APPENDIX Q
HUMAN HEALTH RISK ASSESSMENT TABLES

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Table Q-1. Summary of COPC Screening for Load Line 3 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											
Inorganics											
Barium	7440-39-3	mg/L	12 / 12	8.8E-03	1.7E-02	3.3E-02	2.2E-02	2.2E-02	2.6E-01	2.6E+00	No
Calcium	7440-70-2	mg/L	12 / 12	7.4E+00	3.0E+01	6.2E+01	3.7E+01	3.7E+01	5.3E+01	--	No
Cobalt	7440-48-4	mg/L	7 / 12	1.3E-03	5.1E-03	1.3E-02	1.1E-02	1.1E-02	--	7.3E-01	No
Iron	7439-89-6	mg/L	4 / 12	1.1E-01	1.8E-01	4.8E-01	2.4E-01	2.4E-01	1.4E+00	1.1E+01	No
Magnesium	7439-95-4	mg/L	12 / 12	4.2E+00	1.4E+01	3.8E+01	2.2E+01	2.2E+01	1.5E+01	--	No
Manganese	7439-96-5	mg/L	12 / 12	1.7E-02	9.2E-01	2.2E+00	1.3E+00	1.3E+00	1.3E+00	8.8E-01	Yes
Nickel	7440-02-0	mg/L	9 / 12	4.2E-03	1.7E-02	5.1E-02	2.5E-02	2.5E-02	8.3E-02	7.3E-01	No
Potassium	7440-09-7	mg/L	12 / 12	9.0E-01	2.1E+00	6.9E+00	2.9E+00	2.9E+00	5.8E+00	--	No
Sodium	7440-23-5	mg/L	12 / 12	9.9E-01	1.0E+01	2.9E+01	2.2E+01	2.2E+01	5.1E+01	--	No
Zinc	7440-66-6	mg/L	4 / 12	1.3E-02	1.8E-02	2.2E-02	2.0E-02	2.0E-02	5.2E-02	1.1E+01	No
Organic Explosives											
1,3,5-Trinitrobenzene	99-35-4	mg/L	2 / 12	1.9E-03	4.4E-03	5.0E-02	1.2E-02	1.2E-02	--	1.1E+00	No
1,3-Dinitrobenzene	99-65-0	mg/L	1 / 12	1.2E-04	1.0E-04	1.2E-04	1.0E-04	1.0E-04	--	3.6E-03	No
2,4,6-Trinitrotoluene	118-96-7	mg/L	2 / 12	9.2E-04	7.0E-03	8.2E-02	1.9E-02	1.9E-02	--	2.2E-03	Yes
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/L	3 / 12	1.2E-04	2.9E-03	3.2E-02	7.7E-03	7.7E-03	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/L	3 / 12	2.3E-04	4.7E-03	5.4E-02	1.3E-02	1.3E-02	--	--	Yes
HMX	2691-41-0	mg/L	1 / 12	2.0E-03	4.0E-04	2.0E-03	6.6E-04	6.6E-04	--	1.8E+00	No
RDX	121-82-4	mg/L	3 / 12	4.7E-04	9.8E-04	7.7E-03	2.1E-03	2.1E-03	--	6.1E-04	Yes
Organic Pesticides											
Heptachlor Epoxide	1024-57-3	mg/L	1 / 12	7.5E-05	2.9E-05	7.5E-05	3.7E-05	3.7E-05	--	7.4E-06	Yes
beta-BHC	319-85-7	mg/L	1 / 12	1.5E-04	3.5E-05	1.5E-04	5.4E-05	5.4E-05	--	3.7E-05	Yes
Organic Semivolatiles											
Bis(2-ethylhexyl)phthalate	117-81-7	mg/L	1 / 12	4.7E-03	5.0E-03	4.7E-03	5.0E-03	4.7E-03	--	4.8E-03	No
Organic Volatiles											
Acetone	67-64-1	mg/L	6 / 12	2.1E-03	4.2E-03	6.7E-03	5.0E-03	5.0E-03	--	6.1E-01	No
Carbon Disulfide	75-15-0	mg/L	1 / 12	1.4E-03	5.8E-04	1.4E-03	7.1E-04	7.1E-04	--	1.0E+00	No
Carbon Tetrachloride	56-23-5	mg/L	2 / 12	1.5E-04	4.5E-04	2.5E-04	5.1E-04	2.5E-04	--	1.7E-04	Yes

Table Q-1. Summary of COPC Screening for Load Line 3 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?
Chloroform	67-66-3	mg/L	2 / 12	2.0E-04	5.3E-04	1.2E-03	6.5E-04	6.5E-04	--	6.2E-03	No
Chloromethane	74-87-3	mg/L	3 / 12	1.5E-04	4.2E-04	2.3E-04	5.0E-04	2.3E-04	--	1.5E-03	No
Tetrachloroethene	127-18-4	mg/L	1 / 12	4.9E-04	5.0E-04	4.9E-04	5.0E-04	4.9E-04	--	6.6E-04	No
Toluene	108-88-3	mg/L	1 / 12	2.0E-04	4.8E-04	2.0E-04	5.2E-04	2.0E-04	--	7.2E-01	No

BHC = Benzene hexachloride.
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-2. Summary of COPC Screening for Load Line 3 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?
Cobb's Pond Tributary											
Inorganics											
Aluminum	7429-90-5	mg/L	2 / 2	2.3E-01	4.6E-01	6.8E-01	1.9E+00	6.8E-01	3.4E+00	3.6E+01	No
Antimony	7440-36-0	mg/L	1 / 2	2.5E-03	3.8E-03	2.5E-03	1.2E-02	2.5E-03	--	1.5E-02	No
Arsenic	7440-38-2	mg/L	2 / 2	4.3E-03	4.5E-03	4.7E-03	5.8E-03	4.7E-03	3.2E-03	4.5E-05	Yes
Barium	7440-39-3	mg/L	2 / 2	5.4E-02	6.7E-02	8.0E-02	1.5E-01	8.0E-02	4.8E-02	2.6E+00	No
Calcium	7440-70-2	mg/L	2 / 2	2.2E+01	3.1E+01	3.9E+01	8.4E+01	3.9E+01	4.1E+01	--	No
Cobalt	7440-48-4	mg/L	1 / 2	6.5E-03	3.9E-03	6.5E-03	2.0E-02	6.5E-03	--	7.3E-01	No
Iron	7439-89-6	mg/L	2 / 2	2.7E+00	3.3E+00	3.8E+00	6.7E+00	3.8E+00	2.6E+00	1.1E+01	No
Magnesium	7439-95-4	mg/L	2 / 2	5.5E+00	5.6E+00	5.6E+00	5.9E+00	5.6E+00	1.1E+01	--	No
Manganese	7439-96-5	mg/L	2 / 2	3.5E+00	5.7E+00	7.8E+00	1.9E+01	7.8E+00	3.9E-01	8.8E-01	Yes
Nickel	7440-02-0	mg/L	1 / 2	8.7E-03	5.1E-03	8.7E-03	2.8E-02	8.7E-03	--	7.3E-01	No
Potassium	7440-09-7	mg/L	2 / 2	4.3E+00	5.9E+00	7.4E+00	1.6E+01	7.4E+00	3.2E+00	--	No
Sodium	7440-23-5	mg/L	2 / 2	1.1E+00	3.8E+00	6.4E+00	2.0E+01	6.4E+00	2.1E+01	--	No
Vanadium	7440-62-2	mg/L	1 / 2	1.5E-03	2.5E-03	1.5E-03	8.8E-03	1.5E-03	--	2.6E-01	No
Zinc	7440-66-6	mg/L	2 / 2	1.6E-02	2.1E-02	2.6E-02	5.3E-02	2.6E-02	4.2E-02	1.1E+01	No
Organic Volatiles											
2-Butanone	78-93-3	mg/L	1 / 1	7.0E-04	7.0E-04	7.0E-04	--	7.0E-04	--	1.9E+00	No

