

APPENDIX Q
HUMAN HEALTH RISK ASSESSMENT TABLES

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Table Q-1. Summary of COPC Screening for Load Line 2 Groundwater

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Tap Water PRG	COPC?
All											
<i>Inorganics</i>											
Antimony	7440-36-0	mg/L	3 / 12	2.2E-03	5.0E-03	8.0E-03	5.6E-03	5.6E-03	--	1.5E-02	No
Arsenic	7440-38-2	mg/L	8 / 12	4.7E-03	1.9E-02	1.0E-01	3.3E-02	3.3E-02	--	4.5E-05	Yes
Barium	7440-39-3	mg/L	12 / 12	5.7E-03	3.3E-02	1.1E-01	6.0E-02	6.0E-02	2.6E-01	2.6E+00	No
Calcium	7440-70-2	mg/L	12 / 12	1.8E+01	4.8E+01	6.7E+01	5.6E+01	5.6E+01	5.3E+01	--	No
Cobalt	7440-48-4	mg/L	4 / 12	9.2E-03	9.7E-03	7.3E-02	2.0E-02	2.0E-02	--	7.3E-01	No
Iron	7439-89-6	mg/L	8 / 12	5.3E-01	9.8E-01	2.9E+00	1.4E+00	1.4E+00	1.4E+00	1.1E+01	No
Magnesium	7439-95-4	mg/L	11 / 12	7.0E+00	1.9E+01	2.8E+01	2.2E+01	2.2E+01	1.5E+01	--	No
Manganese	7439-96-5	mg/L	12 / 12	4.2E-03	7.2E-01	1.9E+00	1.0E+00	1.0E+00	1.3E+00	8.8E-01	Yes
Nickel	7440-02-0	mg/L	10 / 12	3.5E-03	3.6E-02	3.0E-01	7.9E-02	7.9E-02	8.3E-02	7.3E-01	No
Potassium	7440-09-7	mg/L	11 / 12	8.7E-01	1.9E+00	5.8E+00	3.7E+00	3.7E+00	5.8E+00	--	No
Sodium	7440-23-5	mg/L	12 / 12	2.7E+00	8.0E+00	1.6E+01	1.0E+01	1.0E+01	5.1E+01	--	No
<i>Organic Explosives</i>											
1,3,5-Trinitrobenzene	99-35-4	mg/L	1 / 12	4.8E-03	4.9E-04	4.8E-03	1.2E-03	1.2E-03	--	1.1E+00	No
2,4-Dinitrotoluene	121-14-2	mg/L	1 / 12	3.3E-04	8.7E-05	3.3E-04	1.3E-04	1.3E-04	--	9.9E-05	Yes
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/L	1 / 12	1.1E-03	1.8E-04	1.1E-03	3.3E-04	3.3E-04	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/L	1 / 12	8.7E-04	1.6E-04	8.7E-04	2.8E-04	2.8E-04	--	--	Yes
HMX	2691-41-0	mg/L	1 / 12	3.3E-04	2.6E-04	3.3E-04	2.7E-04	2.7E-04	--	1.8E+00	No
RDX	121-82-4	mg/L	1 / 12	1.8E-04	2.4E-04	1.8E-04	2.5E-04	1.8E-04	--	6.1E-04	No
<i>Organic PCBs</i>											
PCB-1242	53469-21-9	mg/L	2 / 12	7.2E-04	3.4E-04	8.5E-04	4.5E-04	4.5E-04	--	3.4E-05	Yes
<i>Organic Pesticides</i>											
Heptachlor Epoxide	1024-57-3	mg/L	2 / 12	2.2E-04	6.8E-05	3.4E-04	1.2E-04	1.2E-04	--	7.4E-06	Yes
<i>Organic Volatiles</i>											
2-Butanone	78-93-3	mg/L	1 / 12	1.2E-03	4.7E-03	1.2E-03	5.3E-03	1.2E-03	--	1.9E+00	No
Benzene	71-43-2	mg/L	2 / 12	2.2E-04	4.8E-04	4.9E-04	5.2E-04	4.9E-04	--	3.4E-04	Yes
Carbon Disulfide	75-15-0	mg/L	2 / 12	2.6E-04	4.6E-04	3.1E-04	5.1E-04	3.1E-04	--	1.0E+00	No
Chloromethane	74-87-3	mg/L	2 / 12	1.6E-04	4.6E-04	3.7E-04	5.1E-04	3.7E-04	--	1.5E-03	No

CAS = Chemical Abstracts Service.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

-- Criteria not available or insufficient data to calculate the UCL.

PCB = Polychlorinated biphenyl.

PRG = Preliminary remediation goal.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

UCL = Upper confidence limit on the mean.

Table Q-2. Summary of COPC Screening for Load Line 2 Surface Water

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Tap Water PRG	COPC?
Kelly's Pond and Exit Drainages											
<i>Inorganics</i>											
Aluminum	7429-90-5	mg/L	3 / 3	2.7E-01	4.0E-01	5.1E-01	6.0E-01	5.1E-01	3.4E+00	3.6E+01	No
Antimony	7440-36-0	mg/L	2 / 3	1.4E-02	1.1E-02	1.5E-02	2.1E-02	1.5E-02	--	1.5E-02	Yes
Barium	7440-39-3	mg/L	3 / 3	2.9E-02	3.2E-02	3.7E-02	4.4E-02	3.7E-02	4.8E-02	2.6E+00	No
Cadmium	7440-43-9	mg/L	1 / 3	2.8E-04	1.8E-03	2.8E-04	3.9E-03	2.8E-04	--	1.8E-02	No
Calcium	7440-70-2	mg/L	3 / 3	3.0E+01	3.5E+01	4.4E+01	6.6E+01	4.4E+01	4.1E+01	--	No
Copper	7440-50-8	mg/L	1 / 3	4.2E-03	6.4E-03	4.2E-03	9.6E-03	4.2E-03	7.9E-03	1.5E+00	No
Iron	7439-89-6	mg/L	3 / 3	2.9E-01	5.4E-01	7.0E-01	9.1E-01	7.0E-01	2.6E+00	1.1E+01	No
Magnesium	7439-95-4	mg/L	3 / 3	3.5E+00	6.7E+00	1.3E+01	1.7E+03	1.3E+01	1.1E+01	--	No
Manganese	7439-96-5	mg/L	3 / 3	5.5E-02	7.4E-02	9.7E-02	1.7E-01	9.7E-02	3.9E-01	8.8E-01	No
Potassium	7440-09-7	mg/L	3 / 3	2.2E+00	2.5E+00	2.6E+00	2.9E+00	2.6E+00	3.2E+00	--	No
Sodium	7440-23-5	mg/L	3 / 3	1.9E+00	3.7E+00	7.4E+00	9.1E+00	7.4E+00	2.1E+01	--	No
Vanadium	7440-62-2	mg/L	2 / 3	1.7E-03	2.5E-03	2.4E-03	9.8E-03	2.4E-03	--	2.6E-01	No
Zinc	7440-66-6	mg/L	1 / 3	1.6E-02	1.9E-02	1.6E-02	2.3E-02	1.6E-02	4.2E-02	1.1E+01	No
<i>Organic Explosives</i>											
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/L	1 / 3	1.0E-03	4.0E-04	1.0E-03	1.3E-03	1.0E-03	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/L	1 / 3	1.3E-03	5.0E-04	1.3E-03	1.7E-03	1.3E-03	--	--	Yes
HMX	2691-41-0	mg/L	1 / 3	7.0E-04	4.0E-04	7.0E-04	8.4E-04	7.0E-04	--	1.8E+00	No
RDX	121-82-4	mg/L	1 / 3	2.4E-03	9.7E-04	2.4E-03	3.1E-03	2.4E-03	--	6.1E-04	Yes
<i>Organic Semivolatiles</i>											
Bis(2-ethylhexyl)phthalate	117-81-7	mg/L	1 / 2	2.8E-03	3.9E-03	2.8E-03	1.1E-02	2.8E-03	--	4.8E-03	No
<i>Organic Volatiles</i>											
Carbon Disulfide	75-15-0	mg/L	1 / 2	2.3E-03	1.4E-03	2.3E-03	7.1E-03	2.3E-03	--	1.0E+00	No

CAS = Chemical Abstracts Service.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

PRG = Preliminary remediation goal.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

UCL = Upper confidence limit on the mean.

-- Criteria not available or insufficient data to calculate the UCL.

Table Q-3. Summary of COPC Screening for Load Line 2 Sediment

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Kelly's Pond and Exit Drainages												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	6 / 6	5.7E+03	8.7E+03	1.2E+04	1.3E+04	1.2E+04	1.4E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	2 / 5	8.5E-01	9.0E-01	1.8E+00	1.4E+00	1.4E+00	--	3.1E+00	4.1E+01	No
Arsenic	7440-38-2	mg/kg	6 / 6	6.5E+00	1.3E+01	1.9E+01	2.1E+01	1.9E+01	2.0E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	6 / 6	3.5E+01	5.8E+01	8.3E+01	7.3E+01	7.3E+01	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	5 / 5	5.2E-01	6.0E-01	6.4E-01	6.5E-01	6.4E-01	3.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	2 / 6	2.1E-01	2.9E-01	2.6E-01	3.4E-01	2.6E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	5 / 5	8.3E+02	7.0E+03	2.6E+04	1.7E+06	2.6E+04	5.5E+03	--	--	No
Chromium	7440-47-3	mg/kg	6 / 6	9.4E+00	1.6E+01	2.4E+01	2.1E+01	2.1E+01	1.8E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	5 / 5	8.3E+00	9.4E+00	1.1E+01	1.1E+01	1.1E+01	9.1E+00	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	5 / 5	1.2E+01	2.0E+01	2.9E+01	2.6E+01	2.6E+01	2.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	5 / 5	2.0E+04	2.2E+04	2.7E+04	2.5E+04	2.5E+04	2.8E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	6 / 6	1.2E+01	2.7E+01	4.6E+01	4.8E+01	4.6E+01	2.7E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	5 / 5	1.3E+03	3.4E+03	9.3E+03	1.6E+04	9.3E+03	2.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	6 / 6	2.4E+02	5.7E+02	1.2E+03	1.6E+03	1.2E+03	2.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	3 / 6	1.6E-02	4.2E-02	5.1E-02	5.8E-02	5.1E-02	5.9E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	5 / 5	1.5E+01	1.8E+01	2.2E+01	2.1E+01	2.1E+01	1.8E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	5 / 5	4.1E+02	7.3E+02	1.1E+03	1.0E+03	1.0E+03	2.0E+03	--	--	No
Silver	7440-22-4	mg/kg	1 / 6	4.1E+00	9.1E-01	4.1E+00	2.2E+00	2.2E+00	--	3.9E+01	5.1E+02	No
Thallium	6533-73-9	mg/kg	1 / 5	4.3E-01	2.6E-01	4.3E-01	3.6E-01	3.6E-01	8.9E-01	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	5 / 5	1.3E+01	1.6E+01	2.1E+01	2.1E+01	2.1E+01	2.6E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	6 / 6	5.7E+01	8.0E+01	1.4E+02	1.2E+02	1.2E+02	5.3E+02	2.3E+03	3.1E+04	No
<i>Organic Explosives</i>												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	1 / 2	2.7E-01	2.0E-01	2.7E-01	6.6E-01	2.7E-01	--	3.1E+00	3.1E+01	No
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 2	1.9E-01	1.6E-01	1.9E-01	3.6E-01	1.9E-01	--	7.2E-01	2.5E+00	No
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	1 / 1	1.3E-01	1.3E-01	1.3E-01	--	1.3E-01	--	--	--	Yes
<i>Organic Pesticides</i>												
4,4'-DDD	72-54-8	mg/kg	1 / 5	3.8E-03	1.8E-03	3.8E-03	2.9E-03	2.9E-03	--	2.4E+00	1.0E+01	No
4,4'-DDE	72-55-9	mg/kg	3 / 5	2.6E-03	6.3E-03	2.1E-02	2.8E-01	2.1E-02	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	1 / 5	3.7E-03	1.8E-03	3.7E-03	2.9E-03	2.9E-03	--	1.7E+00	7.0E+00	No
Endrin Ketone	53494-70-5	mg/kg	1 / 5	1.0E-02	3.1E-03	1.0E-02	6.8E-03	6.8E-03	--	1.8E+00	1.8E+01	No
beta-BHC	319-85-7	mg/kg	3 / 5	4.0E-03	1.9E-02	7.9E-02	9.5E+01	7.9E-02	--	3.2E-01	1.3E+00	No

Table Q-3. Summary of COPC Screening for Load Line 2 Sediment

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Organic Semivolatiles												
Anthracene	120-12-7	mg/kg	1 / 5	1.2E-01	2.0E-01	1.2E-01	2.4E-01	1.2E-01	--	2.2E+03	2.4E+04	No
Benz(a)anthracene	56-55-3	mg/kg	2 / 5	1.5E-01	2.7E-01	6.0E-01	4.5E-01	4.5E-01	--	6.2E-01	2.1E+00	No
Benzo(a)pyrene	50-32-8	mg/kg	2 / 5	1.8E-01	2.7E-01	5.5E-01	4.2E-01	4.2E-01	--	6.2E-02	2.1E-01	Yes
Benzo(b)fluoranthene	205-99-2	mg/kg	3 / 5	7.4E-02	2.9E-01	7.1E-01	1.9E+00	7.1E-01	--	6.2E-01	2.1E+00	Yes
Benzo(g,h,i)perylene	191-24-2	mg/kg	2 / 5	1.1E-01	1.9E-01	2.0E-01	2.3E-01	2.0E-01	--	--	--	Yes
Benzo(k)fluoranthene	207-08-9	mg/kg	2 / 5	1.4E-01	2.2E-01	3.6E-01	3.0E-01	3.0E-01	--	6.2E+00	2.1E+01	No
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	1 / 5	1.2E-01	2.0E-01	1.2E-01	2.4E-01	1.2E-01	--	3.5E+01	1.2E+02	No
Chrysene	218-01-9	mg/kg	3 / 5	6.1E-02	2.8E-01	6.9E-01	2.1E+00	6.9E-01	--	6.2E+01	2.1E+02	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	1 / 5	8.2E-02	1.9E-01	8.2E-02	2.5E-01	8.2E-02	--	6.2E-02	2.1E-01	Yes
Fluoranthene	206-44-0	mg/kg	5 / 5	7.2E-02	3.2E-01	9.4E-01	1.1E+01	9.4E-01	--	2.3E+02	2.2E+03	No
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	2 / 5	1.1E-01	1.9E-01	2.2E-01	2.3E-01	2.2E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	2 / 5	1.8E-01	2.6E-01	5.0E-01	3.9E-01	3.9E-01	--	--	--	Yes
Pyrene	129-00-0	mg/kg	5 / 5	6.0E-02	2.8E-01	8.4E-01	1.0E+01	8.4E-01	--	2.3E+02	2.9E+03	No
North Ponds												
Inorganics												
Aluminum	7429-90-5	mg/kg	1 / 1	6.4E+03	6.4E+03	6.4E+03	--	6.4E+03	1.4E+04	7.6E+03	9.2E+04	No
Arsenic	7440-38-2	mg/kg	1 / 1	1.9E+01	1.9E+01	1.9E+01	--	1.9E+01	2.0E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	1 / 1	3.3E+01	3.3E+01	3.3E+01	--	3.3E+01	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	1 / 1	3.8E-01	3.8E-01	3.8E-01	--	3.8E-01	3.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	1 / 1	2.5E-01	2.5E-01	2.5E-01	--	2.5E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	1 / 1	7.1E+02	7.1E+02	7.1E+02	--	7.1E+02	5.5E+03	--	--	No
Chromium	7440-47-3	mg/kg	1 / 1	9.5E+00	9.5E+00	9.5E+00	--	9.5E+00	1.8E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	1 / 1	8.5E+00	8.5E+00	8.5E+00	--	8.5E+00	9.1E+00	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	1 / 1	2.3E+01	2.3E+01	2.3E+01	--	2.3E+01	2.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	1 / 1	2.8E+04	2.8E+04	2.8E+04	--	2.8E+04	2.8E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	1 / 1	2.9E+01	2.9E+01	2.9E+01	--	2.9E+01	2.7E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	1 / 1	1.9E+03	1.9E+03	1.9E+03	--	1.9E+03	2.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	1 / 1	4.4E+02	4.4E+02	4.4E+02	--	4.4E+02	2.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	1 / 1	1.4E-02	1.4E-02	1.4E-02	--	1.4E-02	5.9E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	1 / 1	2.1E+01	2.1E+01	2.1E+01	--	2.1E+01	1.8E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	1 / 1	7.9E+02	7.9E+02	7.9E+02	--	7.9E+02	2.0E+03	--	--	No
Selenium	7782-49-2	mg/kg	1 / 1	5.6E-01	5.6E-01	5.6E-01	--	5.6E-01	1.7E+00	3.9E+01	5.1E+02	No

Table Q-3. Summary of COPC Screening for Load Line 2 Sediment

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Thallium	6533-73-9	mg/kg	1 / 1	3.5E-01	3.5E-01	3.5E-01	--	3.5E-01	8.9E-01	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	1 / 1	1.3E+01	1.3E+01	1.3E+01	--	1.3E+01	2.6E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	1 / 1	7.0E+01	7.0E+01	7.0E+01	--	7.0E+01	5.3E+02	2.3E+03	3.1E+04	No
<i>Organic Explosives</i>												
Nitrocellulose	9004-70-0	mg/kg	1 / 1	4.3E-01	4.3E-01	4.3E-01	--	4.3E-01	--	--	--	Yes

BHC = Benzene hexachloride.

CAS = Chemical Abstracts Service.

COPC = Chemical of potential concern.

DDD = Dichlorodiphenyldichloroethane.

DDE = Dichlorodiphenyldichloroethylene.

DDT = Dichlorodiphenyltrichloroethane.

EPC = Exposure point concentration.

PRG = Preliminary remediation goal.

UCL = Upper confidence limit on the mean.

-- Criteria not available or insufficient data to calculate the UCL.

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Change Houses												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	4 / 4	4.1E+03	7.7E+03	1.4E+04	2.9E+04	1.4E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	3 / 4	5.6E-01	7.4E-01	1.2E+00	1.1E+00	1.1E+00	9.6E-01	3.1E+00	4.1E+01	No
Arsenic	7440-38-2	mg/kg	4 / 4	4.8E+00	9.0E+00	1.4E+01	2.3E+01	1.4E+01	1.5E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	4 / 4	3.8E+01	5.3E+01	6.9E+01	7.3E+01	6.9E+01	8.8E+01	5.4E+02	6.7E+03	No
Cadmium	7440-43-9	mg/kg	3 / 4	5.1E-01	7.5E-01	1.5E+00	5.2E+00	1.5E+00	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	4 / 4	1.2E+03	5.7E+03	1.7E+04	1.6E+06	1.7E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	4 / 4	8.1E+00	1.5E+01	2.0E+01	3.8E+01	2.0E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	3 / 4	5.0E+00	7.2E+00	1.1E+01	1.2E+01	1.1E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	4 / 4	1.7E+01	2.0E+01	2.5E+01	2.5E+01	2.5E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	4 / 4	1.4E+04	1.8E+04	2.7E+04	3.2E+04	2.7E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	4 / 4	1.7E+01	5.8E+01	9.5E+01	9.7E+01	9.5E+01	2.6E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	4 / 4	9.2E+02	3.0E+03	7.7E+03	1.1E+05	7.7E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	4 / 4	3.0E+02	3.9E+02	5.5E+02	6.0E+02	5.5E+02	1.5E+03	1.8E+02	1.9E+03	No
Nickel	7440-02-0	mg/kg	4 / 4	9.0E+00	1.9E+01	2.7E+01	7.1E+01	2.7E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	4 / 4	6.4E+02	1.5E+03	3.0E+03	1.5E+04	3.0E+03	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	1 / 4	6.4E-01	3.9E-01	6.4E-01	5.9E-01	5.9E-01	1.4E+00	3.9E+01	5.1E+02	No
Vanadium	7440-62-2	mg/kg	4 / 4	7.4E+00	1.4E+01	2.3E+01	4.0E+01	2.3E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	4 / 4	6.8E+01	1.4E+02	2.6E+02	8.1E+02	2.6E+02	6.2E+01	2.3E+03	3.1E+04	No
Explosives Handling Areas												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	108 / 108	2.5E+03	8.5E+03	2.5E+04	9.1E+03	9.1E+03	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	12 / 78	3.3E-01	3.2E+00	1.8E+02	7.0E+00	7.0E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	108 / 108	2.1E+00	1.1E+01	3.2E+01	1.2E+01	1.2E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	108 / 108	1.5E+01	7.4E+01	3.0E+02	8.2E+01	8.2E+01	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	56 / 78	2.8E-01	6.0E-01	3.1E+00	7.0E-01	7.0E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	78 / 108	5.0E-02	1.2E+00	2.3E+01	1.7E+00	1.7E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	78 / 78	5.6E+02	1.4E+04	1.2E+05	1.8E+04	1.8E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	108 / 108	4.4E+00	1.7E+01	1.4E+02	2.0E+01	2.0E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	78 / 78	1.5E+00	7.5E+00	1.9E+01	8.3E+00	8.3E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	78 / 78	4.0E+00	2.3E+01	8.2E+01	2.6E+01	2.6E+01	1.8E+01	3.1E+02	4.1E+03	No
Cyanide	57-12-5	mg/kg	5 / 18	1.0E-01	5.5E-01	5.0E+00	1.0E+00	1.0E+00	--	1.2E+02	1.2E+03	No

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Iron	7439-89-6	mg/kg	78 / 78	7.0E+03	1.9E+04	5.6E+04	2.1E+04	2.1E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	108 / 108	4.2E+00	1.0E+02	8.8E+02	1.3E+02	1.3E+02	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	78 / 78	5.5E+02	2.9E+03	1.5E+04	3.3E+03	3.3E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	108 / 108	3.9E+01	5.5E+02	5.0E+03	6.6E+02	6.6E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	68 / 108	9.6E-03	5.2E-02	9.9E-01	7.3E-02	7.3E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	78 / 78	4.6E+00	1.9E+01	4.2E+01	2.1E+01	2.1E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	78 / 78	2.7E+02	8.9E+02	2.4E+03	9.8E+02	9.8E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	42 / 108	3.7E-01	8.0E-01	3.3E+00	8.9E-01	8.9E-01	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	6 / 108	1.9E-01	2.4E-01	1.5E+00	2.7E-01	2.7E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	20 / 78	5.5E+01	2.7E+02	6.5E+02	2.9E+02	2.9E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	62 / 78	1.5E-01	6.2E-01	7.6E+00	8.0E-01	8.0E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	78 / 78	5.2E+00	1.3E+01	2.5E+01	1.4E+01	1.4E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	108 / 108	1.4E+01	1.5E+02	8.9E+02	1.8E+02	1.8E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	14 / 72	9.4E-02	3.4E+00	1.6E+02	7.3E+00	7.3E+00	--	1.8E+02	1.8E+03	No
1,3-Dinitrobenzene	99-65-0	mg/kg	1 / 72	1.3E-01	2.3E-01	1.3E-01	3.7E-01	1.3E-01	--	6.1E-01	6.2E+00	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	52 / 72	5.5E-02	4.5E+02	1.7E+04	9.3E+02	9.3E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	11 / 72	5.4E-02	3.6E-01	5.0E+00	5.5E-01	5.5E-01	--	7.2E-01	2.5E+00	Yes
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	16 / 33	1.5E-01	8.8E+00	9.8E+00	2.2E+01	9.8E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	6 / 33	1.3E-01	4.3E+01	1.9E+00	1.1E+02	1.9E+00	--	--	--	Yes
HMX	2691-41-0	mg/kg	7 / 72	6.7E-01	2.3E+01	1.5E+03	5.7E+01	5.7E+01	--	3.1E+02	3.1E+03	Yes
Nitrocellulose	9004-70-0	mg/kg	5 / 7	2.3E+00	2.8E+01	9.4E+01	7.1E+03	9.4E+01	--	--	--	Yes
RDX	121-82-4	mg/kg	13 / 72	1.8E-01	1.4E+02	9.8E+03	3.7E+02	3.7E+02	--	4.4E+00	1.6E+01	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	40 / 70	3.7E-02	5.6E-01	5.2E+00	7.8E-01	7.8E-01	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	10 / 70	4.2E-02	2.8E-01	6.0E+00	4.4E-01	4.4E-01	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDD	72-54-8	mg/kg	1 / 20	1.2E-02	5.4E-02	1.2E-02	1.4E-01	1.2E-02	--	2.4E+00	1.0E+01	No
4,4'-DDE	72-55-9	mg/kg	9 / 20	3.9E-03	6.6E-02	8.1E-02	1.5E-01	8.1E-02	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	6 / 20	6.4E-03	6.9E-02	1.7E-01	1.6E-01	1.6E-01	--	1.7E+00	7.0E+00	No
Aldrin	309-00-2	mg/kg	2 / 20	2.2E-03	5.4E-02	2.4E-02	1.4E-01	2.4E-02	--	2.9E-02	1.0E-01	No
Dieldrin	60-57-1	mg/kg	3 / 20	3.1E-03	5.5E-02	2.7E-02	1.4E-01	2.7E-02	--	3.0E-02	1.1E-01	No
Endrin	72-20-8	mg/kg	1 / 20	5.6E-03	5.3E-02	5.6E-03	1.4E-01	5.6E-03	--	1.8E+00	1.8E+01	No

