Supplemental Response to USEPA Comments
Resource Conservation and Recovery Act
CA725 Environmental Indicators Report

Vernay Laboratories, Inc.
Plant 2/3 Facility
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OHD 004 243 002

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The Environmental Indicators (EI) CA725 Report for the Vernay Laboratories, Inc. ("Vernay") Facility (the "Facility") located in the Village of Yellow Springs, Ohio was submitted to USEPA on July 14, 2004. This submittal included responses to USEPA's June 29, 2004 comments on the draft EI CA 725 Report provided to USEPA on April 9, 2004. The EI CA725 Report evaluated and discussed information that is pertinent to the RCRA CA725 determination, and included data collected during the Phase I Facility Investigation and from prior investigations that were summarized in the Facility Current Conditions Report. Based on these data, and a consideration of potential exposure pathways and site-specific conditions, current human exposures were determined to be under control according to the provisions of CA725.

On August 5, 2004, USEPA requested additional information and/or clarification of the responses to the June 29, 2004 comments. The requested information/clarification was submitted to USEPA on August 24, 2004. Based on subsequent discussions between USEPA and Vernay, Vernay understands that USEPA is requesting that, despite the fact that no areas of interest (AOIs) were eliminated in CA725 Question 2 from consideration in CA725 Questions 3 and 4, the screening procedure for responding to Question 2 should include comparison of soil concentrations with risk based screening levels without accounting for background contributions to these concentrations.

Supplemental Response to USEPA Comments

In the approach presented in the July 2004 EI CA725 Report for the Vernay Facility, only the site-related component of metals in the soil was accounted for in Question 2 to identify those metal concentrations that are subject to RCRA corrective action and warranted further evaluation in the CA725 determination. Those AOIs with constituents concentrations identified in Question

2 for further evaluation were then assessed to identify if complete pathways (Question 3) exist, and if so, the significance of potential exposures (Question 4). However, to address USEPA's additional comments on the approach used for the Vernay Facility, Vernay is providing supplemental information for CA725 Question 2, specifically, the results of the screening of soil concentrations with risk-based screening criteria without accounting for background contributions to these concentrations.

As described in the EI CA 725 Report, the identification of contamination for soil is based on comparison of the Phase I RFI characterization data with generic risk-based screening criteria. The following is a list of screening criteria that were selected based on the conceptual site model for current human exposures to identify contamination in each of the environmental media investigated during the Phase I Facility Investigation:

Soil

- Risk-based screening levels calculated using the methodology and conservative exposure factors for deriving USEPA Region 9 Preliminary Remediation Goals (PRGs) for industrial and/or residential land use (set at a TCRL of 10^{-5} for carcinogenic constituents and a target HQ of 1 for non-carcinogenic constituents); and
- For on-Facility areas, risk-based screening levels for evaluating soil vapor migration to indoor air based on meeting OSHA criteria for industrial chemical exposures, or in the absence of an OSHA criterion, risk-based screening levels calculated using the methodology and conservative exposure factors published by Michigan Department of Environmental Quality (MDEQ) for evaluating the soil to indoor air pathway for industrial land use (set at a TCRL of 10^{-5} for carcinogenic constituents and a target HQ of 1 for non-carcinogenic constituents) (see Appendix C of the July 2004 EI CA725 Report).

The results of the comparison of detected constituent concentrations in on-Facility and off-Facility soil with these criteria are discussed below. In addition, the significance of these screening results is also evaluated taking into consideration background concentrations of three commonly occurring metals (As, Cu and Zn) in soil (see Appendix B of the July 2004 EI CA725 Report).

The Phase I RFI soil characterization data are summarized on Table 2-1a and Table 2-2a by AOI for on-Facility and off-Facility soils, respectively. The data on Tables 2-1a and 2-2a include only valid data (i.e., no R-qualified data), and concentrations among duplicate pairs have been averaged to obtain a representative concentration for each pair. For each AOI, Table 2-1a and

Table 2-2a lists the detected constituents, the detection frequencies, the ranges of detected concentrations, and the ratios of the highest measured concentrations to the screening criteria.

Constituents are identified for further evaluation in each AOI when the ratio of the highest measured Facility-related concentration at the AOI to the screening criterion exceeds 1. Such ratios are highlighted on Table 2-1a and Table 2-2a. The constituents with concentrations exceeding screening criteria in each of the AOIs are:

AOI-1 – Undeveloped Western Fill Area[1]

- 1,2-dichloropropane
- benzo(a)pyrene
- arsenic

AOI-2 – Developed Area of Facility

- tetrachloroethene
- trichloroethene
- benzo(a)pyrene
- dibenz(a,h)anthracene
- arsenic

AOI-2A – On-Facility Sewer Lines Area

- tetrachloroethene
- trichloroethene
- arsenic

AOI-3 – Off-Facility Soils

- arsenic

AOI-3A – Off-Facility Sewer Lines Area

- tetrachloroethene
- trichloroethene

"Contamination" as defined in the EI CA725 form is identified in each AOI when the ratio of the highest measured Facility-related concentration at the AOI to the screening criterion exceeds 1 (for inorganics, Facility-related concentrations are those that are higher than the site-specific

[1] Note that certain delineation data for AOI-1 are identified as Off-Facility soil samples and are reported on Table 2-2a.

background levels). Such ratios are highlighted on Table 2-1b and Table 2-2b to facilitate identification of AOIs where soil is considered to meet the definition of "contaminated" for further evaluation under Questions 3 and 4 of the CA725. Question 3 of the CA725 form asks whether there are complete exposure pathways between "contamination" identified under Question 2 and human receptors such that exposures can be reasonably expected under current conditions. Question 4 of the CA725 form asks whether exposures from the complete exposure pathways identified under Question 3 can be reasonably expected to be "significant" or unacceptable.

As indicated on Table 2-1b, when background soil concentrations are considered in the risk-based data screening, potential Facility-related contributions of arsenic in AOI 2 and 2A soils are below these risk-based screening criteria. As a result, arsenic concentrations in these AOIs do not meet the definition of Facility-related "contamination" warranting further evaluation under Questions 3 and 4 of the CA725. Similarly, as indicated on Table 2-2b, when background soil concentrations are considered in the risk-based data screening, potential Facility-related contributions of arsenic in AOI 1 and 3 soils are below these risk-based screening criteria. As a result, arsenic concentrations in these AOIs do not meet the definition of Facility-related "contamination" warranting further evaluation under Questions 3 and 4 of the CA725.

It should be noted that all of the AOIs listed above as having constituent concentrations above screening criteria were evaluated under Question 4 of the CA725; the significance of any potential exposures to Facility-related concentrations is discussed in Section 2.4 of the July 2004 EI CA725 Report, and the cumulative cancer risk and hazard index for all AOIs are presented on Tables 2-16a and 2-16b of the EI CA725 Report. Therefore, the conclusion of the EI CA725 evaluation is unaffected by the adjustment for background concentrations in the screening level assessment conducted for the purpose of answering Question 2 of the CA725 form.

ATTACHED TABLES

Table 2-1a:	On-Facility Soil Screening Results - Without Adjustment for Background Levels of Arsenic, Copper and Zinc
Table 2-1b:	On-Facility Soil Screening Results - With Adjustment for Background Levels of Arsenic, Copper and Zinc
Table 2-2a:	Off-Facility Soil Screening Results - Without Adjustment for Background Levels of Arsenic, Copper and Zinc
Table 2-2b:	Off-Facility Soil Screening Results - With Adjustment for Background Levels of Arsenic, Copper and Zinc

