	3) Exposure Medium Indoor Air: POE Conc. (mg/m <sup>3</sup> ) (1) / (2)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)	5) Average Inhalation Exposure Concentration (mg/m <sup>3</sup> ) (3) x (4)
	Groundwater Conc. (mg/L)	Commercial	Commercial	Commercial	Commercial
Benzene	3.6E-1	4.4E+3	8.3E-5	2.4E-1	2.0E-5
Toluene	1.2E-1	4.5E+3	2.6E-5	6.8E-1	1.8E-5
Ethylbenzene	1.3E-1	5.2E+3	2.5E-5	6.8E-1	1.7E-5
Xylene (mixed isomers)	5.4E-1	4.9E+3	1.1E-4	6.8E-1	7.5E-5

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: Bank of America - San Leandro, California

Site Location: 2585 Nicholson Street

Completed By: Tim Berger

Date Completed: 13-Dec-00

Job ID: 4422-003



**RBCA SITE ASSESSMENT**

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**TIER 1 EXPOSURE CONCENTRATION AND INTAKE CALCULATION**

**INDOOR AIR EXPOSURE PATHWAYS**

**TOTAL PATHWAY EXPOSURE (mg/m<sup>3</sup>)**  
*(Sum average exposure concentrations  
 from soil and groundwater routes.)*

Constituents of Concern	Commercial
Benzene	2.0E-5
Toluene	1.8E-5
Ethylbenzene	1.7E-5
Xylene (mixed isomers)	7.5E-5

Site Name: Bank of America - San Leandro, Calif Date Completed: 13-Dec-00  
 Site Location: 2585 Nicholson Street Job ID: 4422-003  
 Completed By: Tim Berger

**RBCA SITE ASSESSMENT**

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**TIER 1 PATHWAY RISK CALCULATION**

**INDOOR AIR EXPOSURE PATHWAYS**  **(CHECKED IF PATHWAYS ARE ACTIVE)**

**CARCINOGENIC RISK**

Constituents of Concern	(1) EPA Carcinogenic Classification	(2) Total Carcinogenic Exposure (mg/m <sup>3</sup> )	(3) Inhalation Unit Risk Factor (µg/m <sup>3</sup> ) <sup>-1</sup>	(4) Individual COC Risk (2) x (3) x 1000
		Commercial		Commercial
Benzene	A	2.0E-5	8.3E-6	1.7E-7
Toluene	D			
Ethylbenzene	D			
Xylene (mixed isomers)	D			

**Total Pathway Carcinogenic Risk = 1.7E-7**

Site Name: Bank of America - San Leandro, California  
 Site Location: 2585 Nicholson Street  
 Completed By: Tim Berger

Date Completed: 13-Dec-00  
 Job ID: 4422-003

**RBCA SITE ASSESSMENT**

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**TIER 1 PATHWAY RISK CALCULATION**

**INDOOR AIR EXPOSURE PATHWAYS**  (CHECKED IF PATHWAYS ARE ACTIVE)

**TOXIC EFFECTS**

Constituents of Concern	(5) Total Toxicant Exposure (mg/m <sup>3</sup> )	(6) Inhalation Reference Concentration (mg/m <sup>3</sup> )	(7) Individual COC Hazard Quotient (5) / (6)
	Commercial		Commercial
Benzene	5.7E-5	6.0E-3	9.5E-3
Toluene	1.8E-5	4.0E-1	4.5E-5
Ethylbenzene	1.7E-5	1.0E+0	1.7E-5
Xylene (mixed isomers)	7.5E-5	7.0E+0	1.1E-5

**Total Pathway Hazard Index = 9.6E-3**

Site Name: Bank of America - San Leandro, California  
 Site Location: 2585 Nicholson Street  
 Completed By: Tim Berger

Date Completed: 13-Dec-00  
 Job ID: 4422-003

**RBCA SITE ASSESSMENT**

**Baseline Risk Summary-All Pathways**

Site Name: Bank of America - San Leandro, California  
 Site Location: 2585 Nicholson Street

Completed By: Tim Berger  
 Date Completed: 13-Dec-00

**TIER 1 BASELINE RISK SUMMARY TABLE**

EXPOSURE PATHWAY	BASELINE CARCINOGENIC RISK					BASELINE TOXIC EFFECTS				
	Individual COC Risk		Cumulative COC Risk		Risk Limit(s) Exceeded?	Hazard Quotient		Hazard Index		Toxicity Limit(s) Exceeded?
	Maximum Value	Target Risk	Total Value	Target Risk		Maximum Value	Applicable Limit	Total Value	Applicable Limit	
<b>OUTDOOR AIR EXPOSURE PATHWAYS</b>										
Complete:	6.4E-10	1.0E-6	6.4E-10	1.0E-5	<input type="checkbox"/>	3.6E-5	1.0E+0	3.6E-5	1.0E+0	<input type="checkbox"/>
<b>INDOOR AIR EXPOSURE PATHWAYS</b>										
Complete:	1.7E-7	1.0E-6	1.7E-7	1.0E-5	<input type="checkbox"/>	9.5E-3	1.0E+0	9.6E-3	1.0E+0	<input type="checkbox"/>
<b>SOIL EXPOSURE PATHWAYS</b>										
Complete:	NA	NA	NA	NA	<input type="checkbox"/>	NA	NA	NA	NA	<input type="checkbox"/>
<b>GROUNDWATER EXPOSURE PATHWAYS</b>										
Complete:	NA	NA	NA	NA	<input type="checkbox"/>	NA	NA	NA	NA	<input type="checkbox"/>
<b>SURFACE WATER EXPOSURE PATHWAYS</b>										
Complete:	NA	NA	NA	NA	<input type="checkbox"/>	NA	NA	NA	NA	<input type="checkbox"/>
<b>CRITICAL EXPOSURE PATHWAY (Maximum Values From Complete Pathways)</b>										
	1.7E-7	1.0E-6	1.7E-7	1.0E-5	<input type="checkbox"/>	9.5E-3	1.0E+0	9.6E-3	1.0E+0	<input type="checkbox"/>
	Indoor Air		Indoor Air			Indoor Air		Indoor Air		