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Endrin Aldehyde	7421-93-4	mg/kg	5 / 20	4.6E-03	6.5E-02	1.2E-01	1.5E-01	1.2E-01	--	1.8E+00	1.8E+01	No
Heptachlor	76-44-8	mg/kg	1 / 20	3.6E-02	5.5E-02	3.6E-02	1.4E-01	3.6E-02	--	1.1E-01	3.8E-01	No
Heptachlor Epoxide	1024-57-3	mg/kg	1 / 20	4.2E-03	5.3E-02	4.2E-03	1.4E-01	4.2E-03	--	5.3E-02	1.9E-01	No
Lindane	58-89-9	mg/kg	1 / 20	4.8E-03	5.3E-02	4.8E-03	1.4E-01	4.8E-03	--	4.4E-01	1.7E+00	No
alpha-Chlordane	5103-71-9	mg/kg	1 / 20	5.7E-01	8.1E-02	5.7E-01	1.8E-01	1.8E-01	--	1.6E+00	6.5E+00	No
beta-BHC	319-85-7	mg/kg	2 / 20	2.1E-03	5.3E-02	4.7E-03	1.4E-01	4.7E-03	--	3.2E-01	1.3E+00	No
gamma-Chlordane	5103-74-2	mg/kg	4 / 20	2.4E-03	5.8E-02	8.8E-02	1.4E-01	8.8E-02	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
2-Methylnaphthalene	91-57-6	mg/kg	3 / 23	6.9E-02	6.6E-01	1.7E-01	1.3E+00	1.7E-01	--	--	--	Yes
4-Methylphenol	106-44-5	mg/kg	1 / 23	5.4E-02	6.7E-01	5.4E-02	1.4E+00	5.4E-02	--	3.1E+01	3.1E+02	No
Acenaphthene	83-32-9	mg/kg	1 / 23	7.4E-01	6.9E-01	7.4E-01	1.4E+00	7.4E-01	--	3.7E+02	2.9E+03	No
Anthracene	120-12-7	mg/kg	3 / 23	7.2E-02	7.3E-01	1.9E+00	1.4E+00	1.4E+00	--	2.2E+03	2.4E+04	No
Benz(a)anthracene	56-55-3	mg/kg	11 / 23	7.0E-02	7.2E-01	2.9E+00	1.4E+00	1.4E+00	--	6.2E-01	2.1E+00	Yes
Benzo(a)pyrene	50-32-8	mg/kg	10 / 23	6.3E-02	7.1E-01	2.3E+00	1.4E+00	1.4E+00	--	6.2E-02	2.1E-01	Yes
Benzo(b)fluoranthene	205-99-2	mg/kg	11 / 23	6.8E-02	6.3E-01	6.6E-01	1.3E+00	6.6E-01	--	6.2E-01	2.1E+00	Yes
Benzo(g,h,i)perylene	191-24-2	mg/kg	8 / 23	3.8E-02	6.7E-01	1.1E+00	1.4E+00	1.1E+00	--	--	--	Yes
Benzo(k)fluoranthene	207-08-9	mg/kg	10 / 23	6.1E-02	7.4E-01	3.2E+00	1.5E+00	1.5E+00	--	6.2E+00	2.1E+01	No
Benzoic Acid	65-85-0	mg/kg	1 / 14	2.4E-01	4.4E+00	2.4E-01	1.0E+01	2.4E-01	--	2.4E+04	2.5E+05	No
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	3 / 23	8.1E-02	6.6E-01	1.9E-01	1.4E+00	1.9E-01	--	3.5E+01	1.2E+02	No
Butyl benzyl phthalate	85-68-7	mg/kg	3 / 23	8.4E-02	6.8E-01	8.1E-01	1.4E+00	8.1E-01	--	1.2E+03	1.2E+04	No
Carbazole	86-74-8	mg/kg	1 / 23	1.2E+00	7.1E-01	1.2E+00	1.4E+00	1.2E+00	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	13 / 23	7.1E-02	7.2E-01	2.7E+00	1.4E+00	1.4E+00	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	3 / 23	6.8E-02	6.5E-01	1.1E-01	1.3E+00	1.1E-01	--	6.1E+02	6.2E+03	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	2 / 23	4.8E-02	6.8E-01	7.2E-01	1.4E+00	7.2E-01	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	1 / 23	5.4E-01	6.8E-01	5.4E-01	1.4E+00	5.4E-01	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	13 / 23	1.0E-01	9.8E-01	7.7E+00	1.8E+00	1.8E+00	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	1 / 23	9.1E-01	7.0E-01	9.1E-01	1.4E+00	9.1E-01	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	6 / 23	9.6E-02	6.9E-01	1.3E+00	1.4E+00	1.3E+00	--	6.2E-01	2.1E+00	Yes
Naphthalene	91-20-3	mg/kg	3 / 23	6.0E-02	6.6E-01	2.7E-01	1.4E+00	2.7E-01	--	5.6E+00	1.9E+01	No
Phenanthrene	85-01-8	mg/kg	11 / 23	5.7E-02	8.9E-01	6.4E+00	1.7E+00	1.7E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	13 / 23	8.2E-02	8.6E-01	5.0E+00	1.6E+00	1.6E+00	--	2.3E+02	2.9E+03	No

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Organic Volatiles												
Acetone	67-64-1	mg/kg	1 / 24	6.5E-03	6.6E-02	6.5E-03	1.7E-01	6.5E-03	--	1.6E+02	6.0E+02	No
Chloroform	67-66-3	mg/kg	5 / 24	2.0E-03	1.7E-02	3.0E-03	4.1E-02	3.0E-03	--	3.6E-01	1.2E+00	No
Toluene	108-88-3	mg/kg	8 / 24	5.6E-03	1.6E-01	3.7E+00	4.3E-01	4.3E-01	--	6.6E+01	2.2E+02	No
North Ditches												
Inorganics												
Aluminum	7429-90-5	mg/kg	4 / 4	7.7E+03	9.1E+03	1.0E+04	1.0E+04	1.0E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	1 / 3	4.8E+00	2.1E+00	4.8E+00	6.1E+00	4.8E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	4 / 4	6.4E+00	1.0E+01	1.5E+01	2.0E+01	1.5E+01	1.5E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	4 / 4	5.8E+01	6.5E+01	6.9E+01	7.1E+01	6.9E+01	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	2 / 3	6.0E-01	5.0E-01	6.2E-01	8.2E-01	6.2E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	2 / 4	9.5E-02	2.4E-01	4.8E-01	8.2E+02	4.8E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	3 / 3	1.0E+03	1.8E+03	3.0E+03	4.4E+04	3.0E+03	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	4 / 4	1.1E+01	1.2E+01	1.2E+01	1.2E+01	1.2E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	3 / 3	8.6E+00	9.1E+00	9.8E+00	1.0E+01	9.8E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	3 / 3	1.3E+01	1.4E+01	1.7E+01	2.0E+01	1.7E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	3 / 3	1.6E+04	2.0E+04	2.3E+04	2.6E+04	2.3E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	4 / 4	1.4E+01	1.7E+01	2.5E+01	2.6E+01	2.5E+01	2.6E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	3 / 3	1.7E+03	1.9E+03	2.2E+03	2.6E+03	2.2E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	4 / 4	2.8E+02	6.2E+02	8.8E+02	9.1E+02	8.8E+02	1.5E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	3 / 4	1.6E-02	3.0E-02	5.8E-02	1.2E-01	5.8E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	3 / 3	1.6E+01	2.0E+01	2.2E+01	2.5E+01	2.2E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	3 / 3	6.7E+02	7.0E+02	7.7E+02	8.0E+02	7.7E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	2 / 4	3.8E-01	9.4E-01	6.1E-01	5.8E+00	6.1E-01	1.4E+00	3.9E+01	5.1E+02	No
Thallium	6533-73-9	mg/kg	3 / 3	2.6E-01	2.9E-01	3.4E-01	4.1E-01	3.4E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	3 / 3	1.4E+01	1.6E+01	1.7E+01	1.8E+01	1.7E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	4 / 4	8.1E+01	8.6E+01	9.6E+01	9.5E+01	9.5E+01	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	1 / 2	5.1E-02	8.8E-02	5.1E-02	3.2E-01	5.1E-02	--	3.1E+00	3.1E+01	No
Organic Volatiles												
Acetone	67-64-1	mg/kg	2 / 2	3.0E-03	1.2E-02	2.0E-02	6.5E-02	2.0E-02	--	1.6E+02	6.0E+02	No

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Packaging and Shipping Areas												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	25 / 25	3.3E+03	1.0E+04	2.6E+04	1.3E+04	1.3E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	3 / 22	6.8E-01	3.3E+00	6.0E+01	7.9E+00	7.9E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	25 / 25	3.1E+00	1.3E+01	4.9E+01	1.7E+01	1.7E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	25 / 25	2.9E+01	1.1E+02	9.0E+02	1.8E+02	1.8E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	20 / 24	3.5E-01	9.0E-01	4.2E+00	1.4E+00	1.4E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	10 / 25	1.8E-01	1.2E+00	1.7E+01	2.4E+00	2.4E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	24 / 24	2.3E+02	1.8E+04	1.1E+05	7.2E+04	7.2E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	25 / 25	4.7E+00	2.4E+01	2.2E+02	3.9E+01	3.9E+01	1.7E+01	2.1E+02	4.5E+02	Yes
Cobalt	7440-48-4	mg/kg	24 / 24	2.6E+00	6.6E+00	1.5E+01	7.9E+00	7.9E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	24 / 24	7.2E+00	2.5E+01	1.4E+02	3.5E+01	3.5E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	24 / 24	8.7E+03	2.1E+04	6.0E+04	2.5E+04	2.5E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	25 / 25	9.6E+00	1.1E+02	1.2E+03	2.0E+02	2.0E+02	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	24 / 24	7.6E+02	3.9E+03	2.1E+04	5.4E+03	5.4E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	25 / 25	2.5E+02	1.1E+03	7.5E+03	1.5E+03	1.5E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	22 / 25	9.9E-03	4.6E-02	1.8E-01	6.7E-02	6.7E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	24 / 24	6.7E+00	1.5E+01	5.2E+01	1.8E+01	1.8E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	23 / 24	2.9E+02	7.3E+02	1.6E+03	9.0E+02	9.0E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	14 / 25	3.7E-01	1.2E+00	1.2E+00	1.9E+00	1.2E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	9 / 25	1.7E-01	2.3E+00	1.8E+01	4.0E+00	4.0E+00	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	5 / 24	7.8E+01	2.6E+02	5.4E+02	2.9E+02	2.9E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	15 / 24	1.7E-01	4.0E-01	9.9E-01	5.4E-01	5.4E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	24 / 24	5.1E+00	1.4E+01	2.5E+01	1.6E+01	1.6E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	25 / 25	2.1E+01	1.4E+02	7.0E+02	2.0E+02	2.0E+02	6.2E+01	2.3E+03	3.1E+04	No
<i>Organic Explosives</i>												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	6 / 7	5.3E-02	5.7E-01	2.6E+00	1.1E+01	2.6E+00	--	3.1E+00	3.1E+01	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	2 / 6	1.2E-01	1.3E-01	1.6E-01	1.4E-01	1.4E-01	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	2 / 6	1.9E-01	1.5E-01	2.3E-01	1.9E-01	1.9E-01	--	--	--	Yes
HMX	2691-41-0	mg/kg	1 / 7	6.5E-01	4.1E-01	6.5E-01	6.3E-01	6.3E-01	--	3.1E+02	3.1E+03	No
RDX	121-82-4	mg/kg	1 / 7	2.8E-01	2.9E-01	2.8E-01	3.6E-01	2.8E-01	--	4.4E+00	1.6E+01	No

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	7 / 23	8.0E-02	6.3E-01	9.5E+00	1.4E+00	1.4E+00	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	3 / 23	5.3E-02	1.3E-01	1.3E-01	2.7E-01	1.3E-01	--	2.2E-01	7.4E-01	No
Organic Semivolatiles												
Acenaphthene	83-32-9	mg/kg	1 / 7	1.1E+00	3.2E-01	1.1E+00	5.7E-01	5.7E-01	--	3.7E+02	2.9E+03	No
Anthracene	120-12-7	mg/kg	2 / 7	7.4E-02	2.5E-01	6.9E-01	3.9E-01	3.9E-01	--	2.2E+03	2.4E+04	No
Benz(a)anthracene	56-55-3	mg/kg	3 / 7	1.1E-01	2.5E-01	7.2E-01	4.1E-01	4.1E-01	--	6.2E-01	2.1E+00	Yes
Benzo(a)pyrene	50-32-8	mg/kg	3 / 7	1.3E-01	2.1E-01	4.1E-01	2.8E-01	2.8E-01	--	6.2E-02	2.1E-01	Yes
Benzo(b)fluoranthene	205-99-2	mg/kg	4 / 7	7.8E-02	2.5E-01	6.1E-01	5.2E-01	5.2E-01	--	6.2E-01	2.1E+00	No
Benzo(g,h,i)perylene	191-24-2	mg/kg	3 / 7	9.8E-02	1.7E-01	1.7E-01	2.0E-01	1.7E-01	--	--	--	Yes
Benzo(k)fluoranthene	207-08-9	mg/kg	3 / 7	9.8E-02	1.9E-01	3.4E-01	2.5E-01	2.5E-01	--	6.2E+00	2.1E+01	No
Benzoic Acid	65-85-0	mg/kg	1 / 7	2.4E-01	8.3E-01	2.4E-01	1.0E+00	2.4E-01	--	2.4E+04	2.5E+05	No
Carbazole	86-74-8	mg/kg	1 / 7	3.7E-01	2.2E-01	3.7E-01	2.7E-01	2.7E-01	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	5 / 7	5.6E-02	2.3E-01	5.9E-01	5.8E-01	5.8E-01	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	1 / 7	1.6E-01	1.9E-01	1.6E-01	2.1E-01	1.6E-01	--	6.1E+02	6.2E+03	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	1 / 7	6.6E-02	1.7E-01	6.6E-02	2.1E-01	6.6E-02	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	1 / 7	7.7E-01	2.7E-01	7.7E-01	4.4E-01	4.4E-01	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	5 / 7	8.6E-02	7.8E-01	4.2E+00	1.9E+00	1.9E+00	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	1 / 7	1.4E+00	3.6E-01	1.4E+00	7.0E-01	7.0E-01	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	3 / 7	8.7E-02	1.7E-01	1.7E-01	2.0E-01	1.7E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	3 / 7	1.0E-01	8.1E-01	4.6E+00	2.0E+00	2.0E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	5 / 7	7.1E-02	6.4E-01	3.3E+00	1.5E+00	1.5E+00	--	2.3E+02	2.9E+03	No
Organic Volatiles												
Toluene	108-88-3	mg/kg	2 / 8	1.6E-03	2.9E-03	3.7E-03	3.3E-03	3.3E-03	--	6.6E+01	2.2E+02	No
Perimeter Area												
Inorganics												
Aluminum	7429-90-5	mg/kg	34 / 34	2.8E+03	1.1E+04	2.1E+04	1.2E+04	1.2E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	2 / 27	7.8E-01	3.0E+02	8.1E+03	8.1E+02	8.1E+02	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	34 / 34	5.5E+00	1.2E+01	3.7E+01	1.3E+01	1.3E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	34 / 34	1.5E+01	1.0E+02	1.1E+03	1.5E+02	1.5E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	23 / 27	3.2E-01	7.0E-01	2.9E+00	9.2E-01	9.2E-01	8.8E-01	1.5E+01	1.9E+02	No

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Cadmium	7440-43-9	mg/kg	23 / 33	5.6E-02	5.0E-01	4.8E+00	7.8E-01	7.8E-01	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	27 / 27	1.5E+02	5.2E+03	9.7E+04	1.1E+04	1.1E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	34 / 34	4.0E+00	1.3E+02	4.0E+03	3.3E+02	3.3E+02	1.7E+01	2.1E+02	4.5E+02	Yes
Cobalt	7440-48-4	mg/kg	27 / 27	3.1E+00	1.3E+01	1.2E+02	2.0E+01	2.0E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	27 / 27	4.0E+00	4.3E+01	7.2E+02	8.8E+01	8.8E+01	1.8E+01	3.1E+02	4.1E+03	Yes
Iron	7439-89-6	mg/kg	27 / 27	1.0E+04	2.0E+04	3.6E+04	2.2E+04	2.2E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	34 / 34	8.8E+00	7.5E+02	2.5E+04	2.0E+03	2.0E+03	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	27 / 27	8.0E+02	2.6E+03	1.4E+04	3.7E+03	3.7E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	34 / 34	1.3E+02	7.3E+02	2.9E+03	9.8E+02	9.8E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	27 / 34	1.4E-02	1.2E-01	2.8E+00	2.6E-01	2.6E-01	3.6E-02	2.3E+00	3.1E+01	Yes
Nickel	7440-02-0	mg/kg	27 / 27	5.7E+00	1.6E+01	3.5E+01	1.9E+01	1.9E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	27 / 27	2.3E+02	6.9E+02	2.0E+03	8.1E+02	8.1E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	20 / 34	3.7E-01	9.7E-01	4.0E+00	1.2E+00	1.2E+00	1.4E+00	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	2 / 27	1.9E+02	3.1E+02	2.1E+02	3.5E+02	2.1E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	15 / 27	3.0E-01	3.5E-01	9.3E-01	4.2E-01	4.2E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	27 / 27	5.2E+00	1.9E+01	2.9E+01	2.1E+01	2.1E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	34 / 34	3.5E+01	8.6E+01	9.0E+02	1.3E+02	1.3E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	5 / 10	4.7E-02	3.6E+02	3.6E+03	1.0E+03	1.0E+03	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	2 / 10	5.1E-01	5.5E-01	4.0E+00	1.3E+00	1.3E+00	--	7.2E-01	2.5E+00	Yes
2,6-Dinitrotoluene	606-20-2	mg/kg	1 / 10	2.9E-01	3.9E-01	2.9E-01	8.4E-01	2.9E-01	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	1 / 5	5.8E-01	1.2E+01	5.8E-01	3.8E+01	5.8E-01	--	--	--	Yes
Nitrocellulose	9004-70-0	mg/kg	1 / 1	4.2E+03	4.2E+03	4.2E+03	--	4.2E+03	--	--	--	Yes
RDX	121-82-4	mg/kg	1 / 10	1.6E+00	5.1E-01	1.6E+00	7.4E-01	7.4E-01	--	4.4E+00	1.6E+01	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	4 / 12	5.1E-02	6.8E-01	5.7E+00	1.5E+00	1.5E+00	--	1.1E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	1 / 2	3.3E-03	2.1E-03	3.3E-03	9.5E-03	3.3E-03	--	1.7E+00	7.0E+00	No
Dieldrin	60-57-1	mg/kg	1 / 2	3.2E-03	2.1E-03	3.2E-03	9.0E-03	3.2E-03	--	3.0E-02	1.1E-01	No
alpha-Chlordane	5103-71-9	mg/kg	1 / 2	8.3E-03	4.6E-03	8.3E-03	2.8E-02	8.3E-03	--	1.6E+00	6.5E+00	No
beta-BHC	319-85-7	mg/kg	2 / 2	2.2E-03	3.1E-03	4.0E-03	8.8E-03	4.0E-03	--	3.2E-01	1.3E+00	No

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
<i>Organic Semivolatiles</i>												
Benzoic Acid	65-85-0	mg/kg	1 / 2	1.5E-01	5.3E-01	1.5E-01	2.9E+00	1.5E-01	--	2.4E+04	2.5E+05	No
Fluoranthene	206-44-0	mg/kg	1 / 2	6.8E-02	1.3E-01	6.8E-02	5.1E-01	6.8E-02	--	2.3E+02	2.2E+03	No
Preparation and Receiving Areas												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	35 / 35	2.5E+03	9.1E+03	2.2E+04	1.0E+04	1.0E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	14 / 34	5.5E-01	2.9E+01	6.6E+02	6.3E+01	6.3E+01	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	35 / 35	3.6E+00	1.2E+01	3.9E+01	1.5E+01	1.5E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	35 / 35	1.3E+01	1.3E+02	8.1E+02	1.8E+02	1.8E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	25 / 31	3.1E-01	8.3E-01	2.6E+00	1.1E+00	1.1E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	21 / 32	5.9E-02	4.0E+00	5.0E+01	7.3E+00	7.3E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	34 / 34	3.1E+02	1.9E+04	1.5E+05	5.0E+04	5.0E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	35 / 35	4.3E+00	1.3E+02	1.9E+03	2.2E+02	2.2E+02	1.7E+01	2.1E+02	4.5E+02	Yes
Chromium, hexavalent	18540-29-9	mg/kg	1 / 13	8.2E+01	7.0E+00	8.2E+01	1.8E+01	1.8E+01	--	2.2E+01	6.4E+01	Yes
Cobalt	7440-48-4	mg/kg	34 / 34	3.0E+00	1.0E+01	2.5E+01	1.2E+01	1.2E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	34 / 34	6.6E+00	2.3E+02	3.3E+03	4.1E+02	4.1E+02	1.8E+01	3.1E+02	4.1E+03	Yes
Cyanide	57-12-5	mg/kg	3 / 7	1.4E-01	2.3E-01	4.0E-01	3.2E-01	3.2E-01	--	1.2E+02	1.2E+03	No
Iron	7439-89-6	mg/kg	34 / 34	1.1E+04	3.4E+04	2.5E+05	4.7E+04	4.7E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	35 / 35	7.3E+00	5.6E+02	6.9E+03	9.5E+02	9.5E+02	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	34 / 34	8.0E+02	3.7E+03	2.2E+04	4.8E+03	4.8E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	35 / 35	1.7E+02	7.1E+02	2.3E+03	8.6E+02	8.6E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	30 / 34	1.1E-02	2.5E-01	2.4E+00	4.0E-01	4.0E-01	3.6E-02	2.3E+00	3.1E+01	Yes
Nickel	7440-02-0	mg/kg	34 / 34	8.4E+00	3.0E+01	1.4E+02	3.8E+01	3.8E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	34 / 34	2.4E+02	8.2E+02	1.5E+03	9.0E+02	9.0E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	15 / 35	4.1E-01	1.4E+00	5.2E+00	1.7E+00	1.7E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	7 / 35	2.0E-01	4.3E-01	3.1E+00	5.8E-01	5.8E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	13 / 34	9.8E+01	2.9E+02	5.7E+02	3.4E+02	3.4E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	29 / 34	1.5E-01	7.1E-01	4.2E+00	9.7E-01	9.7E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	34 / 34	4.7E+00	1.6E+01	3.0E+01	1.8E+01	1.8E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	35 / 35	3.0E+01	6.0E+02	7.3E+03	1.0E+03	1.0E+03	6.2E+01	2.3E+03	3.1E+04	Yes