Table 2-1a: On-Facility Soil Screening Results - Without Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	ENVIRON Industrial Soil Volatilization to Indoor Air Criteria (mg/kg)	Industrial Screen-ing Criteria (mg/kg)		Ratio of Max Conc to ENVIRON Industrial Soil Volatilization to Indoor Air Criteria	Ratio of Max Detect to Industrial Screening Criteria
1	VOC	Acetone	67-64-1	ID	34	6	9.80E-03	2.30E-02	4.60E-02		1.4E+06	6.0E+03	nc	3.4E-08	7.7E-06
1	VOC	Benzene	71-43-2	A	38	1	2.90E-03	2.90E-03	2.90E-03		1.4E+02	1.3E+01	c	2.1E-05	2.2E-04
1	VOC	2-Butanone	78-93-3	ID	36	1	3.80E-03	3.80E-03	3.80E-03			2.7E+04	nc		1.4E-07
1	VOC	cis-1,2-Dichloroethene	156-59-2	D	38	3	1.20E-03	3.50E-02	6.00E-02		3.1E+04	1.5E+02	nc	2.0E-06	4.0E-04
1	VOC	trans-1,2-Dichloroethene	156-60-5		38	1	4.90E-04	4.90E-04	4.90E-04		2.0E+04	2.3E+02	nc	2.5E-08	2.1E-06
1	VOC	1,2-Dichloropropane	78-87-5	B2	38	3	4.30E-03	5.70E+01	1.70E+02		2.3E+04	7.4E+00	c	7.4E-03	**2.3E+01**
1	VOC	Ethyl Benzene	100-41-4	D	38	1	4.60E-04	4.60E-04	4.60E-04		7.5E+04	2.0E+02	c	6.2E-09	2.3E-06
1	VOC	Methylene Chloride	75-09-2	B2	38	8	1.00E-03	1.10E-02	7.82E-02		2.7E+03	2.1E+02	c	2.9E-05	3.7E-04
1	VOC	Tetrachloroethene	127-18-4	C-B2	37	5	6.70E-04	7.90E-01	2.50E+00		2.3E+04	3.4E+01	c	1.1E-04	7.4E-02
1	VOC	Toluene	108-88-3	D	38	6	3.80E-04	7.00E-04	1.30E-03		7.9E+04	2.2E+03	nc	1.7E-08	5.9E-07
1	VOC	Trichloroethene	79-01-6	C-B2	37	4	3.60E-03	1.60E-01	5.10E-01		3.4E+04	1.2E+00	c	1.5E-05	4.3E-01
1	VOC	Vinyl Chloride	75-01-4	A	38	1	3.70E-03	3.70E-03	3.70E-03		1.4E+01	7.5E+00	c	2.6E-04	4.9E-04
1	VOC	Xylenes (total)	1330-20-7	ID	38	1	1.10E-03	1.10E-03	1.10E-03		9.2E+04	9.0E+02	nc	1.2E-08	1.2E-06
1	SVOC	Acenaphthylene	208-96-8	D	35	2	3.90E-01	4.20E-01	4.40E-01			2.9E+04	nc		1.5E-05
1	SVOC	Anthracene	120-12-7	D	35	4	2.70E-02	1.30E-01	2.50E-01			2.4E+05	nc		1.0E-06
1	SVOC	Benzo(a)anthracene	56-55-3	B2	35	20	1.30E-02	1.00E+00	4.60E+00			2.1E+01	c		2.2E-01
1	SVOC	Benzo(a)pyrene	50-32-8	B2	35	18	1.10E-02	1.20E+00	4.50E+00			2.1E+00	c		**2.1E+00**
1	SVOC	Benzo(b)fluoranthene	205-99-2	B2	35	20	2.20E-02	1.40E+00	4.80E+00			2.1E+01	c		2.3E-01
1	SVOC	Benzo(g,h,i)perylene	191-24-2	D	35	15	1.20E-02	6.80E-01	2.10E+00			2.9E+04	nc		7.2E-05
1	SVOC	Benzo(k)fluoranthene	207-08-9	B2	35	20	9.10E-03	6.20E-01	2.10E+00			2.1E+02	c		1.0E-02
1	SVOC	bis(2-Ethylhexyl)phthalate	117-81-7	B2	28	3	5.50E-02	1.20E-01	1.90E-01		2.7E+12	1.2E+03	c	7.0E-14	1.6E-04
1	SVOC	Carbazole	86-74-8	B2	28	1	1.80E-01	1.80E-01	1.80E-01			8.6E+02	c		2.1E-04
1	SVOC	Chrysene	218-01-9	B2	35	19	1.40E-02	1.10E+00	3.60E+00			2.1E+03	c		1.7E-03
1	SVOC	Dibenz(a,h)anthracene	53-70-3	B2	35	9	1.10E-02	7.10E-01	1.60E+00			2.1E+00	c		7.6E-01
1	SVOC	Di-n-octylphthalate	117-84-0		28	2	6.90E-02	1.10E-01	1.60E-01			2.5E+04	nc		6.4E-06
1	SVOC	Fluoranthene	206-44-0	D	35	22	3.50E-02	2.40E+00	1.30E+01			2.2E+04	nc		5.9E-04
1	SVOC	Indeno(1,2,3-cd)pyrene	193-39-5	B2	35	18	1.70E-02	8.30E-01	2.80E+00			2.1E+01	c		1.3E-01
1	SVOC	Phenanthrene	85-01-8	D	35	10	4.80E-02	1.00E+00	3.10E+00			2.9E+04	nc		1.1E-04
1	SVOC	Pyrene	129-00-0	D	35	23	2.70E-02	2.50E+00	1.80E+01			2.9E+04	nc		6.2E-04
1	P/PCB	PCBs (total)	1336-36-3	B2	7	1	5.50E-02	5.50E-02	5.50E-02		2.2E+05	7.4E+00	c	2.6E-07	7.4E-03
1	P/PCB	4,4'-DDE	72-55-9	B2	7	1	7.40E-03	7.40E-03	7.40E-03			7.0E+01	c		1.1E-04
1	INORG	Arsenic	7440-38-2	A	20	20	5.50E+00	7.40E+00	1.07E+01	1.5E+01		1.6E+01	c		6.7E-01
1	INORG	Barium	7440-39-3	D	14	14	4.68E+01	8.30E+01	1.99E+02			6.7E+04	nc		3.0E-03
1	INORG	Chromium (total)	7440-47-3		14	14	7.50E+00	1.10E+01	1.68E+01			2.5E+03	nc		6.7E-03
1	INORG	Copper	7440-50-8	D	6	6	1.18E+01	1.50E+01	1.97E+01	2.5E+01		4.1E+04	nc		4.8E-04
1	INORG	Lead	7439-92-1	B2	14	14	1.12E+01	2.40E+01	4.82E+01			7.5E+02	nc		6.4E-02
1	INORG	Mercury	7439-97-6	D	14	1	1.20E-01	1.20E-01	1.20E-01		2.2E+03	1.4E+01	nc	5.5E-05	8.8E-03
1	INORG	Selenium	7782-49-2	D	14	1	8.00E-01	8.00E-01	8.00E-01			5.1E+03	nc		1.6E-04
1	INORG	Zinc	7440-66-6	D	6	6	3.62E+01	4.80E+01	5.83E+01	7.1E+01		3.1E+05	nc		1.9E-04
2	VOC	Acetone	67-64-1	ID	184	27	9.50E-03	1.00E-01	6.80E-01		1.4E+06	6.0E+03	nc	5.0E-07	1.1E-04
2	VOC	Benzene	71-43-2	A	190	4	4.50E-04	1.30E-03	2.40E-03		1.4E+02	1.3E+01	c	1.7E-05	1.8E-04
2	VOC	2-Butanone	78-93-3	ID	188	14	2.00E-03	1.50E-02	4.50E-02			2.7E+04	nc		1.7E-06
2	VOC	Carbon Disulfide	75-15-0		190	2	1.40E-03	7.70E-03	1.40E-02		2.6E+02	1.2E+03	nc	5.3E-05	1.2E-05
2	VOC	Chloroethane	75-00-3		190	1	6.00E-02	6.00E-02	6.00E-02			6.5E+01	c		9.2E-04
2	VOC	Cumene	98-82-8	D	52	2	1.80E-03	6.40E-03	1.10E-02			2.0E+03	nc		5.5E-06
2	VOC	Cyclohexane	110-82-7	ID	52	1	7.70E-04	7.70E-04	7.70E-04			3.2E+04	nc		2.4E-08
2	VOC	1,2-Dichlorobenzene	95-50-1	D	111	3	2.20E-03	2.50E-02	7.00E-02		1.8E+05	4.1E+03	nc	3.9E-07	1.7E-05
2	VOC	1,1-Dichloroethane	75-34-3	C	190	4	1.50E-03	1.70E-02	5.00E-02		1.1E+04	1.7E+03	nc	4.8E-06	2.9E-05

