TABLE 1
Johnson and Ettinger Model Input Parameters (former Table 2 of the Indoor Air HRA)

Parameter	Value	Reference/Rationale
Depth below grade to bottom of enclosed floor space (cm)	15	Model default (slab on grade) (USEPA 2004)
Soil gas sampling depth (cm)	150	Site-specific (five feet below ground surface [bgs])
Average soil temperature (°C)	17	Site-specific (Figure 8, USEPA 2004, p. 48). The average shallow groundwater temperature in the Henderson, Nevada area.
Thickness of soil stratum (cm) A	150	Site-specific (five feet bgs)
Thickness of soil stratum (cm) B	0	No stratum B; used single stratum model
Thickness of soil stratum (cm) C	0	No stratum C; used single stratum model
Soil stratum used to calculate soil vapor permeability	S	Sand
Vadose zone dry bulk density (g/cm^3)	1.83	Site-specific (Borrow Area data)
Vadose zone total porosity (unitless)	0.30	Site-specific (Borrow Area data)
Vadose zone water-filled porosity (unitless)	0.090	(Dry bulk density/water density) × soil moisture content [1]
Stratum B soil parameters	blank	No stratum B; used single stratum model
Stratum C soil parameters	blank	No stratum C; used single stratum model
Enclosed space floor thickness (cm)	10	Model default (USEPA 2004)
Soil-building pressure differential, ($g/cm\text{-}s^2$)	40	Model default (USEPA 2004)
Enclosed space floor length (cm)	2,000	MDEQ - commericial (2001)
Enclosed space floor width (cm)	2,000	MDEQ - commericial (2001)
Modeling Enclosed space height (cm)	244	Model default (USEPA 2004) [2]
Floor-wall seam crack width (cm)	0.1	Model default (USEPA 2004)
Indoor air exchange rate (1/hr)	1 or 2	Cal-EPA (2005) or MDEQ (2001)
Average vapor flow rate into building, Qsoil, (L/m) - Table 3 Results	20	Model default (Cal-EPA 2005)
Average vapor flow rate into building, Qsoil, (L/m) - Table 4 Results	Calculated	Intermediate value (Eq. 15, USEPA 2004, p. 22) [3]
Averaging time for carcinogens (yrs)	70	USEPA 2002
Averaging time for non-carcinogens (yrs)	25	USEPA 2002
Exposure duration (yrs)	25	USEPA 2002
Exposure frequency (days/yr)	250	USEPA 2002

Notes:
1 - Where soil moisture content=gravimetric moisture content per ASTM D2216; site-specific value=0.049
2 - This value is the model default for residential buildings since there is no model default for commercial buildings (USEPA 2004).
3 - This is a calculated value of 10 L/min.

TABLE 2
Toxicological Surrogates for Toxicity Values

Chemical	Surrogate
1,2-Dichlorotetrafluoroethane	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)
1,3-Dichlorobenzene	1,2-Dichlorobenzene
4-Ethyltoluene	Isopropylbenzene (Cumene)
4-Isopropyltoluene	Isopropylbenzene (Cumene)
alpha-Methylstyrene	Styrene
cis-1,2-Dichloroethene	trans-1,2-Dichloroethene
Ethanol[a]	See footnote a
N-Butylbenzene	Isopropylbenzene (Cumene)
n-Heptane	n-Hexane
n-Octane	C5 - C8 alkane and cycloalkane compounds
sec-Butylbenzene	Isopropylbenzene (Cumene)
t-Butyl alcohol	sec-Butyl Alcohol
tert-Butylbenzene	Isopropylbenzene (Cumene)

Notes:

[a] California Environmental Protection Agency derived a draft reference concentration for ethanol based on ethanol toxicity data as provided in Attachment B of NDEP (2010).

References:

Nevada Division of Environmental Protection (NDEP), 2010. NDEP Response to Revised Technical Memorandum: Screening-Level Indoor Air Health Assessment for the 2008 Tronox Parcels A/B Soil Gas Investigation, Tronox LLC, Henderson, Nevada, Dated: June 29, 2010. August 31.