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Organic Explosives												
1,3-Dinitrobenzene	99-65-0	mg/kg	1 / 21	4.5E-02	1.2E-01	4.5E-02	1.3E-01	4.5E-02	--	6.1E-01	6.2E+00	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	6 / 21	1.6E-01	2.8E-01	1.2E+00	3.9E-01	3.9E-01	--	3.1E+00	3.1E+01	No
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 21	4.9E-02	1.2E-01	4.9E-02	1.3E-01	4.9E-02	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	1 / 16	3.4E-01	1.4E-01	3.4E-01	1.7E-01	1.7E-01	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	2 / 16	2.2E-01	1.7E-01	4.8E-01	2.2E-01	2.2E-01	--	--	--	Yes
Nitrocellulose	9004-70-0	mg/kg	2 / 2	6.8E+00	7.0E+00	7.2E+00	8.3E+00	7.2E+00	--	--	--	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	13 / 32	3.8E-02	3.9E+00	5.9E+01	7.5E+00	7.5E+00	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	3 / 32	7.9E-02	5.6E-01	5.2E-01	1.1E+00	5.2E-01	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	6 / 9	4.0E-03	1.2E-01	8.8E-01	3.7E+01	8.8E-01	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	2 / 9	6.2E-03	4.5E-02	3.7E-01	1.2E-01	1.2E-01	--	1.7E+00	7.0E+00	No
Dieldrin	60-57-1	mg/kg	2 / 9	1.1E-02	3.7E-02	2.9E-01	9.6E-02	9.6E-02	--	3.0E-02	1.1E-01	Yes
Endrin Aldehyde	7421-93-4	mg/kg	2 / 9	1.4E-02	7.7E-02	6.5E-01	2.1E-01	2.1E-01	--	1.8E+00	1.8E+01	No
beta-BHC	319-85-7	mg/kg	3 / 9	5.3E-03	4.5E-02	3.6E-01	1.2E-01	1.2E-01	--	3.2E-01	1.3E+00	Yes
delta-BHC	319-86-8	mg/kg	1 / 9	2.2E-03	8.6E-03	2.2E-03	1.9E-02	2.2E-03	--	--	--	Yes
gamma-Chlordane	5103-74-2	mg/kg	2 / 9	7.0E-03	5.5E-02	4.6E-01	1.5E-01	1.5E-01	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
2-Methylnaphthalene	91-57-6	mg/kg	6 / 17	1.4E-01	4.6E-01	4.5E+00	9.0E-01	9.0E-01	--	--	--	Yes
Acenaphthene	83-32-9	mg/kg	4 / 17	1.0E-01	4.7E-01	1.7E+00	8.2E-01	8.2E-01	--	3.7E+02	2.9E+03	No
Acenaphthylene	208-96-8	mg/kg	4 / 17	9.3E-02	3.7E-01	1.8E-01	7.0E-01	1.8E-01	--	--	--	Yes
Anthracene	120-12-7	mg/kg	5 / 17	8.0E-02	7.4E-01	5.6E+00	1.4E+00	1.4E+00	--	2.2E+03	2.4E+04	No
Benz(a)anthracene	56-55-3	mg/kg	10 / 17	5.2E-02	1.1E+00	1.0E+01	2.1E+00	2.1E+00	--	6.2E-01	2.1E+00	Yes
Benzo(a)pyrene	50-32-8	mg/kg	11 / 17	5.9E-02	1.1E+00	9.9E+00	3.6E+00	3.6E+00	--	6.2E-02	2.1E-01	Yes
Benzo(b)fluoranthene	205-99-2	mg/kg	12 / 17	4.3E-02	1.3E+00	1.1E+01	5.6E+00	5.6E+00	--	6.2E-01	2.1E+00	Yes
Benzo(g,h,i)perylene	191-24-2	mg/kg	11 / 17	4.5E-02	7.6E-01	4.6E+00	2.2E+00	2.2E+00	--	--	--	Yes
Benzo(k)fluoranthene	207-08-9	mg/kg	9 / 17	5.4E-02	9.5E-01	6.7E+00	1.7E+00	1.7E+00	--	6.2E+00	2.1E+01	Yes
Benzoic Acid	65-85-0	mg/kg	3 / 13	3.3E-01	2.0E+00	5.0E-01	4.2E+00	5.0E-01	--	2.4E+04	2.5E+05	No
Butyl benzyl phthalate	85-68-7	mg/kg	2 / 17	6.5E-02	3.7E-01	1.3E-01	7.0E-01	1.3E-01	--	1.2E+03	1.2E+04	No
Carbazole	86-74-8	mg/kg	5 / 17	6.2E-02	4.6E-01	1.3E+00	8.0E-01	8.0E-01	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	12 / 17	6.0E-02	1.2E+00	1.1E+01	4.1E+00	4.1E+00	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	5 / 17	1.1E-01	3.9E-01	2.7E-01	7.2E-01	2.7E-01	--	6.1E+02	6.2E+03	No

Table Q-4. Summary of COPC Screening for Load Line 2 Shallow Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Dibenz(<i>a,h</i>)anthracene	53-70-3	mg/kg	5 / 17	1.1E-01	4.5E-01	1.3E+00	7.9E-01	7.9E-01	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	5 / 17	5.8E-02	4.3E-01	1.0E+00	7.6E-01	7.6E-01	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	14 / 17	3.9E-02	2.4E+00	2.4E+01	1.6E+01	1.6E+01	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	4 / 17	2.1E-01	5.3E-01	2.2E+00	9.1E-01	9.1E-01	--	2.7E+02	2.6E+03	No
Indeno(1,2,3- <i>cd</i>)pyrene	193-39-5	mg/kg	9 / 17	4.9E-02	7.8E-01	5.1E+00	2.2E+00	2.2E+00	--	6.2E-01	2.1E+00	Yes
Naphthalene	91-20-3	mg/kg	7 / 17	6.5E-02	3.4E-01	2.6E+00	5.9E-01	5.9E-01	--	5.6E+00	1.9E+01	No
Pentachlorophenol	87-86-5	mg/kg	1 / 17	3.5E-01	4.5E-01	3.5E-01	7.8E-01	3.5E-01	--	3.0E+00	9.0E+00	No
Phenanthrene	85-01-8	mg/kg	11 / 17	5.6E-02	1.9E+00	1.8E+01	8.0E+00	8.0E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	13 / 17	7.0E-02	2.5E+00	2.3E+01	4.8E+00	4.8E+00	--	2.3E+02	2.9E+03	No
Organic Volatiles												
2-Butanone	78-93-3	mg/kg	1 / 15	1.2E-02	9.5E-03	1.2E-02	1.2E-02	1.2E-02	--	7.3E+02	2.7E+03	No
Acetone	67-64-1	mg/kg	1 / 13	3.8E-02	1.3E-02	3.8E-02	1.7E-02	1.7E-02	--	1.6E+02	6.0E+02	No
Carbon Disulfide	75-15-0	mg/kg	1 / 15	4.7E-03	3.0E-03	4.7E-03	3.3E-03	3.3E-03	--	3.6E+01	1.2E+02	No
Toluene	108-88-3	mg/kg	6 / 15	7.4E-04	1.0E-02	5.6E-02	1.9E-02	1.9E-02	--	6.6E+01	2.2E+02	No

BHC = Benzene hexachloride.

CAS = Chemical Abstracts Service.

COPC = Chemical of potential concern.

DDD = Dichlorodiphenyldichloroethane.

DDE = Dichlorodiphenyldichloroethylene.

DDT = Dichlorodiphenyltrichloroethane.

EPC = Exposure point concentration.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

PCB = Polychlorinated biphenyl.

PRG = Preliminary remediation goal.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

UCL = Upper confidence limit on the mean.

-- Criteria not available or insufficient data to calculate the UCL.