Table 2-1a: On-Facility Soil Screening Results - Without Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	ENVIRON Industrial Soil Volatilization to Indoor Air Criteria (mg/kg)	Industrial Screen-ing Criteria (mg/kg)		Ratio of Max Conc to ENVIRON Industrial Soil Volatilization to Indoor Air Criteria	Ratio of Max Detect to Industrial Screening Criteria
2	VOC	1,1-Dichloroethene	75-35-4	C	190	1	6.20E-03	6.20E-03	6.20E-03		2.2E+02	4.1E+02	nc	2.8E-05	1.5E-05
2	VOC	1,2-Dichloroethene (total)	540-59-0		138	34	5.20E-03	8.10E-01	5.60E+00		2.0E+04	1.5E+02	nc	2.9E-04	3.7E-02
2	VOC	cis-1,2-Dichloroethene	156-59-2	D	190	73	9.00E-04	1.50E+00	2.20E+01		3.1E+04	1.5E+02	nc	7.2E-04	1.5E-01
2	VOC	trans-1,2-Dichloroethene	156-60-5		190	17	1.10E-03	3.40E-02	2.10E-01		2.0E+04	2.3E+02	nc	1.1E-05	9.1E-04
2	VOC	1,2-Dichloropropane	78-87-5	B2	190	5	1.70E-03	1.50E-02	3.20E-02		2.3E+04	7.4E+00	c	1.4E-06	4.3E-03
2	VOC	Ethyl Benzene	100-41-4	D	190	2	4.20E-04	1.90E-02	3.80E-02		7.5E+04	2.0E+02	c	5.1E-07	1.9E-04
2	VOC	Methyl Acetate	79-20-9		52	2	8.50E-02	8.90E-02	9.30E-02			9.2E+04	nc		1.0E-06
2	VOC	4-Methyl-2-pentanone	108-10-1	ID	190	5	2.00E-03	1.40E-02	5.60E-02			2.8E+03	nc		2.0E-05
2	VOC	Methylcyclohexane	108-87-2		52	2	1.10E-03	1.80E-03	2.50E-03			8.7E+03	nc		2.9E-07
2	VOC	Methylene Chloride	75-09-2	B2	190	11	2.10E-03	2.40E-01	2.30E+00		2.7E+03	2.1E+02	c	8.7E-04	1.1E-02
2	VOC	Tetrachloroethene	127-18-4	C-B2	190	75	6.50E-04	5.70E+00	8.20E+01		2.3E+04	3.4E+01	c	3.6E-03	**2.4E+00**
2	VOC	Toluene	108-88-3	D	190	16	5.40E-04	1.30E-02	1.60E-01		7.9E+04	2.2E+03	nc	2.0E-06	7.3E-05
2	VOC	Trichloroethene	79-01-6	C-B2	190	59	9.00E-04	2.90E+00	4.00E+01		3.4E+04	1.2E+00	c	1.2E-03	**3.3E+01**
2	VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		52	16	1.60E-03	4.70E+00	4.90E+01		9.3E+04	6.9E+04	nc	5.3E-04	7.1E-04
2	VOC	Vinyl Chloride	75-01-4	A	190	25	1.40E-03	1.50E-01	9.50E-01		1.4E+01	7.5E+00	c	6.7E-02	1.3E-01
2	VOC	Xylenes (total)	1330-20-7	ID	190	7	1.40E-03	2.80E-02	1.00E-01		9.2E+04	9.0E+02	nc	1.1E-06	1.1E-04
2	SVOC	Acenaphthene	83-32-9		125	1	9.30E-02	9.30E-02	9.30E-02			2.9E+04	nc		3.2E-06
2	SVOC	Acenaphthylene	208-96-8	D	125	4	3.30E-02	1.30E-01	2.30E-01			2.9E+04	nc		7.9E-06
2	SVOC	Anthracene	120-12-7	D	125	2	2.10E-02	3.30E-02	4.40E-02			2.4E+05	nc		1.8E-07
2	SVOC	Benzo(a)anthracene	56-55-3	B2	125	20	5.60E-03	4.60E-01	5.60E+00			2.1E+01	c		2.7E-01
2	SVOC	Benzo(a)pyrene	50-32-8	B2	125	16	5.40E-03	6.00E-01	5.60E+00			2.1E+00	c		**2.7E+00**
2	SVOC	Benzo(b)fluoranthene	205-99-2	B2	125	22	1.80E-03	4.20E-01	5.40E+00			2.1E+01	c		2.6E-01
2	SVOC	Benzo(g,h,i)perylene	191-24-2	D	125	12	7.80E-03	2.90E-01	1.60E+00			2.9E+04	nc		5.5E-05
2	SVOC	Benzo(k)fluoranthene	207-08-9	B2	125	20	2.00E-03	1.80E-01	2.20E+00			2.1E+02	c		1.0E-02
2	SVOC	bis(2-Ethylhexyl)phthalate	117-81-7	B2	39	9	6.90E-02	6.70E-01	3.30E+00		2.7E+12	1.2E+03	c	1.2E-12	2.8E-03
2	SVOC	Chrysene	218-01-9	B2	125	25	7.50E-04	4.10E-01	6.00E+00			2.1E+03	c		2.9E-03
2	SVOC	Dibenz(a,h)anthracene	53-70-3	B2	125	4	9.70E-02	8.70E-01	2.40E+00			2.1E+00	c		**1.1E+00**
2	SVOC	Di-n-butylphthalate	84-74-2	D	39	1	8.20E-02	8.20E-02	8.20E-02		6.4E+11	6.2E+04	nc	1.3E-13	1.3E-06
2	SVOC	Di-n-octylphthalate	117-84-0		39	1	6.60E-02	6.60E-02	6.60E-02			2.5E+04	nc		2.6E-06
2	SVOC	Fluoranthene	206-44-0	D	125	30	1.10E-03	9.40E-01	1.70E+01			2.2E+04	nc		7.7E-04
2	SVOC	Fluorene	86-73-7	D	125	2	8.40E-03	2.20E-02	3.60E-02			2.6E+04	nc		1.4E-06
2	SVOC	Indeno(1,2,3-cd)pyrene	193-39-5	B2	125	18	2.50E-03	3.80E-01	3.50E+00			2.1E+01	c		1.7E-01
2	SVOC	2-Methylnaphthalene	91-57-6	ID	119	1	2.30E+01	2.30E+01	2.30E+01			1.9E+02	nc		1.2E-01
2	SVOC	Naphthalene	91-20-3	C	143	4	4.50E-03	4.30E-02	7.40E-02		7.5E+05	1.9E+02	nc	9.8E-08	3.9E-04
2	SVOC	Phenanthrene	85-01-8	D	125	10	7.55E-03	2.20E+00	1.90E+01			2.9E+04	nc		6.6E-04
2	SVOC	Pyrene	129-00-0	D	125	44	5.90E-03	7.50E-01	2.10E+01			2.9E+04	nc		7.2E-04
2	INORG	Arsenic	7440-38-2	A	117	117	1.10E+00	8.60E+00	2.28E+01	1.5E+01		1.6E+01	c		**1.4E+00**
2	INORG	Barium	7440-39-3	D	98	97	1.22E+01	6.50E+01	1.66E+02			6.7E+04	nc		2.5E-03
2	INORG	Cadmium	7440-43-9	B1	98	9	3.70E-02	3.10E-01	1.60E+00			4.5E+02	nc		3.6E-03
2	INORG	Chromium (total)	7440-47-3		98	98	4.00E+00	1.20E+01	2.32E+01			2.5E+03	nc		9.3E-03
2	INORG	Copper	7440-50-8	D	22	22	4.10E+00	1.60E+01	2.41E+01	2.5E+01		4.1E+04	nc		5.9E-04
2	INORG	Lead	7439-92-1	B2	98	98	1.20E+00	1.20E+01	1.02E+02			7.5E+02	nc		1.4E-01
2	INORG	Mercury	7439-97-6	D	98	6	3.40E-02	1.50E-01	5.50E-01		2.2E+03	1.4E+01	nc	2.5E-04	4.0E-02
2	INORG	Selenium	7782-49-2	D	98	10	5.00E-01	6.60E-01	9.30E-01			5.1E+03	nc		1.8E-04
2	INORG	Zinc	7440-66-6	D	22	22	8.30E+00	4.90E+01	7.38E+01	7.1E+01		3.1E+05	nc		2.4E-04
2A	VOC	Acetone	67-64-1	ID	165	27	6.40E-03	5.50E-02	4.84E-01		1.4E+06	6.0E+03	nc	3.6E-07	8.1E-05
2A	VOC	Benzene	71-43-2	A	170	2	4.40E-04	7.00E-04	9.60E-04		1.4E+02	1.3E+01	c	6.8E-06	7.4E-05
2A	VOC	2-Butanone	78-93-3	ID	169	7	2.30E-03	5.70E-02	3.76E-01			2.7E+04	nc		1.4E-05

Table 2-1a: On-Facility Soil Screening Results - Without Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	ENVIRON Industrial Soil Volatilization to Indoor Air Criteria (mg/kg)	Industrial Screen-ing Criteria (mg/kg)		Ratio of Max Conc to ENVIRON Industrial Soil Volatilization to Indoor Air Criteria	Ratio of Max Detect to Industrial Screening Criteria
2A	VOC	Carbon Disulfide	75-15-0		170	1	2.40E-03	2.40E-03	2.40E-03		2.6E+02	1.2E+03	nc	9.1E-06	2.0E-06
2A	VOC	Chloroform	67-66-3	B2	170	1	9.30E-03	9.30E-03	9.30E-03		2.3E+03	1.2E+01	nc	4.1E-06	7.8E-04
2A	VOC	Chloromethane	74-87-3	D	170	1	2.90E-02	2.90E-02	2.90E-02		8.0E+02	2.7E+01	c	3.6E-05	1.1E-03
2A	VOC	Cumene	98-82-8	D	63	5	6.50E-04	6.00E-02	1.70E-01			2.0E+03	nc		8.5E-05
2A	VOC	Cyclohexane	110-82-7	ID	63	1	2.00E-03	2.00E-03	2.00E-03			3.2E+04	nc		6.3E-08
2A	VOC	Dichlorodifluoromethane	75-71-8		63	2	3.60E-03	7.70E-02	1.50E-01		1.9E+04	3.1E+02	nc	8.0E-06	4.8E-04
2A	VOC	1,1-Dichloroethane	75-34-3	C	169	6	8.70E-04	2.70E-02	9.85E-02		1.1E+04	1.7E+03	nc	9.4E-06	5.8E-05
2A	VOC	1,1-Dichloroethene	75-35-4	C	170	1	2.00E-03	2.00E-03	2.00E-03		2.2E+02	4.1E+02	nc	9.0E-06	4.9E-06
2A	VOC	1,2-Dichloroethene (total)	540-59-0		107	25	5.60E-03	2.00E+00	8.30E+00		2.0E+04	1.5E+02	nc	4.3E-04	5.5E-02
2A	VOC	cis-1,2-Dichloroethene	156-59-2	D	170	59	7.00E-04	1.50E+00	8.30E+00		3.1E+04	1.5E+02	nc	2.7E-04	5.5E-02
2A	VOC	trans-1,2-Dichloroethene	156-60-5		170	10	3.80E-03	4.40E-02	1.10E-01		2.0E+04	2.3E+02	nc	5.6E-06	4.8E-04
2A	VOC	1,2-Dichloropropane	78-87-5	B2	170	5	1.90E-03	2.20E-02	9.79E-02		2.3E+04	7.4E+00	c	4.3E-06	1.3E-02
2A	VOC	Ethyl Benzene	100-41-4	D	170	3	4.80E-04	9.10E-02	2.70E-01		7.5E+04	2.0E+02	c	3.6E-06	1.4E-03
2A	VOC	2-Hexanone	591-78-6		170	1	1.00E-03	1.00E-03	1.00E-03						
2A	VOC	4-Methyl-2-pentanone	108-10-1	ID	170	5	1.90E-03	3.80E-03	9.30E-03			2.8E+03	nc		3.3E-06
2A	VOC	Methylcyclohexane	108-87-2		63	1	2.70E-03	2.70E-03	2.70E-03			8.7E+03	nc		3.1E-07
2A	VOC	Methylene Chloride	75-09-2	B2	170	7	1.00E-03	2.00E-02	1.07E-01		2.7E+03	2.1E+02	c	4.0E-05	5.1E-04
2A	VOC	Tetrachloroethene	127-18-4	C-B2	169	99	7.30E-04	3.90E+01	1.10E+03		2.3E+04	3.4E+01	c	4.8E-02	**3.2E+01**
2A	VOC	Toluene	108-88-3	D	170	23	4.20E-04	2.00E-02	3.00E-01		7.9E+04	2.2E+03	nc	3.8E-06	1.4E-04
2A	VOC	Trichloroethene	79-01-6	C-B2	170	43	5.60E-04	1.80E+00	3.10E+01		3.4E+04	1.2E+00	c	9.2E-04	**2.6E+01**
2A	VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		63	20	2.08E-03	7.30E+01	1.20E+03		9.3E+04	6.9E+04	nc	1.3E-02	1.7E-02
2A	VOC	Vinyl Chloride	75-01-4	A	170	14	1.40E-03	2.30E-01	1.00E+00		1.4E+01	7.5E+00	c	7.0E-02	1.3E-01
2A	VOC	Xylenes (total)	1330-20-7	ID	170	3	3.00E-03	5.40E-01	1.60E+00		9.2E+04	9.0E+02	nc	1.7E-05	1.8E-03
2A	SVOC	Acenaphthylene	208-96-8	D	75	6	3.80E-02	6.30E-01	2.40E+00			2.9E+04	nc		8.3E-05
2A	SVOC	Anthracene	120-12-7	D	75	1	8.10E-03	8.10E-03	8.10E-03			2.4E+05	nc		3.4E-08
2A	SVOC	Benzo(a)anthracene	56-55-3	B2	75	10	7.30E-03	4.60E-02	2.40E-01			2.1E+01	c		1.1E-02
2A	SVOC	Benzo(a)pyrene	50-32-8	B2	75	10	8.20E-03	4.00E-02	1.30E-01			2.1E+00	c		6.2E-02
2A	SVOC	Benzo(b)fluoranthene	205-99-2	B2	75	15	5.80E-03	4.30E-02	2.10E-01			2.1E+01	c		1.0E-02
2A	SVOC	Benzo(g,h,i)perylene	191-24-2	D	75	7	1.10E-02	3.80E-02	6.70E-02			2.9E+04	nc		2.3E-06
2A	SVOC	Benzo(k)fluoranthene	207-08-9	B2	75	17	2.40E-03	2.00E-02	9.50E-02			2.1E+02	c		4.5E-04
2A	SVOC	Chrysene	218-01-9	B2	75	12	2.20E-03	4.10E-02	2.50E-01			2.1E+03	c		1.2E-04
2A	SVOC	Dibenz(a,h)anthracene	53-70-3	B2	75	4	6.20E-03	5.40E-02	1.60E-01			2.1E+00	c		7.6E-02
2A	SVOC	Fluoranthene	206-44-0	D	75	16	8.20E-04	1.20E-01	7.10E-01			2.2E+04	nc		3.2E-05
2A	SVOC	Fluorene	86-73-7	D	75	1	2.30E-02	2.30E-02	2.30E-02			2.6E+04	nc		8.8E-07
2A	SVOC	Indeno(1,2,3-cd)pyrene	193-39-5	B2	75	11	5.80E-03	3.80E-02	1.00E-01			2.1E+01	c		4.8E-03
2A	SVOC	Naphthalene	91-20-3	C	92	3	4.20E-02	1.10E+00	3.20E+00		7.5E+05	1.9E+02	nc	4.2E-06	1.7E-02
2A	SVOC	Phenanthrene	85-01-8	D	75	7	2.50E-03	1.00E-01	5.50E-01			2.9E+04	nc		1.9E-05
2A	SVOC	Pyrene	129-00-0	D	75	25	4.50E-03	1.20E-01	1.20E+00			2.9E+04	nc		4.1E-05
2A	INORG	Arsenic	7440-38-2	A	89	89	2.80E+00	8.20E+00	2.53E+01	1.5E+01		1.6E+01	c		**1.6E+00**
2A	INORG	Barium	7440-39-3	D	64	60	1.78E+01	6.60E+01	1.22E+02			6.7E+04	nc		1.8E-03
2A	INORG	Cadmium	7440-43-9	B1	64	3	7.90E-02	1.30E-01	1.70E-01			4.5E+02	nc		3.8E-04
2A	INORG	Chromium (total)	7440-47-3		64	64	4.00E+00	1.20E+01	2.07E+01			2.5E+03	nc		8.3E-03
2A	INORG	Copper	7440-50-8	D	31	31	8.40E+00	1.50E+01	2.87E+01	2.5E+01		4.1E+04	nc		7.0E-04
2A	INORG	Lead	7439-92-1	B2	64	64	3.70E+00	9.60E+00	1.64E+01			7.5E+02	nc		2.2E-02
2A	INORG	Mercury	7439-97-6	D	64	3	2.30E-02	3.10E-02	3.90E-02		2.2E+03	1.4E+01	nc	1.8E-05	2.9E-03
2A	INORG	Selenium	7782-49-2	D	64	3	6.50E-01	6.90E-01	7.30E-01			5.1E+03	nc		1.4E-04
2A	INORG	Zinc	7440-66-6	D	31	31	2.92E+01	5.10E+01	8.98E+01	7.1E+01		3.1E+05	nc		2.9E-04