CAS = Chemical Abstracts Service.
COPC = Chemical of potential concern.
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-3. Summary of COPC Screening for Load Line 3 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?
Cobb's Pond Tributary												
Inorganics												
Aluminum	7429-90-5	mg/kg	6 / 6	6.6E+03	9.0E+03	1.2E+04	1.1E+04	1.1E+04	1.4E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	2 / 5	9.7E-01	4.3E+00	1.8E+01	1.2E+01	1.2E+01	--	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	6 / 6	4.5E+00	9.2E+00	1.9E+01	1.8E+01	1.8E+01	2.0E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	6 / 6	4.0E+01	6.1E+01	8.7E+01	8.0E+01	8.0E+01	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	4 / 5	5.3E-01	5.4E-01	6.8E-01	6.9E-01	6.8E-01	3.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	5 / 6	6.0E-02	8.3E-01	3.5E+00	8.0E+02	3.5E+00	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	5 / 5	1.3E+03	1.6E+03	2.3E+03	2.0E+03	2.0E+03	5.5E+03	--	--	No
Chromium	7440-47-3	mg/kg	6 / 6	9.3E+00	1.4E+01	2.0E+01	1.8E+01	1.8E+01	1.8E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	5 / 5	6.5E+00	1.0E+01	1.5E+01	1.6E+01	1.5E+01	9.1E+00	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	5 / 5	1.2E+01	5.6E+01	2.2E+02	1.4E+02	1.4E+02	2.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	5 / 5	1.6E+04	4.0E+04	1.2E+05	8.5E+04	8.5E+04	2.8E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	6 / 6	8.8E+00	3.0E+01	9.2E+01	1.0E+02	9.2E+01	2.7E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	5 / 5	1.1E+03	1.5E+03	1.8E+03	1.8E+03	1.8E+03	2.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	6 / 6	1.3E+02	3.5E+02	6.9E+02	8.9E+02	6.9E+02	2.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	5 / 6	3.4E-02	5.2E-02	6.0E-02	6.1E-02	6.0E-02	5.9E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	5 / 5	1.3E+01	2.0E+01	4.2E+01	3.2E+01	3.2E+01	1.8E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	5 / 5	4.4E+02	5.3E+02	6.3E+02	6.0E+02	6.0E+02	2.0E+03	--	--	No
Selenium	7782-49-2	mg/kg	4 / 6	5.8E-01	1.2E+00	9.9E-01	2.6E+00	9.9E-01	1.7E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 6	1.1E+01	2.0E+00	1.1E+01	5.4E+00	5.4E+00	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	2 / 5	1.4E+02	2.9E+02	1.8E+02	4.2E+02	1.8E+02	1.1E+02	--	--	No
Thallium	6533-73-9	mg/kg	5 / 5	2.5E-01	4.1E-01	8.9E-01	6.7E-01	6.7E-01	8.9E-01	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	5 / 5	1.4E+01	1.8E+01	2.4E+01	2.3E+01	2.3E+01	2.6E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	6 / 6	4.5E+01	4.2E+02	2.2E+03	1.1E+03	1.1E+03	5.3E+02	2.3E+03	3.1E+04	No
Organic Explosives												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	2 / 3	6.5E-01	7.3E-01	1.4E+00	1.8E+00	1.4E+00	--	3.1E+00	3.1E+01	No
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	1 / 1	3.7E-01	3.7E-01	3.7E-01	--	3.7E-01	--	--	--	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	1 / 5	1.8E-01	5.9E-02	1.8E-01	1.2E-01	1.2E-01	--	1.1E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	1 / 1	3.2E-03	3.2E-03	3.2E-03	--	3.2E-03	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	1 / 1	8.1E-03	8.1E-03	8.1E-03	--	8.1E-03	--	1.7E+00	7.0E+00	No

Table Q-3. Summary of COPC Screening for Load Line 3 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?
Endrin	72-20-8	mg/kg	1 / 1	1.0E-02	1.0E-02	1.0E-02	--	1.0E-02	--	1.8E+00	1.8E+01	No
gamma-Chlordane	5103-74-2	mg/kg	1 / 1	2.9E-03	2.9E-03	2.9E-03	--	2.9E-03	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
Benz(*a*)anthracene	56-55-3	mg/kg	1 / 1	1.0E-01	1.0E-01	1.0E-01	--	1.0E-01	--	6.2E-01	2.1E+00	No
Benzo(*a*)pyrene	50-32-8	mg/kg	1 / 1	1.4E-01	1.4E-01	1.4E-01	--	1.4E-01	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	1 / 1	1.3E-01	1.3E-01	1.3E-01	--	1.3E-01	--	6.2E-01	2.1E+00	No
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	1 / 1	8.8E-02	8.8E-02	8.8E-02	--	8.8E-02	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	1 / 1	1.4E-01	1.4E-01	1.4E-01	--	1.4E-01	--	6.2E+00	2.1E+01	No
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	1 / 1	5.4E-02	5.4E-02	5.4E-02	--	5.4E-02	--	3.5E+01	1.2E+02	No
Chrysene	218-01-9	mg/kg	1 / 1	1.3E-01	1.3E-01	1.3E-01	--	1.3E-01	--	6.2E+01	2.1E+02	No
Dibenz(*a,h*)anthracene	53-70-3	mg/kg	1 / 1	5.5E-02	5.5E-02	5.5E-02	--	5.5E-02	--	6.2E-02	2.1E-01	No
Fluoranthene	206-44-0	mg/kg	1 / 1	2.4E-01	2.4E-01	2.4E-01	--	2.4E-01	--	2.3E+02	2.2E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	1 / 1	1.1E-01	1.1E-01	1.1E-01	--	1.1E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	1 / 1	9.1E-02	9.1E-02	9.1E-02	--	9.1E-02	--	--	--	Yes
Pyrene	129-00-0	mg/kg	1 / 1	1.8E-01	1.8E-01	1.8E-01	--	1.8E-01	--	2.3E+02	2.9E+03	No
Organic Volatiles												
Toluene	108-88-3	mg/kg	1 / 1	4.0E-03	4.0E-03	4.0E-03	--	4.0E-03	--	6.6E+01	2.2E+02	No

COPC = Chemical of potential concern.
DDE = Dichlorodiphonyldichloroethylene.
DDT = Dichlorodiphenyltrichloroethane.
EPC = Exposure point concentration.
PCB = Polychlorinated biphenyl.
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 3 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												
Inorganics												
Aluminum	7429-90-5	mg/kg	6 / 6	1.0E+04	1.3E+04	1.9E+04	1.6E+04	1.6E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Arsenic	7440-38-2	mg/kg	6 / 6	5.3E+00	9.2E+00	1.5E+01	1.3E+01	1.3E+01	1.5E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	6 / 6	5.7E+01	1.2E+02	2.1E+02	2.3E+02	2.1E+02	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	6 / 6	5.2E-01	1.4E+00	2.9E+00	4.4E+00	2.9E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	6 / 6	2.1E-01	4.7E-01	1.0E+00	9.0E-01	9.0E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	6 / 6	1.3E+03	5.4E+04	1.2E+05	7.8E+08	1.2E+05	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	6 / 6	1.2E+01	1.5E+01	1.9E+01	1.7E+01	1.7E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	6 / 6	2.2E+00	6.6E+00	1.1E+01	9.7E+00	9.7E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	6 / 6	6.4E+00	1.4E+01	2.2E+01	1.9E+01	1.9E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	6 / 6	6.8E+03	1.7E+04	2.7E+04	2.4E+04	2.4E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	6 / 6	1.8E+01	5.8E+01	1.8E+02	2.0E+02	1.8E+02	2.6E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	6 / 6	1.8E+03	6.3E+03	1.2E+04	2.3E+04	1.2E+04	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	6 / 6	5.0E+02	1.3E+03	2.4E+03	2.0E+03	2.0E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	6 / 6	1.2E-02	3.6E-02	7.4E-02	1.5E-01	7.4E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	6 / 6	5.9E+00	1.3E+01	2.3E+01	1.8E+01	1.8E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	6 / 6	8.6E+02	1.1E+03	1.5E+03	1.3E+03	1.3E+03	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	5 / 6	3.7E-01	6.3E-01	7.4E-01	1.1E+00	7.4E-01	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 6	8.7E+00	1.7E+00	8.7E+00	4.5E+00	4.5E+00	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	3 / 6	2.4E+02	3.5E+02	5.2E+02	5.0E+02	5.0E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	6 / 6	1.9E-01	2.7E-01	3.4E-01	3.4E-01	3.4E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	6 / 6	7.2E+00	1.5E+01	2.5E+01	2.6E+01	2.5E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	6 / 6	4.6E+01	6.5E+01	9.5E+01	8.5E+01	8.5E+01	6.2E+01	2.3E+03	3.1E+04	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	4 / 6	1.5E-01	1.2E+00	6.3E+00	2.7E+04	6.3E+00	--	1.1E-01	7.4E-01	Yes
DLA Tanks												
Inorganics												
Aluminum	7429-90-5	mg/kg	19 / 19	8.7E+03	1.2E+04	1.6E+04	1.3E+04	1.3E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	13 / 19	9.2E-01	5.6E+01	8.3E+02	1.3E+02	1.3E+02	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	19 / 19	7.4E+00	1.1E+01	1.6E+01	1.2E+01	1.2E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	19 / 19	4.9E+01	9.9E+01	1.9E+02	1.2E+02	1.2E+02	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	19 / 19	5.3E-01	8.4E-01	1.7E+00	9.8E-01	9.8E-01	8.8E-01	1.5E+01	1.9E+02	No