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Change Houses												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	4 / 4	4.1E+03	7.7E+03	1.4E+04	2.9E+04	1.4E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	3 / 4	5.6E-01	7.4E-01	1.2E+00	1.1E+00	1.1E+00	9.6E-01	3.1E+00	4.1E+01	No
Arsenic	7440-38-2	mg/kg	4 / 4	4.8E+00	9.0E+00	1.4E+01	2.3E+01	1.4E+01	1.5E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	4 / 4	3.8E+01	5.3E+01	6.9E+01	7.3E+01	6.9E+01	8.8E+01	5.4E+02	6.7E+03	No
Cadmium	7440-43-9	mg/kg	3 / 4	5.1E-01	7.5E-01	1.5E+00	5.2E+00	1.5E+00	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	4 / 4	1.2E+03	5.7E+03	1.7E+04	1.6E+06	1.7E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	4 / 4	8.1E+00	1.5E+01	2.0E+01	3.8E+01	2.0E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	3 / 4	5.0E+00	7.2E+00	1.1E+01	1.2E+01	1.1E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	4 / 4	1.7E+01	2.0E+01	2.5E+01	2.5E+01	2.5E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	4 / 4	1.4E+04	1.8E+04	2.7E+04	3.2E+04	2.7E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	4 / 4	1.7E+01	5.8E+01	9.5E+01	9.7E+01	9.5E+01	1.9E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	4 / 4	9.2E+02	3.0E+03	7.7E+03	1.1E+05	7.7E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	4 / 4	3.0E+02	3.9E+02	5.5E+02	6.0E+02	5.5E+02	1.5E+03	1.8E+02	1.9E+03	No
Nickel	7440-02-0	mg/kg	4 / 4	9.0E+00	1.9E+01	2.7E+01	7.1E+01	2.7E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	4 / 4	6.4E+02	1.5E+03	3.0E+03	1.5E+04	3.0E+03	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	1 / 4	6.4E-01	3.9E-01	6.4E-01	5.9E-01	5.9E-01	1.4E+00	3.9E+01	5.1E+02	No
Vanadium	7440-62-2	mg/kg	4 / 4	7.4E+00	1.4E+01	2.3E+01	4.0E+01	2.3E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	4 / 4	6.8E+01	1.4E+02	2.6E+02	8.1E+02	2.6E+02	6.2E+01	2.3E+03	3.1E+04	No
Explosives Handling Areas												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	122 / 122	2.5E+03	8.7E+03	2.5E+04	9.3E+03	9.3E+03	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	14 / 92	3.3E-01	3.0E+00	1.8E+02	6.3E+00	6.3E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	122 / 122	2.1E+00	1.1E+01	3.2E+01	1.2E+01	1.2E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	122 / 122	1.5E+01	7.5E+01	3.0E+02	8.3E+01	8.3E+01	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	67 / 92	2.8E-01	6.2E-01	3.1E+00	7.1E-01	7.1E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	87 / 122	5.0E-02	1.1E+00	2.3E+01	1.5E+00	1.5E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	92 / 92	5.6E+02	1.3E+04	1.2E+05	1.8E+04	1.8E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	122 / 122	4.4E+00	1.7E+01	1.4E+02	2.0E+01	2.0E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	92 / 92	1.5E+00	7.8E+00	1.9E+01	8.7E+00	8.7E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	92 / 92	4.0E+00	2.2E+01	8.2E+01	2.4E+01	2.4E+01	1.8E+01	3.1E+02	4.1E+03	No
Cyanide	57-12-5	mg/kg	5 / 18	1.0E-01	5.5E-01	5.0E+00	1.0E+00	1.0E+00	--	1.2E+02	1.2E+03	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Iron	7439-89-6	mg/kg	92 / 92	7.0E+03	2.0E+04	5.6E+04	2.1E+04	2.1E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	122 / 122	4.2E+00	9.7E+01	8.8E+02	1.2E+02	1.2E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	92 / 92	5.5E+02	3.0E+03	1.5E+04	3.4E+03	3.4E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	122 / 122	3.9E+01	5.5E+02	5.0E+03	6.5E+02	6.5E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	77 / 120	9.6E-03	1.1E-01	7.1E+00	2.1E-01	2.1E-01	3.6E-02	2.3E+00	3.1E+01	Yes
Nickel	7440-02-0	mg/kg	92 / 92	4.6E+00	1.9E+01	5.6E+01	2.2E+01	2.2E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	92 / 92	2.7E+02	8.9E+02	2.4E+03	9.5E+02	9.5E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	47 / 122	3.7E-01	8.1E-01	3.3E+00	8.9E-01	8.9E-01	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	6 / 122	1.9E-01	2.5E-01	1.5E+00	2.7E-01	2.7E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	21 / 92	5.5E+01	2.7E+02	6.5E+02	2.9E+02	2.9E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	75 / 92	1.5E-01	5.8E-01	7.6E+00	7.3E-01	7.3E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	92 / 92	5.2E+00	1.3E+01	2.5E+01	1.4E+01	1.4E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	122 / 122	1.4E+01	1.4E+02	8.9E+02	1.7E+02	1.7E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	19 / 79	9.3E-02	3.1E+00	1.6E+02	6.7E+00	6.7E+00	--	1.8E+02	1.8E+03	No
1,3-Dinitrobenzene	99-65-0	mg/kg	2 / 79	5.4E-02	2.5E-01	1.3E-01	3.9E-01	1.3E-01	--	6.1E-01	6.2E+00	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	59 / 79	5.5E-02	4.4E+02	1.7E+04	8.7E+02	8.7E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	15 / 79	5.4E-02	3.7E-01	5.0E+00	5.5E-01	5.5E-01	--	7.2E-01	2.5E+00	Yes
2,6-Dinitrotoluene	606-20-2	mg/kg	1 / 79	1.0E-01	3.5E+00	1.0E-01	8.7E+00	1.0E-01	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	22 / 40	1.4E-01	7.8E+00	9.8E+00	1.8E+01	9.8E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	7 / 40	1.3E-01	3.6E+01	4.8E+00	9.3E+01	4.8E+00	--	--	--	Yes
HMX	2691-41-0	mg/kg	7 / 79	6.7E-01	2.1E+01	1.5E+03	5.2E+01	5.2E+01	--	3.1E+02	3.1E+03	Yes
Nitrocellulose	9004-70-0	mg/kg	5 / 7	2.3E+00	2.8E+01	9.4E+01	7.1E+03	9.4E+01	--	--	--	Yes
RDX	121-82-4	mg/kg	16 / 79	1.8E-01	1.3E+02	9.8E+03	3.3E+02	3.3E+02	--	4.4E+00	1.6E+01	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	40 / 71	3.7E-02	5.5E-01	5.2E+00	7.7E-01	7.7E-01	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	10 / 71	4.2E-02	2.7E-01	6.0E+00	4.3E-01	4.3E-01	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDD	72-54-8	mg/kg	1 / 20	1.2E-02	5.4E-02	1.2E-02	1.4E-01	1.2E-02	--	2.4E+00	1.0E+01	No
4,4'-DDE	72-55-9	mg/kg	9 / 20	3.9E-03	6.6E-02	8.1E-02	1.5E-01	8.1E-02	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	6 / 20	6.4E-03	6.9E-02	1.7E-01	1.6E-01	1.6E-01	--	1.7E+00	7.0E+00	No
Aldrin	309-00-2	mg/kg	2 / 20	2.2E-03	5.4E-02	2.4E-02	1.4E-01	2.4E-02	--	2.9E-02	1.0E-01	No
Dieldrin	60-57-1	mg/kg	3 / 20	3.1E-03	5.5E-02	2.7E-02	1.4E-01	2.7E-02	--	3.0E-02	1.1E-01	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Endrin	72-20-8	mg/kg	1 / 20	5.6E-03	5.3E-02	5.6E-03	1.4E-01	5.6E-03	--	1.8E+00	1.8E+01	No
Endrin Aldehyde	7421-93-4	mg/kg	5 / 20	4.6E-03	6.5E-02	1.2E-01	1.5E-01	1.2E-01	--	1.8E+00	1.8E+01	No
Heptachlor	76-44-8	mg/kg	1 / 20	3.6E-02	5.5E-02	3.6E-02	1.4E-01	3.6E-02	--	1.1E-01	3.8E-01	No
Heptachlor Epoxide	1024-57-3	mg/kg	1 / 20	4.2E-03	5.3E-02	4.2E-03	1.4E-01	4.2E-03	--	5.3E-02	1.9E-01	No
Lindane	58-89-9	mg/kg	1 / 20	4.8E-03	5.3E-02	4.8E-03	1.4E-01	4.8E-03	--	4.4E-01	1.7E+00	No
alpha-Chlordane	5103-71-9	mg/kg	1 / 20	5.7E-01	8.1E-02	5.7E-01	1.8E-01	1.8E-01	--	1.6E+00	6.5E+00	No
beta-BHC	319-85-7	mg/kg	2 / 20	2.1E-03	5.3E-02	4.7E-03	1.4E-01	4.7E-03	--	3.2E-01	1.3E+00	No
gamma-Chlordane	5103-74-2	mg/kg	4 / 20	2.4E-03	5.8E-02	8.8E-02	1.4E-01	8.8E-02	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
2-Methylnaphthalene	91-57-6	mg/kg	3 / 23	6.9E-02	6.6E-01	1.7E-01	1.3E+00	1.7E-01	--	--	--	Yes
4-Methylphenol	106-44-5	mg/kg	1 / 23	5.4E-02	6.7E-01	5.4E-02	1.4E+00	5.4E-02	--	3.1E+01	3.1E+02	No
Acenaphthene	83-32-9	mg/kg	1 / 23	7.4E-01	6.9E-01	7.4E-01	1.4E+00	7.4E-01	--	3.7E+02	2.9E+03	No
Anthracene	120-12-7	mg/kg	3 / 23	7.2E-02	7.3E-01	1.9E+00	1.4E+00	1.4E+00	--	2.2E+03	2.4E+04	No
Benz(a)anthracene	56-55-3	mg/kg	11 / 23	7.0E-02	7.2E-01	2.9E+00	1.4E+00	1.4E+00	--	6.2E-01	2.1E+00	Yes
Benzo(a)pyrene	50-32-8	mg/kg	10 / 23	6.3E-02	7.1E-01	2.3E+00	1.4E+00	1.4E+00	--	6.2E-02	2.1E-01	Yes
Benzo(b)fluoranthene	205-99-2	mg/kg	11 / 23	6.8E-02	6.3E-01	6.6E-01	1.3E+00	6.6E-01	--	6.2E-01	2.1E+00	Yes
Benzo(g,h,i)perylene	191-24-2	mg/kg	8 / 23	3.8E-02	6.7E-01	1.1E+00	1.4E+00	1.1E+00	--	--	--	Yes
Benzo(k)fluoranthene	207-08-9	mg/kg	10 / 23	6.1E-02	7.4E-01	3.2E+00	1.5E+00	1.5E+00	--	6.2E+00	2.1E+01	No
Benzoic Acid	65-85-0	mg/kg	1 / 14	2.4E-01	4.4E+00	2.4E-01	1.0E+01	2.4E-01	--	2.4E+04	2.5E+05	No
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	3 / 23	8.1E-02	6.6E-01	1.9E-01	1.4E+00	1.9E-01	--	3.5E+01	1.2E+02	No
Butyl benzyl phthalate	85-68-7	mg/kg	3 / 23	8.4E-02	6.8E-01	8.1E-01	1.4E+00	8.1E-01	--	1.2E+03	1.2E+04	No
Carbazole	86-74-8	mg/kg	1 / 23	1.2E+00	7.1E-01	1.2E+00	1.4E+00	1.2E+00	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	13 / 23	7.1E-02	7.2E-01	2.7E+00	1.4E+00	1.4E+00	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	3 / 23	6.8E-02	6.5E-01	1.1E-01	1.3E+00	1.1E-01	--	6.1E+02	6.2E+03	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	2 / 23	4.8E-02	6.8E-01	7.2E-01	1.4E+00	7.2E-01	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	1 / 23	5.4E-01	6.8E-01	5.4E-01	1.4E+00	5.4E-01	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	13 / 23	1.0E-01	9.8E-01	7.7E+00	1.8E+00	1.8E+00	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	1 / 23	9.1E-01	7.0E-01	9.1E-01	1.4E+00	9.1E-01	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	6 / 23	9.6E-02	6.9E-01	1.3E+00	1.4E+00	1.3E+00	--	6.2E-01	2.1E+00	Yes
Naphthalene	91-20-3	mg/kg	3 / 23	6.0E-02	6.6E-01	2.7E-01	1.4E+00	2.7E-01	--	5.6E+00	1.9E+01	No
Phenanthrene	85-01-8	mg/kg	11 / 23	5.7E-02	8.9E-01	6.4E+00	1.7E+00	1.7E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	13 / 23	8.2E-02	8.6E-01	5.0E+00	1.6E+00	1.6E+00	--	2.3E+02	2.9E+03	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Organic Volatiles												
Acetone	67-64-1	mg/kg	1 / 24	6.5E-03	6.6E-02	6.5E-03	1.7E-01	6.5E-03	--	1.6E+02	6.0E+02	No
Chloroform	67-66-3	mg/kg	5 / 24	2.0E-03	1.7E-02	3.0E-03	4.1E-02	3.0E-03	--	3.6E-01	1.2E+00	No
Toluene	108-88-3	mg/kg	8 / 24	5.6E-03	1.6E-01	3.7E+00	4.3E-01	4.3E-01	--	6.6E+01	2.2E+02	No
North Ditches												
Inorganics												
Aluminum	7429-90-5	mg/kg	4 / 4	7.7E+03	9.1E+03	1.0E+04	1.0E+04	1.0E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	1 / 3	4.8E+00	2.1E+00	4.8E+00	6.1E+00	4.8E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	4 / 4	6.4E+00	1.0E+01	1.5E+01	2.0E+01	1.5E+01	1.5E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	4 / 4	5.8E+01	6.5E+01	6.9E+01	7.1E+01	6.9E+01	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	2 / 3	6.0E-01	5.0E-01	6.2E-01	8.2E-01	6.2E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	2 / 4	9.5E-02	2.4E-01	4.8E-01	8.2E+02	4.8E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	3 / 3	1.0E+03	1.8E+03	3.0E+03	4.4E+04	3.0E+03	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	4 / 4	1.1E+01	1.2E+01	1.2E+01	1.2E+01	1.2E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	3 / 3	8.6E+00	9.1E+00	9.8E+00	1.0E+01	9.8E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	3 / 3	1.3E+01	1.4E+01	1.7E+01	2.0E+01	1.7E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	3 / 3	1.6E+04	2.0E+04	2.3E+04	2.6E+04	2.3E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	4 / 4	1.4E+01	1.7E+01	2.5E+01	2.6E+01	2.5E+01	1.9E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	3 / 3	1.7E+03	1.9E+03	2.2E+03	2.6E+03	2.2E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	4 / 4	2.8E+02	6.2E+02	8.8E+02	9.1E+02	8.8E+02	1.5E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	3 / 4	1.6E-02	3.0E-02	5.8E-02	1.2E-01	5.8E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	3 / 3	1.6E+01	2.0E+01	2.2E+01	2.5E+01	2.2E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	3 / 3	6.7E+02	7.0E+02	7.7E+02	8.0E+02	7.7E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	2 / 4	3.8E-01	9.4E-01	6.1E-01	5.8E+00	6.1E-01	1.4E+00	3.9E+01	5.1E+02	No
Thallium	6533-73-9	mg/kg	3 / 3	2.6E-01	2.9E-01	3.4E-01	4.1E-01	3.4E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	3 / 3	1.4E+01	1.6E+01	1.7E+01	1.8E+01	1.7E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	4 / 4	8.1E+01	8.6E+01	9.6E+01	9.5E+01	9.5E+01	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	1 / 2	5.1E-02	8.8E-02	5.1E-02	3.2E-01	5.1E-02	--	3.1E+00	3.1E+01	No
Organic Volatiles												
Acetone	67-64-1	mg/kg	2 / 2	3.0E-03	1.2E-02	2.0E-02	6.5E-02	2.0E-02	--	1.6E+02	6.0E+02	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Packaging and Shipping Areas												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	29 / 29	3.3E+03	1.1E+04	2.6E+04	1.3E+04	1.3E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	4 / 26	6.8E-01	3.7E+00	6.0E+01	7.8E+00	7.8E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	29 / 29	3.1E+00	1.3E+01	4.9E+01	1.6E+01	1.6E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	29 / 29	2.9E+01	1.1E+02	9.0E+02	1.7E+02	1.7E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	24 / 28	3.5E-01	8.9E-01	4.2E+00	1.3E+00	1.3E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	12 / 29	1.8E-01	1.4E+00	1.7E+01	2.5E+00	2.5E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	28 / 28	2.3E+02	1.7E+04	1.1E+05	6.6E+04	6.6E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	29 / 29	4.7E+00	2.8E+01	2.2E+02	4.3E+01	4.3E+01	1.7E+01	2.1E+02	4.5E+02	Yes
Cobalt	7440-48-4	mg/kg	28 / 28	2.6E+00	7.1E+00	1.5E+01	8.4E+00	8.4E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	28 / 28	7.2E+00	2.8E+01	1.4E+02	3.8E+01	3.8E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	28 / 28	8.7E+03	2.2E+04	6.0E+04	2.6E+04	2.6E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	29 / 29	9.6E+00	1.5E+02	1.5E+03	2.6E+02	2.6E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	28 / 28	7.6E+02	3.9E+03	2.1E+04	5.0E+03	5.0E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	29 / 29	2.3E+02	1.0E+03	7.5E+03	1.5E+03	1.5E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	26 / 29	9.9E-03	4.6E-02	1.8E-01	6.4E-02	6.4E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	28 / 28	6.7E+00	1.7E+01	5.2E+01	2.0E+01	2.0E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	27 / 28	2.9E+02	7.5E+02	1.6E+03	9.0E+02	9.0E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	15 / 29	3.7E-01	1.2E+00	1.2E+00	1.8E+00	1.2E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	10 / 29	1.7E-01	2.1E+00	1.8E+01	3.5E+00	3.5E+00	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	6 / 28	7.8E+01	2.6E+02	5.4E+02	2.9E+02	2.9E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	19 / 28	1.7E-01	4.0E-01	9.9E-01	5.1E-01	5.1E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	28 / 28	5.1E+00	1.5E+01	2.5E+01	1.7E+01	1.7E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	29 / 29	2.1E+01	1.5E+02	7.0E+02	2.1E+02	2.1E+02	6.2E+01	2.3E+03	3.1E+04	No
<i>Organic Explosives</i>												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	6 / 8	5.3E-02	5.2E-01	2.6E+00	5.1E+00	2.6E+00	--	3.1E+00	3.1E+01	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	2 / 7	1.2E-01	1.3E-01	1.6E-01	1.4E-01	1.4E-01	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	2 / 7	1.9E-01	1.5E-01	2.3E-01	1.8E-01	1.8E-01	--	--	--	Yes
HMX	2691-41-0	mg/kg	1 / 8	6.5E-01	3.9E-01	6.5E-01	5.8E-01	5.8E-01	--	3.1E+02	3.1E+03	No
RDX	121-82-4	mg/kg	1 / 8	2.8E-01	2.9E-01	2.8E-01	3.4E-01	2.8E-01	--	4.4E+00	1.6E+01	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	7 / 25	8.0E-02	5.8E-01	9.5E+00	1.2E+00	1.2E+00	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	3 / 25	5.3E-02	1.2E-01	1.3E-01	2.5E-01	1.3E-01	--	2.2E-01	7.4E-01	No
Organic Semivolatiles												
Acenaphthene	83-32-9	mg/kg	1 / 8	1.1E+00	3.1E-01	1.1E+00	5.2E-01	5.2E-01	--	3.7E+02	2.9E+03	No
Anthracene	120-12-7	mg/kg	2 / 8	7.4E-02	2.4E-01	6.9E-01	3.7E-01	3.7E-01	--	2.2E+03	2.4E+04	No
Benz(a)anthracene	56-55-3	mg/kg	3 / 8	1.1E-01	2.5E-01	7.2E-01	3.8E-01	3.8E-01	--	6.2E-01	2.1E+00	Yes
Benzo(a)pyrene	50-32-8	mg/kg	3 / 8	1.3E-01	2.1E-01	4.1E-01	2.7E-01	2.7E-01	--	6.2E-02	2.1E-01	Yes
Benzo(b)fluoranthene	205-99-2	mg/kg	4 / 8	7.8E-02	2.4E-01	6.1E-01	4.2E-01	4.2E-01	--	6.2E-01	2.1E+00	No
Benzo(g,h,i)perylene	191-24-2	mg/kg	3 / 8	9.8E-02	1.7E-01	1.7E-01	2.0E-01	1.7E-01	--	--	--	Yes
Benzo(k)fluoranthene	207-08-9	mg/kg	3 / 8	9.8E-02	1.9E-01	3.4E-01	2.4E-01	2.4E-01	--	6.2E+00	2.1E+01	No
Benzoic Acid	65-85-0	mg/kg	1 / 8	2.4E-01	8.6E-01	2.4E-01	1.0E+00	2.4E-01	--	2.4E+04	2.5E+05	No
Carbazole	86-74-8	mg/kg	1 / 8	3.7E-01	2.2E-01	3.7E-01	2.6E-01	2.6E-01	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	5 / 8	5.6E-02	2.2E-01	5.9E-01	4.5E-01	4.5E-01	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	1 / 8	1.6E-01	1.9E-01	1.6E-01	2.1E-01	1.6E-01	--	6.1E+02	6.2E+03	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	1 / 8	6.6E-02	1.8E-01	6.6E-02	2.1E-01	6.6E-02	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	1 / 8	7.7E-01	2.7E-01	7.7E-01	4.0E-01	4.0E-01	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	5 / 8	8.6E-02	7.1E-01	4.2E+00	1.7E+00	1.7E+00	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	1 / 8	1.4E+00	3.5E-01	1.4E+00	6.3E-01	6.3E-01	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	3 / 8	8.7E-02	1.7E-01	1.7E-01	2.0E-01	1.7E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	3 / 8	1.0E-01	7.4E-01	4.6E+00	1.8E+00	1.8E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	5 / 8	7.1E-02	5.9E-01	3.3E+00	1.3E+00	1.3E+00	--	2.3E+02	2.9E+03	No
Organic Volatiles												
2-Butanone	78-93-3	mg/kg	1 / 9	3.6E-03	1.1E-02	3.6E-03	1.2E-02	3.6E-03	--	7.3E+02	2.7E+03	No
Acetone	67-64-1	mg/kg	1 / 9	1.7E-02	1.2E-02	1.7E-02	1.3E-02	1.3E-02	--	1.6E+02	6.0E+02	No
Toluene	108-88-3	mg/kg	3 / 9	1.4E-03	2.7E-03	3.7E-03	3.2E-03	3.2E-03	--	6.6E+01	2.2E+02	No
Perimeter Area												
Inorganics												
Aluminum	7429-90-5	mg/kg	36 / 36	2.8E+03	1.1E+04	2.1E+04	1.2E+04	1.2E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	2 / 29	7.8E-01	2.8E+02	8.1E+03	7.6E+02	7.6E+02	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	36 / 36	5.5E+00	1.2E+01	3.7E+01	1.3E+01	1.3E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	36 / 36	1.5E+01	1.0E+02	1.1E+03	1.5E+02	1.5E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	25 / 29	3.2E-01	6.9E-01	2.9E+00	8.5E-01	8.5E-01	8.8E-01	1.5E+01	1.9E+02	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Cadmium	7440-43-9	mg/kg	24 / 35	5.6E-02	4.8E-01	4.8E+00	7.4E-01	7.4E-01	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	29 / 29	1.5E+02	4.9E+03	9.7E+04	1.1E+04	1.1E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	36 / 36	4.0E+00	1.2E+02	4.0E+03	3.1E+02	3.1E+02	1.7E+01	2.1E+02	4.5E+02	Yes
Cobalt	7440-48-4	mg/kg	29 / 29	3.1E+00	1.3E+01	1.2E+02	1.9E+01	1.9E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	29 / 29	4.0E+00	4.1E+01	7.2E+02	8.3E+01	8.3E+01	1.8E+01	3.1E+02	4.1E+03	Yes
Iron	7439-89-6	mg/kg	29 / 29	1.0E+04	2.0E+04	3.6E+04	2.2E+04	2.2E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	36 / 36	8.8E+00	7.1E+02	2.5E+04	1.9E+03	1.9E+03	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	29 / 29	8.0E+02	2.6E+03	1.4E+04	3.6E+03	3.6E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	36 / 36	1.3E+02	7.0E+02	2.9E+03	9.3E+02	9.3E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	28 / 36	1.4E-02	1.2E-01	2.8E+00	2.5E-01	2.5E-01	3.6E-02	2.3E+00	3.1E+01	Yes
Nickel	7440-02-0	mg/kg	29 / 29	5.7E+00	1.6E+01	3.5E+01	1.9E+01	1.9E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	29 / 29	2.3E+02	7.0E+02	2.0E+03	8.1E+02	8.1E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	21 / 36	3.7E-01	9.6E-01	4.0E+00	1.1E+00	1.1E+00	1.4E+00	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	2 / 29	1.9E+02	3.1E+02	2.1E+02	3.5E+02	2.1E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	15 / 29	3.0E-01	3.3E-01	9.3E-01	4.0E-01	4.0E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	29 / 29	5.2E+00	1.9E+01	2.9E+01	2.1E+01	2.1E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	36 / 36	3.5E+01	8.5E+01	9.0E+02	1.3E+02	1.3E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	1 / 11	6.7E+00	6.2E+00	6.7E+00	1.6E+01	6.7E+00	--	1.8E+02	1.8E+03	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	6 / 11	4.7E-02	3.7E+02	3.6E+03	9.6E+02	9.6E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	3 / 11	5.1E-01	6.6E-01	4.0E+00	1.3E+00	1.3E+00	--	7.2E-01	2.5E+00	Yes
2,6-Dinitrotoluene	606-20-2	mg/kg	1 / 11	2.9E-01	4.1E-01	2.9E-01	8.2E-01	2.9E-01	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	1 / 6	5.8E-01	1.0E+01	5.8E-01	3.0E+01	5.8E-01	--	--	--	Yes
Nitrocellulose	9004-70-0	mg/kg	1 / 1	4.2E+03	4.2E+03	4.2E+03	--	4.2E+03	--	--	--	Yes
RDX	121-82-4	mg/kg	1 / 11	1.6E+00	5.8E-01	1.6E+00	8.2E-01	8.2E-01	--	4.4E+00	1.6E+01	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	4 / 13	5.1E-02	6.3E-01	5.7E+00	1.4E+00	1.4E+00	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	1 / 13	6.4E-01	1.1E-01	6.4E-01	2.0E-01	2.0E-01	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	1 / 2	3.3E-03	2.1E-03	3.3E-03	9.5E-03	3.3E-03	--	1.7E+00	7.0E+00	No
Dieldrin	60-57-1	mg/kg	1 / 2	3.2E-03	2.1E-03	3.2E-03	9.0E-03	3.2E-03	--	3.0E-02	1.1E-01	No
alpha-Chlordane	5103-71-9	mg/kg	1 / 2	8.3E-03	4.6E-03	8.3E-03	2.8E-02	8.3E-03	--	1.6E+00	6.5E+00	No
beta-BHC	319-85-7	mg/kg	2 / 2	2.2E-03	3.1E-03	4.0E-03	8.8E-03	4.0E-03	--	3.2E-01	1.3E+00	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Organic Semivolatiles												
Benzoic Acid	65-85-0	mg/kg	1 / 2	1.5E-01	5.3E-01	1.5E-01	2.9E+00	1.5E-01	--	2.4E+04	2.5E+05	No
Fluoranthene	206-44-0	mg/kg	1 / 2	6.8E-02	1.3E-01	6.8E-02	5.1E-01	6.8E-02	--	2.3E+02	2.2E+03	No
Preparation and Receiving Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	39 / 39	1.4E+03	9.0E+03	2.2E+04	9.9E+03	9.9E+03	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	16 / 38	5.5E-01	2.6E+01	6.6E+02	5.6E+01	5.6E+01	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	39 / 39	9.5E-01	1.2E+01	3.9E+01	1.4E+01	1.4E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	39 / 39	1.3E+01	1.2E+02	8.1E+02	1.6E+02	1.6E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	28 / 35	3.1E-01	8.0E-01	2.6E+00	9.5E-01	9.5E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	22 / 36	5.9E-02	3.6E+00	5.0E+01	6.6E+00	6.6E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	38 / 38	3.1E+02	1.7E+04	1.5E+05	4.1E+04	4.1E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	39 / 39	4.3E+00	1.1E+02	1.9E+03	2.0E+02	2.0E+02	1.7E+01	2.1E+02	4.5E+02	Yes
Chromium, hexavalent	18540-29-9	mg/kg	1 / 13	8.2E+01	7.0E+00	8.2E+01	1.8E+01	1.8E+01	--	2.2E+01	6.4E+01	Yes
Cobalt	7440-48-4	mg/kg	38 / 38	3.0E+00	9.9E+00	2.5E+01	1.2E+01	1.2E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	38 / 38	4.2E+00	2.1E+02	3.3E+03	3.7E+02	3.7E+02	1.8E+01	3.1E+02	4.1E+03	Yes
Cyanide	57-12-5	mg/kg	3 / 7	1.4E-01	2.3E-01	4.0E-01	3.2E-01	3.2E-01	--	1.2E+02	1.2E+03	No
Iron	7439-89-6	mg/kg	38 / 38	1.1E+04	3.2E+04	2.5E+05	4.4E+04	4.4E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	39 / 39	7.3E+00	5.1E+02	6.9E+03	8.5E+02	8.5E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	38 / 38	3.4E+02	3.5E+03	2.2E+04	4.5E+03	4.5E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	39 / 39	1.7E+02	6.8E+02	2.3E+03	8.2E+02	8.2E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	32 / 38	1.0E-02	2.3E-01	2.4E+00	3.7E-01	3.7E-01	3.6E-02	2.3E+00	3.1E+01	Yes
Nickel	7440-02-0	mg/kg	38 / 38	8.4E+00	2.9E+01	1.4E+02	3.6E+01	3.6E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	38 / 38	2.4E+02	8.2E+02	1.5E+03	9.0E+02	9.0E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	15 / 39	4.1E-01	1.4E+00	5.2E+00	1.7E+00	1.7E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	7 / 39	2.0E-01	4.1E-01	3.1E+00	5.5E-01	5.5E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	13 / 38	9.8E+01	2.9E+02	5.7E+02	3.3E+02	3.3E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	33 / 38	1.5E-01	6.7E-01	4.2E+00	9.0E-01	9.0E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	38 / 38	4.7E+00	1.5E+01	3.0E+01	1.7E+01	1.7E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	39 / 39	2.1E+01	5.5E+02	7.3E+03	9.1E+02	9.1E+02	6.2E+01	2.3E+03	3.1E+04	Yes
Organic Explosives												
1,3-Dinitrobenzene	99-65-0	mg/kg	1 / 21	4.5E-02	1.2E-01	4.5E-02	1.3E-01	4.5E-02	--	6.1E-01	6.2E+00	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	6 / 21	1.6E-01	2.8E-01	1.2E+00	3.9E-01	3.9E-01	--	3.1E+00	3.1E+01	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 21	4.9E-02	1.2E-01	4.9E-02	1.3E-01	4.9E-02	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	1 / 16	3.4E-01	1.4E-01	3.4E-01	1.7E-01	1.7E-01	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	2 / 16	2.2E-01	1.7E-01	4.8E-01	2.2E-01	2.2E-01	--	--	--	Yes
Nitrocellulose	9004-70-0	mg/kg	2 / 2	6.8E+00	7.0E+00	7.2E+00	8.3E+00	7.2E+00	--	--	--	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	13 / 33	3.8E-02	3.8E+00	5.9E+01	7.3E+00	7.3E+00	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	3 / 33	7.9E-02	5.4E-01	5.2E-01	1.1E+00	5.2E-01	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	6 / 9	4.0E-03	1.2E-01	8.8E-01	3.7E+01	8.8E-01	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	2 / 9	6.2E-03	4.5E-02	3.7E-01	1.2E-01	1.2E-01	--	1.7E+00	7.0E+00	No
Dieldrin	60-57-1	mg/kg	2 / 9	1.1E-02	3.7E-02	2.9E-01	9.6E-02	9.6E-02	--	3.0E-02	1.1E-01	Yes
Endrin Aldehyde	7421-93-4	mg/kg	2 / 9	1.4E-02	7.7E-02	6.5E-01	2.1E-01	2.1E-01	--	1.8E+00	1.8E+01	No
beta-BHC	319-85-7	mg/kg	3 / 9	5.3E-03	4.5E-02	3.6E-01	1.2E-01	1.2E-01	--	3.2E-01	1.3E+00	Yes
delta-BHC	319-86-8	mg/kg	1 / 9	2.2E-03	8.6E-03	2.2E-03	1.9E-02	2.2E-03	--	--	--	Yes
gamma-Chlordane	5103-74-2	mg/kg	2 / 9	7.0E-03	5.5E-02	4.6E-01	1.5E-01	1.5E-01	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
2-Methylnaphthalene	91-57-6	mg/kg	6 / 18	1.4E-01	4.4E-01	4.5E+00	8.6E-01	8.6E-01	--	--	--	Yes
Acenaphthene	83-32-9	mg/kg	4 / 18	1.0E-01	4.5E-01	1.7E+00	7.9E-01	7.9E-01	--	3.7E+02	2.9E+03	No
Acenaphthylene	208-96-8	mg/kg	4 / 18	9.3E-02	3.6E-01	1.8E-01	6.7E-01	1.8E-01	--	--	--	Yes
Anthracene	120-12-7	mg/kg	5 / 18	8.0E-02	7.1E-01	5.6E+00	1.3E+00	1.3E+00	--	2.2E+03	2.4E+04	No
Benz(a)anthracene	56-55-3	mg/kg	10 / 18	5.2E-02	1.0E+00	1.0E+01	2.0E+00	2.0E+00	--	6.2E-01	2.1E+00	Yes
Benzo(a)pyrene	50-32-8	mg/kg	11 / 18	5.9E-02	1.1E+00	9.9E+00	2.0E+00	2.0E+00	--	6.2E-02	2.1E-01	Yes
Benzo(b)fluoranthene	205-99-2	mg/kg	13 / 18	4.3E-02	1.2E+00	1.1E+01	4.8E+00	4.8E+00	--	6.2E-01	2.1E+00	Yes
Benzo(g,h,i)perylene	191-24-2	mg/kg	11 / 18	4.5E-02	7.3E-01	4.6E+00	1.9E+00	1.9E+00	--	--	--	Yes
Benzo(k)fluoranthene	207-08-9	mg/kg	9 / 18	5.4E-02	9.1E-01	6.7E+00	1.6E+00	1.6E+00	--	6.2E+00	2.1E+01	Yes
Benzoic Acid	65-85-0	mg/kg	3 / 14	3.3E-01	2.0E+00	5.0E-01	3.9E+00	5.0E-01	--	2.4E+04	2.5E+05	No
Butyl benzyl phthalate	85-68-7	mg/kg	2 / 18	6.5E-02	3.6E-01	1.3E-01	6.7E-01	1.3E-01	--	1.2E+03	1.2E+04	No
Carbazole	86-74-8	mg/kg	5 / 18	6.2E-02	4.5E-01	1.3E+00	7.7E-01	7.7E-01	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	13 / 18	6.0E-02	1.2E+00	1.1E+01	4.3E+00	4.3E+00	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	5 / 18	1.1E-01	3.8E-01	2.7E-01	6.9E-01	2.7E-01	--	6.1E+02	6.2E+03	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	5 / 18	1.1E-01	4.4E-01	1.3E+00	7.6E-01	7.6E-01	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	5 / 18	5.8E-02	4.2E-01	1.0E+00	7.3E-01	7.3E-01	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	15 / 18	3.9E-02	2.3E+00	2.4E+01	1.3E+01	1.3E+01	--	2.3E+02	2.2E+03	No

Table Q-5. Summary of COPC Screening for Load Line 2 Deep Surface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Fluorene	86-73-7	mg/kg	4 / 18	2.1E-01	5.1E-01	2.2E+00	8.7E-01	8.7E-01	--	2.7E+02	2.6E+03	No
Indeno(1,2,3- <i>cd</i>)pyrene	193-39-5	mg/kg	9 / 18	4.9E-02	7.5E-01	5.1E+00	1.3E+00	1.3E+00	--	6.2E-01	2.1E+00	Yes
Naphthalene	91-20-3	mg/kg	7 / 18	6.5E-02	3.4E-01	2.6E+00	5.7E-01	5.7E-01	--	5.6E+00	1.9E+01	No
Pentachlorophenol	87-86-5	mg/kg	1 / 18	3.5E-01	4.4E-01	3.5E-01	7.4E-01	3.5E-01	--	3.0E+00	9.0E+00	No
Phenanthrene	85-01-8	mg/kg	12 / 18	5.6E-02	1.8E+00	1.8E+01	3.5E+00	3.5E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	14 / 18	7.0E-02	2.4E+00	2.3E+01	4.6E+00	4.6E+00	--	2.3E+02	2.9E+03	No
Organic Volatiles												
2-Butanone	78-93-3	mg/kg	1 / 16	1.2E-02	9.7E-03	1.2E-02	1.2E-02	1.2E-02	--	7.3E+02	2.7E+03	No
Acetone	67-64-1	mg/kg	1 / 14	3.8E-02	1.3E-02	3.8E-02	1.6E-02	1.6E-02	--	1.6E+02	6.0E+02	No
Carbon Disulfide	75-15-0	mg/kg	1 / 16	4.7E-03	3.0E-03	4.7E-03	3.3E-03	3.3E-03	--	3.6E+01	1.2E+02	No
Toluene	108-88-3	mg/kg	7 / 16	7.4E-04	9.9E-03	5.6E-02	1.8E-02	1.8E-02	--	6.6E+01	2.2E+02	No

BHC = Benzene hexachloride.

CAS = Chemical Abstracts Service.

COPC = Chemical of potential concern.

DDD = Dichlorodiphenyldichloroethane.

DDE = Dichlorodiphenyldichloroethylene.

DDT = Dichlorodiphenyltrichloroethane.

EPC = Exposure point concentration.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

PCB = Polychlorinated biphenyl.

PRG = Preliminary remediation goal.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

UCL = Upper confidence limit on the mean.

-- Criteria not available or insufficient data to calculate the UCL.