Table 2-1a: On-Facility Soil Screening Results - Without Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	ENVIRON Industrial Soil Volatilization to Indoor Air Criteria (mg/kg)	Industrial Screen-ing Criteria (mg/kg)		Ratio of Max Conc to ENVIRON Industrial Soil Volatilization to Indoor Air Criteria	Ratio of Max Detect to Industrial Screening Criteria
	Notes:														
	The Screening Criteria for residential and industrial soil is the lower of the integrated Screening Criteria at:														
		target cancer risk =	**1E-05**												
		target hazard quotient =	**1**												
	The Screening Criteria for Pyrene were used as surrogates for Phenanthrene and Benzo(g,h,i)perylene.														
	The Screening Criteria for Naphthalene were used as surrogates for 2-Methylnaphthalene.														
	The Screening Criteria for cis-1,2-Dichloroethene were used as surrogates for 1,2-Dichloroethene (total).														
	The Screening Criteria for Chromium VI was used as a surrogate for Chromium (total).														
	The concentrations for all PCB isomers were summed before comparing to Polychlorinated biphenyls (PCBs) for cancer effects														
	and Aroclor 1254 for noncancer effects.														
	The concentrations for the Xylene isomers (m/p and o) were summed before comparing to the Screening Criteria.														
	The Screening Criteria for Mercury was calculated by ENVIRON to account for the vapor inhalation pathway using:														
	EPA Region 9 equations, RfC from IRIS, and chemical properties from EPA's Soil Screening Guidance.														
	c - The Screening Criterion is based on cancer risk.														
	nc - The Screening Criterion is based on noncancer effects.														
	Chem Group - Chemical Group														
	Carc Class - EPA Weight-of-Evidence Cancer Classification														