TABLE 3
Cumulative Risk for Vapor Intrusion and Soil-Related Pathways

Receptor[a]	Commercial/Industrial Worker				Construction Worker	Future Maintenance Worker	Current/Future On-Site Trespasser
Media	**Soil**	**Indoor Air[b]**	**Indoor Air[c]**	**Cumulative HI and Cancer Risk[d]**	**Soil[e]**	**Soil[e]**	**Soil[e]**
Total Non-Cancer HI	0.10	0.002	0.0008	**0.10**			
Total Cancer Risk	3.9E-06	1.2E-06	4.5E-07	**5.1E-06**			
Estimated Chrysotile Risk - Best Estimate[f]					1.5E-07	2.6E-09	7.0E-11
Estimated Chrysotile Risk - Upper Bound[g]					2.6E-07	4.6E-09	1.2E-10
Estimated Amphibole Risk - Best Estimate[f]					0.0E+00	0.0E+00	0.0E+00
Estimated Amphibole Risk - Upper Bound[g]					5.4E-06	9.7E-08	2.6E-09

Notes:
BEC = Basic Environmental Company
Cal/EPA = California Environmental Protection Agency
ER = Indoor air exchange rate
HI = Hazard index
L/min = Liters per minute
Q_{soil} = Average vapor flow rate
UCL = Upper confidence limit

[a] Gray shading indicates that the pathway was not evaluated in the screening-level health risk assessment. The indoor air pathway was only evaluated for the commercial/industrial worker.
[b] The indoor air concentrations were estimated based on a scaled Q_{soil} value of 4 × 5 L/min or 20 L/min to account for the default commercial building size and an ER of 1 per hour as recommended by Cal/EPA (2011).
[c] The indoor air concentrations were estimated based on a calculated Q_{soil} value and an ER of 2 per hour as recommended by Michigan Environmental Science Board (2001).
[d] The indoor air cancer risk and HI were based on a scaled Q_{soil} value of 20 L/min and an ER of 1 per hour as described in footnote b.
[e] The estimated risks for asbestos were presented as reported in BEC (2008).
[f] The best estimate was based on the pooled analytical sensitivity multiplied by the number of asbestos fibers found.
[g] The upper bound was based on the 95% UCL of the Poisson distribution.

References:
Basic Environmental Company (BEC). 2008. Technical Memorandum – Data Review for 2007 Tronox Parcels A/B Investigation, BMI Industrial Complex, Clark County, Nevada, Revision 1. February 11.
California Environmental Protection Agency (Cal/EPA). 2011. Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). October.
Michigan Environmental Science Board. 2001. Evaluation of the Michigan Department of Environmental Quality's Generic Groundwater and Soil Volatilization to Indoor Air Inhalation Criteria. (A Science Report to Governor John Engler). Michigan Environmental Science Board, Lansing, MI.

TABLE 4
Summary of Data Qualifiers for Parcel A/B Data (former Table E-2 of the Indoor Air HRA)

Sample ID	SDG	Method	Matrix	Analyte	Result	Qualifiers	Units	Reason	Batch ID	Method Blank Result	Dilution Factor	SQL
Qualifications based on blank contamination (b) (from Table E-4 of the soil gas DVSR)												
SG06B-05	P0801507	TO-15	GS	Methylene chloride	0.77	U	µg/m^3	b	MS16052708	0.076	1.54	0.77
SG10B-05	P0801483	TO-15	GS	Vinyl acetate	7.8	U	µg/m^3	b	MS13052708	0.40	1.55	7.8
SG10B-05	P0801483	TO-15	GS	Acetone	24	U	µg/m^3	b	MS13052708	1.8	1.55	7.8
SG11B-05	P0801483	TO-15	GS	Carbon disulfide	1.4	U	µg/m^3	b	MS13052708	0.29	1.47	0.74
SG12B-05	P0801483	TO-15	GS	Vinyl acetate	7.7	U	µg/m^3	b	MS13052708	0.40	1.54	7.7
SG12B-05	P0801483	TO-15	GS	Carbon disulfide	1.1	U	µg/m^3	b	MS13052708	0.29	1.54	0.77
SG12B-05	P0801483	TO-15	GS	Acetone	15	U	µg/m^3	b	MS13052708	1.8	1.54	7.7
Qualification based on quantitation problems (q) (from Table D-7 of the soil gas DVSR)												
SG01B-05	P0801656	TO-15	GS	Acetone	33	J+	µg/m^3	q				
SG04B-05	P0801656	TO-15	GS	Acetone	12	J+	µg/m^3	q				