Table Q-6. Summary of COPC Screening for Load Line 2 Subsurface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Explosives Handling Areas												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	15 / 15	8.3E+03	1.1E+04	2.3E+04	1.2E+04	1.2E+04	2.0E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	2 / 15	1.1E+00	1.9E+00	2.0E+01	4.2E+00	4.2E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	15 / 15	4.1E+00	1.3E+01	2.2E+01	1.5E+01	1.5E+01	2.0E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	15 / 15	3.4E+01	8.2E+01	2.9E+02	1.1E+02	1.1E+02	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	12 / 15	4.7E-01	7.1E-01	3.1E+00	1.0E+00	1.0E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	9 / 15	1.3E-01	5.0E-01	3.3E+00	8.2E-01	8.2E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	15 / 15	1.2E+03	1.2E+04	1.2E+05	2.6E+04	2.6E+04	3.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	15 / 15	1.1E+01	2.1E+01	1.1E+02	3.2E+01	3.2E+01	2.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	15 / 15	2.0E+00	9.8E+00	1.7E+01	1.2E+01	1.2E+01	2.3E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	15 / 15	5.7E+00	1.8E+01	2.4E+01	2.0E+01	2.0E+01	3.2E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	15 / 15	1.2E+04	2.4E+04	3.2E+04	2.6E+04	2.6E+04	3.5E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	15 / 15	1.2E+01	7.1E+01	7.5E+02	1.6E+02	1.6E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	15 / 15	1.0E+03	3.6E+03	1.4E+04	5.0E+03	5.0E+03	8.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	15 / 15	7.3E+01	5.5E+02	2.8E+03	9.5E+02	9.5E+02	3.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	10 / 13	1.2E-02	5.7E-01	7.1E+00	1.5E+00	1.5E+00	4.4E-02	2.3E+00	3.1E+01	Yes
Nickel	7440-02-0	mg/kg	15 / 15	6.8E+00	2.4E+01	5.6E+01	3.4E+01	3.4E+01	6.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	15 / 15	6.1E+02	9.1E+02	1.3E+03	1.0E+03	1.0E+03	3.4E+03	--	--	No
Selenium	7782-49-2	mg/kg	5 / 15	4.0E-01	9.3E-01	1.1E+00	1.1E+00	1.1E+00	1.5E+00	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	1 / 15	3.1E+02	3.0E+02	3.1E+02	3.0E+02	3.0E+02	1.5E+02	--	--	No
Thallium	6533-73-9	mg/kg	14 / 15	1.9E-01	3.6E-01	5.4E-01	4.2E-01	4.2E-01	9.1E-01	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	15 / 15	1.1E+01	1.6E+01	2.0E+01	1.7E+01	1.7E+01	3.8E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	15 / 15	3.8E+01	6.9E+01	1.6E+02	8.3E+01	8.3E+01	9.3E+01	2.3E+03	3.1E+04	No
<i>Organic Explosives</i>												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	6 / 8	9.3E-02	5.5E-01	2.4E+00	3.0E+00	2.4E+00	--	1.8E+02	1.8E+03	No
1,3-Dinitrobenzene	99-65-0	mg/kg	1 / 8	5.4E-02	4.3E-01	5.4E-02	9.9E-01	5.4E-02	--	6.1E-01	6.2E+00	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	8 / 8	5.8E+00	2.4E+02	1.6E+03	5.4E+03	1.6E+03	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	4 / 8	5.5E-02	4.3E-01	2.1E+00	2.2E+00	2.1E+00	--	7.2E-01	2.5E+00	Yes
2,6-Dinitrotoluene	606-20-2	mg/kg	1 / 8	1.0E-01	5.3E-01	1.0E-01	1.1E+00	1.0E-01	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	6 / 8	1.4E-01	2.3E+00	5.1E+00	3.6E+00	3.6E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	1 / 8	4.8E+00	5.8E+00	4.8E+00	1.1E+01	4.8E+00	--	--	--	Yes
RDX	121-82-4	mg/kg	3 / 8	2.4E-01	8.8E-01	2.9E-01	2.0E+00	2.9E-01	--	4.4E+00	1.6E+01	No

Table Q-6. Summary of COPC Screening for Load Line 2 Subsurface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Packaging and Shipping Areas												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	4 / 4	1.2E+04	1.3E+04	1.4E+04	1.5E+04	1.4E+04	2.0E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	1 / 4	2.2E+01	6.0E+00	2.2E+01	1.9E+01	1.9E+01	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	4 / 4	1.0E+01	1.5E+01	2.3E+01	2.9E+01	2.3E+01	2.0E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	4 / 4	6.5E+01	1.1E+02	2.3E+02	2.0E+02	2.0E+02	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	4 / 4	5.2E-01	8.4E-01	1.4E+00	2.1E+00	1.4E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	2 / 4	2.6E-01	2.3E+00	8.5E+00	7.2E+00	7.2E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	4 / 4	3.7E+02	1.0E+04	3.8E+04	5.8E+12	3.8E+04	3.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	4 / 4	1.3E+01	5.4E+01	1.7E+02	1.4E+02	1.4E+02	2.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	4 / 4	8.6E+00	9.9E+00	1.2E+01	1.2E+01	1.2E+01	2.3E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	4 / 4	1.1E+01	4.5E+01	1.2E+02	6.7E+03	1.2E+02	3.2E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	4 / 4	1.9E+04	3.2E+04	5.4E+04	8.5E+04	5.4E+04	3.5E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	4 / 4	1.5E+01	3.9E+02	1.5E+03	1.3E+03	1.3E+03	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	4 / 4	1.6E+03	3.4E+03	6.0E+03	1.3E+04	6.0E+03	8.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	4 / 4	2.3E+02	5.9E+02	1.5E+03	1.3E+04	1.5E+03	3.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	4 / 4	2.4E-02	4.4E-02	7.9E-02	1.8E-01	7.9E-02	4.4E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	4 / 4	1.3E+01	2.6E+01	4.8E+01	1.1E+02	4.8E+01	6.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	4 / 4	5.4E+02	8.8E+02	1.2E+03	1.2E+03	1.2E+03	3.4E+03	--	--	No
Selenium	7782-49-2	mg/kg	1 / 4	6.2E-01	1.1E+00	6.2E-01	1.4E+00	6.2E-01	1.5E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 4	1.5E+00	6.1E-01	1.5E+00	1.3E+00	1.3E+00	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	1 / 4	1.6E+02	2.7E+02	1.6E+02	3.6E+02	1.6E+02	1.5E+02	--	--	No
Thallium	6533-73-9	mg/kg	4 / 4	3.0E-01	4.1E-01	5.1E-01	5.1E-01	5.1E-01	9.1E-01	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	4 / 4	1.6E+01	2.1E+01	2.4E+01	2.5E+01	2.4E+01	3.8E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	4 / 4	5.1E+01	2.1E+02	6.4E+02	5.5E+02	5.5E+02	9.3E+01	2.3E+03	3.1E+04	No
<i>Organic Volatiles</i>												
2-Butanone	78-93-3	mg/kg	1 / 1	3.6E-03	3.6E-03	3.6E-03	--	3.6E-03	--	7.3E+02	2.7E+03	No
Acetone	67-64-1	mg/kg	1 / 1	1.7E-02	1.7E-02	1.7E-02	--	1.7E-02	--	1.6E+02	6.0E+02	No
Toluene	108-88-3	mg/kg	1 / 1	1.4E-03	1.4E-03	1.4E-03	--	1.4E-03	--	6.6E+01	2.2E+02	No
Perimeter Area												
<i>Inorganics</i>												
Aluminum	7429-90-5	mg/kg	2 / 2	1.1E+04	1.2E+04	1.4E+04	2.5E+04	1.4E+04	2.0E+04	7.6E+03	9.2E+04	No
Arsenic	7440-38-2	mg/kg	2 / 2	1.1E+01	1.2E+01	1.2E+01	1.4E+01	1.2E+01	2.0E+01	3.9E-01	1.6E+00	No

Table Q-6. Summary of COPC Screening for Load Line 2 Subsurface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Barium	7440-39-3	mg/kg	2 / 2	8.2E+01	8.3E+01	8.3E+01	8.7E+01	8.3E+01	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	2 / 2	6.7E-01	6.8E-01	6.8E-01	7.1E-01	6.8E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	1 / 2	2.9E-01	1.8E-01	2.9E-01	8.7E-01	2.9E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	2 / 2	2.2E+02	5.3E+02	8.4E+02	2.5E+03	8.4E+02	3.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	2 / 2	1.4E+01	1.5E+01	1.5E+01	1.8E+01	1.5E+01	2.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	2 / 2	7.0E+00	8.4E+00	9.8E+00	1.7E+01	9.8E+00	2.3E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	2 / 2	1.7E+01	1.7E+01	1.7E+01	1.8E+01	1.7E+01	3.2E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	2 / 2	2.2E+04	2.3E+04	2.3E+04	2.5E+04	2.3E+04	3.5E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	2 / 2	1.2E+01	1.8E+01	2.5E+01	5.9E+01	2.5E+01	1.9E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	2 / 2	2.0E+03	2.3E+03	2.6E+03	4.3E+03	2.6E+03	8.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	2 / 2	1.4E+02	1.8E+02	2.3E+02	4.5E+02	2.3E+02	3.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	1 / 2	3.5E-02	2.2E-02	3.5E-02	1.0E-01	3.5E-02	4.4E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	2 / 2	1.5E+01	1.9E+01	2.3E+01	4.3E+01	2.3E+01	6.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	2 / 2	7.3E+02	8.5E+02	9.6E+02	1.6E+03	9.6E+02	3.4E+03	--	--	No
Selenium	7782-49-2	mg/kg	1 / 2	5.2E-01	8.6E-01	5.2E-01	3.0E+00	5.2E-01	1.5E+00	3.9E+01	5.1E+02	No
Vanadium	7440-62-2	mg/kg	2 / 2	1.5E+01	1.7E+01	1.9E+01	3.1E+01	1.9E+01	3.8E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	2 / 2	6.6E+01	6.6E+01	6.6E+01	6.6E+01	6.6E+01	9.3E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	1 / 1	6.7E+00	6.7E+00	6.7E+00	--	6.7E+00	--	1.8E+02	1.8E+03	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	1 / 1	4.5E+02	4.5E+02	4.5E+02	--	4.5E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 1	1.7E+00	1.7E+00	1.7E+00	--	1.7E+00	--	7.2E-01	2.5E+00	Yes
Organic PCBs												
PCB-1260	11096-82-5	mg/kg	1 / 1	6.4E-01	6.4E-01	6.4E-01	--	6.4E-01	--	2.2E-01	7.4E-01	Yes
Preparation and Receiving Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	4 / 4	1.4E+03	7.8E+03	1.3E+04	1.4E+04	1.3E+04	2.0E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	2 / 4	1.9E+00	1.4E+00	2.6E+00	2.6E+00	2.6E+00	9.6E-01	3.1E+00	4.1E+01	No
Arsenic	7440-38-2	mg/kg	4 / 4	9.5E-01	7.8E+00	1.6E+01	1.5E+01	1.5E+01	2.0E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	4 / 4	2.3E+01	5.1E+01	7.1E+01	7.5E+01	7.1E+01	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	3 / 4	6.5E-01	5.6E-01	8.0E-01	9.4E-01	8.0E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	1 / 4	8.2E-02	2.4E-01	8.2E-02	3.6E-01	8.2E-02	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	4 / 4	4.3E+02	3.2E+03	8.6E+03	1.4E+06	8.6E+03	3.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	4 / 4	5.8E+00	1.4E+01	1.9E+01	2.1E+01	1.9E+01	2.7E+01	2.1E+02	4.5E+02	No

Table Q-6. Summary of COPC Screening for Load Line 2 Subsurface Soil

Chemical	CAS Number	Units	Frequency of Detection	Minimum Detect	Average Result	Maximum Detect	95% UCL of Mean	EPC	Site Background Criteria	Region 9 Residential PRG	Region 9 Industrial PRG	COPC?
Cobalt	7440-48-4	mg/kg	4 / 4	3.1E+00	9.2E+00	1.4E+01	1.4E+01	1.4E+01	2.3E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	4 / 4	4.2E+00	2.2E+01	4.6E+01	1.2E+03	4.6E+01	3.2E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	4 / 4	1.6E+04	2.1E+04	2.8E+04	3.1E+04	2.8E+04	3.5E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	4 / 4	7.4E+00	1.8E+01	3.9E+01	1.7E+02	3.9E+01	1.9E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	4 / 4	3.4E+02	1.9E+03	3.2E+03	3.4E+03	3.2E+03	8.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	4 / 4	2.2E+02	4.5E+02	6.1E+02	6.4E+02	6.1E+02	3.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	2 / 4	1.0E-02	4.0E-02	3.9E-02	6.5E-02	3.9E-02	4.4E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	4 / 4	8.9E+00	2.1E+01	2.9E+01	3.2E+01	2.9E+01	6.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	4 / 4	2.8E+02	8.9E+02	1.1E+03	1.4E+03	1.1E+03	3.4E+03	--	--	No
Thallium	6533-73-9	mg/kg	4 / 4	2.6E-01	3.1E-01	4.0E-01	4.4E-01	4.0E-01	9.1E-01	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	4 / 4	4.8E+00	1.3E+01	2.1E+01	2.2E+01	2.1E+01	3.8E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	4 / 4	2.1E+01	5.3E+01	9.9E+01	3.7E+02	9.9E+01	9.3E+01	2.3E+03	3.1E+04	No
Organic Semivolatiles												
Benzo(b)fluoranthene	205-99-2	mg/kg	1 / 1	6.9E-02	6.9E-02	6.9E-02	--	6.9E-02	--	6.2E-01	2.1E+00	No
Chrysene	218-01-9	mg/kg	1 / 1	6.2E-02	6.2E-02	6.2E-02	--	6.2E-02	--	6.2E+01	2.1E+02	No
Fluoranthene	206-44-0	mg/kg	1 / 1	1.1E-01	1.1E-01	1.1E-01	--	1.1E-01	--	2.3E+02	2.2E+03	No
Phenanthrene	85-01-8	mg/kg	1 / 1	7.8E-02	7.8E-02	7.8E-02	--	7.8E-02	--	--	--	Yes
Pyrene	129-00-0	mg/kg	1 / 1	8.3E-02	8.3E-02	8.3E-02	--	8.3E-02	--	2.3E+02	2.9E+03	No
Organic Volatiles												
Toluene	108-88-3	mg/kg	1 / 1	1.2E-03	1.2E-03	1.2E-03	--	1.2E-03	--	6.6E+01	2.2E+02	No

CAS = Chemical Abstracts Service.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

PCB = Polychlorinated biphenyl.

PRG = Preliminary remediation goal.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

UCL = Upper confidence limit on the mean.

-- Criteria not available or insufficient data to calculate the UCL.

Table Q-7. Chemical-Specific Exposure Parameters for Load Line 2 COPCs

COPC	Dermal Absorption Factor ^a (unitless)	Permeability Constant ^b (cm/hr)	Volatilization Factor ^c (m ³ /kg)
Inorganics			
Aluminum	0.001	2.1E-03	--
Antimony	0.001	1.1E-03	--
Arsenic	0.03	1.9E-03	--
Barium	0.001	4.0E-04	--
Cadmium	0.001	3.5E-04	--
Chromium (as Chromium III)	0.001	1.0E-03	--
Chromium, hexavalent	0.001	1.0E-03	--
Copper	0.001	3.1E-04	--
Manganese	0.001	1.3E-03	--
Mercury	0.001	2.9E-05	--
Thallium (as Thallium carbomate)	0.001	1.6E-04	--
Zinc	0.001	3.4E-04	--
Organics			
2,4,6-Trinitrotoluene	0.1	1.1E-03	--
2,4-Dinitrotoluene	0.1	3.8E-03	--
2-Methylnaphthalene	0.1	1.4E-01	2.4E+05
Benz(a)anthracene	0.13	9.5E-01	--
Benzene	0.01	2.1E-02	--
Benzo(a)pyrene	0.13	1.2E+00	--
Benzo(b)fluoranthene	0.13	7.0E-01	--
Benzo(k)fluoranthene	0.13	1.2E+00	--
Dibenz(a,h)anthracene	0.13	1.7E+00	--
Dieldrin	0.1	4.5E-02	--
HMX	0.1	1.1E-04	--
Heptachlor Epoxide	0.1	2.8E-02	--
Indeno(1,2,3-cd)pyrene	0.13	2.2E+00	--
PCB-1242	0.14	9.2E-01	--
PCB-1254	0.14	1.3E+00	--
PCB-1260	0.14	5.5E+00	--
RDX	0.1	3.5E-04	--
beta-BHC	0.1	2.8E-02	--

^a Chemical-specific absorption factor values from the U.S. Environmental Protection Agency (EPA) Region 5 (EPA 2000). When chemical-specific values are not available, the following default values are used:

SVOCs = 0.1, VOCs = 0.01, inorganics = 0.001, per EPA Region 4 Supplemental Guidance to RAGS.

^b From Risk Assessment Information System (RAIS), http://risk.lsd.ornl.gov/tox/tox_values.shtml.

^c Volatilization factors calculated using the 1996 EPA Soil Screening Guidance Methodology, using site-specific parameter values for Cleveland, Ohio. Only used for VOCs.

BHC = Benzene hexachloride.

COPC = Chemical of potential concern.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

PCB = Polychlorinated biphenyl.

RAGS = Risk Assessment Guidance for Superfund.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

SVOC = Semivolatile organic compound.

VOC = Volatile organic compound.

-- = No value available.

Table Q-8. Noncarcinogenic RfDs for Load Line 2 COPCs

COPC	Oral Chronic RfD (mg/kg-d)	Confidence Level	% GI Absorption ^a	Dermal Chronic RfD (mg/kg-d)	Inhalation Chronic RfD (mg/kg-d)	RfD Basis (vehicle)	Critical Effect	Uncertainty/Modifying Factor
<i>Inorganics</i>								
Aluminum	1.0E+00	NA	1	1.0E+00	1.4E-03	NA	NA	(O) UF = 10
Antimony	4.0E-04	Low	0.15	6.0E-05	--	Oral, oral-water	Gastrointestinal, liver, cardiovascular, and developmental toxicity	(O) UF = 1000
Arsenic	3.0E-04	Medium (O)	0.95	3.0E-04	--	Oral, oral-water	Hyperpigmentation and keritosis and possible vascular complication	(O) UF = 3
Barium	7.0E-02	Medium (O)	0.07	4.9E-03	1.4E-04	Oral, oral-water, inhalation	(O) increased blood pressure (human) (I) baritosis (human)	(O) UF = 3 (I) UF = 1000
Cadmium (diet)	1.0E-03	High	0.025	2.5E-05	--	Oral, oral-water	Renal toxicity, osteomalacia, osteoporosis, and significant proteinuria	(O) UF = 1000
Chromium (as Cr III)	1.5E+00	Low (O)	0.013	2.0E-02	--	Oral (rat)	Reduced liver/spleen weight	(O) UF = 100
Chromium, hexavalent	3.0E-03	Low (O)	0.025	7.5E-05	2.9E-05	NA	NA	(O) UF = 300 (O) MF = 3 (I) UF = 300
Copper	4.0E-02	NA	1	4.0E-02	--	NA	NA	
Manganese (water)	4.6E-02	NA	0.04	1.8E-03	1.4E-05	Oral: water, inhalation	(O) lethargy, tremors, mental disturbance, muscle tonus, and central nervous system effects	(O) UF = 1 (O) MF = 3 (I) UF = 1000
Mercury	3.0E-04	Low (O) Medium (I)	0.07	2.1E-05	--	Oral: diet (mouse) Inahaltion: (human)	(O) None (I) Neurotoxicity (human)	(O) UF = 300 (I) UF = 30
Thallium	8.0E-05	Low	1	8.0E-05	--	Oral (rat)	Increased levels of SGOT and LDH	UF = 3000

Table Q-8. Noncarcinogenic RfDs for Load Line 2 COPCs

COPC	Oral Chronic RfD (mg/kg-d)	Confidence Level	% GI Absorption ^a	Dermal Chronic RfD (mg/kg-d)	Inhalation Chronic RfD (mg/kg-d)	RfD Basis (vehicle)	Critical Effect	Uncertainty/Modifying Factor
Zinc	3.0E-01	Medium	0.3	9.0E-02	--	Oral	(O) copper deficiency and hypochromic microcytic anemia (human) gastrointestinal effects (human)	UF = 3
Organics								
2,4,6-Trinitrotoluene	5.0E-04	Medium	1	5.0E-04	--	Oral (dog)	Liver effects	UF = 1000
2,4-Dinitrotoluene	2.0E-03	High	1	2.0E-03	--	Oral (dog)	Neurotoxicity, biliary tract hyperplasia	UF = 100
2-Methylnaphthalene	4.0E-03	Low	1	4.0E-03	--	Oral (mice)	Pulmonary alveolar proteinosis	(O) UF = 1000
Benzene	4.0E-03	Medium	1	4.0E-03	8.6E-03	NA	Decreased lymphocyte count	(O) UF = 300
Dieldrin	5.0E-05	Medium	1	5.0E-05	--	Oral (rat)	Liver lesions (rat)	UF = 100
HMX	5.0E-02	Low	1	5.0E-02	--	Oral (rat)	Hepatic lesions	UF = 1000
Heptachlor Epoxide	1.3E-05	Low	1	1.3E-05	--	Oral (dog)	Increased liver-to-body weight ratio in both males and females	(O) UF = 1000
PCB-1254	2.0E-05	NA	0.8	2.0E-05	--	Oral: capsule (monkey)	Immune system toxicity (monkey)	UF = 300
RDX	3.0E-03	High (O)	1	3.0E-03	--	Oral (rat)	Inflamed prostate	UF = 100

^a % Gastrointestinal (GI) absorption values from EPA 2000.

(O) indicates oral, (I) indicates inhalation.

COPC = Chemical of potential concern.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

MF = Modifying factor (the default modifying factor is 1).

PCB = Polychlorinated biphenyl.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

RfD = Reference dose.

UF = Uncertainty factor.

NA = Not available.

-- = No value available.

Table Q-9. Cancer Slope Factors for Load Line 2 COPCs

COPC	Oral Slope Factor (mg/kg-d) ⁻¹	% GI Absorption ^a	Dermal Slope Factor (mg/kg-d) ⁻¹	Inhalation Slope Factor (mg/kg-d) ⁻¹	EPA Class	TEF	Type of Cancer
Inorganics							
Arsenic	1.5E+00	0.95	1.5E+00	1.5E+01	A	--	Respiratory system tumors
Cadmium (diet)	--	0.025	--	6.3E+00	B1	--	Respiratory tract and lung tumors
Chromium, hexavalent	--	0.025	--	4.2E+01	A	--	Lung tumors
Organics							
2,4,6-Trinitrotoluene	3.0E-02	1	3.0E-02	--	C	--	Bladder transitional cell papilloma
2,4-Dinitrotoluene	6.8E-01	1	6.8E-01	--	B2	--	Liver carcinoma, mammary adenomas, fibromas (mouse)
Benz(<i>a</i>)anthracene	7.3E-01	0.58	7.3E-01	3.1E-01	B2	0.1	Stomach tumors (mouse)
Benzene	5.5E-02	1	5.5E-02	2.7E-02	A	--	Acute nonlymphocytic leukemia
Benzo(<i>a</i>)pyrene	7.3E+00	0.58	7.3E+00	3.1E+00	B2	1	Stomach, nasal cavity, larynx, trachea, and pharynx
Benzo(<i>b</i>)fluoranthene	7.3E-01	0.58	7.3E-01	3.1E-01	B2	0.1	Tumors
Benzo(<i>k</i>)fluoranthene	7.3E-02	0.58	7.3E-02	3.1E-02	B2	0.01	Tumors (mouse)
Dibenz(<i>a,h</i>)anthracene	7.3E+00	0.58	7.3E+00	3.1E+00	B2	1	Immunodepressive effects (mouse)
Dieldrin	1.6E+01	1	1.6E+01	1.6E+01	B2	--	Liver carcinoma (mouse)
Heptachlor Epoxide	9.1E+00	1	9.1E+00	9.1E+00	B2	--	Hepatocellular carcinoma (mouse)
Indeno(1,2,3- <i>cd</i>)pyrene	7.3E-01	0.58	7.3E-01	3.1E-01	B2	0.1	Tumors
PCB-1242	4.0E-01	0.8	4.0E-01	4.0E-01	B2	--	Liver hepatocellular adenomas, carcinomas, cholangiomas, or cholangiocarcinomas (rat)
PCB-1254	2.0E+00	0.8	2.0E+00	2.0E+00	B2	--	Liver hepatocellular adenomas, carcinomas, cholangiomas, or cholangiocarcinomas (rat)
PCB-1260	2.0E+00	0.8	2.0E+00	2.0E+00	B2	--	Liver hepatocellular adenomas, carcinomas, cholangiomas, or cholangiocarcinomas (rat)
RDX	1.1E-01	1	1.1E-01	--	C	--	Liver hepatocellular carcinomas/adenomas (mouse)
beta-BHC	1.8E+00	1	1.8E+00	1.9E+00	C	--	Hepatic nodules, hepatocellular carcinoma

^a % Gastrointestinal (GI) absorption values from EPA 2000.

BHC = Benzene hexachloride.

COPC = Chemical of potential concern.

EPA = U.S. Environmental Protection Agency.

PCB = Polychlorinated biphenyl.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

TEF = Toxicity equivalency factor is based on the relative potency of each carcinogenic polycyclic aromatic hydrocarbon (PAH) relative to that of benzo(*a*)pyrene.

-- = No value available.

Table Q-10. Screening Risk-based RGOs for Groundwater (mg/L) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
National Guard Trainee									
<i>Inorganics</i>									
Arsenic	9.8E-03	6.1E-04	2.1E+00	1.3E-01	--	--	9.8E-03	6.1E-04	6.1E-04
Manganese	1.5E+00	--	1.9E+01	--	--	--	1.4E+00	--	1.4E+00
<i>Organic Explosives</i>									
2,4-Dinitrotoluene	6.6E-02	1.3E-03	7.2E+00	1.5E-01	--	--	6.5E-02	1.3E-03	1.3E-03
<i>Organic PCBs</i>									
PCB-1242	--	2.3E-03	--	1.0E-03	--	--	--	7.1E-04	7.1E-04
<i>Organic Pesticides</i>									
Heptachlor Epoxide	4.3E-04	1.0E-04	6.4E-03	1.5E-03	--	--	4.0E-04	9.4E-05	9.4E-05
<i>Organic Volatiles</i>									
Benzene	1.3E-01	1.7E-02	2.6E+00	3.3E-01	5.6E-02	6.7E-03	3.9E-02	4.7E-03	4.7E-03
Resident Farmer Adult									
<i>Inorganics</i>									
Arsenic	1.1E-03	5.7E-05	2.3E-01	1.2E-02	--	--	1.1E-03	5.7E-05	5.7E-05
Manganese	1.7E-01	--	2.2E+00	--	--	--	1.6E-01	--	1.6E-01
<i>Organic Explosives</i>									
2,4-Dinitrotoluene	7.3E-03	1.3E-04	8.0E-01	1.4E-02	--	--	7.2E-03	1.2E-04	1.2E-04
<i>Organic PCBs</i>									
PCB-1242	--	2.1E-04	--	9.5E-05	--	--	--	6.6E-05	6.6E-05
<i>Organic Pesticides</i>									
Heptachlor Epoxide	4.7E-05	9.4E-06	7.1E-04	1.4E-04	--	--	4.4E-05	8.8E-06	8.8E-06
<i>Organic Volatiles</i>									
Benzene	1.5E-02	1.5E-03	2.9E-01	3.1E-02	6.3E-03	6.2E-04	4.3E-03	4.4E-04	4.4E-04
Resident Farmer Child									
<i>Inorganics</i>									
Arsenic	3.1E-04	8.1E-05	1.1E-01	2.9E-02	--	--	3.1E-04	8.1E-05	8.1E-05
Manganese	4.8E-02	--	1.0E+00	--	--	--	4.6E-02	--	4.6E-02
<i>Organic Explosives</i>									
2,4-Dinitrotoluene	2.1E-03	1.8E-04	3.8E-01	3.3E-02	--	--	2.1E-03	1.8E-04	1.8E-04

Table Q-10. Screening Risk-based RGOs for Groundwater (mg/L) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Organic PCBs									
PCB-1242	--	3.0E-04	--	2.3E-04	--	--	--	1.3E-04	1.3E-04
Organic Pesticides									
Heptachlor Epoxide	1.4E-05	1.3E-05	3.4E-04	3.4E-04	--	--	1.3E-05	1.3E-05	1.3E-05
Organic Volatiles									
Benzene	4.2E-03	2.2E-03	1.4E-01	7.4E-02	2.7E-03	1.3E-03	1.6E-03	8.2E-04	8.2E-04

^a Total RGO is the RGO across all pathways (ingestion, dermal, and inhalation).