Table 2-1b: On-Facility Soil Screening Results - With Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	ENVIRON Industrial Soil Volatilization to Indoor Air Criteria (mg/kg)	Industrial Screen-ing Criteria (mg/kg)		Ratio of Max Conc to ENVIRON Industrial Soil Volatilization to Indoor Air Criteria	Ratio of Max Site Related Detect to Industrial Screening Criteria
1	VOC	Acetone	67-64-1	ID	34	6	9.80E-03	2.30E-02	4.60E-02		1.4E+06	6.0E+03	nc	3.4E-08	7.7E-06
1	VOC	Benzene	71-43-2	A	38	1	2.90E-03	2.90E-03	2.90E-03		1.4E+02	1.3E+01	c	2.1E-05	2.2E-04
1	VOC	2-Butanone	78-93-3	ID	36	1	3.80E-03	3.80E-03	3.80E-03			2.7E+04	nc		1.4E-07
1	VOC	cis-1,2-Dichloroethene	156-59-2	D	38	3	1.20E-03	3.50E-02	6.00E-02		3.1E+04	1.5E+02	nc	2.0E-06	4.0E-04
1	VOC	trans-1,2-Dichloroethene	156-60-5		38	1	4.90E-04	4.90E-04	4.90E-04		2.0E+04	2.3E+02	nc	2.5E-08	2.1E-06
1	VOC	1,2-Dichloropropane	78-87-5	B2	38	3	4.30E-03	5.70E+01	1.70E+02		2.3E+04	7.4E+00	c	7.4E-03	**2.3E+01**
1	VOC	Ethyl Benzene	100-41-4	D	38	1	4.60E-04	4.60E-04	4.60E-04		7.5E+04	2.0E+02	c	6.2E-09	2.3E-06
1	VOC	Methylene Chloride	75-09-2	B2	38	8	1.00E-03	1.10E-02	7.82E-02		2.7E+03	2.1E+02	c	2.9E-05	3.7E-04
1	VOC	Tetrachloroethene	127-18-4	C-B2	37	5	6.70E-04	7.90E-01	2.50E+00		2.3E+04	3.4E+01	c	1.1E-04	7.4E-02
1	VOC	Toluene	108-88-3	D	38	6	3.80E-04	7.00E-04	1.30E-03		7.9E+04	2.2E+03	nc	1.7E-08	5.9E-07
1	VOC	Trichloroethene	79-01-6	C-B2	37	4	3.60E-03	1.60E-01	5.10E-01		3.4E+04	1.2E+00	c	1.5E-05	4.3E-01
1	VOC	Vinyl Chloride	75-01-4	A	38	1	3.70E-03	3.70E-03	3.70E-03		1.4E+01	7.5E+00	c	2.6E-04	4.9E-04
1	VOC	Xylenes (total)	1330-20-7	ID	38	1	1.10E-03	1.10E-03	1.10E-03		9.2E+04	9.0E+02	nc	1.2E-08	1.2E-06
1	SVOC	Acenaphthylene	208-96-8	D	35	2	3.90E-01	4.20E-01	4.40E-01			2.9E+04	nc		1.5E-05
1	SVOC	Anthracene	120-12-7	D	35	4	2.70E-02	1.30E-01	2.50E-01			2.4E+05	nc		1.0E-06
1	SVOC	Benzo(a)anthracene	56-55-3	B2	35	20	1.30E-02	1.00E+00	4.60E+00			2.1E+01	c		2.2E-01
1	SVOC	Benzo(a)pyrene	50-32-8	B2	35	18	1.10E-02	1.20E+00	4.50E+00			2.1E+00	c		**2.1E+00**
1	SVOC	Benzo(b)fluoranthene	205-99-2	B2	35	20	2.20E-02	1.40E+00	4.80E+00			2.1E+01	c		2.3E-01
1	SVOC	Benzo(g,h,i)perylene	191-24-2	D	35	15	1.20E-02	6.80E-01	2.10E+00			2.9E+04	nc		7.2E-05
1	SVOC	Benzo(k)fluoranthene	207-08-9	B2	35	20	9.10E-03	6.20E-01	2.10E+00			2.1E+02	c		1.0E-02
1	SVOC	bis(2-Ethylhexyl)phthalate	117-81-7	B2	28	3	5.50E-02	1.20E-01	1.90E-01		2.7E+12	1.2E+03	c	7.0E-14	1.6E-04
1	SVOC	Carbazole	86-74-8	B2	28	1	1.80E-01	1.80E-01	1.80E-01			8.6E+02	c		2.1E-04
1	SVOC	Chrysene	218-01-9	B2	35	19	1.40E-02	1.10E+00	3.60E+00			2.1E+03	c		1.7E-03
1	SVOC	Dibenz(a,h)anthracene	53-70-3	B2	35	9	1.10E-02	7.10E-01	1.60E+00			2.1E+00	c		7.6E-01
1	SVOC	Di-n-octylphthalate	117-84-0		28	2	6.90E-02	1.10E-01	1.60E-01			2.5E+04	nc		6.4E-06
1	SVOC	Fluoranthene	206-44-0	D	35	22	3.50E-02	2.40E+00	1.30E+01			2.2E+04	nc		5.9E-04
1	SVOC	Indeno(1,2,3-cd)pyrene	193-39-5	B2	35	18	1.70E-02	8.30E-01	2.80E+00			2.1E+01	c		1.3E-01
1	SVOC	Phenanthrene	85-01-8	D	35	10	4.80E-02	1.00E+00	3.10E+00			2.9E+04	nc		1.1E-04
1	SVOC	Pyrene	129-00-0	D	35	23	2.70E-02	2.50E+00	1.80E+01			2.9E+04	nc		6.2E-04
1	P/PCB	PCBs (total)	1336-36-3	B2	7	1	5.50E-02	5.50E-02	5.50E-02		2.2E+05	7.4E+00	c	2.6E-07	7.4E-03
1	P/PCB	4,4'-DDE	72-55-9	B2	7	1	7.40E-03	7.40E-03	7.40E-03			7.0E+01	c		1.1E-04
1	INORG	Arsenic	7440-38-2	A	20	20	5.50E+00	7.40E+00	1.07E+01	1.5E+01		1.6E+01	c		
1	INORG	Barium	7440-39-3	D	14	14	4.68E+01	8.30E+01	1.99E+02			6.7E+04	nc		3.0E-03
1	INORG	Chromium (total)	7440-47-3		14	14	7.50E+00	1.10E+01	1.68E+01			2.5E+03	nc		6.7E-03
1	INORG	Copper	7440-50-8	D	6	6	1.18E+01	1.50E+01	1.97E+01	2.5E+01		4.1E+04	nc		
1	INORG	Lead	7439-92-1	B2	14	14	1.12E+01	2.40E+01	4.82E+01			7.5E+02	nc		6.4E-02
1	INORG	Mercury	7439-97-6	D	14	1	1.20E-01	1.20E-01	1.20E-01		2.2E+03	1.4E+01	nc	5.5E-05	8.8E-03
1	INORG	Selenium	7782-49-2	D	14	1	8.00E-01	8.00E-01	8.00E-01			5.1E+03	nc		1.6E-04
1	INORG	Zinc	7440-66-6	D	6	6	3.62E+01	4.80E+01	5.83E+01	7.1E+01		3.1E+05	nc		
2	VOC	Acetone	67-64-1	ID	184	27	9.50E-03	1.00E-01	6.80E-01		1.4E+06	6.0E+03	nc	5.0E-07	1.1E-04
2	VOC	Benzene	71-43-2	A	190	4	4.50E-04	1.30E-03	2.40E-03		1.4E+02	1.3E+01	c	1.7E-05	1.8E-04
2	VOC	2-Butanone	78-93-3	ID	188	14	2.00E-03	1.50E-02	4.50E-02			2.7E+04	nc		1.7E-06
2	VOC	Carbon Disulfide	75-15-0		190	2	1.40E-03	7.70E-03	1.40E-02		2.6E+02	1.2E+03	nc	5.3E-05	1.2E-05
2	VOC	Chloroethane	75-00-3		190	1	6.00E-02	6.00E-02	6.00E-02			6.5E+01	c		9.2E-04
2	VOC	Cumene	98-82-8	D	52	2	1.80E-03	6.40E-03	1.10E-02			2.0E+03	nc		5.5E-06
2	VOC	Cyclohexane	110-82-7	ID	52	1	7.70E-04	7.70E-04	7.70E-04			3.2E+04	nc		2.4E-08
2	VOC	1,2-Dichlorobenzene	95-50-1	D	111	3	2.20E-03	2.50E-02	7.00E-02		1.8E+05	4.1E+03	nc	3.9E-07	1.7E-05
2	VOC	1,1-Dichloroethane	75-34-3	C	190	4	1.50E-03	1.70E-02	5.00E-02		1.1E+04	1.7E+03	nc	4.8E-06	2.9E-05

Table 2-1b: On-Facility Soil Screening Results - With Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	ENVIRON Industrial Soil Volatilization to Indoor Air Criteria (mg/kg)	Industrial Screen-ing Criteria (mg/kg)		Ratio of Max Conc to ENVIRON Industrial Soil Volatilization to Indoor Air Criteria	Ratio of Max Site Related Detect to Industrial Screening Criteria
2	VOC	1,1-Dichloroethene	75-35-4	C	190	1	6.20E-03	6.20E-03	6.20E-03		2.2E+02	4.1E+02	nc	2.8E-05	1.5E-05
2	VOC	1,2-Dichloroethene (total)	540-59-0		138	34	5.20E-03	8.10E-01	5.60E+00		2.0E+04	1.5E+02	nc	2.9E-04	3.7E-02
2	VOC	cis-1,2-Dichloroethene	156-59-2	D	190	73	9.00E-04	1.50E+00	2.20E+01		3.1E+04	1.5E+02	nc	7.2E-04	1.5E-01
2	VOC	trans-1,2-Dichloroethene	156-60-5		190	17	1.10E-03	3.40E-02	2.10E-01		2.0E+04	2.3E+02	nc	1.1E-05	9.1E-04
2	VOC	1,2-Dichloropropane	78-87-5	B2	190	5	1.70E-03	1.50E-02	3.20E-02		2.3E+04	7.4E+00	c	1.4E-06	4.3E-03
2	VOC	Ethyl Benzene	100-41-4	D	190	2	4.20E-04	1.90E-02	3.80E-02		7.5E+04	2.0E+02	c	5.1E-07	1.9E-04
2	VOC	Methyl Acetate	79-20-9		52	2	8.50E-02	8.90E-02	9.30E-02			9.2E+04	nc		1.0E-06
2	VOC	4-Methyl-2-pentanone	108-10-1	ID	190	5	2.00E-03	1.40E-02	5.60E-02			2.8E+03	nc		2.0E-05
2	VOC	Methylcyclohexane	108-87-2		52	2	1.10E-03	1.80E-03	2.50E-03			8.7E+03	nc		2.9E-07
2	VOC	Methylene Chloride	75-09-2	B2	190	11	2.10E-03	2.40E-01	2.30E+00		2.7E+03	2.1E+02	c	8.7E-04	1.1E-02
2	VOC	Tetrachloroethene	127-18-4	C-B2	190	75	6.50E-04	5.70E+00	8.20E+01		2.3E+04	3.4E+01	c	3.6E-03	**2.4E+00**
2	VOC	Toluene	108-88-3	D	190	16	5.40E-04	1.30E-02	1.60E-01		7.9E+04	2.2E+03	nc	2.0E-06	7.3E-05
2	VOC	Trichloroethene	79-01-6	C-B2	190	59	9.00E-04	2.90E+00	4.00E+01		3.4E+04	1.2E+00	c	1.2E-03	**3.3E+01**
2	VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		52	16	1.60E-03	4.70E+00	4.90E+01		9.3E+04	6.9E+04	nc	5.3E-04	7.1E-04
2	VOC	Vinyl Chloride	75-01-4	A	190	25	1.40E-03	1.50E-01	9.50E-01		1.4E+01	7.5E+00	c	6.7E-02	1.3E-01
2	VOC	Xylenes (total)	1330-20-7	ID	190	7	1.40E-03	2.80E-02	1.00E-01		9.2E+04	9.0E+02	nc	1.1E-06	1.1E-04
2	SVOC	Acenaphthene	83-32-9		125	1	9.30E-02	9.30E-02	9.30E-02			2.9E+04	nc		3.2E-06
2	SVOC	Acenaphthylene	208-96-8	D	125	4	3.30E-02	1.30E-01	2.30E-01			2.9E+04	nc		7.9E-06
2	SVOC	Anthracene	120-12-7	D	125	2	2.10E-02	3.30E-02	4.40E-02			2.4E+05	nc		1.8E-07
2	SVOC	Benzo(a)anthracene	56-55-3	B2	125	20	5.60E-03	4.60E-01	5.60E+00			2.1E+01	c		2.7E-01
2	SVOC	Benzo(a)pyrene	50-32-8	B2	125	16	5.40E-03	6.00E-01	5.60E+00			2.1E+00	c		**2.7E+00**
2	SVOC	Benzo(b)fluoranthene	205-99-2	B2	125	22	1.80E-03	4.20E-01	5.40E+00			2.1E+01	c		2.6E-01
2	SVOC	Benzo(g,h,i)perylene	191-24-2	D	125	12	7.80E-03	2.90E-01	1.60E+00			2.9E+04	nc		5.5E-05
2	SVOC	Benzo(k)fluoranthene	207-08-9	B2	125	20	2.00E-03	1.80E-01	2.20E+00			2.1E+02	c		1.0E-02
2	SVOC	bis(2-Ethylhexyl)phthalate	117-81-7	B2	39	9	6.90E-02	6.70E-01	3.30E+00		2.7E+12	1.2E+03	c	1.2E-12	2.8E-03
2	SVOC	Chrysene	218-01-9	B2	125	25	7.50E-04	4.10E-01	6.00E+00			2.1E+03	c		2.9E-03
2	SVOC	Dibenz(a,h)anthracene	53-70-3	B2	125	4	9.70E-02	8.70E-01	2.40E+00			2.1E+00	c		**1.1E+00**
2	SVOC	Di-n-butylphthalate	84-74-2	D	39	1	8.20E-02	8.20E-02	8.20E-02		6.4E+11	6.2E+04	nc	1.3E-13	1.3E-06
2	SVOC	Di-n-octylphthalate	117-84-0		39	1	6.60E-02	6.60E-02	6.60E-02			2.5E+04	nc		2.6E-06
2	SVOC	Fluoranthene	206-44-0	D	125	30	1.10E-03	9.40E-01	1.70E+01			2.2E+04	nc		7.7E-04
2	SVOC	Fluorene	86-73-7	D	125	2	8.40E-03	2.20E-02	3.60E-02			2.6E+04	nc		1.4E-06
2	SVOC	Indeno(1,2,3-cd)pyrene	193-39-5	B2	125	18	2.50E-03	3.80E-01	3.50E+00			2.1E+01	c		1.7E-01
2	SVOC	2-Methylnaphthalene	91-57-6	ID	119	1	2.30E+01	2.30E+01	2.30E+01			1.9E+02	nc		1.2E-01
2	SVOC	Naphthalene	91-20-3	C	143	4	4.50E-03	4.30E-02	7.40E-02		7.5E+05	1.9E+02	nc	9.8E-08	3.9E-04
2	SVOC	Phenanthrene	85-01-8	D	125	10	7.55E-03	2.20E+00	1.90E+01			2.9E+04	nc		6.6E-04
2	SVOC	Pyrene	129-00-0	D	125	44	5.90E-03	7.50E-01	2.10E+01			2.9E+04	nc		7.2E-04
2	INORG	Arsenic	7440-38-2	A	117	117	1.10E+00	8.60E+00	2.28E+01	1.5E+01		1.6E+01	c		5.1E-01
2	INORG	Barium	7440-39-3	D	98	97	1.22E+01	6.50E+01	1.66E+02			6.7E+04	nc		2.5E-03
2	INORG	Cadmium	7440-43-9	B1	98	9	3.70E-02	3.10E-01	1.60E+00			4.5E+02	nc		3.6E-03
2	INORG	Chromium (total)	7440-47-3		98	98	4.00E+00	1.20E+01	2.32E+01			2.5E+03	nc		9.3E-03
2	INORG	Copper	7440-50-8	D	22	22	4.10E+00	1.60E+01	2.41E+01	2.5E+01		4.1E+04	nc		
2	INORG	Lead	7439-92-1	B2	98	98	1.20E+00	1.20E+01	1.02E+02			7.5E+02	nc		1.4E-01
2	INORG	Mercury	7439-97-6	D	98	6	3.40E-02	1.50E-01	5.50E-01		2.2E+03	1.4E+01	nc	2.5E-04	4.0E-02
2	INORG	Selenium	7782-49-2	D	98	10	5.00E-01	6.60E-01	9.30E-01			5.1E+03	nc		1.8E-04
2	INORG	Zinc	7440-66-6	D	22	22	8.30E+00	4.90E+01	7.38E+01	7.1E+01		3.1E+05	nc		9.3E-06
2A	VOC	Acetone	67-64-1	ID	165	27	6.40E-03	5.50E-02	4.84E-01		1.4E+06	6.0E+03	nc	3.6E-07	8.1E-05
2A	VOC	Benzene	71-43-2	A	170	2	4.40E-04	7.00E-04	9.60E-04		1.4E+02	1.3E+01	c	6.8E-06	7.4E-05
2A	VOC	2-Butanone	78-93-3	ID	169	7	2.30E-03	5.70E-02	3.76E-01			2.7E+04	nc		1.4E-05