Notes:
- GS = Soil gas
- SDG = Sample delivery group
- SQL = Sample quantitation limit
- µg/m^3 = micrograms per cubic meter

Reason codes:
- b = Qualified due to blank contamination
- q = Qualified due to quantitation problem

Qualifiers:
- U = The analyte was analyzed for, but was not detected above the sample reporting limit
- J+ = The result is an estimated quantity and the result may be biased high

TABLE 5

Historical and Recent Chloroform Concentrations in Shallow Groundwater[a]

Parcel	Well ID	Date Sampled[b]	Chloroform (µg/L)[b]
Parcel A	H-48	9/1/1981	900
		10/14/1981	400
		11/10/1981	300
		2/9/1982	ND
		4/13/1982	300
		6/23/1982	ND
		8/16/1982	ND
		10/19/1982	400
		12/6/1982	ND
		2/14/1983	200
		2/29/1984	1000
		6/19/2008	**<1**
	H-49A	9/16/2004	10
		11/30/2004	6.0
		2/22/2005	<5.0
		5/24/2005	<5.0
		9/23/2005	7.6
		10/25/2005	7.0
		2/2/2006	<5.0
		4/25/2006	<5.0
		7/25/2006	<5.0
		11/30/2006	<0.33
		1/18/2007	3.4
		4/17/2007	2.3
		7/11/2007	2.0
		11/14/2007	3.2
		1/30/2008	<0.33
		4/3/2008	<0.33
		4/3/2008	<0.33
		6/24/2008	3.0
		7/11/2008	<0.33
		11/5/2008	2.0
		1/19/2009	<0.33
		4/15/2009	<0.33
		4/20/2010	1.4
		4/4/2011	**0.97**
	H-56A	9/16/2004	ND
		2/22/2005	<5.0
		5/24/2005	<5.0
		9/23/2005	<5.0
		10/25/2005	<5.0
		1/31/2006	<5.0
		4/25/2006	<5.0
		7/19/2006	1.1
		7/25/2006	<5.0
		11/30/2006	<0.33J
		1/17/2007	<0.33
		4/18/2007	<0.33
		4/18/2007	<0.33
		7/11/2007	<0.33
		11/14/2007	<0.33
		1/30/2008	<0.33
		4/3/2008	<0.33
		7/11/2008	<0.33
		11/5/2008	<0.33
		1/19/2009	<0.33
		4/15/2009	<0.33
		4/19/2010	2.0

TABLE 5

Historical and Recent Chloroform Concentrations in Shallow Groundwater[a]

Parcel	Well ID	Date Sampled[b]	Chloroform (µg/L)[b]
Parcel A (Continued)	H-56A (Continued)	7/28/2010	2.0
		4/4/2011	**1.8**
	H-58A	9/16/2004	ND
		2/22/2005	<5.0
		5/24/2005	<5.0
		9/23/2005	9.6
		10/25/2005	17
		2/2/2006	7.7
		4/25/2006	4.9
		7/25/2006	16
		11/30/2006	<0.33
		1/18/2007	4.3
		4/18/2007	4.6
		7/11/2007	6.6
		11/14/2007	5.6
		1/30/2008	9.7
		1/30/2008	9.0
		4/3/2008	8.6
		7/11/2008	4.8
		11/5/2008	2.4
		1/19/2009	2.0
		4/15/2009	<0.33
		4/19/2010	2.2
		4/4/2011	**5.2**
	MC-62	1/25/2005	3.4
		4/19/2005	2.8
		10/27/2005	4.3
		2/1/2006	68
		4/27/2006	8
		7/27/2006	4.6
		6/23/2008	**2.3J**
	MC-65	**6/20/2008**	**8.3**
	MC-66	6/20/2008	5.2
		6/20/2008	**5.3**
	PC-40	12/17/1998	<5.0
		5/26/2000	<5.0
		12/1/2006	4J
		6/18/2008	**1.6**
Parcel B	M-44	**6/24/2008**	**34**
	PC-37	**6/20/2008**	**2.0**
	PC-72	**6/23/2008**	**29**
Relevant Nearby Locations for Parcels A and B	M-23	**6/25/2008**	**130**
	M-48	12/6/2006	99
		7/9/2008	**180**
	M-94	**6/23/2008**	**50**
	M-95	12/4/2006	350
		6/27/2008	**390**
	M-96	**7/9/2008**	**28**
	MC-09R	7/24/2009	7.9
		5/19/2010	4.3
		4/22/2011	6.5
		4/30/2012	**0.94J**
	MC-45	1/17/1986	ND
		2/19/1986	ND
		7/15/1986	ND
		12/6/2006	3.0J
		6/25/2008	**3.0**
	MC-47	1/25/2005	1.7
		4/19/2005	1.9