Table Q-4. Summary of COPC Screening for Load Line 3 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	12 / 19	9.9E-02	3.7E-01	3.2E+00	6.6E-01	6.6E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	19 / 19	5.1E+02	1.2E+04	5.7E+04	3.7E+04	3.7E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	19 / 19	1.1E+01	2.0E+01	1.2E+02	2.9E+01	2.9E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	19 / 19	5.1E+00	7.9E+00	1.2E+01	8.7E+00	8.7E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	19 / 19	6.4E+00	1.3E+01	3.1E+01	1.6E+01	1.6E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	19 / 19	1.4E+04	2.2E+04	2.8E+04	2.4E+04	2.4E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	19 / 19	1.2E+01	1.5E+02	1.5E+03	3.0E+02	3.0E+02	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	19 / 19	1.3E+03	3.2E+03	9.1E+03	4.3E+03	4.3E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	19 / 19	2.2E+02	1.0E+03	2.5E+03	1.3E+03	1.3E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	16 / 19	1.4E-02	4.6E-02	1.0E-01	5.9E-02	5.9E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	19 / 19	8.3E+00	1.4E+01	2.5E+01	1.6E+01	1.6E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	19 / 19	4.0E+02	6.8E+02	9.7E+02	7.5E+02	7.5E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	4 / 19	3.8E-01	9.3E-01	1.6E+00	1.1E+00	1.1E+00	1.4E+00	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	6 / 19	7.5E+01	2.4E+02	2.6E+02	2.7E+02	2.6E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	6 / 19	3.0E-01	3.5E-01	2.7E+00	5.8E-01	5.8E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	19 / 19	1.1E+01	2.1E+01	2.9E+01	2.3E+01	2.3E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	19 / 19	3.6E+01	6.8E+01	2.3E+02	8.7E+01	8.7E+01	6.2E+01	2.3E+03	3.1E+04	No
Organic Pesticides												
Dieldrin	60-57-1	mg/kg	1 / 5	9.4E-03	5.0E-03	9.4E-03	7.8E-03	7.8E-03	--	3.0E-02	1.1E-01	No
Organic Semivolatiles												
Benz(*a*)anthracene	56-55-3	mg/kg	1 / 5	8.2E-02	1.7E-01	8.2E-02	2.1E-01	8.2E-02	--	6.2E-01	2.1E+00	No
Benzo(*a*)pyrene	50-32-8	mg/kg	1 / 5	5.4E-02	1.6E-01	5.4E-02	2.2E-01	5.4E-02	--	6.2E-02	2.1E-01	No
Benzo(*b*)fluoranthene	205-99-2	mg/kg	2 / 5	5.4E-02	1.4E-01	7.9E-02	2.0E-01	7.9E-02	--	6.2E-01	2.1E+00	No
Benzo(*k*)fluoranthene	207-08-9	mg/kg	1 / 5	5.0E-02	1.6E-01	5.0E-02	2.2E-01	5.0E-02	--	6.2E+00	2.1E+01	No
Chrysene	218-01-9	mg/kg	2 / 5	7.5E-02	1.4E-01	8.3E-02	2.0E-01	8.3E-02	--	6.2E+01	2.1E+02	No
Fluoranthene	206-44-0	mg/kg	2 / 5	7.3E-02	1.5E-01	1.3E-01	2.0E-01	1.3E-01	--	2.3E+02	2.2E+03	No
Phenanthrene	85-01-8	mg/kg	1 / 5	7.4E-02	1.7E-01	7.4E-02	2.1E-01	7.4E-02	--	--	--	Yes
Pyrene	129-00-0	mg/kg	2 / 5	8.0E-02	1.5E-01	8.9E-02	2.0E-01	8.9E-02	--	2.3E+02	2.9E+03	No
Explosives Handling Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	108 / 108	2.5E+03	9.0E+03	3.5E+04	9.7E+03	9.7E+03	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	13 / 78	5.1E-01	2.8E+00	1.6E+02	6.3E+00	6.3E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	107 / 108	4.5E+00	1.3E+01	3.4E+01	1.3E+01	1.3E+01	1.5E+01	3.9E-01	1.6E+00	Yes

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Barium	7440-39-3	mg/kg	108 / 108	1.6E+01	1.2E+02	1.3E+03	1.5E+02	1.5E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	74 / 78	2.6E-01	7.7E-01	4.6E+00	9.0E-01	9.0E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	105 / 107	6.0E-02	1.4E+00	2.9E+01	2.0E+00	2.0E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	78 / 78	5.1E+02	1.3E+04	2.0E+05	1.9E+04	1.9E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	108 / 108	4.9E+00	2.2E+01	3.2E+02	2.8E+01	2.8E+01	1.7E+01	2.1E+02	4.5E+02	Yes
Chromium, hexavalent	18540-29-9	mg/kg	1 / 1	1.1E+00	1.1E+00	1.1E+00	--	1.1E+00	--	2.2E+01	6.4E+01	No
Cobalt	7440-48-4	mg/kg	78 / 78	1.9E+00	9.1E+00	2.9E+01	1.0E+01	1.0E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	78 / 78	3.3E+00	2.8E+01	3.0E+02	3.7E+01	3.7E+01	1.8E+01	3.1E+02	4.1E+03	No
Cyanide	57-12-5	mg/kg	5 / 14	1.6E-01	2.8E-01	3.8E-01	3.0E-01	3.0E-01	--	1.2E+02	1.2E+03	No
Iron	7439-89-6	mg/kg	78 / 78	8.1E+03	2.3E+04	1.8E+05	2.7E+04	2.7E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	108 / 108	3.6E+00	1.2E+02	2.6E+03	1.7E+02	1.7E+02	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	78 / 78	7.8E+02	3.2E+03	2.7E+04	4.0E+03	4.0E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	108 / 108	7.5E+01	7.8E+02	4.8E+03	9.0E+02	9.0E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	64 / 108	1.1E-02	3.7E-02	2.4E-01	4.2E-02	4.2E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	77 / 78	3.1E+00	1.9E+01	7.7E+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	7.3E+02	1.3E+03	7.7E+02	7.7E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	72 / 108	3.5E-01	9.3E-01	4.1E+00	1.0E+00	1.0E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	17 / 108	2.7E-01	3.5E-01	4.5E+00	4.3E-01	4.3E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	15 / 78	5.3E+01	2.8E+02	6.2E+02	3.0E+02	3.0E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	48 / 78	1.6E-01	4.2E-01	3.5E+00	5.3E-01	5.3E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	78 / 78	5.9E+00	1.5E+01	2.6E+01	1.6E+01	1.6E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	107 / 108	2.2E+01	1.5E+02	2.8E+03	2.0E+02	2.0E+02	6.2E+01	2.3E+03	3.1E+04	Yes
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	18 / 70	1.1E-01	2.5E+00	1.1E+02	5.2E+00	5.2E+00	--	1.8E+02	1.8E+03	No
1,3-Dinitrobenzene	99-65-0	mg/kg	1 / 70	4.7E+00	9.6E+00	4.7E+00	2.4E+01	4.7E+00	--	6.1E-01	6.2E+00	Yes
2,4,6-Trinitrotoluene	118-96-7	mg/kg	52 / 70	7.0E-02	5.9E+03	3.9E+05	1.5E+04	1.5E+04	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	12 / 70	8.3E-02	9.6E+00	1.2E+01	2.4E+01	1.2E+01	--	7.2E-01	2.5E+00	Yes
2,6-Dinitrotoluene	606-20-2	mg/kg	3 / 70	1.3E-01	1.0E+01	2.3E-01	2.5E+01	2.3E-01	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	19 / 35	1.9E-01	2.0E+00	7.7E+00	3.0E+00	3.0E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	11 / 35	1.4E-01	2.1E+01	6.5E+00	4.3E+01	6.5E+00	--	--	--	Yes
4-Nitrotoluene	99-99-0	mg/kg	1 / 70	2.2E-01	9.6E+00	2.2E-01	2.4E+01	2.2E-01	--	3.7E+01	1.8E+02	No
HMX	2691-41-0	mg/kg	2 / 70	2.4E+00	7.4E+01	1.4E+01	1.9E+02	1.4E+01	--	3.1E+02	3.1E+03	No
Nitrocellulose	9004-70-0	mg/kg	4 / 8	2.3E+00	9.5E+00	5.3E+01	2.1E+01	2.1E+01	--	--	--	Yes