Table 2-1b: On-Facility Soil Screening Results - With Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	ENVIRON Industrial Soil Volatilization to Indoor Air Criteria (mg/kg)	Industrial Screen-ing Criteria (mg/kg)		Ratio of Max Conc to ENVIRON Industrial Soil Volatilization to Indoor Air Criteria	Ratio of Max Site Related Detect to Industrial Screening Criteria
2A	VOC	Carbon Disulfide	75-15-0		170	1	2.40E-03	2.40E-03	2.40E-03		2.6E+02	1.2E+03	nc	9.1E-06	2.0E-06
2A	VOC	Chloroform	67-66-3	B2	170	1	9.30E-03	9.30E-03	9.30E-03		2.3E+03	1.2E+01	nc	4.1E-06	7.8E-04
2A	VOC	Chloromethane	74-87-3	D	170	1	2.90E-02	2.90E-02	2.90E-02		8.0E+02	2.7E+01	c	3.6E-05	1.1E-03
2A	VOC	Cumene	98-82-8	D	63	5	6.50E-04	6.00E-02	1.70E-01			2.0E+03	nc		8.5E-05
2A	VOC	Cyclohexane	110-82-7	ID	63	1	2.00E-03	2.00E-03	2.00E-03			3.2E+04	nc		6.3E-08
2A	VOC	Dichlorodifluoromethane	75-71-8		63	2	3.60E-03	7.70E-02	1.50E-01		1.9E+04	3.1E+02	nc	8.0E-06	4.8E-04
2A	VOC	1,1-Dichloroethane	75-34-3	C	169	6	8.70E-04	2.70E-02	9.85E-02		1.1E+04	1.7E+03	nc	9.4E-06	5.8E-05
2A	VOC	1,1-Dichloroethene	75-35-4	C	170	1	2.00E-03	2.00E-03	2.00E-03		2.2E+02	4.1E+02	nc	9.0E-06	4.9E-06
2A	VOC	1,2-Dichloroethene (total)	540-59-0		107	25	5.60E-03	2.00E+00	8.30E+00		2.0E+04	1.5E+02	nc	4.3E-04	5.5E-02
2A	VOC	cis-1,2-Dichloroethene	156-59-2	D	170	59	7.00E-04	1.50E+00	8.30E+00		3.1E+04	1.5E+02	nc	2.7E-04	5.5E-02
2A	VOC	trans-1,2-Dichloroethene	156-60-5		170	10	3.80E-03	4.40E-02	1.10E-01		2.0E+04	2.3E+02	nc	5.6E-06	4.8E-04
2A	VOC	1,2-Dichloropropane	78-87-5	B2	170	5	1.90E-03	2.20E-02	9.79E-02		2.3E+04	7.4E+00	c	4.3E-06	1.3E-02
2A	VOC	Ethyl Benzene	100-41-4	D	170	3	4.80E-04	9.10E-02	2.70E-01		7.5E+04	2.0E+02	c	3.6E-06	1.4E-03
2A	VOC	2-Hexanone	591-78-6		170	1	1.00E-03	1.00E-03	1.00E-03						
2A	VOC	4-Methyl-2-pentanone	108-10-1	ID	170	5	1.90E-03	3.80E-03	9.30E-03			2.8E+03	nc		3.3E-06
2A	VOC	Methylcyclohexane	108-87-2		63	1	2.70E-03	2.70E-03	2.70E-03			8.7E+03	nc		3.1E-07
2A	VOC	Methylene Chloride	75-09-2	B2	170	7	1.00E-03	2.00E-02	1.07E-01		2.7E+03	2.1E+02	c	4.0E-05	5.1E-04
2A	VOC	Tetrachloroethene	127-18-4	C-B2	169	99	7.30E-04	3.90E+01	1.10E+03		2.3E+04	3.4E+01	c	4.8E-02	**3.2E+01**
2A	VOC	Toluene	108-88-3	D	170	23	4.20E-04	2.00E-02	3.00E-01		7.9E+04	2.2E+03	nc	3.8E-06	1.4E-04
2A	VOC	Trichloroethene	79-01-6	C-B2	170	43	5.60E-04	1.80E+00	3.10E+01		3.4E+04	1.2E+00	c	9.2E-04	**2.6E+01**
2A	VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		63	20	2.08E-03	7.30E+01	1.20E+03		9.3E+04	6.9E+04	nc	1.3E-02	1.7E-02
2A	VOC	Vinyl Chloride	75-01-4	A	170	14	1.40E-03	2.30E-01	1.00E+00		1.4E+01	7.5E+00	c	7.0E-02	1.3E-01
2A	VOC	Xylenes (total)	1330-20-7	ID	170	3	3.00E-03	5.40E-01	1.60E+00		9.2E+04	9.0E+02	nc	1.7E-05	1.8E-03
2A	SVOC	Acenaphthylene	208-96-8	D	75	6	3.80E-02	6.30E-01	2.40E+00			2.9E+04	nc		8.3E-05
2A	SVOC	Anthracene	120-12-7	D	75	1	8.10E-03	8.10E-03	8.10E-03			2.4E+05	nc		3.4E-08
2A	SVOC	Benzo(a)anthracene	56-55-3	B2	75	10	7.30E-03	4.60E-02	2.40E-01			2.1E+01	c		1.1E-02
2A	SVOC	Benzo(a)pyrene	50-32-8	B2	75	10	8.20E-03	4.00E-02	1.30E-01			2.1E+00	c		6.2E-02
2A	SVOC	Benzo(b)fluoranthene	205-99-2	B2	75	15	5.80E-03	4.30E-02	2.10E-01			2.1E+01	c		1.0E-02
2A	SVOC	Benzo(g,h,i)perylene	191-24-2	D	75	7	1.10E-02	3.80E-02	6.70E-02			2.9E+04	nc		2.3E-06
2A	SVOC	Benzo(k)fluoranthene	207-08-9	B2	75	17	2.40E-03	2.00E-02	9.50E-02			2.1E+02	c		4.5E-04
2A	SVOC	Chrysene	218-01-9	B2	75	12	2.20E-03	4.10E-02	2.50E-01			2.1E+03	c		1.2E-04
2A	SVOC	Dibenz(a,h)anthracene	53-70-3	B2	75	4	6.20E-03	5.40E-02	1.60E-01			2.1E+00	c		7.6E-02
2A	SVOC	Fluoranthene	206-44-0	D	75	16	8.20E-04	1.20E-01	7.10E-01			2.2E+04	nc		3.2E-05
2A	SVOC	Fluorene	86-73-7	D	75	1	2.30E-02	2.30E-02	2.30E-02			2.6E+04	nc		8.8E-07
2A	SVOC	Indeno(1,2,3-cd)pyrene	193-39-5	B2	75	11	5.80E-03	3.80E-02	1.00E-01			2.1E+01	c		4.8E-03
2A	SVOC	Naphthalene	91-20-3	C	92	3	4.20E-02	1.10E+00	3.20E+00		7.5E+05	1.9E+02	nc	4.2E-06	1.7E-02
2A	SVOC	Phenanthrene	85-01-8	D	75	7	2.50E-03	1.00E-01	5.50E-01			2.9E+04	nc		1.9E-05
2A	SVOC	Pyrene	129-00-0	D	75	25	4.50E-03	1.20E-01	1.20E+00			2.9E+04	nc		4.1E-05
2A	INORG	Arsenic	7440-38-2	A	89	89	2.80E+00	8.20E+00	2.53E+01	1.5E+01		1.6E+01	c		6.6E-01
2A	INORG	Barium	7440-39-3	D	64	60	1.78E+01	6.60E+01	1.22E+02			6.7E+04	nc		1.8E-03
2A	INORG	Cadmium	7440-43-9	B1	64	3	7.90E-02	1.30E-01	1.70E-01			4.5E+02	nc		3.8E-04
2A	INORG	Chromium (total)	7440-47-3		64	64	4.00E+00	1.20E+01	2.07E+01			2.5E+03	nc		8.3E-03
2A	INORG	Copper	7440-50-8	D	31	31	8.40E+00	1.50E+01	2.87E+01	2.5E+01		4.1E+04	nc		8.8E-05
2A	INORG	Lead	7439-92-1	B2	64	64	3.70E+00	9.60E+00	1.64E+01			7.5E+02	nc		2.2E-02
2A	INORG	Mercury	7439-97-6	D	64	3	2.30E-02	3.10E-02	3.90E-02		2.2E+03	1.4E+01	nc	1.8E-05	2.9E-03
2A	INORG	Selenium	7782-49-2	D	64	3	6.50E-01	6.90E-01	7.30E-01			5.1E+03	nc		1.4E-04
2A	INORG	Zinc	7440-66-6	D	31	31	2.92E+01	5.10E+01	8.98E+01	7.1E+01		3.1E+05	nc		6.1E-05