^b RGO for screening is the smaller of the total RGOs. This screening RGO is only used to define COCs (see Table Q-16).

COC = Chemical of concern.

COPC = Chemical of potential concern.

HQ = Hazard quotient.

PCB = Polychlorinated biphenyl.

RGO = Remedial goal option. Risk-based RGOs for screening are at a risk level of 10⁻⁶ or hazard level of 0.1.

-- = No RGO could be quantified, based on lack of approved toxicity value.

Table Q-11. Screening Risk-based RGOs for Surface Water (mg/L) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Dust/Fire Control Worker									
<i>Inorganics</i>									
Antimony	6.8E-01	--	7.1E-01	--	--	--	3.5E-01	--	3.5E-01
<i>Organic Explosives</i>									
RDX	5.1E+00	4.3E-01	1.1E+02	9.4E+00	--	--	4.9E+00	4.1E-01	4.1E-01
Hunter/Trapper/Fisher									
<i>Inorganics</i>									
Antimony	2.9E+00	--	8.5E-01	--	--	--	6.6E-01	--	6.6E-01
<i>Organic Explosives</i>									
RDX	2.2E+01	1.5E+00	1.3E+02	9.3E+00	--	--	1.9E+01	1.3E+00	1.3E+00
National Guard Trainee									
<i>Inorganics</i>									
Antimony	2.6E-01	--	4.6E-02	--	--	--	3.9E-02	--	3.9E-02
<i>Organic Explosives</i>									
RDX	2.0E+00	1.7E-01	7.1E+00	6.0E-01	--	--	1.5E+00	1.3E-01	1.3E-01
Resident Farmer Adult									
<i>Inorganics</i>									
Antimony	2.9E-02	--	2.8E-02	--	--	--	1.4E-02	--	1.4E-02
<i>Organic Explosives</i>									
RDX	2.2E-01	1.5E-02	4.4E+00	3.1E-01	--	--	2.1E-01	1.5E-02	1.5E-02
Resident Farmer Child									
<i>Inorganics</i>									
Antimony	6.3E-03	--	1.6E-02	--	--	--	4.5E-03	--	4.5E-03
<i>Organic Explosives</i>									
RDX	4.7E-02	1.7E-02	2.4E+00	8.6E-01	--	--	4.6E-02	1.6E-02	1.6E-02

^a Total RGO is the RGO across all pathways (ingestion, dermal, and inhalation).

^b RGO for screening is the smaller of the total RGOs. This screening RGO is only used to define COCs (see Table Q-17).

COC = Chemical of concern.

COPC = Chemical of potential concern.

HQ = Hazard quotient.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

RGO = Remedial goal option. Risk-based RGOs for screening are at a risk level of 10⁻⁶ or hazard level of 0.1.

-- = No RGO could be quantified, based on lack of approved toxicity value.

Table Q-12. Screening Risk-based RGOs for Sediment (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Dust/Fire Control Worker									
<i>Organic Semivolatiles</i>									
Benzo(a)pyrene	--	3.9E+01	--	5.1E+00	--	1.0E+06	--	4.5E+00	4.5E+00
Benzo(b)fluoranthene	--	3.9E+02	--	5.1E+01	--	1.0E+06	--	4.5E+01	4.5E+01
Dibenz(a,h)anthracene	--	3.9E+01	--	5.1E+00	--	1.0E+06	--	4.5E+00	4.5E+00
Hunter/Trapper/Fisher									
<i>Organic Semivolatiles</i>									
Benzo(a)pyrene	--	6.1E+01	--	5.8E+00	--	1.0E+06	--	5.3E+00	5.3E+00
Benzo(b)fluoranthene	--	6.1E+02	--	5.8E+01	--	1.0E+06	--	5.3E+01	5.3E+01
Dibenz(a,h)anthracene	--	6.1E+01	--	5.8E+00	--	1.0E+06	--	5.3E+00	5.3E+00
National Guard Trainee									
<i>Organic Semivolatiles</i>									
Benzo(a)pyrene	--	2.5E+00	--	2.0E+00	--	2.2E+01	--	1.0E+00	1.0E+00
Benzo(b)fluoranthene	--	2.5E+01	--	2.0E+01	--	2.2E+02	--	1.0E+01	1.0E+01
Dibenz(a,h)anthracene	--	2.5E+00	--	2.0E+00	--	2.2E+01	--	1.0E+00	1.0E+00
Resident Farmer Adult									
<i>Organic Semivolatiles</i>									
Benzo(a)pyrene	--	2.3E-01	--	7.9E-02	--	1.5E+04	--	5.9E-02	5.9E-02
Benzo(b)fluoranthene	--	2.3E+00	--	7.9E-01	--	1.5E+05	--	5.9E-01	5.9E-01
Dibenz(a,h)anthracene	--	2.3E-01	--	7.9E-02	--	1.5E+04	--	5.9E-02	5.9E-02
Resident Farmer Child									
<i>Organic Semivolatiles</i>									
Benzo(a)pyrene	--	1.3E-01	--	4.4E-01	--	3.2E+04	--	9.7E-02	9.7E-02
Benzo(b)fluoranthene	--	1.3E+00	--	4.4E+00	--	3.2E+05	--	9.7E-01	9.7E-01
Dibenz(a,h)anthracene	--	1.3E-01	--	4.4E-01	--	3.2E+04	--	9.7E-02	9.7E-02

^a Total RGO is the RGO across all pathways (ingestion, dermal, and inhalation).

^b RGO for screening is the smaller of the total RGOs. This screening RGO is only used to define COCs (see Table Q-18).

COC = Chemical of concern.

COPC = Chemical of potential concern.

HQ = Hazard quotient.

RGO = Remedial goal option. Risk-based RGOs for screening are at a risk level of 10⁻⁶ or hazard level of 0.1.

-- = No RGO could be quantified, based on lack of approved toxicity value.

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Dust/Fire Control Worker									
<i>Inorganics</i>									
Aluminum	1.0E+06	--	1.0E+06	--	1.0E+06	--	1.0E+06	--	1.0E+06
Antimony	4.1E+03	--	1.0E+04	--	--	--	2.9E+03	--	2.9E+03
Arsenic	3.1E+03	1.9E+02	1.7E+03	1.1E+02	--	2.3E+05	1.1E+03	6.9E+01	6.9E+01
Barium	7.2E+05	--	8.4E+05	--	1.0E+06	--	3.8E+05	--	3.8E+05
Cadmium	1.0E+04	--	4.3E+03	--	--	5.5E+05	3.0E+03	5.5E+05	3.0E+03
Chromium	1.0E+06	--	1.0E+06	--	--	--	1.0E+06	--	1.0E+06
Chromium, hexavalent	3.1E+04	--	1.3E+04	--	1.0E+06	8.3E+04	9.1E+03	8.3E+04	9.1E+03
Copper	4.1E+05	--	1.0E+06	--	--	--	3.9E+05	--	3.9E+05
Manganese	4.7E+05	--	3.2E+05	--	1.0E+06	--	1.7E+05	--	1.7E+05
Mercury	3.1E+03	--	3.6E+03	--	--	--	1.7E+03	--	1.7E+03
Thallium	8.2E+02	--	1.4E+04	--	--	--	7.7E+02	--	7.7E+02
Zinc	1.0E+06	--	1.0E+06	--	--	--	1.0E+06	--	1.0E+06
<i>Organic Explosives</i>									
2,4,6-Trinitrotoluene	5.1E+03	9.5E+03	8.6E+02	1.6E+03	--	--	7.4E+02	1.4E+03	7.4E+02
2,4-Dinitrotoluene	2.0E+04	4.2E+02	3.4E+03	7.1E+01	--	--	2.9E+03	6.1E+01	6.1E+01
HMX	5.1E+05	--	8.6E+04	--	--	--	7.4E+04	--	7.4E+04
RDX	3.1E+04	2.6E+03	5.2E+03	4.4E+02	--	--	4.4E+03	3.7E+02	3.7E+02
<i>Organic PCBs</i>									
PCB-1254	2.0E+02	1.4E+02	2.5E+01	1.7E+01	--	1.0E+06	2.2E+01	1.5E+01	1.5E+01
PCB-1260	--	1.4E+02	--	1.7E+01	--	1.0E+06	--	1.5E+01	1.5E+01
<i>Organic Pesticides</i>									
Dieldrin	5.1E+02	1.8E+01	8.6E+01	3.0E+00	--	2.2E+05	7.4E+01	2.6E+00	2.6E+00
beta-BHC	--	1.6E+02	--	2.7E+01	--	1.0E+06	--	2.3E+01	2.3E+01
<i>Organic Semivolatiles</i>									
2-Methylnaphthalene	4.1E+04	--	6.9E+03	--	--	--	5.9E+03	--	5.9E+03
Benz(a)anthracene	--	3.9E+02	--	5.1E+01	--	1.0E+06	--	4.5E+01	4.5E+01
Benzo(a)pyrene	--	3.9E+01	--	5.1E+00	--	1.0E+06	--	4.5E+00	4.5E+00
Benzo(b)fluoranthene	--	3.9E+02	--	5.1E+01	--	1.0E+06	--	4.5E+01	4.5E+01

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Benzo(k)fluoranthene	--	3.9E+03	--	5.1E+02	--	1.0E+06	--	4.5E+02	4.5E+02
Dibenz(a,h)anthracene	--	3.9E+01	--	5.1E+00	--	1.0E+06	--	4.5E+00	4.5E+00
Indeno(1,2,3-cd)pyrene	--	3.9E+02	--	5.1E+01	--	1.0E+06	--	4.5E+01	4.5E+01
Hunter/Trapper/Fisher									
<i>Inorganics</i>									
Aluminum	1.0E+06	--	1.0E+06	--	1.0E+06	--	1.0E+06	--	1.0E+06
Antimony	7.7E+03	--	1.3E+04	--	--	--	4.8E+03	--	4.8E+03
Arsenic	5.7E+03	3.0E+02	2.1E+03	1.1E+02	--	8.0E+05	1.6E+03	8.1E+01	8.1E+01
Barium	1.0E+06	--	1.0E+06	--	1.0E+06	--	5.8E+05	--	5.8E+05
Cadmium	1.9E+04	--	5.3E+03	--	--	1.0E+06	4.2E+03	1.0E+06	4.2E+03
Chromium	1.0E+06	--	1.0E+06	--	--	--	1.0E+06	--	1.0E+06
Chromium, hexavalent	5.7E+04	--	1.6E+04	--	1.0E+06	2.9E+05	1.3E+04	2.9E+05	1.3E+04
Copper	7.7E+05	--	1.0E+06	--	--	--	7.0E+05	--	7.0E+05
Manganese	8.8E+05	--	3.9E+05	--	1.0E+06	--	2.6E+05	--	2.6E+05
Mercury	5.7E+03	--	4.5E+03	--	--	--	2.5E+03	--	2.5E+03
Thallium	1.5E+03	--	1.7E+04	--	--	--	1.4E+03	--	1.4E+03
Zinc	1.0E+06	--	1.0E+06	--	--	--	1.0E+06	--	1.0E+06
<i>Organic Explosives</i>									
2,4,6-Trinitrotoluene	9.6E+03	1.5E+04	1.1E+03	1.7E+03	--	--	9.6E+02	1.5E+03	9.6E+02
2,4-Dinitrotoluene	3.8E+04	6.6E+02	4.3E+03	7.3E+01	--	--	3.8E+03	6.6E+01	6.6E+01
HMX	9.6E+05	--	1.1E+05	--	--	--	9.6E+04	--	9.6E+04
RDX	5.7E+04	4.1E+03	6.4E+03	4.5E+02	--	--	5.8E+03	4.1E+02	4.1E+02
<i>Organic PCBs</i>									
PCB-1254	3.8E+02	2.2E+02	3.0E+01	1.8E+01	--	1.0E+06	2.8E+01	1.6E+01	1.6E+01
PCB-1260	--	2.2E+02	--	1.8E+01	--	1.0E+06	--	1.6E+01	1.6E+01
<i>Organic Pesticides</i>									
Dieldrin	9.6E+02	2.8E+01	1.1E+02	3.1E+00	--	7.5E+05	9.6E+01	2.8E+00	2.8E+00
beta-BHC	--	2.5E+02	--	2.8E+01	--	1.0E+06	--	2.5E+01	2.5E+01
<i>Organic Semivolatiles</i>									
2-Methylnaphthalene	7.7E+04	--	8.5E+03	--	--	--	7.7E+03	--	7.7E+03

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Benz(a)anthracene	--	6.1E+02	--	5.2E+01	--	1.0E+06	--	4.8E+01	4.8E+01
Benzo(a)pyrene	--	6.1E+01	--	5.2E+00	--	1.0E+06	--	4.8E+00	4.8E+00
Benzo(b)fluoranthene	--	6.1E+02	--	5.2E+01	--	1.0E+06	--	4.8E+01	4.8E+01
Benzo(k)fluoranthene	--	6.1E+03	--	5.2E+02	--	1.0E+06	--	4.8E+02	4.8E+02
Dibenz(a,h)anthracene	--	6.1E+01	--	5.2E+00	--	1.0E+06	--	4.8E+00	4.8E+00
Indeno(1,2,3-cd)pyrene	--	6.1E+02	--	5.2E+01	--	1.0E+06	--	4.8E+01	4.8E+01
Resident Farmer Adult									
<i>Inorganics</i>									
Aluminum	7.3E+04	--	1.0E+06	--	1.0E+06	--	7.0E+04	--	7.0E+04
Antimony	2.9E+01	--	1.9E+02	--	--	--	2.5E+01	--	2.5E+01
Arsenic	2.2E+01	1.1E+00	3.2E+01	1.7E+00	--	3.0E+03	1.3E+01	6.7E-01	6.7E-01
Barium	5.1E+03	--	1.6E+04	--	2.8E+05	--	3.8E+03	--	3.8E+03
Cadmium	7.3E+01	--	8.0E+01	--	--	7.3E+03	3.8E+01	7.3E+03	3.8E+01
Chromium	1.1E+05	--	6.2E+04	--	--	--	4.0E+04	--	4.0E+04
Chromium, hexavalent	2.2E+02	--	2.4E+02	--	5.6E+04	1.1E+03	1.1E+02	1.1E+03	1.1E+02
Copper	2.9E+03	--	1.3E+05	--	--	--	2.9E+03	--	2.9E+03
Manganese	3.4E+03	--	5.9E+03	--	2.8E+04	--	2.0E+03	--	2.0E+03
Mercury	2.2E+01	--	6.7E+01	--	--	--	1.7E+01	--	1.7E+01
Thallium	5.8E+00	--	2.6E+02	--	--	--	5.7E+00	--	5.7E+00
Zinc	2.2E+04	--	2.9E+05	--	--	--	2.0E+04	--	2.0E+04
<i>Organic Explosives</i>									
2,4,6-Trinitrotoluene	3.7E+01	5.7E+01	1.6E+01	2.5E+01	--	--	1.1E+01	1.7E+01	1.1E+01
2,4-Dinitrotoluene	1.5E+02	2.5E+00	6.4E+01	1.1E+00	--	--	4.5E+01	7.6E-01	7.6E-01
HMX	3.7E+03	--	1.6E+03	--	--	--	1.1E+03	--	1.1E+03
RDX	2.2E+02	1.5E+01	9.6E+01	6.8E+00	--	--	6.7E+01	4.7E+00	4.7E+00
<i>Organic PCBs</i>									
PCB-1254	1.5E+00	8.5E-01	4.6E-01	2.7E-01	--	2.3E+04	3.5E-01	2.0E-01	2.0E-01
PCB-1260	--	8.5E-01	--	2.7E-01	--	2.3E+04	--	2.0E-01	2.0E-01
<i>Organic Pesticides</i>									
Dieldrin	3.7E+00	1.1E-01	1.6E+00	4.7E-02	--	2.8E+03	1.1E+00	3.2E-02	3.2E-02
beta-BHC	--	9.5E-01	--	4.2E-01	--	2.5E+04	--	2.9E-01	2.9E-01

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Organic Semivolatiles									
2-Methylnaphthalene	2.9E+02	--	1.3E+02	--	--	--	8.9E+01	--	8.9E+01
Benzo(a)anthracene	--	2.3E+00	--	7.9E-01	--	1.5E+05	--	5.9E-01	5.9E-01
Benzo(a)pyrene	--	2.3E-01	--	7.9E-02	--	1.5E+04	--	5.9E-02	5.9E-02
Benzo(b)fluoranthene	--	2.3E+00	--	7.9E-01	--	1.5E+05	--	5.9E-01	5.9E-01
Benzo(k)fluoranthene	--	2.3E+01	--	7.9E+00	--	1.0E+06	--	5.9E+00	5.9E+00
Dibenz(a,h)anthracene	--	2.3E-01	--	7.9E-02	--	1.5E+04	--	5.9E-02	5.9E-02
Indeno(1,2,3-cd)pyrene	--	2.3E+00	--	7.9E-01	--	1.5E+05	--	5.9E-01	5.9E-01
Resident Farmer Child									
Inorganics									
Aluminum	7.8E+03	--	1.0E+06	--	1.0E+06	--	7.8E+03	--	7.8E+03
Antimony	3.1E+00	--	2.1E+02	--	--	--	3.1E+00	--	3.1E+00
Arsenic	2.3E+00	6.1E-01	3.6E+01	9.2E+00	--	6.5E+03	2.2E+00	5.7E-01	5.7E-01
Barium	5.5E+02	--	1.7E+04	--	1.2E+05	--	5.3E+02	--	5.3E+02
Cadmium	7.8E+00	--	8.9E+01	--	--	1.6E+04	7.2E+00	1.6E+04	7.2E+00
Chromium	1.2E+04	--	6.9E+04	--	--	--	1.0E+04	--	1.0E+04
Chromium, hexavalent	2.3E+01	--	2.7E+02	--	2.4E+04	2.3E+03	2.2E+01	2.3E+03	2.2E+01
Copper	3.1E+02	--	1.4E+05	--	--	--	3.1E+02	--	3.1E+02
Manganese	3.6E+02	--	6.5E+03	--	1.2E+04	--	3.3E+02	--	3.3E+02
Mercury	2.3E+00	--	7.5E+01	--	--	--	2.3E+00	--	2.3E+00
Thallium	6.3E-01	--	2.8E+02	--	--	--	6.2E-01	--	6.2E-01
Zinc	2.3E+03	--	3.2E+05	--	--	--	2.3E+03	--	2.3E+03
Organic Explosives									
2,4,6-Trinitrotoluene	3.9E+00	3.0E+01	1.8E+01	1.4E+02	--	--	3.2E+00	2.5E+01	3.2E+00
2,4-Dinitrotoluene	1.6E+01	1.3E+00	7.1E+01	6.1E+00	--	--	1.3E+01	1.1E+00	1.1E+00
HMX	3.9E+02	--	1.8E+03	--	--	--	3.2E+02	--	3.2E+02
RDX	2.3E+01	8.3E+00	1.1E+02	3.8E+01	--	--	1.9E+01	6.8E+00	6.8E+00
Organic PCBs									
PCB-1254	1.6E-01	4.6E-01	5.1E-01	1.5E+00	--	4.9E+04	1.2E-01	3.5E-01	1.2E-01
PCB-1260	--	4.6E-01	--	1.5E+00	--	4.9E+04	--	3.5E-01	3.5E-01

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Organic Pesticides									
Dieldrin	3.9E-01	5.7E-02	1.8E+00	2.6E-01	--	6.1E+03	3.2E-01	4.7E-02	4.7E-02
beta-BHC	--	5.1E-01	--	2.3E+00	--	5.3E+04	--	4.2E-01	4.2E-01
Organic Semivolatiles									
2-Methylnaphthalene	3.1E+01	--	1.4E+02	--	--	--	2.6E+01	--	2.6E+01
Benz(a)anthracene	--	1.3E+00	--	4.4E+00	--	3.2E+05	--	9.7E-01	9.7E-01
Benzo(a)pyrene	--	1.3E-01	--	4.4E-01	--	3.2E+04	--	9.7E-02	9.7E-02
Benzo(b)fluoranthene	--	1.3E+00	--	4.4E+00	--	3.2E+05	--	9.7E-01	9.7E-01
Benzo(k)fluoranthene	--	1.3E+01	--	4.4E+01	--	1.0E+06	--	9.7E+00	9.7E+00
Dibenz(a,h)anthracene	--	1.3E-01	--	4.4E-01	--	3.2E+04	--	9.7E-02	9.7E-02
Indeno(1,2,3-cd)pyrene	--	1.3E+00	--	4.4E+00	--	3.2E+05	--	9.7E-01	9.7E-01
Security Guard/Maintenance Worker									
Inorganics									
Aluminum	1.0E+06	--	1.0E+06	--	1.0E+06	--	1.0E+06	--	1.0E+06
Antimony	9.8E+02	--	2.7E+02	--	--	--	2.1E+02	--	2.1E+02
Arsenic	7.4E+02	4.6E+01	4.4E+01	2.8E+00	--	1.2E+05	4.2E+01	2.6E+00	2.6E+00
Barium	1.7E+05	--	2.2E+04	--	1.0E+06	--	1.9E+04	--	1.9E+04
Cadmium	2.5E+03	--	1.1E+02	--	--	2.9E+05	1.1E+02	2.9E+05	1.1E+02
Chromium	1.0E+06	--	8.6E+04	--	--	--	8.4E+04	--	8.4E+04
Chromium, hexavalent	7.4E+03	--	3.3E+02	--	1.0E+06	4.4E+04	3.2E+02	4.4E+04	3.2E+02
Copper	9.8E+04	--	1.8E+05	--	--	--	6.3E+04	--	6.3E+04
Manganese	1.1E+05	--	8.1E+03	--	9.4E+05	--	7.5E+03	--	7.5E+03
Mercury	7.4E+02	--	9.3E+01	--	--	--	8.2E+01	--	8.2E+01
Thallium	2.0E+02	--	3.5E+02	--	--	--	1.3E+02	--	1.3E+02
Zinc	7.4E+05	--	4.0E+05	--	--	--	2.6E+05	--	2.6E+05
Organic Explosives									
2,4,6-Trinitrotoluene	1.2E+03	2.3E+03	2.2E+01	4.1E+01	--	--	2.2E+01	4.1E+01	2.2E+01
2,4-Dinitrotoluene	4.9E+03	1.0E+02	8.8E+01	1.8E+00	--	--	8.7E+01	1.8E+00	1.8E+00
HMX	1.2E+05	--	2.2E+03	--	--	--	2.2E+03	--	2.2E+03
RDX	7.4E+03	6.2E+02	1.3E+02	1.1E+01	--	--	1.3E+02	1.1E+01	1.1E+01

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Organic PCBs									
PCB-1254	4.9E+01	3.4E+01	6.3E-01	4.4E-01	--	9.2E+05	6.2E-01	4.4E-01	4.4E-01
PCB-1260	--	3.4E+01	--	4.4E-01	--	9.2E+05	--	4.4E-01	4.4E-01
Organic Pesticides									
Dieldrin	1.2E+02	4.3E+00	2.2E+00	7.7E-02	--	1.1E+05	2.2E+00	7.6E-02	7.6E-02
beta-BHC	--	3.8E+01	--	6.9E-01	--	1.0E+06	--	6.8E-01	6.8E-01
Organic Semivolatiles									
2-Methylnaphthalene	9.8E+03	--	1.8E+02	--	--	--	1.7E+02	--	1.7E+02
Benzo(a)anthracene	--	9.4E+01	--	1.3E+00	--	1.0E+06	--	1.3E+00	1.3E+00
Benzo(a)pyrene	--	9.4E+00	--	1.3E-01	--	6.0E+05	--	1.3E-01	1.3E-01
Benzo(b)fluoranthene	--	9.4E+01	--	1.3E+00	--	1.0E+06	--	1.3E+00	1.3E+00
Benzo(k)fluoranthene	--	9.4E+02	--	1.3E+01	--	1.0E+06	--	1.3E+01	1.3E+01
Dibenz(a,h)anthracene	--	9.4E+00	--	1.3E-01	--	6.0E+05	--	1.3E-01	1.3E-01
Indeno(1,2,3-cd)pyrene	--	9.4E+01	--	1.3E+00	--	1.0E+06	--	1.3E+00	1.3E+00

^a Total RGO is the RGO across all pathways (ingestion, dermal, and inhalation).