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Nitroguanidine	556-88-7	mg/kg	4 / 8	4.2E-02	9.8E-02	1.3E-01	1.2E-01	1.2E-01	--	6.1E+02	6.2E+03	No
RDX	121-82-4	mg/kg	2 / 70	1.0E+01	3.8E+01	3.4E+01	9.7E+01	3.4E+01	--	4.4E+00	1.6E+01	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	47 / 71	4.6E-02	2.2E+01	1.1E+03	4.8E+01	4.8E+01	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	6 / 71	7.5E-02	1.1E+00	1.4E+00	2.1E+00	1.4E+00	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	5 / 16	3.8E-03	5.1E-02	5.5E-01	1.1E-01	1.1E-01	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	1 / 16	1.1E-02	1.5E-02	1.1E-02	2.6E-02	1.1E-02	--	1.7E+00	7.0E+00	No
Dieldrin	60-57-1	mg/kg	3 / 16	4.0E-03	8.8E-02	1.2E+00	2.2E-01	2.2E-01	--	3.0E-02	1.1E-01	Yes
Endosulfan II	3321-36-5	mg/kg	1 / 16	4.5E-03	1.4E-02	4.5E-03	2.6E-02	4.5E-03	--	3.7E+01	3.7E+02	No
Endosulfan Sulfate	115-29-7	mg/kg	1 / 16	5.1E-01	4.3E-02	5.1E-01	9.8E-02	9.8E-02	--	3.7E+01	3.7E+02	No
Endrin	72-20-8	mg/kg	2 / 16	1.0E-02	2.1E-01	3.2E+00	5.6E-01	5.6E-01	--	1.8E+00	1.8E+01	Yes
Endrin Aldehyde	7421-93-4	mg/kg	3 / 16	5.4E-03	4.4E-02	5.1E-01	1.0E-01	1.0E-01	--	1.8E+00	1.8E+01	No
Endrin Ketone	53494-70-5	mg/kg	1 / 16	1.4E-02	1.5E-02	1.4E-02	2.6E-02	1.4E-02	--	1.8E+00	1.8E+01	No
Heptachlor	76-44-8	mg/kg	2 / 16	1.1E-02	2.3E-02	1.8E-01	4.4E-02	4.4E-02	--	1.1E-01	3.8E-01	Yes
Heptachlor Epoxide	1024-57-3	mg/kg	1 / 16	9.4E-02	2.0E-02	9.4E-02	3.4E-02	3.4E-02	--	5.3E-02	1.9E-01	Yes
alpha-Chlordane	5103-71-9	mg/kg	1 / 16	5.9E-01	5.1E-02	5.9E-01	1.1E-01	1.1E-01	--	1.6E+00	6.5E+00	No
beta-BHC	319-85-7	mg/kg	1 / 16	3.0E-02	1.6E-02	3.0E-02	2.7E-02	2.7E-02	--	3.2E-01	1.3E+00	No
gamma-Chlordane	5103-74-2	mg/kg	4 / 16	4.1E-03	2.7E-02	1.4E-01	4.7E-02	4.7E-02	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
2-Methylnaphthalene	91-57-6	mg/kg	5 / 28	4.8E-02	3.5E-01	2.5E+00	5.3E-01	5.3E-01	--	--	--	Yes
Acenaphthene	83-32-9	mg/kg	6 / 28	6.6E-02	6.9E-01	1.1E+01	1.4E+00	1.4E+00	--	3.7E+02	2.9E+03	No
Acenaphthylene	208-96-8	mg/kg	2 / 28	5.4E-02	2.9E-01	5.8E-02	4.2E-01	5.8E-02	--	--	--	Yes
Anthracene	120-12-7	mg/kg	7 / 28	5.9E-02	1.2E+00	2.2E+01	2.6E+00	2.6E+00	--	2.2E+03	2.4E+04	No
Benz(*a*)anthracene	56-55-3	mg/kg	12 / 28	3.9E-02	1.7E+00	2.9E+01	3.5E+00	3.5E+00	--	6.2E-01	2.1E+00	Yes
Benzo(*a*)pyrene	50-32-8	mg/kg	11 / 28	3.6E-02	1.5E+00	2.3E+01	2.9E+00	2.9E+00	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	16 / 28	3.5E-02	1.8E+00	2.9E+01	3.6E+00	3.6E+00	--	6.2E-01	2.1E+00	Yes
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	8 / 28	8.0E-02	8.6E-01	1.2E+01	1.6E+00	1.6E+00	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	11 / 28	3.8E-02	1.1E+00	1.6E+01	2.1E+00	2.1E+00	--	6.2E+00	2.1E+01	Yes
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	6 / 28	6.2E-02	3.1E-01	1.2E+00	4.4E-01	4.4E-01	--	3.5E+01	1.2E+02	No
Carbazole	86-74-8	mg/kg	6 / 28	1.1E-01	8.2E-01	1.3E+01	1.6E+00	1.6E+00	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	15 / 28	4.5E-02	1.7E+00	2.8E+01	3.4E+00	3.4E+00	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	1 / 28	1.9E-01	3.0E-01	1.9E-01	4.3E-01	1.9E-01	--	6.1E+02	6.2E+03	No

Table Q-4. Summary of COPC Screening for Load Line 3 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(*a,h*)anthracene	53-70-3	mg/kg	6 / 28	1.2E-01	4.4E-01	4.1E+00	7.0E-01	7.0E-01	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	4 / 28	5.7E-02	6.0E-01	8.8E+00	1.1E+00	1.1E+00	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	16 / 28	5.7E-02	3.7E+00	7.1E+01	8.0E+00	8.0E+00	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	7 / 28	5.8E-02	7.7E-01	1.3E+01	1.6E+00	1.6E+00	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	7 / 28	1.3E-01	8.8E-01	1.2E+01	1.6E+00	1.6E+00	--	6.2E-01	2.1E+00	Yes
Naphthalene	91-20-3	mg/kg	6 / 28	4.3E-02	4.1E-01	4.7E+00	7.0E-01	7.0E-01	--	5.6E+00	1.9E+01	No
Phenanthrene	85-01-8	mg/kg	12 / 28	6.3E-02	3.4E+00	7.2E+01	7.8E+00	7.8E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	17 / 28	4.4E-02	3.0E+00	5.8E+01	6.6E+00	6.6E+00	--	2.3E+02	2.9E+03	No
Organic Volatiles												
2-Butanone	78-93-3	mg/kg	1 / 27	1.3E-02	9.9E-03	1.3E-02	1.1E-02	1.1E-02	--	7.3E+02	2.7E+03	No
Acetone	67-64-1	mg/kg	2 / 26	3.4E-02	1.9E-02	2.1E-01	3.2E-02	3.2E-02	--	1.6E+02	6.0E+02	No
Chloromethane	74-87-3	mg/kg	1 / 27	5.1E-03	2.9E-03	5.1E-03	3.1E-03	3.1E-03	--	1.2E+00	2.6E+00	No
Toluene	108-88-3	mg/kg	12 / 27	6.6E-04	4.6E-03	3.8E-02	7.0E-03	7.0E-03	--	6.6E+01	2.2E+02	No
Packaging and Shipping Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	7 / 7	4.5E+03	1.0E+04	2.4E+04	1.9E+04	1.9E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	1 / 7	3.4E+01	5.2E+00	3.4E+01	1.4E+01	1.4E+01	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	7 / 7	6.1E+00	1.1E+01	1.7E+01	1.4E+01	1.4E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	7 / 7	3.3E+01	2.0E+02	8.2E+02	1.7E+03	8.2E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	5 / 7	4.5E-01	1.0E+00	3.4E+00	9.9E+00	3.4E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	7 / 7	2.4E-01	5.7E+00	3.7E+01	1.6E+01	1.6E+01	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	7 / 7	9.4E+02	2.7E+04	1.3E+05	5.1E+06	1.3E+05	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	7 / 7	8.7E+00	2.9E+01	1.4E+02	6.3E+01	6.3E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	7 / 7	4.6E+00	5.9E+00	7.6E+00	7.1E+00	7.1E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	7 / 7	1.1E+01	2.9E+01	1.2E+02	5.7E+01	5.7E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	7 / 7	1.1E+04	1.6E+04	1.9E+04	1.8E+04	1.8E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	7 / 7	1.5E+01	2.5E+02	1.6E+03	6.8E+02	6.8E+02	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	7 / 7	1.0E+03	3.8E+03	1.2E+04	1.4E+04	1.2E+04	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	7 / 7	2.5E+02	1.0E+03	3.3E+03	3.3E+03	3.3E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	7 / 7	1.5E-02	1.5E-01	5.9E-01	1.2E+00	5.9E-01	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	7 / 7	1.1E+01	1.4E+01	2.0E+01	1.7E+01	1.7E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	7 / 7	4.1E+02	6.3E+02	9.4E+02	8.6E+02	8.6E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	3 / 7	4.5E-01	8.9E-01	7.7E-01	1.1E+00	7.7E-01	1.4E+00	3.9E+01	5.1E+02	No