Table 2-1b: On-Facility Soil Screening Results - With Adjustment for Background Levels of Arsenic, Copper and Zinc Vernay Laboratories Inc. Yellow Springs, Ohio															
Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	ENVIRON Industrial Soil Volatilization to Indoor Air Criteria (mg/kg)	Industrial Screen-ing Criteria (mg/kg)		Ratio of Max Conc to ENVIRON Industrial Soil Volatilization to Indoor Air Criteria	Ratio of Max Site Related Detect to Industrial Screening Criteria
	Notes:														
	The Screening Criteria for residential and industrial soil is the lower of the integrated Screening Criteria at:														
		target cancer risk =	**1E-05**												
		target hazard quotient =	**1**												
	The Screening Criteria for Pyrene were used as surrogates for Phenanthrene and Benzo(g,h,i)perylene.														
	The Screening Criteria for Naphthalene were used as surrogates for 2-Methylnaphthalene.														
	The Screening Criteria for cis-1,2-Dichloroethene were used as surrogates for 1,2-Dichloroethene (total).														
	The Screening Criteria for Chromium VI was used as a surrogate for Chromium (total).														
	The concentrations for all PCB isomers were summed before comparing to Polychlorinated biphenyls (PCBs) for cancer effects														
	and Aroclor 1254 for noncancer effects.														
	The concentrations for the Xylene isomers (m/p and o) were summed before comparing to the Screening Criteria.														
	The Screening Criteria for Mercury was calculated by ENVIRON to account for the vapor inhalation pathway using:														
	EPA Region 9 equations, RfC from IRIS, and chemical properties from EPA's Soil Screening Guidance.														
	c - The Screening Criterion is based on cancer risk.														
	nc - The Screening Criterion is based on noncancer effects.														
	Chem Group - Chemical Group														
	Carc Class - EPA Weight-of-Evidence Cancer Classification														

Table 2-2a: Off-Facility Soil Screening Results - Without Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	Residential Screening Criteria (mg/kg)		Ind Screening Criteria (mg/kg)		Ratio of Max Detect to Residential Screening Criteria	Ratio of Max Detect to Ind Criteria
1	VOC	Toluene	108-88-3	D	3	2	3.90E-04	4.10E-04	4.20E-04		6.6E+02	nc	2.2E+03	nc	6.4E-07	1.9E-07
1	SVOC	Acenaphthylene	208-96-8	D	2	1	9.40E-02	9.40E-02	9.40E-02		2.3E+03	nc	2.9E+04	nc	4.1E-05	3.2E-06
1	SVOC	Anthracene	120-12-7	D	2	1	4.90E-02	4.90E-02	4.90E-02		2.2E+04	nc	2.4E+05	nc	2.2E-06	2.0E-07
1	SVOC	Benzo(a)anthracene	56-55-3	B2	2	1	6.40E-01	6.40E-01	6.40E-01		6.2E+00	c	2.1E+01	c	1.0E-01	3.0E-02
1	SVOC	Benzo(a)pyrene	50-32-8	B2	2	1	9.10E-01	9.10E-01	9.10E-01		6.2E-01	c	2.1E+00	c	**1.5E+00**	4.3E-01
1	SVOC	Benzo(b)fluoranthene	205-99-2	B2	2	1	1.10E+00	1.10E+00	1.10E+00		6.2E+00	c	2.1E+01	c	1.8E-01	5.2E-02
1	SVOC	Benzo(g,h,i)perylene	191-24-2	D	2	1	5.90E-01	5.90E-01	5.90E-01		2.3E+03	nc	2.9E+04	nc	2.6E-04	2.0E-05
1	SVOC	Benzo(k)fluoranthene	207-08-9	B2	2	1	4.80E-01	4.80E-01	4.80E-01		6.2E+01	c	2.1E+02	c	7.7E-03	2.3E-03
1	SVOC	Chrysene	218-01-9	B2	2	1	8.30E-01	8.30E-01	8.30E-01		6.2E+02	c	2.1E+03	c	1.3E-03	4.0E-04
1	SVOC	Dibenz(a,h)anthracene	53-70-3	B2	2	1	1.70E-01	1.70E-01	1.70E-01		6.2E-01	c	2.1E+00	c	2.7E-01	8.1E-02
1	SVOC	Fluoranthene	206-44-0	D	2	1	1.30E+00	1.30E+00	1.30E+00		2.3E+03	nc	2.2E+04	nc	5.7E-04	5.9E-05
1	SVOC	Indeno(1,2,3-cd)pyrene	193-39-5	B2	2	1	5.20E-01	5.20E-01	5.20E-01		6.2E+00	c	2.1E+01	c	8.4E-02	2.5E-02
1	SVOC	Phenanthrene	85-01-8	D	2	1	2.30E-01	2.30E-01	2.30E-01		2.3E+03	nc	2.9E+04	nc	1.0E-04	7.9E-06
1	SVOC	Pyrene	129-00-0	D	2	1	1.10E+00	1.10E+00	1.10E+00		2.3E+03	nc	2.9E+04	nc	4.8E-04	3.8E-05
1	INORG	Arsenic	7440-38-2	A	2	2	6.00E+00	8.30E+00	1.06E+01	1.5E+01	3.9E+00	c	1.6E+01	c	**2.7E+00**	6.6E-01
1	INORG	Copper	7440-50-8	D	2	2	9.80E+00	1.10E+01	1.26E+01	2.5E+01	3.1E+03	nc	4.1E+04	nc	4.1E-03	3.1E-04
1	INORG	Zinc	7440-66-6	D	2	2	3.10E+01	3.70E+01	4.35E+01	7.1E+01	2.3E+04	nc	3.1E+05	nc	1.9E-03	1.4E-04
3	VOC	2-Butanone	78-93-3	ID	7	1	1.90E-03	1.90E-03	1.90E-03		7.3E+03	nc	2.7E+04	nc	2.6E-07	7.0E-08
3	VOC	Methylene Chloride	75-09-2	B2	7	4	3.90E-03	6.90E-03	1.10E-02		9.1E+01	c	2.1E+02	c	1.2E-04	5.2E-05
3	VOC	Toluene	108-88-3	D	7	1	5.80E-04	5.80E-04	5.80E-04		6.6E+02	nc	2.2E+03	nc	8.8E-07	2.6E-07
3	INORG	Arsenic	7440-38-2	A	1	1	6.80E+00	6.80E+00	6.80E+00	1.5E+01	3.9E+00	c	1.6E+01	c	**1.7E+00**	4.3E-01
3	INORG	Barium	7440-39-3	D	1	1	3.25E+01	3.30E+01	3.25E+01		5.4E+03	nc	6.7E+04	nc	6.0E-03	4.9E-04
3	INORG	Chromium (total)	7440-47-3		1	1	9.60E+00	9.60E+00	9.60E+00		2.2E+02	nc	2.5E+03	nc	4.4E-02	3.8E-03
3	INORG	Lead	7439-92-1	B2	1	1	6.90E+00	6.90E+00	6.90E+00		4.0E+02	nc	7.5E+02	nc	1.7E-02	9.2E-03
3A	VOC	1,3-Dichlorobenzene	541-73-1	D	33	1	1.67E-03	1.70E-03	1.67E-03		1.6E+01	nc	6.3E+01	nc	1.0E-04	2.7E-05
3A	VOC	1,4-Dichlorobenzene	106-46-7	C	33	1	1.68E-03	1.70E-03	1.68E-03		3.5E+01	c	7.9E+01	c	4.8E-05	2.1E-05
3A	VOC	1,1-Dichloroethene	75-35-4	C	33	1	2.10E-03	2.10E-03	2.10E-03		1.2E+02	nc	4.1E+02	nc	1.8E-05	5.1E-06
3A	VOC	cis-1,2-Dichloroethene	156-59-2	D	33	2	2.90E-03	5.50E-03	8.10E-03		4.3E+01	nc	1.5E+02	nc	1.9E-04	5.4E-05
3A	VOC	trans-1,2-Dichloroethene	156-60-5		33	1	1.00E-03	1.00E-03	1.00E-03		7.0E+01	nc	2.3E+02	nc	1.4E-05	4.3E-06
3A	VOC	Tetrachloroethene	127-18-4	C-B2	33	8	1.10E-02	5.10E+01	4.00E+02		1.5E+01	c	3.4E+01	c	**2.7E+01**	**1.2E+01**
3A	VOC	Toluene	108-88-3	D	33	12	4.30E-04	7.90E-04	1.50E-03		6.6E+02	nc	2.2E+03	nc	2.3E-06	6.8E-07
3A	VOC	Trichloroethene	79-01-6	C-B2	33	3	4.20E-04	4.00E+00	1.20E+01		5.3E-01	c	1.2E+00	c	**2.3E+01**	**1.0E+01**