^b RGO for screening is the smaller of the total RGOs. This screening RGO is only used to define COCs (see Table Q-19).

BHC = Benzene hexachloride.

COC = Chemical of concern.

COPC = Chemical of potential concern.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

HQ = Hazard quotient.

PCB = Polychlorinated biphenyl.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

RGO = Remedial goal option. Risk-based RGOs for screening are at a risk level of 10⁻⁶ or hazard level of 0.1.

-- = No RGO could be quantified, based on lack of approved toxicity value.

Table Q-14. Screening Risk-based RGOs for Deep Surface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
National Guard Trainee									
<i>Inorganics</i>									
Aluminum	6.6E+05	--	1.0E+06	--	3.5E+03	--	3.5E+03	--	3.5E+03
Antimony	2.6E+02	--	4.0E+03	--	--	--	2.5E+02	--	2.5E+02
Arsenic	2.0E+02	1.2E+01	6.6E+02	4.1E+01	--	4.6E+00	1.5E+02	3.1E+00	3.1E+00
Barium	4.6E+04	--	3.2E+05	--	3.5E+02	--	3.5E+02	--	3.5E+02
Cadmium	6.6E+02	--	1.7E+03	--	--	1.1E+01	4.7E+02	1.1E+01	1.1E+01
Chromium	9.8E+05	--	1.0E+06	--	--	--	5.6E+05	--	5.6E+05
Chromium, hexavalent	2.0E+03	--	5.0E+03	--	7.0E+01	1.6E+00	6.7E+01	1.6E+00	1.6E+00
Copper	2.6E+04	--	1.0E+06	--	--	--	2.6E+04	--	2.6E+04
Manganese	3.0E+04	--	1.2E+05	--	3.5E+01	--	3.5E+01	--	3.5E+01
Mercury	2.0E+02	--	1.4E+03	--	--	--	1.7E+02	--	1.7E+02
Thallium	5.2E+01	--	5.3E+03	--	--	--	5.2E+01	--	5.2E+01
Zinc	2.0E+05	--	1.0E+06	--	--	--	1.9E+05	--	1.9E+05
<i>Organic Explosives</i>									
2,4,6-Trinitrotoluene	3.3E+02	6.1E+02	3.3E+02	6.2E+02	--	--	1.6E+02	3.1E+02	1.6E+02
2,4-Dinitrotoluene	1.3E+03	2.7E+01	1.3E+03	2.7E+01	--	--	6.6E+02	1.4E+01	1.4E+01
HMX	3.3E+04	--	3.3E+04	--	--	--	1.6E+04	--	1.6E+04
RDX	2.0E+03	1.7E+02	2.0E+03	1.7E+02	--	--	9.9E+02	8.4E+01	8.4E+01
<i>Organic PCBs</i>									
PCB-1254	1.3E+01	9.2E+00	9.5E+00	6.6E+00	--	3.4E+01	5.5E+00	3.5E+00	3.5E+00
PCB-1260	--	9.2E+00	--	6.6E+00	--	3.4E+01	--	3.5E+00	3.5E+00
<i>Organic Pesticides</i>									
Dieldrin	3.3E+01	1.1E+00	3.3E+01	1.2E+00	--	4.3E+00	1.6E+01	5.1E-01	5.1E-01
beta-BHC	--	1.0E+01	--	1.0E+01	--	3.7E+01	--	4.5E+00	4.5E+00
<i>Organic Semivolatiles</i>									
2-Methylnaphthalene	2.6E+03	--	2.6E+03	--	--	--	1.3E+03	--	1.3E+03
Benz(a)anthracene	--	2.5E+01	--	2.0E+01	--	2.2E+02	--	1.0E+01	1.0E+01
Benzo(a)pyrene	--	2.5E+00	--	2.0E+00	--	2.2E+01	--	1.0E+00	1.0E+00
Benzo(b)fluoranthene	--	2.5E+01	--	2.0E+01	--	2.2E+02	--	1.0E+01	1.0E+01

Table Q-14. Screening Risk-based RGOs for Deep Surface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Benzo(<i>k</i>)fluoranthene	--	2.5E+02	--	2.0E+02	--	2.2E+03	--	1.0E+02	1.0E+02
Dibenz(<i>a,h</i>)anthracene	--	2.5E+00	--	2.0E+00	--	2.2E+01	--	1.0E+00	1.0E+00
Indeno(1,2,3- <i>cd</i>)pyrene	--	2.5E+01	--	2.0E+01	--	2.2E+02	--	1.0E+01	1.0E+01

^a Total RGO is the RGO across all pathways (ingestion, dermal, and inhalation).

^b RGO for screening is the smaller of the total RGOs. This screening RGO is only used to define COCs (see Table Q-20).

BHC = Benzene hexachloride.

COC = Chemical of concern.

COPC = Chemical of potential concern.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

HQ = Hazard quotient.

PCB = Polychlorinated biphenyl.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

RGO = Remedial goal option. Risk-based RGOs for screening are at a risk level of 10⁻⁶ or hazard level of 0.1.

-- = No RGO could be quantified, based on lack of approved toxicity value.

Table Q-15. Screening Risk-based RGOs for Subsurface Soil (mg/kg) COPCs at Load Line 2

COPC	Ingestion RGO		Dermal RGO		Inhalation RGO		Total RGO ^a		RGO ^b for Screening
	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	HQ = 0.1	Risk = 10 ⁻⁶	
Resident Farmer Adult									
<i>Inorganics</i>									
Aluminum	7.3E+04	--	1.0E+06	--	1.0E+06	--	7.0E+04	--	7.0E+04
Antimony	2.9E+01	--	1.9E+02	--	--	--	2.5E+01	--	2.5E+01
Arsenic	2.2E+01	1.1E+00	3.2E+01	1.7E+00	--	3.0E+03	1.3E+01	6.7E-01	6.7E-01
Cadmium	7.3E+01	--	8.0E+01	--	--	7.3E+03	3.8E+01	7.3E+03	3.8E+01
Mercury	2.2E+01	--	6.7E+01	--	--	--	1.7E+01	--	1.7E+01
<i>Organic Explosives</i>									
2,4,6-Trinitrotoluene	3.7E+01	5.7E+01	1.6E+01	2.5E+01	--	--	1.1E+01	1.7E+01	1.1E+01
2,4-Dinitrotoluene	1.5E+02	2.5E+00	6.4E+01	1.1E+00	--	--	4.5E+01	7.6E-01	7.6E-01
<i>Organic PCBs</i>									
PCB-1260	--	8.5E-01	--	2.7E-01	--	2.3E+04	--	2.0E-01	2.0E-01
Resident Farmer Child									
<i>Inorganics</i>									
Aluminum	7.8E+03	--	1.0E+06	--	1.0E+06	--	7.8E+03	--	7.8E+03
Antimony	3.1E+00	--	2.1E+02	--	--	--	3.1E+00	--	3.1E+00
Arsenic	2.3E+00	6.1E-01	3.6E+01	9.2E+00	--	6.5E+03	2.2E+00	5.7E-01	5.7E-01
Cadmium	7.8E+00	--	8.9E+01	--	--	1.6E+04	7.2E+00	1.6E+04	7.2E+00
Mercury	2.3E+00	--	7.5E+01	--	--	--	2.3E+00	--	2.3E+00
<i>Organic Explosives</i>									
2,4,6-Trinitrotoluene	3.9E+00	3.0E+01	1.8E+01	1.4E+02	--	--	3.2E+00	2.5E+01	3.2E+00
2,4-Dinitrotoluene	1.6E+01	1.3E+00	7.1E+01	6.1E+00	--	--	1.3E+01	1.1E+00	1.1E+00
<i>Organic PCBs</i>									
PCB-1260	--	4.6E-01	--	1.5E+00	--	4.9E+04	--	3.5E-01	3.5E-01

^a Total RGO is the RGO across all pathways (ingestion, dermal, and inhalation).

^b RGO for screening is the smaller of the total RGOs. This screening RGO is only used to define COCs (see Table Q-21).

COC = Chemical of concern.

COPC = Chemical of potential concern.

HQ = Hazard quotient.

PCB = Polychlorinated biphenyl.

RGO = Remedial goal option. Risk-based RGOs for screening are at a risk level of 10⁻⁶ or hazard level of 0.1.

-- = No RGO could be quantified, based on lack of approved toxicity value.

Table Q-16. Determination of Groundwater (mg/L) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee		Resident Farmer Adult		Resident Farmer Child	
				Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?
All									
<i>Inorganics</i>									
Arsenic	8 / 12	1.0E-01	3.3E-02	6.1E-04	Yes	5.7E-05	Yes	8.1E-05	Yes
Manganese	12 / 12	1.9E+00	1.0E+00	1.4E+00	No	1.6E-01	Yes	4.6E-02	Yes
<i>Organic Explosives</i>									
2,4-Dinitrotoluene	1 / 12	3.3E-04	1.3E-04	1.3E-03	No	1.2E-04	Yes	1.8E-04	No
<i>Organic PCBs</i>									
PCB-1242	2 / 12	8.5E-04	4.5E-04	7.1E-04	No	6.6E-05	Yes	1.3E-04	Yes
<i>Organic Pesticides</i>									
Heptachlor Epoxide	2 / 12	3.4E-04	1.2E-04	9.4E-05	Yes	8.8E-06	Yes	1.3E-05	Yes
<i>Organic Volatiles</i>									
Benzene	2 / 12	4.9E-04	4.9E-04	4.7E-03	No	4.4E-04	Yes	8.2E-04	No

^a RGO = Remedial goal option. The screening RGO is the RGO at a risk level of 10⁻⁶ or hazard level of 0.1, whichever is smaller. See Table Q-10.

This screening RGO is only used to define COCs.

^b COC = Chemical of concern. A chemical is a COC if the EPC exceeds the screening RGO.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

PCB = Polychlorinated biphenyl.

Table Q-17. Determination of Surface Water (mg/L) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	Dust/Fire Control Worker		National Guard Trainee		Hunter/Trapper/Fisher		Resident Farmer Adult		Resident Farmer Child	
				Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?
Kelly's Pond and Exit Drainages													
<i>Inorganics</i>													
Antimony	2 / 3	1.5E-02	1.5E-02	3.5E-01	No	3.9E-02	No	6.6E-01	No	1.4E-02	Yes	4.5E-03	Yes
<i>Organic Explosives</i>													
RDX	1 / 3	2.4E-03	2.4E-03	4.1E-01	No	1.3E-01	No	1.3E+00	No	1.5E-02	No	1.6E-02	No

^a RGO = Remedial goal option. The screening RGO is the RGO at a risk level of 10⁻⁶ or hazard level of 0.1, whichever is smaller. See Table Q-11.

This screening RGO is only used to define COCs.

^b COC = Chemical of concern. A chemical is a COC if the EPC exceeds the screening RGO.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

Table Q-18. Determination of Sediment (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	Dust/Fire Control Worker		National Guard Trainee		Hunter/Trapper/Fisher		Resident Farmer Adult		Resident Farmer Child	
				Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?
Kelly's Pond and Exit Drainages													
<i>Organic Semivolatiles</i>													
Benzo(a)pyrene	2 / 5	5.5E-01	4.2E-01	4.5E+00	No	1.0E+00	No	5.3E+00	No	5.9E-02	Yes	9.7E-02	Yes
Benzo(b)fluoranthene	3 / 5	7.1E-01	7.1E-01	4.5E+01	No	1.0E+01	No	5.3E+01	No	5.9E-01	Yes	9.7E-01	No
Dibenz(a,h)anthracene	1 / 5	8.2E-02	8.2E-02	4.5E+00	No	1.0E+00	No	5.3E+00	No	5.9E-02	Yes	9.7E-02	No

^a RGO = Remedial goal option. The screening RGO is the RGO at a risk level of 10⁻⁶ or hazard level of 0.1, whichever is smaller. See Table Q-12.

This screening RGO is only used to define COCs.

^b COC = Chemical of concern. A chemical is a COC if the EPC exceeds the screening RGO.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

Table Q-19. Determination of Shallow Surface Soil (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	Security Guard/ Maintenance Worker		Dust/Fire Control Worker		Hunter/Trapper/ Fisher		Resident Farmer Adult		Resident Farmer Child	
				Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?
Explosives Handling Areas													
<i>Inorganics</i>													
Aluminum	108 / 108	2.5E+04	9.1E+03	1.0E+06	No	1.0E+06	No	1.0E+06	No	7.0E+04	No	7.8E+03	Yes
Antimony	12 / 78	1.8E+02	7.0E+00	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	No	3.1E+00	Yes
Arsenic	108 / 108	3.2E+01	1.2E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes
Cadmium	78 / 108	2.3E+01	1.7E+00	1.1E+02	No	3.0E+03	No	4.2E+03	No	3.8E+01	No	7.2E+00	No
Manganese	108 / 108	5.0E+03	6.6E+02	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Thallium	62 / 78	7.6E+00	8.0E-01	1.3E+02	No	7.7E+02	No	1.4E+03	No	5.7E+00	No	6.2E-01	Yes
<i>Organic Explosives</i>													
2,4,6-Trinitrotoluene	52 / 72	1.7E+04	9.3E+02	2.2E+01	Yes	7.4E+02	Yes	9.6E+02	No	1.1E+01	Yes	3.2E+00	Yes
2,4-Dinitrotoluene	11 / 72	5.0E+00	5.5E-01	1.8E+00	No	6.1E+01	No	6.6E+01	No	7.6E-01	No	1.1E+00	No
HMX	7 / 72	1.5E+03	5.7E+01	2.2E+03	No	7.4E+04	No	9.6E+04	No	1.1E+03	No	3.2E+02	No
RDX	13 / 72	9.8E+03	3.7E+02	1.1E+01	Yes	3.7E+02	No	4.1E+02	No	4.7E+00	Yes	6.8E+00	Yes
<i>Organic PCBs</i>													
PCB-1254	40 / 70	5.2E+00	7.8E-01	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	1.2E-01	Yes
PCB-1260	10 / 70	6.0E+00	4.4E-01	4.4E-01	No	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	3.5E-01	Yes
<i>Organic Semivolatiles</i>													
2-Methylnaphthalene	3 / 23	1.7E-01	1.7E-01	1.7E+02	No	5.9E+03	No	7.7E+03	No	8.9E+01	No	2.6E+01	No
Benz(a)anthracene	11 / 23	2.9E+00	1.4E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
Benzo(a)pyrene	10 / 23	2.3E+00	1.4E+00	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Benzo(b)fluoranthene	11 / 23	6.6E-01	6.6E-01	1.3E+00	No	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	No
Dibenz(a,h)anthracene	2 / 23	7.2E-01	7.2E-01	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Indeno(1,2,3-cd)pyrene	6 / 23	1.3E+00	1.3E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
North Ditches													
<i>Inorganics</i>													
Antimony	1 / 3	4.8E+00	4.8E+00	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	No	3.1E+00	Yes
Packaging and Shipping Areas													
<i>Inorganics</i>													
Aluminum	25 / 25	2.6E+04	1.3E+04	1.0E+06	No	1.0E+06	No	1.0E+06	No	7.0E+04	No	7.8E+03	Yes
Antimony	3 / 22	6.0E+01	7.9E+00	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	No	3.1E+00	Yes
Arsenic	25 / 25	4.9E+01	1.7E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes
Barium	25 / 25	9.0E+02	1.8E+02	1.9E+04	No	3.8E+05	No	5.8E+05	No	3.8E+03	No	5.3E+02	No

Table Q-19. Determination of Shallow Surface Soil (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	Security Guard/ Maintenance Worker		Dust/Fire Control Worker		Hunter/Trapper/ Fisher		Resident Farmer Adult		Resident Farmer Child	
				Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?
Cadmium	10 / 25	1.7E+01	2.4E+00	1.1E+02	No	3.0E+03	No	4.2E+03	No	3.8E+01	No	7.2E+00	No
Chromium	25 / 25	2.2E+02	3.9E+01	8.4E+04	No	1.0E+06	No	1.0E+06	No	4.0E+04	No	1.0E+04	No
Manganese	25 / 25	7.5E+03	1.5E+03	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Thallium	15 / 24	9.9E-01	5.4E-01	1.3E+02	No	7.7E+02	No	1.4E+03	No	5.7E+00	No	6.2E-01	No
Organic PCBs													
PCB-1254	7 / 23	9.5E+00	1.4E+00	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	1.2E-01	Yes
Organic Semivolatiles													
Benz(a)anthracene	3 / 7	7.2E-01	4.1E-01	1.3E+00	No	4.5E+01	No	4.8E+01	No	5.9E-01	No	9.7E-01	No
Benzo(a)pyrene	3 / 7	4.1E-01	2.8E-01	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Dibenz(a,h)anthracene	1 / 7	6.6E-02	6.6E-02	1.3E-01	No	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	No
Perimeter Area													
Inorganics													
Aluminum	34 / 34	2.1E+04	1.2E+04	1.0E+06	No	1.0E+06	No	1.0E+06	No	7.0E+04	No	7.8E+03	Yes
Antimony	2 / 27	8.1E+03	8.1E+02	2.1E+02	Yes	2.9E+03	No	4.8E+03	No	2.5E+01	Yes	3.1E+00	Yes
Arsenic	34 / 34	3.7E+01	1.3E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes
Barium	34 / 34	1.1E+03	1.5E+02	1.9E+04	No	3.8E+05	No	5.8E+05	No	3.8E+03	No	5.3E+02	No
Cadmium	23 / 33	4.8E+00	7.8E-01	1.1E+02	No	3.0E+03	No	4.2E+03	No	3.8E+01	No	7.2E+00	No
Chromium	34 / 34	4.0E+03	3.3E+02	8.4E+04	No	1.0E+06	No	1.0E+06	No	4.0E+04	No	1.0E+04	No
Copper	27 / 27	7.2E+02	8.8E+01	6.3E+04	No	3.9E+05	No	7.0E+05	No	2.9E+03	No	3.1E+02	No
Manganese	34 / 34	2.9E+03	9.8E+02	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Mercury	27 / 34	2.8E+00	2.6E-01	8.2E+01	No	1.7E+03	No	2.5E+03	No	1.7E+01	No	2.3E+00	No
Thallium	15 / 27	9.3E-01	4.2E-01	1.3E+02	No	7.7E+02	No	1.4E+03	No	5.7E+00	No	6.2E-01	No
Organic Explosives													
2,4,6-Trinitrotoluene	5 / 10	3.6E+03	1.0E+03	2.2E+01	Yes	7.4E+02	Yes	9.6E+02	Yes	1.1E+01	Yes	3.2E+00	Yes
2,4-Dinitrotoluene	2 / 10	4.0E+00	1.3E+00	1.8E+00	No	6.1E+01	No	6.6E+01	No	7.6E-01	Yes	1.1E+00	Yes
Organic PCBs													
PCB-1254	4 / 12	5.7E+00	1.5E+00	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	1.2E-01	Yes
Preparation and Receiving Areas													
Inorganics													
Aluminum	35 / 35	2.2E+04	1.0E+04	1.0E+06	No	1.0E+06	No	1.0E+06	No	7.0E+04	No	7.8E+03	Yes
Antimony	14 / 34	6.6E+02	6.3E+01	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	Yes	3.1E+00	Yes
Arsenic	35 / 35	3.9E+01	1.5E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes

Table Q-19. Determination of Shallow Surface Soil (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	Security Guard/ Maintenance Worker		Dust/Fire Control Worker		Hunter/Trapper/ Fisher		Resident Farmer Adult		Resident Farmer Child	
				Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?
Barium	35 / 35	8.1E+02	1.8E+02	1.9E+04	No	3.8E+05	No	5.8E+05	No	3.8E+03	No	5.3E+02	No
Cadmium	21 / 32	5.0E+01	7.3E+00	1.1E+02	No	3.0E+03	No	4.2E+03	No	3.8E+01	No	7.2E+00	Yes
Chromium	35 / 35	1.9E+03	2.2E+02	8.4E+04	No	1.0E+06	No	1.0E+06	No	4.0E+04	No	1.0E+04	No
Chromium, hexavalent	1 / 13	8.2E+01	1.8E+01	3.2E+02	No	9.1E+03	No	1.3E+04	No	1.1E+02	No	2.2E+01	No
Copper	34 / 34	3.3E+03	4.1E+02	6.3E+04	No	3.9E+05	No	7.0E+05	No	2.9E+03	No	3.1E+02	Yes
Manganese	35 / 35	2.3E+03	8.6E+02	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Mercury	30 / 34	2.4E+00	4.0E-01	8.2E+01	No	1.7E+03	No	2.5E+03	No	1.7E+01	No	2.3E+00	No
Thallium	29 / 34	4.2E+00	9.7E-01	1.3E+02	No	7.7E+02	No	1.4E+03	No	5.7E+00	No	6.2E-01	Yes
Zinc	35 / 35	7.3E+03	1.0E+03	2.6E+05	No	1.0E+06	No	1.0E+06	No	2.0E+04	No	2.3E+03	No
Organic PCBs													
PCB-1254	13 / 32	5.9E+01	7.5E+00	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	1.2E-01	Yes
PCB-1260	3 / 32	5.2E-01	5.2E-01	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	3.5E-01	Yes
Organic Pesticides													
Dieldrin	2 / 9	2.9E-01	9.6E-02	7.6E-02	Yes	2.6E+00	No	2.8E+00	No	3.2E-02	Yes	4.7E-02	Yes
beta-BHC	3 / 9	3.6E-01	1.2E-01	6.8E-01	No	2.3E+01	No	2.5E+01	No	2.9E-01	No	4.2E-01	No
Organic Semivolatiles													
2-Methylnaphthalene	6 / 17	4.5E+00	9.0E-01	1.7E+02	No	5.9E+03	No	7.7E+03	No	8.9E+01	No	2.6E+01	No
Benz(a)anthracene	10 / 17	1.0E+01	2.1E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
Benzo(a)pyrene	11 / 17	9.9E+00	3.6E+00	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Benzo(b)fluoranthene	12 / 17	1.1E+01	5.6E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
Benzo(k)fluoranthene	9 / 17	6.7E+00	1.7E+00	1.3E+01	No	4.5E+02	No	4.8E+02	No	5.9E+00	No	9.7E+00	No
Dibenz(a,h)anthracene	5 / 17	1.3E+00	7.9E-01	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Indeno(1,2,3-cd)pyrene	9 / 17	5.1E+00	2.2E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes

^a RGO = Remedial goal option. The screening RGO is the RGO at a risk level of 10⁻⁶ or hazard level of 0.1, whichever is smaller. See Table Q-13.

This screening RGO is only used to define COCs.

^b COC = Chemical of concern. A chemical is a COC if the EPC exceeds the screening RGO.