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Silver	7440-22-4	mg/kg	1 / 7	2.8E+01	4.2E+00	2.8E+01	1.2E+01	1.2E+01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	2 / 7	8.9E+01	2.7E+02	3.6E+02	3.3E+02	3.3E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	7 / 7	2.4E-01	2.7E-01	3.0E-01	2.9E-01	2.9E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	7 / 7	4.8E+00	9.9E+00	1.4E+01	1.2E+01	1.2E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	7 / 7	5.4E+01	3.4E+02	1.5E+03	2.6E+03	1.5E+03	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	1 / 3	2.2E+00	8.2E-01	2.2E+00	2.8E+00	2.2E+00	--	1.8E+02	1.8E+03	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	2 / 3	6.8E-02	2.7E+02	8.2E+02	1.0E+133	8.2E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 3	1.4E+00	5.5E-01	1.4E+00	1.8E+00	1.4E+00	--	7.2E-01	2.5E+00	Yes
Nitroguanidine	556-88-7	mg/kg	3 / 6	4.5E-02	1.1E-01	1.4E-01	1.4E-01	1.4E-01	--	6.1E+02	6.2E+03	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	6 / 7	4.6E-02	1.3E+01	9.1E+01	1.3E+06	9.1E+01	--	1.1E-01	7.4E-01	Yes
Organic Semivolatiles												
Benz(*a*)anthracene	56-55-3	mg/kg	1 / 1	1.7E-01	1.7E-01	1.7E-01	--	1.7E-01	--	6.2E-01	2.1E+00	No
Benzo(*a*)pyrene	50-32-8	mg/kg	1 / 1	2.1E-01	2.1E-01	2.1E-01	--	2.1E-01	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	1 / 1	3.2E-01	3.2E-01	3.2E-01	--	3.2E-01	--	6.2E-01	2.1E+00	No
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	1 / 1	9.9E-02	9.9E-02	9.9E-02	--	9.9E-02	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	1 / 1	1.2E-01	1.2E-01	1.2E-01	--	1.2E-01	--	6.2E+00	2.1E+01	No
Benzoic Acid	65-85-0	mg/kg	1 / 1	2.1E-01	2.1E-01	2.1E-01	--	2.1E-01	--	2.4E+04	2.5E+05	No
Chrysene	218-01-9	mg/kg	1 / 1	2.0E-01	2.0E-01	2.0E-01	--	2.0E-01	--	6.2E+01	2.1E+02	No
Fluoranthene	206-44-0	mg/kg	1 / 1	4.4E-01	4.4E-01	4.4E-01	--	4.4E-01	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	1 / 1	7.4E-02	7.4E-02	7.4E-02	--	7.4E-02	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	1 / 1	1.0E-01	1.0E-01	1.0E-01	--	1.0E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	1 / 1	2.6E-01	2.6E-01	2.6E-01	--	2.6E-01	--	--	--	Yes
Pyrene	129-00-0	mg/kg	1 / 1	4.9E-01	4.9E-01	4.9E-01	--	4.9E-01	--	2.3E+02	2.9E+03	No
Perimeter Area												
Inorganics												
Aluminum	7429-90-5	mg/kg	19 / 19	4.5E+03	1.1E+04	1.7E+04	1.2E+04	1.2E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	2 / 16	1.3E+00	9.3E-01	5.4E+00	1.5E+00	1.5E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	19 / 19	6.3E+00	1.1E+01	1.7E+01	1.2E+01	1.2E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	19 / 19	4.6E+01	1.1E+02	7.7E+02	1.7E+02	1.7E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	15 / 16	4.3E-01	6.0E-01	1.2E+00	7.6E-01	7.6E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	12 / 19	7.0E-02	4.6E+00	7.7E+01	1.2E+01	1.2E+01	--	3.7E+00	4.5E+01	Yes

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Calcium	7440-70-2	mg/kg	16 / 16	1.8E+02	5.5E+03	4.0E+04	2.7E+04	2.7E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	19 / 19	6.0E+00	2.2E+01	1.1E+02	3.3E+01	3.3E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	16 / 16	3.6E+00	7.8E+00	1.5E+01	9.4E+00	9.4E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	16 / 16	6.1E+00	1.6E+01	5.5E+01	2.3E+01	2.3E+01	1.8E+01	3.1E+02	4.1E+03	No
Cyanide	57-12-5	mg/kg	1 / 2	2.4E+00	1.3E+00	2.4E+00	8.0E+00	2.4E+00	--	1.2E+02	1.2E+03	No
Iron	7439-89-6	mg/kg	16 / 16	9.9E+03	2.0E+04	3.3E+04	2.3E+04	2.3E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	19 / 19	1.4E+01	1.7E+02	2.5E+03	4.0E+02	4.0E+02	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	16 / 16	9.4E+02	2.4E+03	8.0E+03	3.2E+03	3.2E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	19 / 19	1.3E+02	7.1E+02	1.9E+03	1.1E+03	1.1E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	16 / 19	1.2E-02	4.4E-02	1.0E-01	5.4E-02	5.4E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	16 / 16	6.8E+00	1.4E+01	2.4E+01	1.6E+01	1.6E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	16 / 16	2.9E+02	5.8E+02	1.1E+03	7.0E+02	7.0E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	9 / 19	4.0E-01	1.0E+00	1.9E+00	1.2E+00	1.2E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 19	4.0E-01	2.6E-01	4.0E-01	2.9E-01	2.9E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	2 / 16	1.1E+02	2.7E+02	1.5E+02	2.9E+02	1.5E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	11 / 16	2.2E-01	2.7E-01	4.2E-01	3.0E-01	3.0E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	16 / 16	6.4E+00	2.0E+01	2.9E+01	2.2E+01	2.2E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	19 / 19	3.6E+01	1.3E+02	1.4E+03	2.4E+02	2.4E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	1 / 3	1.0E-01	1.2E-01	1.0E-01	1.4E-01	1.0E-01	--	1.8E+02	1.8E+03	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	2 / 3	8.3E-01	1.1E+00	2.4E+00	2.0E+09	2.4E+00	--	3.1E+00	3.1E+01	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	2 / 3	2.6E-01	8.3E-01	2.1E+00	7.7E+08	2.1E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	2 / 3	5.2E-01	1.3E+00	3.4E+00	1.0E+12	3.4E+00	--	--	--	Yes
HMX	2691-41-0	mg/kg	1 / 3	3.3E+00	1.3E+00	3.3E+00	4.2E+00	3.3E+00	--	3.1E+02	3.1E+03	No
Nitrocellulose	9004-70-0	mg/kg	1 / 1	6.1E+01	6.1E+01	6.1E+01	--	6.1E+01	--	--	--	Yes
Nitroguanidine	556-88-7	mg/kg	1 / 1	5.1E+00	5.1E+00	5.1E+00	--	5.1E+00	--	6.1E+02	6.2E+03	No
RDX	121-82-4	mg/kg	1 / 3	2.2E+01	7.5E+00	2.2E+01	2.9E+01	2.2E+01	--	4.4E+00	1.6E+01	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	3 / 8	1.5E+00	1.6E+01	1.1E+02	4.2E+01	4.2E+01	--	1.1E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	1 / 2	3.2E+00	1.6E+00	3.2E+00	1.2E+01	3.2E+00	--	1.7E+00	7.0E+00	Yes
Dieldrin	60-57-1	mg/kg	1 / 2	2.0E-02	5.5E-02	2.0E-02	2.8E-01	2.0E-02	--	3.0E-02	1.1E-01	No
Endrin Aldehyde	7421-93-4	mg/kg	1 / 2	1.7E+00	8.5E-01	1.7E+00	6.2E+00	1.7E+00	--	1.8E+00	1.8E+01	No