Notes:

The Screening Criteria for residential and industrial soil is the lower of the integrated Screening Criteria at:

target cancer risk = **1E-05**

target hazard quotient = **1**

The Screening Criteria for Pyrene were used as surrogates for Phenanthrene and Benzo(g,h,i)perylene.

The Screening Criteria for cis-1,2-Dichloroethene were used as surrogates for 1,2-Dichloroethene (total).

The Screening Criteria for Chromium VI was used as a surrogate for Chromium (total).

c - The Screening Criterion is based on cancer risk.

nc - The Screening Criterion is based on noncancer effects.

Chem Group - Chemical Group

Carc Class - EPA Weight-of-Evidence Cancer Classification

Table 2-2b: Off-Facility Soil Screening Results - With Adjustment for Background Levels of Arsenic, Copper and Zinc
Vernay Laboratories Inc. Yellow Springs, Ohio

Area	Chem Group	Chemical	CASRN	Carc Class	Analyzed	Detected	Min Detected (mg/kg)	Mean Detected (mg/kg)	Max Detected (mg/kg)	Site Specific Background (mg/kg)	Residential Screening Criteria (mg/kg)		Ind Screening Criteria (mg/kg)		Ratio of Max Detect to Residential Screening Criteria	Ratio of Max Detect to Ind Criteria
1	VOC	Toluene	108-88-3	D	3	2	3.90E-04	4.10E-04	4.20E-04		6.6E+02	nc	2.2E+03	nc	6.4E-07	1.9E-07
1	SVOC	Acenaphthylene	208-96-8	D	2	1	9.40E-02	9.40E-02	9.40E-02		2.3E+03	nc	2.9E+04	nc	4.1E-05	3.2E-06
1	SVOC	Anthracene	120-12-7	D	2	1	4.90E-02	4.90E-02	4.90E-02		2.2E+04	nc	2.4E+05	nc	2.2E-06	2.0E-07
1	SVOC	Benzo(a)anthracene	56-55-3	B2	2	1	6.40E-01	6.40E-01	6.40E-01		6.2E+00	c	2.1E+01	c	1.0E-01	3.0E-02
1	SVOC	Benzo(a)pyrene	50-32-8	B2	2	1	9.10E-01	9.10E-01	9.10E-01		6.2E-01	c	2.1E+00	c	**1.5E+00**	4.3E-01
1	SVOC	Benzo(b)fluoranthene	205-99-2	B2	2	1	1.10E+00	1.10E+00	1.10E+00		6.2E+00	c	2.1E+01	c	1.8E-01	5.2E-02
1	SVOC	Benzo(g,h,i)perylene	191-24-2	D	2	1	5.90E-01	5.90E-01	5.90E-01		2.3E+03	nc	2.9E+04	nc	2.6E-04	2.0E-05
1	SVOC	Benzo(k)fluoranthene	207-08-9	B2	2	1	4.80E-01	4.80E-01	4.80E-01		6.2E+01	c	2.1E+02	c	7.7E-03	2.3E-03
1	SVOC	Chrysene	218-01-9	B2	2	1	8.30E-01	8.30E-01	8.30E-01		6.2E+02	c	2.1E+03	c	1.3E-03	4.0E-04
1	SVOC	Dibenz(a,h)anthracene	53-70-3	B2	2	1	1.70E-01	1.70E-01	1.70E-01		6.2E-01	c	2.1E+00	c	2.7E-01	8.1E-02
1	SVOC	Fluoranthene	206-44-0	D	2	1	1.30E+00	1.30E+00	1.30E+00		2.3E+03	nc	2.2E+04	nc	5.7E-04	5.9E-05
1	SVOC	Indeno(1,2,3-cd)pyrene	193-39-5	B2	2	1	5.20E-01	5.20E-01	5.20E-01		6.2E+00	c	2.1E+01	c	8.4E-02	2.5E-02
1	SVOC	Phenanthrene	85-01-8	D	2	1	2.30E-01	2.30E-01	2.30E-01		2.3E+03	nc	2.9E+04	nc	1.0E-04	7.9E-06
1	SVOC	Pyrene	129-00-0	D	2	1	1.10E+00	1.10E+00	1.10E+00		2.3E+03	nc	2.9E+04	nc	4.8E-04	3.8E-05
1	INORG	Arsenic	7440-38-2	A	2	2	6.00E+00	8.30E+00	1.06E+01	1.5E+01	3.9E+00	c	1.6E+01	c		
1	INORG	Copper	7440-50-8	D	2	2	9.80E+00	1.10E+01	1.26E+01	2.5E+01	3.1E+03	nc	4.1E+04	nc		
1	INORG	Zinc	7440-66-6	D	2	2	3.10E+01	3.70E+01	4.35E+01	7.1E+01	2.3E+04	nc	3.1E+05	nc		
3	VOC	2-Butanone	78-93-3	ID	7	1	1.90E-03	1.90E-03	1.90E-03		7.3E+03	nc	2.7E+04	nc	2.6E-07	7.0E-08
3	VOC	Methylene Chloride	75-09-2	B2	7	4	3.90E-03	6.90E-03	1.10E-02		9.1E+01	c	2.1E+02	c	1.2E-04	5.2E-05
3	VOC	Toluene	108-88-3	D	7	1	5.80E-04	5.80E-04	5.80E-04		6.6E+02	nc	2.2E+03	nc	8.8E-07	2.6E-07
3	INORG	Arsenic	7440-38-2	A	1	1	6.80E+00	6.80E+00	6.80E+00	1.5E+01	3.9E+00	c	1.6E+01	c		
3	INORG	Barium	7440-39-3	D	1	1	3.25E+01	3.30E+01	3.25E+01		5.4E+03	nc	6.7E+04	nc	6.0E-03	4.9E-04
3	INORG	Chromium (total)	7440-47-3		1	1	9.60E+00	9.60E+00	9.60E+00		2.2E+02	nc	2.5E+03	nc	4.4E-02	3.8E-03
3	INORG	Lead	7439-92-1	B2	1	1	6.90E+00	6.90E+00	6.90E+00		4.0E+02	nc	7.5E+02	nc	1.7E-02	9.2E-03
3A	VOC	1,3-Dichlorobenzene	541-73-1	D	33	1	1.67E-03	1.70E-03	1.67E-03		1.6E+01	nc	6.3E+01	nc	1.0E-04	2.7E-05
3A	VOC	1,4-Dichlorobenzene	106-46-7	C	33	1	1.68E-03	1.70E-03	1.68E-03		3.5E+01	c	7.9E+01	c	4.8E-05	2.1E-05
3A	VOC	1,1-Dichloroethene	75-35-4	C	33	1	2.10E-03	2.10E-03	2.10E-03		1.2E+02	nc	4.1E+02	nc	1.8E-05	5.1E-06
3A	VOC	cis-1,2-Dichloroethene	156-59-2	D	33	2	2.90E-03	5.50E-03	8.10E-03		4.3E+01	nc	1.5E+02	nc	1.9E-04	5.4E-05
3A	VOC	trans-1,2-Dichloroethene	156-60-5		33	1	1.00E-03	1.00E-03	1.00E-03		7.0E+01	nc	2.3E+02	nc	1.4E-05	4.3E-06
3A	VOC	Tetrachloroethene	127-18-4	C-B2	33	8	1.10E-02	5.10E+01	4.00E+02		1.5E+01	c	3.4E+01	c	**2.7E+01**	**1.2E+01**
3A	VOC	Toluene	108-88-3	D	33	12	4.30E-04	7.90E-04	1.50E-03		6.6E+02	nc	2.2E+03	nc	2.3E-06	6.8E-07
3A	VOC	Trichloroethene	79-01-6	C-B2	33	3	4.20E-04	4.00E+00	1.20E+01		5.3E-01	c	1.2E+00	c	**2.3E+01**	**1.0E+01**

Notes:

The Screening Criteria for residential and industrial soil is the lower of the integrated Screening Criteria at:

target cancer risk = **1E-05**

target hazard quotient = **1**

The Screening Criteria for Pyrene were used as surrogates for Phenanthrene and Benzo(g,h,i)perylene.

The Screening Criteria for cis-1,2-Dichloroethene were used as surrogates for 1,2-Dichloroethene (total).

The Screening Criteria for Chromium VI was used as a surrogate for Chromium (total).

c - The Screening Criterion is based on cancer risk.

nc - The Screening Criterion is based on noncancer effects.

Chem Group - Chemical Group

Carc Class - EPA Weight-of-Evidence Cancer Classification