TABLE 5

Historical and Recent Chloroform Concentrations in Shallow Groundwater[a]

Parcel	Well ID	Date Sampled[b]	Chloroform (µg/L)[b]
	MC-47 (Continued)	10/26/2005	4.5
		1/31/2006	4.3
		4/26/2006	16
		7/26/2006	4.9
		11/29/2006	2
		1/17/2007	2.7
		4/18/2007	3.6
		7/13/2007	11
		12/20/2007	8
		1/29/2008	12
		1/29/2008	13
		4/9/2008	8.1
		4/9/2008	7.5
		7/10/2008	7.2
		11/7/2008	8.2
		1/20/2009	11.0
		4/13/2009	5.9
		4/20/2010	10.0
		4/5/2011	13.0
		4/11/2012	**8.4**
	MC-48	1/15/1986	ND
		2/20/1986	ND
		7/15/1986	ND
		3/31/2004	13
		6/29/2004	8.1
		9/28/2004	1.4
		1/25/2005	1
		4/19/2005	1.8
		10/26/2005	2.1
		2/1/2006	14
		4/26/2006	31
		7/26/2006	6.4
		11/29/2006	<0.33J
		1/24/2007	2.3
		4/18/2007	9.3
		7/13/2007	14
		12/20/2007	4.5
		12/20/2007	4.4
		1/29/2008	57
		4/9/2008	7.9
		7/10/2008	2.2
		11/7/2008	<0.33
		1/20/2009	<0.33
		4/13/2009	<0.33
		4/21/2010	2.7
		4/5/2011	4.2
		4/11/2012	**0.4**
	MC-49	1/16/1986	2100
		2/20/1986	1000.0
		7/15/1986	1600
		4/1/2004	<5
		6/29/2004	1
		9/28/2004	5.3
		1/26/2005	5.1
		4/19/2005	4.6
		10/27/2005	13
		10/27/2005	13

TABLE 5

Historical and Recent Chloroform Concentrations in Shallow Groundwater[a]

Parcel	Well ID	Date Sampled[b]	Chloroform (µg/L)[b]
Relevant Nearby Locations for Parcels A and B (Continued)	MC-49 (Continued)	2/2/2006	<10
		2/2/2006	<10
		4/27/2006	39
		4/27/2006	37
		7/27/2006	9.1
		7/27/2006	9.2
		12/4/2006	2.2
		12/4/2006	440J
		1/19/2007	2.2
		4/19/2007	6.7
		7/13/2007	12
		7/13/2007	13
		12/20/2007	3.5
		1/29/2008	55
		4/9/2008	5.2
		7/10/2008	<0.33
		11/6/2008	<0.33
		1/20/2009	<0.33
		4/13/2009	<0.33
		4/21/2010	1.6
		4/5/2011	2.5
		4/12/2012	**<2.0**
	MC-50	4/1/2004	55
		6/29/2004	25
		9/29/2004	9.3
		1/26/2005	4.7
		4/20/2005	3.4
		10/27/2005	<0.5
		2/1/2006	270
		4/26/2006	6.3
		7/27/2006	3.1
		11/29/2006	<0.33
		1/18/2007	4
		4/18/2007	15
		7/16/2007	6.2
		12/21/2007	<0.66
		1/29/2008	<1.3
		4/9/2008	7.6
		7/10/2008	5
		7/10/2008	4.2
		11/6/2008	3.2
		1/21/2009	3.4
		4/13/2009	2.9
		4/21/2010	3.2
		4/6/2011	15
		4/11/2012	**2.6**
	MC-53	4/1/2004	9.0
		6/29/2004	31
		9/28/2004	220
		1/26/2005	30
		4/20/2005	15
		10/26/2005	17
		2/1/2006	2.7
		4/26/2006	300
		7/26/2006	25
		12/4/2006	4.0