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Heptachlor	76-44-8	mg/kg	1 / 2	1.8E-01	9.0E-02	1.8E-01	6.6E-01	1.8E-01	--	1.1E-01	3.8E-01	Yes
Methoxychlor	72-43-5	mg/kg	1 / 2	4.3E-01	2.2E-01	4.3E-01	1.6E+00	4.3E-01	--	3.1E+01	3.1E+02	No
gamma-Chlordane	5103-74-2	mg/kg	1 / 2	7.1E-01	3.6E-01	7.1E-01	2.6E+00	7.1E-01	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
Anthracene	120-12-7	mg/kg	1 / 3	1.5E-01	1.7E-01	1.5E-01	2.0E-01	1.5E-01	--	2.2E+03	2.4E+04	No
Benz(*a*)anthracene	56-55-3	mg/kg	2 / 3	2.3E-01	3.7E-01	6.9E-01	7.2E+01	6.9E-01	--	6.2E-01	2.1E+00	Yes
Benzo(*a*)pyrene	50-32-8	mg/kg	2 / 3	2.7E-01	3.9E-01	7.0E-01	3.4E+01	7.0E-01	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	2 / 3	8.4E-01	6.7E-01	9.8E-01	1.4E+00	9.8E-01	--	6.2E-01	2.1E+00	Yes
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	2 / 3	2.0E-01	2.5E-01	3.6E-01	9.7E-01	3.6E-01	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	2 / 3	2.1E-01	2.5E-01	3.5E-01	8.8E-01	3.5E-01	--	6.2E+00	2.1E+01	No
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	1 / 3	1.1E-01	1.6E-01	1.1E-01	2.4E-01	1.1E-01	--	3.5E+01	1.2E+02	No
Chrysene	218-01-9	mg/kg	2 / 3	5.2E-01	4.9E-01	7.6E-01	9.8E-01	7.6E-01	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	1 / 3	3.1E-01	2.3E-01	3.1E-01	3.5E-01	3.1E-01	--	6.1E+02	6.2E+03	No
Dibenz(*a,h*)anthracene	53-70-3	mg/kg	2 / 3	6.6E-02	1.2E-01	9.7E-02	2.1E+00	9.7E-02	--	6.2E-02	2.1E-01	Yes
Fluoranthene	206-44-0	mg/kg	2 / 3	4.1E-01	6.0E-01	1.2E+00	4.0E+03	1.2E+00	--	2.3E+02	2.2E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	2 / 3	1.9E-01	2.4E-01	3.5E-01	9.3E-01	3.5E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	2 / 3	1.4E-01	2.8E-01	5.0E-01	2.2E+01	5.0E-01	--	--	--	Yes
Pyrene	129-00-0	mg/kg	2 / 3	4.1E-01	6.0E-01	1.2E+00	4.0E+03	1.2E+00	--	2.3E+02	2.9E+03	No
Organic Volatiles												
Benzene	71-43-2	mg/kg	1 / 4	1.9E-03	2.6E-03	1.9E-03	3.1E-03	1.9E-03	--	6.0E-01	1.3E+00	No
Toluene	108-88-3	mg/kg	1 / 4	9.4E-03	4.5E-03	9.4E-03	8.3E-03	8.3E-03	--	6.6E+01	2.2E+02	No
Preparation and Receiving Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	15 / 15	3.4E+03	9.3E+03	1.7E+04	1.1E+04	1.1E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	7 / 15	1.0E+00	2.9E+00	1.8E+01	5.1E+00	5.1E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	15 / 15	5.2E+00	1.1E+01	1.6E+01	1.3E+01	1.3E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	15 / 15	2.5E+01	1.0E+02	2.2E+02	1.6E+02	1.6E+02	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	13 / 15	3.1E-01	7.9E-01	2.6E+00	1.3E+00	1.3E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	15 / 15	7.2E-02	1.7E+00	6.8E+00	9.3E+00	6.8E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	15 / 15	6.1E+02	3.3E+04	1.5E+05	1.2E+06	1.5E+05	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	15 / 15	7.0E+00	1.8E+01	5.1E+01	2.4E+01	2.4E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	15 / 15	2.9E+00	6.7E+00	1.3E+01	7.9E+00	7.9E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	15 / 15	1.7E+01	6.6E+01	3.3E+02	1.1E+02	1.1E+02	1.8E+01	3.1E+02	4.1E+03	Yes

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Cyanide	57-12-5	mg/kg	2 / 5	1.2E-01	2.4E-01	6.8E-01	4.9E-01	4.9E-01	--	1.2E+02	1.2E+03	No
Iron	7439-89-6	mg/kg	15 / 15	9.0E+03	1.9E+04	2.9E+04	2.2E+04	2.2E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	15 / 15	1.4E+01	1.4E+02	6.3E+02	4.0E+02	4.0E+02	2.6E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	15 / 15	1.2E+03	3.6E+03	1.4E+04	5.1E+03	5.1E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	15 / 15	2.1E+02	6.1E+02	1.6E+03	9.3E+02	9.3E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	11 / 15	1.1E-02	4.8E-02	1.5E-01	7.6E-02	7.6E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	15 / 15	1.1E+01	1.6E+01	2.7E+01	1.9E+01	1.9E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	15 / 15	3.9E+02	7.6E+02	1.4E+03	9.8E+02	9.8E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	5 / 15	4.3E-01	9.5E-01	1.0E+00	1.1E+00	1.0E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 15	2.9E-01	2.5E-01	2.9E-01	2.9E-01	2.9E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	9 / 15	5.7E+01	2.1E+02	2.9E+02	2.5E+02	2.5E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	14 / 15	1.1E-01	4.2E-01	1.1E+00	6.5E-01	6.5E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	15 / 15	5.3E+00	1.3E+01	2.2E+01	1.5E+01	1.5E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	15 / 15	5.3E+01	1.5E+02	4.6E+02	2.3E+02	2.3E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	4 / 10	1.4E-01	2.5E-01	1.2E+00	4.4E-01	4.4E-01	--	3.1E+00	3.1E+01	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	2 / 7	2.3E-01	1.6E-01	2.8E-01	2.1E-01	2.1E-01	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	2 / 7	2.7E-01	2.2E-01	6.5E-01	3.7E-01	3.7E-01	--	--	--	Yes
HMX	2691-41-0	mg/kg	1 / 10	1.9E+00	6.4E-01	1.9E+00	9.7E-01	9.7E-01	--	3.1E+02	3.1E+03	No
Nitrocellulose	9004-70-0	mg/kg	2 / 2	4.0E+00	1.6E+01	2.8E+01	9.1E+01	2.8E+01	--	--	--	Yes
Nitroguanidine	556-88-7	mg/kg	1 / 2	8.4E-02	1.0E-01	8.4E-02	2.3E-01	8.4E-02	--	6.1E+02	6.2E+03	No
RDX	121-82-4	mg/kg	1 / 10	3.1E+01	3.4E+00	3.1E+01	9.0E+00	9.0E+00	--	4.4E+00	1.6E+01	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	10 / 15	4.5E-02	1.3E+00	1.4E+01	1.2E+01	1.2E+01	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	2 / 15	1.9E-01	1.3E-01	2.3E-01	2.4E-01	2.3E-01	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	2 / 5	1.1E-02	6.9E-03	1.2E-02	1.2E-02	1.2E-02	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	2 / 5	2.2E-02	2.1E-02	7.7E-02	5.2E-02	5.2E-02	--	1.7E+00	7.0E+00	No
Endrin Aldehyde	7421-93-4	mg/kg	2 / 5	4.8E-03	5.3E-03	1.0E-02	9.2E-03	9.2E-03	--	1.8E+00	1.8E+01	No
Heptachlor	76-44-8	mg/kg	1 / 5	1.6E-03	3.4E-03	1.6E-03	6.8E-03	1.6E-03	--	1.1E-01	3.8E-01	No
Organic Semivolatiles												
Anthracene	120-12-7	mg/kg	1 / 9	8.6E-02	1.8E-01	8.6E-02	2.0E-01	8.6E-02	--	2.2E+03	2.4E+04	No
Benz(*a*)anthracene	56-55-3	mg/kg	3 / 9	1.1E-01	2.5E-01	5.4E-01	3.4E-01	3.4E-01	--	6.2E-01	2.1E+00	No