BHC = Benzene hexachloride.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

PCB = Polychlorinated biphenyl.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

Table Q-20. Determination of Deep Surface Soil (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO ^a	COC ^b ?
Explosives Handling Areas					
<i>Inorganics</i>					
Aluminum	122 / 122	2.5E+04	9.3E+03	3.5E+03	Yes
Antimony	14 / 92	1.8E+02	6.3E+00	2.5E+02	No
Arsenic	122 / 122	3.2E+01	1.2E+01	3.1E+00	Yes
Cadmium	87 / 122	2.3E+01	1.5E+00	1.1E+01	No
Manganese	122 / 122	5.0E+03	6.5E+02	3.5E+01	Yes
Mercury	77 / 120	7.1E+00	2.1E-01	1.7E+02	No
Thallium	75 / 92	7.6E+00	7.3E-01	5.2E+01	No
<i>Organic Explosives</i>					
2,4,6-Trinitrotoluene	59 / 79	1.7E+04	8.7E+02	1.6E+02	Yes
2,4-Dinitrotoluene	15 / 79	5.0E+00	5.5E-01	1.4E+01	No
HMX	7 / 79	1.5E+03	5.2E+01	1.6E+04	No
RDX	16 / 79	9.8E+03	3.3E+02	8.4E+01	Yes
<i>Organic PCBs</i>					
PCB-1254	40 / 71	5.2E+00	7.7E-01	3.5E+00	No
PCB-1260	10 / 71	6.0E+00	4.3E-01	3.5E+00	No
<i>Organic Semivolatiles</i>					
2-Methylnaphthalene	3 / 23	1.7E-01	1.7E-01	1.3E+03	No
Benz(<i>a</i>)anthracene	11 / 23	2.9E+00	1.4E+00	1.0E+01	No
Benzo(<i>a</i>)pyrene	10 / 23	2.3E+00	1.4E+00	1.0E+00	Yes
Benzo(<i>b</i>)fluoranthene	11 / 23	6.6E-01	6.6E-01	1.0E+01	No
Dibenz(<i>a,h</i>)anthracene	2 / 23	7.2E-01	7.2E-01	1.0E+00	No
Indeno(1,2,3- <i>cd</i>)pyrene	6 / 23	1.3E+00	1.3E+00	1.0E+01	No
North Ditches					
<i>Inorganics</i>					
Antimony	1 / 3	4.8E+00	4.8E+00	2.5E+02	No

Table Q-20. Determination of Deep Surface Soil (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO ^a	COC ^b ?
Packaging and Shipping Areas					
<i>Inorganics</i>					
Aluminum	29 / 29	2.6E+04	1.3E+04	3.5E+03	Yes
Antimony	4 / 26	6.0E+01	7.8E+00	2.5E+02	No
Arsenic	29 / 29	4.9E+01	1.6E+01	3.1E+00	Yes
Barium	29 / 29	9.0E+02	1.7E+02	3.5E+02	No
Cadmium	12 / 29	1.7E+01	2.5E+00	1.1E+01	No
Chromium	29 / 29	2.2E+02	4.3E+01	5.6E+05	No
Manganese	29 / 29	7.5E+03	1.5E+03	3.5E+01	Yes
Thallium	19 / 28	9.9E-01	5.1E-01	5.2E+01	No
<i>Organic PCBs</i>					
PCB-1254	7 / 25	9.5E+00	1.2E+00	3.5E+00	No
<i>Organic Semivolatiles</i>					
Benz(a)anthracene	3 / 8	7.2E-01	3.8E-01	1.0E+01	No
Benzo(a)pyrene	3 / 8	4.1E-01	2.7E-01	1.0E+00	No
Dibenz(a,h)anthracene	1 / 8	6.6E-02	6.6E-02	1.0E+00	No
Perimeter Area					
<i>Inorganics</i>					
Aluminum	36 / 36	2.1E+04	1.2E+04	3.5E+03	Yes
Antimony	2 / 29	8.1E+03	7.6E+02	2.5E+02	Yes
Arsenic	36 / 36	3.7E+01	1.3E+01	3.1E+00	Yes
Barium	36 / 36	1.1E+03	1.5E+02	3.5E+02	No
Cadmium	24 / 35	4.8E+00	7.4E-01	1.1E+01	No
Chromium	36 / 36	4.0E+03	3.1E+02	5.6E+05	No
Copper	29 / 29	7.2E+02	8.3E+01	2.6E+04	No
Manganese	36 / 36	2.9E+03	9.3E+02	3.5E+01	Yes
Mercury	28 / 36	2.8E+00	2.5E-01	1.7E+02	No
Thallium	15 / 29	9.3E-01	4.0E-01	5.2E+01	No

Table Q-20. Determination of Deep Surface Soil (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO ^a	COC ^b ?
Organic Explosives					
2,4,6-Trinitrotoluene	6 / 11	3.6E+03	9.6E+02	1.6E+02	Yes
2,4-Dinitrotoluene	3 / 11	4.0E+00	1.3E+00	1.4E+01	No
Organic PCBs					
PCB-1254	4 / 13	5.7E+00	1.4E+00	3.5E+00	No
PCB-1260	1 / 13	6.4E-01	2.0E-01	3.5E+00	No
Preparation and Receiving Areas					
Inorganics					
Aluminum	39 / 39	2.2E+04	9.9E+03	3.5E+03	Yes
Antimony	16 / 38	6.6E+02	5.6E+01	2.5E+02	No
Arsenic	39 / 39	3.9E+01	1.4E+01	3.1E+00	Yes
Barium	39 / 39	8.1E+02	1.6E+02	3.5E+02	No
Cadmium	22 / 36	5.0E+01	6.6E+00	1.1E+01	No
Chromium	39 / 39	1.9E+03	2.0E+02	5.6E+05	No
Chromium, hexavalent	1 / 13	8.2E+01	1.8E+01	1.6E+00	Yes
Copper	38 / 38	3.3E+03	3.7E+02	2.6E+04	No
Manganese	39 / 39	2.3E+03	8.2E+02	3.5E+01	Yes
Mercury	32 / 38	2.4E+00	3.7E-01	1.7E+02	No
Thallium	33 / 38	4.2E+00	9.0E-01	5.2E+01	No
Zinc	39 / 39	7.3E+03	9.1E+02	1.9E+05	No
Organic PCBs					
PCB-1254	13 / 33	5.9E+01	7.3E+00	3.5E+00	Yes
PCB-1260	3 / 33	5.2E-01	5.2E-01	3.5E+00	No
Organic Pesticides					
Dieldrin	2 / 9	2.9E-01	9.6E-02	5.1E-01	No
beta-BHC	3 / 9	3.6E-01	1.2E-01	4.5E+00	No
Organic Semivolatiles					
2-Methylnaphthalene	6 / 18	4.5E+00	8.6E-01	1.3E+03	No
Benz(a)anthracene	10 / 18	1.0E+01	2.0E+00	1.0E+01	No
Benzo(a)pyrene	11 / 18	9.9E+00	2.0E+00	1.0E+00	Yes

Table Q-20. Determination of Deep Surface Soil (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO ^a	COC ^b ?
Benzo(<i>b</i>)fluoranthene	13 / 18	1.1E+01	4.8E+00	1.0E+01	No
Benzo(<i>k</i>)fluoranthene	9 / 18	6.7E+00	1.6E+00	1.0E+02	No
Dibenz(<i>a,h</i>)anthracene	5 / 18	1.3E+00	7.6E-01	1.0E+00	No
Indeno(1,2,3- <i>cd</i>)pyrene	9 / 18	5.1E+00	1.3E+00	1.0E+01	No

^a RGO = Remedial goal option. The screening RGO is the RGO at a risk level of 10⁻⁶ or hazard level of 0.1, whichever is smaller. See Table Q-14.

This screening RGO is only used to define COCs.

^b COC = Chemical of concern. A chemical is a COC if the EPC exceeds the screening RGO.

BHC = Benzene hexachloride.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

PCB = Polychlorinated biphenyl.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

Table Q-21. Determination of Subsurface Soil (mg/kg) COCs at Load Line 2

COPC	Frequency of Detection	Maximum Detected	EPC	Resident Farmer Adult		Resident Farmer Child	
				Screening RGO ^a	COC ^b ?	Screening RGO ^a	COC ^b ?
Explosives Handling Areas							
<i>Inorganics</i>							
Aluminum	15 / 15	2.3E+04	1.2E+04	7.0E+04	No	7.8E+03	Yes
Antimony	2 / 15	2.0E+01	4.2E+00	2.5E+01	No	3.1E+00	Yes
Arsenic	15 / 15	2.2E+01	1.5E+01	6.7E-01	Yes	5.7E-01	Yes
Mercury	10 / 13	7.1E+00	1.5E+00	1.7E+01	No	2.3E+00	No
<i>Organic Explosives</i>							
2,4,6-Trinitrotoluene	8 / 8	1.6E+03	1.6E+03	1.1E+01	Yes	3.2E+00	Yes
2,4-Dinitrotoluene	4 / 8	2.1E+00	2.1E+00	7.6E-01	Yes	1.1E+00	Yes
Packaging and Shipping Areas							
<i>Inorganics</i>							
Antimony	1 / 4	2.2E+01	1.9E+01	2.5E+01	No	3.1E+00	Yes
Arsenic	4 / 4	2.3E+01	2.3E+01	6.7E-01	Yes	5.7E-01	Yes
Cadmium	2 / 4	8.5E+00	7.2E+00	3.8E+01	No	7.2E+00	No
Perimeter Area							
<i>Organic Explosives</i>							
2,4,6-Trinitrotoluene	1 / 1	4.5E+02	4.5E+02	1.1E+01	Yes	3.2E+00	Yes
2,4-Dinitrotoluene	1 / 1	1.7E+00	1.7E+00	7.6E-01	Yes	1.1E+00	Yes
<i>Organic PCBs</i>							
PCB-1260	1 / 1	6.4E-01	6.4E-01	2.0E-01	Yes	3.5E-01	Yes

^a RGO = Remedial goal option. The screening RGO is the RGO at a risk level of 10⁻⁶ or hazard level of 0.1, whichever is smaller. See Table Q-15.

This screening RGO is only used to define COCs.

^b COC = Chemical of concern. A chemical is a COC if the EPC exceeds the screening RGO.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

PCB = Polychlorinated biphenyl.

Table Q-22. Calculations of Blood Lead Concentrations (PbBs) for Load Line 2 Shallow Surface Soil at the Explosives Handling Areas
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation ^a		Description of Exposure Variable	Units	Security Guard/ Maintenance Worker		Resident Farmer Adult		Resident Farmer Child ^b
	1*	2**			GSDi = 1.8	GSDi = 2.1	GSDi = 1.8	GSDi = 2.1	GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	125.5	125.5	125.5	125.5	125.5
R _{fetal/maternal}	X	X	Fetal/maternal PbB ratio	--	0.9	0.9	0.9	0.9	--
BKSF	X	X	Biokinetic Slope Factor	ug/dL per ug/d	0.4	0.4	0.4	0.4	--
GSD _i	X	X	Geometric standard deviation PbB	--	1.8	2.1	1.8	2.1	1.6
PbB ₀	X	X	Baseline PbB	ug/dL	2.2	1.7	2.2	1.7	--
IR _S	X		Soil ingestion rate (including soil-derived indoor dust)	g/d	0.1	0.1	0.1	0.1	0.2
IR _{S+D}		X	Total ingestion rate of outdoor soil and indoor dust	g/d	--	--	--	--	--
W _S		X	Weighting factor; fraction of IR _{S+D} ingested as outdoor soil	--	--	--	--	--	--
K _{SD}		X	Mass fraction of soil in dust	--	--	--	--	--	--
AF _{S,D}	X	X	Absorption fraction (same for soil and dust)	--	0.12	0.12	0.12	0.12	--
EF _{S,D}	X	X	Exposure frequency (same for soil and dust)	d/year	250	250	350	350	--
AT _{S,D}	X	X	Averaging time (same for soil and dust)	d/year	365	365	365	365	--
PbB	PbB of receptor, geometric mean			ug/dL	2.6	2.1	2.8	2.3	4.0
PbB_{fetal, 0.95}	95th percentile PbB among fetuses of adult workers			ug/dL	6.2	6.4	6.6	6.9	--
PbB_t	Target PbB level of concern (e.g., 10 ug/dL)			ug/dL	10	10	10	10	10
P(PbB > PbB_t)	Probability that PbB > PbB_t, assuming lognormal distribution			%	0.7%	1.3%	0.9%	1.6%	2.5%

^a Equation 1 does not apportion exposure between soil and dust ingestion (excludes W_S, K_{SD}).

When IR_S = IR_{S+D} and W_S = 1.0, the equations yield the same PbB_{fetal,0.95}.

^b Child receptors use the IEUBK win 32 Lead Model Version 1.0 (Build 252) to calculate the PbB concentration and the probability that PbB > PbB_t.

EPA = U.S. Environmental Protection Agency.

*Equation 1, based on Equations 1 and 2 in EPA 1996.

PbB_{adult} =	$(PbS * BKSF * IR_{S+D} * AF_{S,D} * EF_S / AT_{S,D}) + PbB_0$
PbB_{fetal, 0.95} =	$PbB_{adult} * (GSD_i^{1.645} * R)$

Table Q-23. Calculations of Blood Lead Concentrations (PbBs) for Load Line 2 Shallow Surface Soil at the Packaging and Shipping Areas
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation ^a		Description of Exposure Variable	Units	Security Guard/ Maintenance Worker		Resident Farmer Adult		Resident Farmer Child ^b
	1*	2**			GSD _i = 1.8	GSD _i = 2.1	GSD _i = 1.8	GSD _i = 2.1	GSD _i = 1.6
PbS	X	X	Soil lead concentration	mg/kg	196	196	196	196	196
R _{fetal/maternal}	X	X	Fetal/maternal PbB ratio	--	0.9	0.9	0.9	0.9	--
BKSF	X	X	Biokinetic Slope Factor	ug/dL per ug/d	0.4	0.4	0.4	0.4	--
GSD _i	X	X	Geometric standard deviation PbB	--	1.8	2.1	1.8	2.1	1.6
PbB ₀	X	X	Baseline PbB	ug/dL	2.2	1.7	2.2	1.7	--
IR _S	X		Soil ingestion rate (including soil-derived indoor dust)	g/d	0.1	0.1	0.1	0.1	0.2
IR _{S+D}		X	Total ingestion rate of outdoor soil and indoor dust	g/d	--	--	--	--	--
W _S		X	Weighting factor; fraction of IR _{S+D} ingested as outdoor soil	--	--	--	--	--	--
K _{SD}		X	Mass fraction of soil in dust	--	--	--	--	--	--
AF _{S,D}	X	X	Absorption fraction (same for soil and dust)	--	0.12	0.12	0.12	0.12	--
EF _{S,D}	X	X	Exposure frequency (same for soil and dust)	d/year	250	250	350	350	--
AT _{S,D}	X	X	Averaging time (same for soil and dust)	d/year	365	365	365	365	--
PbB	PbB of receptor, geometric mean			ug/dL	2.8	2.3	3.1	2.6	5.2
PbB_{fetal, 0.95}	95th percentile PbB among fetuses of adult workers			ug/dL	6.7	7.2	7.3	7.9	--
PbB_t	Target PbB level of concern (e.g., 10 ug/dL)			ug/dL	10	10	10	10	10
P(PbB > PbB_t)	Probability that PbB > PbB_t, assuming lognormal distribution			%	1.0%	1.8%	1.5%	2.5%	8.5%

^a Equation 1 does not apportion exposure between soil and dust ingestion (excludes W_S, K_{SD}).

When IR_S = IR_{S+D} and W_S = 1.0, the equations yield the same PbB_{fetal, 0.95}.

^b Child receptors use the IEUBK win 32 Lead Model Version 1.0 (Build 252) to calculate the PbB concentration and the probability that PbB > PbB_t.

EPA = U.S. Environmental Protection Agency.

*Equation 1, based on Equations 1 and 2 in EPA 1996.

PbB_{adult} =	$(PbS * BKSF * IR_{S+D} * AF_{S,D} * EF_S / AT_{S,D}) + PbB_0$
PbB_{fetal, 0.95} =	$PbB_{adult} * (GSD_i^{1.645} * R)$

Table Q-24. Calculations of Blood Lead Concentrations (PbBs) for Load Line 2 Shallow Surface Soil at the Perimeter Area
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation ^a		Description of Exposure Variable	Units	Security Guard/ Maintenance Worker		Resident Farmer Adult		Resident Farmer Child ^b
	1*	2**			GSD _i = 1.8	GSD _i = 2.1	GSD _i = 1.8	GSD _i = 2.1	GSD _i = 1.6
PbS	X	X	Soil lead concentration	mg/kg	1984	1984	1984	1984	1984
R _{fetal/maternal}	X	X	Fetal/maternal PbB ratio	--	0.9	0.9	0.9	0.9	--
BKSF	X	X	Biokinetic Slope Factor	ug/dL per ug/d	0.4	0.4	0.4	0.4	--
GSD _i	X	X	Geometric standard deviation PbB	--	1.8	2.1	1.8	2.1	1.6
PbB ₀	X	X	Baseline PbB	ug/dL	2.2	1.7	2.2	1.7	--
IR _S	X		Soil ingestion rate (including soil-derived indoor dust)	g/d	0.1	0.1	0.1	0.1	0.2
IR _{S+D}		X	Total ingestion rate of outdoor soil and indoor dust	g/d	--	--	--	--	--
W _S		X	Weighting factor; fraction of IR _{S+D} ingested as outdoor soil	--	--	--	--	--	--
K _{SD}		X	Mass fraction of soil in dust	--	--	--	--	--	--
AF _{S,D}	X	X	Absorption fraction (same for soil and dust)	--	0.12	0.12	0.12	0.12	--
EF _{S,D}	X	X	Exposure frequency (same for soil and dust)	d/year	250	250	350	350	--
AT _{S,D}	X	X	Averaging time (same for soil and dust)	d/year	365	365	365	365	--
PbB	PbB of receptor, geometric mean			ug/dL	8.7	8.2	11.3	10.8	24.8
PbB_{fetal, 0.95}	95th percentile PbB among fetuses of adult workers			ug/dL	20.6	25.1	26.8	33.0	--
PbB_t	Target PbB level of concern (e.g., 10 ug/dL)			ug/dL	10	10	10	10	10
P(PbB > PbB_t)	Probability that PbB > PbB_t, assuming lognormal distribution			%	34.0%	34.2%	51.3%	48.6%	97.3%

^a Equation 1 does not apportion exposure between soil and dust ingestion (excludes W_S, K_{SD}).

When IR_S = IR_{S+D} and W_S = 1.0, the equations yield the same PbB_{fetal, 0.95}.

^b Child receptors use the IEUBK win 32 Lead Model Version 1.0 (Build 252) to calculate the PbB concentration and the probability that PbB > PbB_t.

EPA = U.S. Environmental Protection Agency.

*Equation 1, based on Equations 1 and 2 in EPA 1996.

PbB_{adult} =	$(PbS * BKSF * IR_{S+D} * AF_{S,D} * EF_S / AT_{S,D}) + PbB_0$
PbB_{fetal, 0.95} =	$PbB_{adult} * (GSD_i^{1.645} * R)$

Table Q-25. Calculations of Blood Lead Concentrations (PbBs) for Load Line 2 Shallow Surface Soil at the Preparation and Receiving Areas
 EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation ^a		Description of Exposure Variable	Units	Security Guard/ Maintenance Worker		Resident Farmer Adult		Resident Farmer Child ^b
	1*	2**			GSDi = 1.8	GSDi = 2.1	GSDi = 1.8	GSDi = 2.1	GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	948.3	948.3	948.3	948.3	948.3
R _{fetal/maternal}	X	X	Fetal/maternal PbB ratio	--	0.9	0.9	0.9	0.9	--
BKSF	X	X	Biokinetic Slope Factor	ug/dL per ug/d	0.4	0.4	0.4	0.4	--
GSD _i	X	X	Geometric standard deviation PbB	--	1.8	2.1	1.8	2.1	1.6
PbB ₀	X	X	Baseline PbB	ug/dL	2.2	1.7	2.2	1.7	--
IR _S	X		Soil ingestion rate (including soil-derived indoor dust)	g/d	0.1	0.1	0.1	0.1	0.2
IR _{S+D}		X	Total ingestion rate of outdoor soil and indoor dust	g/d	--	--	--	--	--
W _S		X	Weighting factor; fraction of IR _{S+D} ingested as outdoor soil	--	--	--	--	--	--
K _{SD}		X	Mass fraction of soil in dust	--	--	--	--	--	--
AF _{S,D}	X	X	Absorption fraction (same for soil and dust)	--	0.12	0.12	0.12	0.12	--
EF _{S,D}	X	X	Exposure frequency (same for soil and dust)	d/year	250	250	350	350	--
AT _{S,D}	X	X	Averaging time (same for soil and dust)	d/year	365	365	365	365	--
PbB	PbB of receptor, geometric mean			ug/dL	5.3	4.8	6.6	6.1	15.5
PbB_{fetal, 0.95}	95th percentile PbB among fetuses of adult workers			ug/dL	12.6	14.7	15.5	18.5	--
PbB_t	Target PbB level of concern (e.g., 10 ug/dL)			ug/dL	10	10	10	10	10
P(PbB > PbB_t)	Probability that PbB > PbB_t, assuming lognormal distribution			%	10.5%	13.0%	18.5%	20.7%	82.4%

^a Equation 1 does not apportion exposure between soil and dust ingestion (excludes W_S, K_{SD}).

When IR_S = IR_{S+D} and W_S = 1.0, the equations yield the same PbB_{fetal, 0.95}.

^b Child receptors use the IEUBK win 32 Lead Model Version 1.0 (Build 252) to calculate the PbB concentration and the probability that PbB > PbB_t.

EPA = U.S. Environmental Protection Agency.

*Equation 1, based on Equations 1 and 2 in EPA 1996.

PbB_{adult} =	$(PbS * BKSF * IR_{S+D} * AF_{S,D} * EF_{S,D} / AT_{S,D}) + PbB_0$
PbB_{fetal, 0.95} =	$PbB_{adult} * (GSD_i^{1.645} * R)$

Table Q-26. Calculations of Blood Lead Concentrations (PbBs) for Load Line 2 Subsurface Soil
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation ^a		Description of Exposure Variable	Units	Explosives Handling Areas			Packaging and Shipping Areas		
	1*	2**			Resident Farmer Adult		Resident Farmer Child ^b	Resident Farmer Adult		Resident Farmer Child ²
					GSDi = 1.8	GSDi = 2.1	GSDi = 1.6	GSDi = 1.8	GSDi = 2.1	GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	156.1	156.1	156.1	1285	1285	1285
R _{fetal/maternal}	X	X	Fetal/maternal PbB ratio	--	0.9	0.9	--	0.9	0.9	--
BKSF	X	X	Biokinetic Slope Factor	ug/dL per ug/d	0.4	0.4	--	0.4	0.4	--
GSD _i	X	X	Geometric standard deviation PbB	--	1.8	2.1	1.6	1.8	2.1	1.6
PbB ₀	X	X	Baseline PbB	ug/dL	2.2	1.7	--	2.2	1.7	--
IR _S	X		Soil ingestion rate (including soil-derived indoor dust)	g/d	0.1	0.1	0.2	0.1	0.1	0.2
IR _{S+D}		X	Total ingestion rate of outdoor soil and indoor dust	g/d	--	--	--	--	--	--
W _S		X	Weighting factor; fraction of IR _{S+D} ingested as outdoor soil	--	--	--	--	--	--	--
K _{SD}		X	Mass fraction of soil in dust	--	--	--	--	--	--	--
AF _{S,D}	X	X	Absorption fraction (same for soil and dust)	--	0.12	0.12	--	0.12	0.12	--
EF _{S,D}	X	X	Exposure frequency (same for soil and dust)	d/year	350	350	--	350	350	--
AT _{S,D}	X	X	Averaging time (same for soil and dust)	d/year	365	365	--	365	365	--
PbB	PbB of receptor, geometric mean			ug/dL	2.9	2.4	4.5	8.1	7.6	18.9
PbB_{fetal, 0.95}	95th percentile PbB among fetuses of adult workers			ug/dL	6.9	7.4	--	19.2	23.2	--
PbB_t	Target PbB level of concern (e.g., 10 ug/dL)			ug/dL	10	10	10	10	10	10
P(PbB > PbB_t)	Probability that PbB > PbB_t, assuming lognormal distribution			%	1.1%	2.0%	4.6%	29.6%	30.5%	91.2%

^a Equation 1 does not apportion exposure between soil and dust ingestion (excludes W_S, K_{SD}).

When IR_S = IR_{S+D} and W_S = 1.0, the equations yield the same PbB_{fetal,0.95}.

^b Child receptors use the IEUBK win 32 Lead Model Version 1.0 (Build 252) to calculate the PbB concentration and the probability that PbB > PbB_t.

EPA = U.S. Environmental Protection Agency.

*Equation 1, based on Equations 1 and 2 in EPA 1996.

PbB_{adult} =	$(PbS * BKSF * IR_{S+D} * AF_{S,D} * EF_{S,D} / AT_{S,D}) + PbB_0$
PbB_{fetal, 0.95} =	$PbB_{adult} * (GSD_i^{1.645} * R)$