TABLE 5

Historical and Recent Chloroform Concentrations in Shallow Groundwater[a]

Parcel	Well ID	Date Sampled[b]	Chloroform (µg/L)[b]
Relevant Nearby Locations for Parcels A and B (Continued)	MC-53 (Continued)	1/17/2007	6.6
		4/18/2007	9.6
		7/16/2007	8.1
		12/21/2007	5.1
		1/29/2008	10
		4/9/2008	36
		6/25/2008	13
		7/10/2008	11
		11/6/2008	7.3
		1/21/2009	9.3
		4/14/2009	7.1
		4/21/2010	5.0
		4/6/2011	14.0
		4/11/2012	**1.3**
	MC-94	**10/7/2009**	**5.4**
	MC-113	11/7/2008	2.6
		1/22/2009	2
		4/14/2009	2.6
		4/22/2010	3
		4/6/2011	5.7
		4/12/2012	**0.59**
	MC-114	11/7/2008	37.0
		1/22/2009	<3.3
		4/14/2009	16.0
		4/22/2010	5.4
		4/6/2011	22.0
		4/12/2012	**3.5**

Notes:
< = sample not detected
µg/L = micrograms per liter
J = the associated value is an estimated quantity
ND = sample not detected and detection limit not available

[a] ENVIRON identified these wells using NDEP's Regional Database available at http://ndep.neptuneinc.org/ndep_gisdt/home/index.xml, the Data Validation Summary Reports for the Phase A Investigation (ENSR 2007) and the Phase B Groundwater Investigation (Northgate 2010a).

[b] Sample results highlighted gray were presented in the Site-Wide Soil Gas HRA (Northgate 2010c) and bolded sample results represent the most recent chloroform sample results.

References:

ENSR Corporation (ENSR), 2007. Phase A Source Area Investigation Results Report, Tronox LLC Facility, Henderson, Nevada, September. NDEP approved the Report November 30, 2007 and Appendix G – Data Validation Summary Report (DVSR) December 17, 2007.

Northgate Environmental Management, Inc. (Northgate), 2010a. Revised Data Validation Summary Report, Phase B Investigation Groundwater, Tronox LLC, Henderson, Nevada. April 7. NDEP approved April 14, 2010.

Northgate, 2010c. Site-Wide Soil Gas Human Health Risk Assessment, Tronox LLC, Henderson, Nevada. November 22. Not reviewed by NDEP.

TABLE 6
Cancer Risks Estimated Using Soil Gas and Groundwater Results from Co-located Samples