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Benzo(*a*)pyrene	50-32-8	mg/kg	3 / 9	1.2E-01	2.7E-01	6.1E-01	3.7E-01	3.7E-01	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	3 / 9	1.6E-01	3.3E-01	9.6E-01	5.2E-01	5.2E-01	--	6.2E-01	2.1E+00	Yes
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	3 / 9	6.7E-02	1.9E-01	3.2E-01	2.4E-01	2.4E-01	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	4 / 9	6.2E-02	1.9E-01	3.9E-01	2.6E-01	2.6E-01	--	6.2E+00	2.1E+01	No
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	1 / 9	2.4E-01	1.9E-01	2.4E-01	2.1E-01	2.1E-01	--	3.5E+01	1.2E+02	No
Butyl Benzyl Phthalate	85-68-7	mg/kg	1 / 9	8.8E-02	1.8E-01	8.8E-02	2.0E-01	8.8E-02	--	1.2E+03	1.2E+04	No
Chrysene	218-01-9	mg/kg	3 / 9	1.2E-01	2.5E-01	5.1E-01	3.4E-01	3.4E-01	--	6.2E+01	2.1E+02	No
Di-n-butyl Phthalate	84-74-2	mg/kg	2 / 9	1.1E-01	1.9E-01	2.7E-01	2.1E-01	2.1E-01	--	6.1E+02	6.2E+03	No
Dibenz(*a,h*)anthracene	53-70-3	mg/kg	2 / 9	6.9E-02	1.6E-01	8.3E-02	1.9E-01	8.3E-02	--	6.2E-02	2.1E-01	Yes
Fluoranthene	206-44-0	mg/kg	4 / 9	5.1E-02	3.1E-01	7.8E-01	4.8E-01	4.8E-01	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	1 / 9	5.5E-02	1.7E-01	5.5E-02	2.0E-01	5.5E-02	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	2 / 9	2.4E-01	2.1E-01	3.2E-01	2.4E-01	2.4E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	3 / 9	1.3E-01	1.8E-01	1.9E-01	1.9E-01	1.9E-01	--	--	--	Yes
Pyrene	129-00-0	mg/kg	3 / 9	2.5E-01	3.2E-01	8.9E-01	4.8E-01	4.8E-01	--	2.3E+02	2.9E+03	No
Organic Volatiles												
2-Butanone	78-93-3	mg/kg	1 / 9	6.9E-03	8.0E-03	6.9E-03	1.1E-02	6.9E-03	--	7.3E+02	2.7E+03	No
Acetone	67-64-1	mg/kg	2 / 9	3.3E-03	1.4E-02	6.6E-02	2.6E-02	2.6E-02	--	1.6E+02	6.0E+02	No
Methylene Chloride	75-09-2	mg/kg	2 / 9	2.0E-03	3.8E-03	4.0E-03	5.4E-03	4.0E-03	--	9.1E+00	2.1E+01	No
Toluene	108-88-3	mg/kg	2 / 9	1.1E-03	2.4E-03	1.4E-03	2.9E-03	1.4E-03	--	6.6E+01	2.2E+02	No
West Ditches												
Inorganics												
Aluminum	7429-90-5	mg/kg	16 / 16	5.4E+03	9.5E+03	1.4E+04	1.1E+04	1.1E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	1 / 11	1.8E+02	1.7E+01	1.8E+02	4.6E+01	4.6E+01	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	16 / 16	9.6E+00	1.5E+01	2.2E+01	1.7E+01	1.7E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	16 / 16	5.6E+01	8.6E+01	1.9E+02	1.0E+02	1.0E+02	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	11 / 11	5.0E-01	8.5E-01	1.4E+00	1.0E+00	1.0E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	15 / 16	1.1E-01	7.1E-01	1.9E+00	9.6E-01	9.6E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	11 / 11	8.3E+02	5.6E+03	1.5E+04	1.3E+04	1.3E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	16 / 16	7.4E+00	2.0E+01	1.1E+02	3.1E+01	3.1E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	11 / 11	6.6E+00	1.2E+01	3.1E+01	1.6E+01	1.6E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	11 / 11	9.9E+00	1.1E+02	1.1E+03	2.9E+02	2.9E+02	1.8E+01	3.1E+02	4.1E+03	Yes
Iron	7439-89-6	mg/kg	11 / 11	1.7E+04	2.3E+04	2.7E+04	2.5E+04	2.5E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	16 / 16	1.7E+01	8.3E+01	8.7E+02	1.8E+02	1.8E+02	2.6E+01	4.0E+02	7.5E+02	Yes

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Magnesium	7439-95-4	mg/kg	11 / 11	1.3E+03	2.0E+03	4.1E+03	2.4E+03	2.4E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	16 / 16	2.1E+02	1.2E+03	4.6E+03	2.0E+03	2.0E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	11 / 16	2.2E-02	6.0E-02	2.3E-01	1.1E-01	1.1E-01	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	11 / 11	1.3E+01	1.8E+01	3.1E+01	2.2E+01	2.2E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	11 / 11	3.6E+02	6.7E+02	9.7E+02	7.7E+02	7.7E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	10 / 16	4.4E-01	1.5E+00	3.6E+00	1.9E+00	1.9E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	4 / 16	2.3E-01	3.6E-01	1.5E+00	5.1E-01	5.1E-01	--	3.9E+01	5.1E+02	No
Thallium	6533-73-9	mg/kg	6 / 11	2.6E-01	2.7E-01	4.4E-01	3.3E-01	3.3E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	11 / 11	1.4E+01	2.0E+01	2.8E+01	2.2E+01	2.2E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	16 / 16	5.2E+01	2.0E+02	5.6E+02	3.2E+02	3.2E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	1 / 10	4.5E-01	1.6E-01	4.5E-01	2.2E-01	2.2E-01	--	1.8E+02	1.8E+03	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	7 / 10	3.2E-01	1.2E+01	1.1E+02	3.2E+01	3.2E+01	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 10	4.7E-02	1.3E-01	4.7E-02	1.6E-01	4.7E-02	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	4 / 5	1.2E-01	8.2E-01	3.2E+00	9.8E+01	3.2E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	3 / 5	2.3E-01	3.0E+00	8.2E-01	1.7E+04	8.2E-01	--	--	--	Yes
Nitroguanidine	556-88-7	mg/kg	1 / 1	4.3E-02	4.3E-02	4.3E-02	--	4.3E-02	--	6.1E+02	6.2E+03	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	6 / 9	5.0E-02	5.1E+00	3.6E+01	1.3E+01	1.3E+01	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	1 / 9	2.2E-01	3.3E-01	2.2E-01	7.4E-01	2.2E-01	--	2.2E-01	7.4E-01	No
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	2 / 5	5.3E-02	6.1E-02	1.3E-01	1.0E-01	1.0E-01	--	1.7E+00	7.0E+00	No
Dieldrin	60-57-1	mg/kg	1 / 5	5.8E-02	3.7E-02	5.8E-02	6.2E-02	5.8E-02	--	3.0E-02	1.1E-01	Yes
Endrin Aldehyde	7421-93-4	mg/kg	1 / 5	5.3E-02	3.6E-02	5.3E-02	6.0E-02	5.3E-02	--	1.8E+00	1.8E+01	No
Endrin Ketone	53494-70-5	mg/kg	1 / 5	1.9E-02	3.2E-02	1.9E-02	5.2E-02	1.9E-02	--	1.8E+00	1.8E+01	No
beta-BHC	319-85-7	mg/kg	1 / 5	1.2E-01	4.3E-02	1.2E-01	8.8E-02	8.8E-02	--	3.2E-01	1.3E+00	No
gamma-Chlordane	5103-74-2	mg/kg	1 / 5	5.9E-02	3.7E-02	5.9E-02	6.2E-02	5.9E-02	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
Acenaphthene	83-32-9	mg/kg	3 / 5	8.8E-02	1.6E-01	1.8E-01	2.1E-01	1.8E-01	--	3.7E+02	2.9E+03	No
Acenaphthylene	208-96-8	mg/kg	1 / 5	2.1E-01	2.5E-01	2.1E-01	3.4E-01	2.1E-01	--	--	--	Yes
Anthracene	120-12-7	mg/kg	3 / 5	1.8E-01	4.0E-01	8.6E-01	1.5E+00	8.6E-01	--	2.2E+03	2.4E+04	No
Benz(*a*)anthracene	56-55-3	mg/kg	5 / 5	1.1E-01	1.9E+00	5.3E+00	2.1E+03	5.3E+00	--	6.2E-01	2.1E+00	Yes
Benzo(*a*)pyrene	50-32-8	mg/kg	5 / 5	9.9E-02	1.7E+00	4.5E+00	2.2E+03	4.5E+00	--	6.2E-02	2.1E-01	Yes