Chemical	Groundwater							Soil Gas						Ratio of Cancer Risk[c]	Ratio of Hazard Quotient[d]
	Well ID[a]	Sample Location Relative to Parcels A and B	Sample Date	Maximum Concentration (µg/L)[b]	RBC (µg/L)	Cancer Risk	Hazard Quotient	Soil Gas Boring	Sample Date	Maximum Concentration (µg/m^3)	RBC (µg/m^3)	Cancer Risk	Hazard Quotient		
Benzene	H-48	Within Parcel A	6/19/2008	3	420	6.0E-09	7.1E-05	--	--	--	--	--	--	--	--
	MC-49	Near Parcels A/B	1/29/2008	6	420	1.4E-08	1.7E-04	--	--	--	--	--	--	--	--
	MC-47	Near Parcels A/B	11/7/2008	4	420	8.8E-09	1.1E-04	--	--	--	--	--	--	--	--
	MC-50	Near Parcels A/B	1/29/2008	1100	420	2.6E-06	3.1E-02	--	--	--	--	--	--	--	--
	MC-62	**Within Parcel A**	**6/23/2008**	**2400**	**420**	**5.7E-06**	**6.8E-02**	**SG05**	**5/29/2008**	**2**	**6197**	**1.9E-09**	**2.2E-05**	**3.1E+03**	**3.1E+03**
	MC-114	Near Parcels A/B	11/7/2008	700	420	1.7E-06	2.0E-02	--	--	--	--	--	--	--	--
Chloroform	**H-49A**	**Within Parcel A**	**6/24/2008**	**3**	**176**	**1.7E-08**	**2.1E-05**	**SG04**	**5/29/2008**	**9**	**1861**	**2.2E-08**	**2.7E-05**	**7.8E-01**	**7.8E-01**
	H-58A	Within Parcel A	1/30/2008	10	176	5.5E-08	6.9E-05	--	--	--	--	--	--	--	--
	M-23	**Near Parcels A/B**	**6/25/2008**	**130**	**176**	**7.4E-07**	**9.2E-04**	**E-SG-9**	**3/8/2013**	**98**	**1861**	**2.5E-07**	**3.1E-04**	**3.0E+00**	**3.0E+00**
	M-44	Within Parcel B	6/24/2008	34	176	1.9E-07	2.4E-04	--	--	--	--	--	--	--	--
	M-94	Near Parcels A/B	6/23/2008	50	176	2.8E-07	3.5E-04	--	--	--	--	--	--	--	--
	M-95	**Near Parcels A/B**	**6/27/2008**	**390**	**176**	**2.2E-06**	**2.8E-03**	**SG07**	**5/17/2008**	**430**	**1861**	**1.1E-06**	**1.4E-03**	**2.0E+00**	**2.0E+00**
	M-96	Near Parcels A/B	7/9/2008	28	176	1.6E-07	2.0E-04	--	--	--	--	--	--	--	--
	MC-45	**Near Parcels A/B**	**6/24/2008**	**3**	**176**	**1.7E-08**	**2.1E-05**	**SG16**	**5/18/2008**	**84**	**1861**	**2.1E-07**	**2.7E-04**	**7.9E-02**	**7.9E-02**
	MC-47	Near Parcels A/B	1/29/2008	13	176	7.4E-08	9.2E-05	--	--	--	--	--	--	--	--
	MC-48	Near Parcels A/B	1/29/2008	57	176	3.2E-07	4.0E-04	--	--	--	--	--	--	--	--
	MC-49	Near Parcels A/B	1/29/2008	55	176	3.1E-07	3.9E-04	--	--	--	--	--	--	--	--
	MC-50	Near Parcels A/B	4/9/2008	8	176	4.3E-08	5.4E-05	--	--	--	--	--	--	--	--
	MC-53	Near Parcels A/B	4/9/2008	36	176	2.0E-07	2.5E-04	--	--	--	--	--	--	--	--
	MC-62	**Within Parcel A**	**6/23/2008**	**2**	**176**	**1.3E-08**	**1.6E-05**	**SG05**	**5/29/2008**	**62**	**1861**	**1.6E-07**	**2.0E-04**	**8.3E-02**	**8.3E-02**
	MC-65	Within Parcel A	6/20/2008	8	176	4.7E-08	5.9E-05	--	--	--	--	--	--	--	--
	MC-66	Within Parcel A	6/20/2008	5	176	3.0E-08	3.7E-05	--	--	--	--	--	--	--	--
	MC-113	Near Parcels A/B	11/7/2008	3	176	1.5E-08	1.8E-05	--	--	--	--	--	--	--	--
	MC-114	Near Parcels A/B	11/7/2008	37	176	2.1E-07	2.6E-04	--	--	--	--	--	--	--	--
	PC-37	**Within Parcel B**	**11/5/2008**	**2**	**176**	**1.1E-08**	**1.4E-05**	**SG06**	**5/20/2008**	**34**	**1861**	**8.7E-08**	**1.1E-04**	**1.3E-01**	**1.3E-01**
	PC-40	**Within Parcel A**	**6/18/2008**	**2**	**176**	**9.1E-09**	**1.1E-05**	**SG01**	**5/29/2008**	**14**	**1861**	**3.6E-08**	**4.4E-05**	**2.5E-01**	**2.5E-01**
	PC-72	Within Parcel B	6/23/2008	29	176	1.6E-07	2.0E-04	--	--	--	--	--	--	--	--

TABLE 6
Cancer Risks Estimated Using Soil Gas and Groundwater Results from Co-located Samples

Chemical	Groundwater							Soil Gas						Ratio of Cancer Risk[c]	Ratio of Hazard Quotient[d]
	Well ID[a]	Sample Location Relative to Parcels A and B	Sample Date	Maximum Concentration (µg/L)[b]	RBC (µg/L)	Cancer Risk	Hazard Quotient	Soil Gas Boring	Sample Date	Maximum Concentration (µg/m^3)	RBC (µg/m^3)	Cancer Risk	Hazard Quotient		
1,4-Dichlorobenzene	H-48	Within Parcel A	6/19/2008	1	933	1.1E-09	3.4E-07	--	--	--	--	--	--	--	--
	H-49A	**Within Parcel A**	**11/5/2008**	**18**	**933**	**1.9E-08**	**6.1E-06**	**SG04**	**5/29/2008**	**16**	**5290**	**1.5E-08**	**4.7E-06**	**1.3E+00**	**1.3E+00**
	H-56A	Within Parcel A	11/5/2008	2	933	2.1E-09	6.8E-07	--	--	--	--	--	--	--	--
	H-58A	Within Parcel A	1/30/2008	12	933	1.3E-08	4.1E-06	--	--	--	--	--	--	--	--
	M-23	**Near Parcels A/B**	**6/25/2008**	**2**	**933**	**1.8E-09**	**5.8E-07**	**E-SG-9**	**3/8/2013**	**<0.18**	**5290**	**1.7E-10**	**5.3E-08**	**1.1E+01**	**1.1E+01**
	M-44	Within Parcel B	6/24/2008	1	933	7.2E-10	2.3E-07	--	--	--	--	--	--	--	--
	M-94	Near Parcels A/B	6/23/2008	0.35	933	3.7E-10	1.2E-07	--	--	--	--	--	--	--	--
	M-96	Near Parcels A/B	7/9/2008	2	933	1.6E-09	5.1E-07	--	--	--	--	--	--	--	--
	MC-45	**Near Parcels A/B**	**6/25/2008**	**6**	**933**	**6.0E-09**	**1.9E-06**	**SG16**	**5/18/2008**	**0.5**	**5290**	**4.4E-10**	**1.4E-07**	**1.4E+01**	**1.4E+01**
	MC-48	Near Parcels A/B	1/30/2008	13	933	1.4E-08	4.4E-06	--	--	--	--	--	--	--	--
	MC-49	Near Parcels A/B	11/6/2008	59	933	6.3E-08	2.0E-05	--	--	--	--	--	--	--	--
	MC-50	Near Parcels A/B	1/29/2008	55	933	5.9E-08	1.9E-05	--	--	--	--	--	--	--	--
	MC-53	Near Parcels A/B	7/9/2008	2	933	1.6E-09	5.1E-07	--	--	--	--	--	--	--	--
	MC-62	**Within Parcel A**	**6/23/2008**	**35**	**933**	**3.7E-08**	**1.2E-05**	**SG05**	**5/29/2008**	**43**	**5290**	**4.0E-08**	**1.3E-05**	**9.4E-01**	**9.4E-01**
	MC-65	Within Parcel A	7/9/2008	2	933	1.6E-09	5.1E-07	--	--	--	--	--	--	--	--
	MC-66	Within Parcel A	6/20/2008	2	933	1.7E-09	5.5E-07	--	--	--	--	--	--	--	--
	MC-113	Near Parcels A/B	11/7/2008	5	933	5.7E-09	1.8E-06	--	--	--	--	--	--	--	--
	MC-114	Near Parcels A/B	11/7/2008	9	933	9.3E-09	3.0E-06	--	--	--	--	--	--	--	--
	PC-37	**Within Parcel B**	**6/20/2008**	**0.29**	**933**	**3.1E-10**	**9.9E-08**	**SG06**	**5/20/2008**	**9**	**5290**	**8.1E-09**	**2.6E-06**	**3.9E-02**	**3.9E-02**
	PC-40	**Within Parcel A**	**6/18/2008**	**8**	**933**	**8.1E-09**	**2.6E-06**	**SG01**	**5/29/2008**	**1**	**5290**	**7.8E-10**	**2.5E-07**	**1.0E+01**	**1.0E+01**

Notes:
-- = no value
µg/L= micrograms per liter
µg/m^3 = micrograms per cubic meter
RBC = risk-based concentration

[a] Only groundwater wells with detected concentrations are shown. Bolded sample results indicate groundwater wells are collocated with a 2008 or 2013 soil gas sample.
[b] Sample results highlighted gray indicate that the maximum concentration exceeds its risk-based concentration.
[c] This value represents the ratio of cancer risk calculated from groundwater to cancer risk calculated from soil gas.
[d] This value represents the ratio of the hazard quotient calculated from groundwater to the hazard quotient calculated from soil gas.