Table Q-4. Summary of COPC Screening for Load Line 3 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?
Benzo(*b*)fluoranthene	205-99-2	mg/kg	5 / 5	1.8E-01	2.5E+00	6.5E+00	2.1E+03	6.5E+00	--	6.2E-01	2.1E+00	Yes
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	5 / 5	7.1E-02	7.3E-01	1.6E+00	1.3E+02	1.6E+00	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	4 / 5	1.2E-01	1.0E+00	2.6E+00	1.5E+02	2.6E+00	--	6.2E+00	2.1E+01	No
Benzoic Acid	65-85-0	mg/kg	1 / 5	3.0E-01	1.1E+00	3.0E-01	1.7E+00	3.0E-01	--	2.4E+04	2.5E+05	No
Carbazole	86-74-8	mg/kg	3 / 5	1.9E-01	2.2E-01	2.9E-01	2.6E-01	2.6E-01	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	5 / 5	1.5E-01	2.0E+00	5.5E+00	5.5E+02	5.5E+00	--	6.2E+01	2.1E+02	No
Dibenz(*a,h*)anthracene	53-70-3	mg/kg	3 / 5	1.4E-01	3.3E-01	6.7E-01	1.1E+00	6.7E-01	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	1 / 5	1.1E-01	2.3E-01	1.1E-01	3.4E-01	1.1E-01	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	5 / 5	2.2E-01	3.9E+00	1.0E+01	4.8E+03	1.0E+01	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	3 / 5	7.3E-02	2.2E-01	3.2E-01	3.0E-01	3.0E-01	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	4 / 5	1.5E-01	8.1E-01	1.9E+00	2.7E+01	1.9E+00	--	6.2E-01	2.1E+00	Yes
Phenanthrene	85-01-8	mg/kg	5 / 5	9.1E-02	1.5E+00	3.3E+00	1.4E+03	3.3E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	5 / 5	2.1E-01	3.2E+00	8.0E+00	2.6E+03	8.0E+00	--	2.3E+02	2.9E+03	No

BHC = Benzene hexachloride.
CAS = Chemical Abstracts Service.
COPC = Chemical of potential concern.
DDE = Dichlorodiphonyldichloroethylene.
DDT = Dichlorodiphenyltrichloroethane.
DLA = Defense Logistics Agency.
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 3 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												
Inorganics												
Aluminum	7429-90-5	mg/kg	6 / 6	1.0E+04	1.3E+04	1.9E+04	1.6E+04	1.6E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Arsenic	7440-38-2	mg/kg	6 / 6	5.3E+00	9.2E+00	1.5E+01	1.3E+01	1.3E+01	1.5E+01	3.9E-01	1.6E+00	No
Barium	7440-39-3	mg/kg	6 / 6	5.7E+01	1.2E+02	2.1E+02	2.3E+02	2.1E+02	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	6 / 6	5.2E-01	1.4E+00	2.9E+00	4.4E+00	2.9E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	6 / 6	2.1E-01	4.7E-01	1.0E+00	9.0E-01	9.0E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	6 / 6	1.3E+03	5.4E+04	1.2E+05	7.8E+08	1.2E+05	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	6 / 6	1.2E+01	1.5E+01	1.9E+01	1.7E+01	1.7E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	6 / 6	2.2E+00	6.6E+00	1.1E+01	9.7E+00	9.7E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	6 / 6	6.4E+00	1.4E+01	2.2E+01	1.9E+01	1.9E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	6 / 6	6.8E+03	1.7E+04	2.7E+04	2.4E+04	2.4E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	6 / 6	1.8E+01	5.8E+01	1.8E+02	2.0E+02	1.8E+02	1.9E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	6 / 6	1.8E+03	6.3E+03	1.2E+04	2.3E+04	1.2E+04	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	6 / 6	5.0E+02	1.3E+03	2.4E+03	2.0E+03	2.0E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	6 / 6	1.2E-02	3.6E-02	7.4E-02	1.5E-01	7.4E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	6 / 6	5.9E+00	1.3E+01	2.3E+01	1.8E+01	1.8E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	6 / 6	8.6E+02	1.1E+03	1.5E+03	1.3E+03	1.3E+03	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	5 / 6	3.7E-01	6.3E-01	7.4E-01	1.1E+00	7.4E-01	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 6	8.7E+00	1.7E+00	8.7E+00	4.5E+00	4.5E+00	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	3 / 6	2.4E+02	3.5E+02	5.2E+02	5.0E+02	5.0E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	6 / 6	1.9E-01	2.7E-01	3.4E-01	3.4E-01	3.4E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	6 / 6	7.2E+00	1.5E+01	2.5E+01	2.6E+01	2.5E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	6 / 6	4.6E+01	6.5E+01	9.5E+01	8.5E+01	8.5E+01	6.2E+01	2.3E+03	3.1E+04	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	4 / 6	1.5E-01	1.2E+00	6.3E+00	2.7E+04	6.3E+00	--	1.1E-01	7.4E-01	Yes
DLA Tanks												
Inorganics												
Aluminum	7429-90-5	mg/kg	19 / 19	8.7E+03	1.2E+04	1.6E+04	1.3E+04	1.3E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	13 / 19	9.2E-01	5.6E+01	8.3E+02	1.3E+02	1.3E+02	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	19 / 19	7.4E+00	1.1E+01	1.6E+01	1.2E+01	1.2E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	19 / 19	4.9E+01	9.9E+01	1.9E+02	1.2E+02	1.2E+02	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	19 / 19	5.3E-01	8.4E-01	1.7E+00	9.8E-01	9.8E-01	8.8E-01	1.5E+01	1.9E+02	No

Table Q-5. Summary of COPC Screening for Load Line 3 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	12 / 19	9.9E-02	3.7E-01	3.2E+00	6.6E-01	6.6E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	19 / 19	5.1E+02	1.2E+04	5.7E+04	3.7E+04	3.7E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	19 / 19	1.1E+01	2.0E+01	1.2E+02	2.9E+01	2.9E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	19 / 19	5.1E+00	7.9E+00	1.2E+01	8.7E+00	8.7E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	19 / 19	6.4E+00	1.3E+01	3.1E+01	1.6E+01	1.6E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	19 / 19	1.4E+04	2.2E+04	2.8E+04	2.4E+04	2.4E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	19 / 19	1.2E+01	1.5E+02	1.5E+03	3.0E+02	3.0E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	19 / 19	1.3E+03	3.2E+03	9.1E+03	4.3E+03	4.3E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	19 / 19	2.2E+02	1.0E+03	2.5E+03	1.3E+03	1.3E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	16 / 19	1.4E-02	4.6E-02	1.0E-01	5.9E-02	5.9E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	19 / 19	8.3E+00	1.4E+01	2.5E+01	1.6E+01	1.6E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	19 / 19	4.0E+02	6.8E+02	9.7E+02	7.5E+02	7.5E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	4 / 19	3.8E-01	9.3E-01	1.6E+00	1.1E+00	1.1E+00	1.4E+00	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	6 / 19	7.5E+01	2.4E+02	2.6E+02	2.7E+02	2.6E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	6 / 19	3.0E-01	3.5E-01	2.7E+00	5.8E-01	5.8E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	19 / 19	1.1E+01	2.1E+01	2.9E+01	2.3E+01	2.3E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	19 / 19	3.6E+01	6.8E+01	2.3E+02	8.7E+01	8.7E+01	6.2E+01	2.3E+03	3.1E+04	No
Organic Pesticides												
Dieldrin	60-57-1	mg/kg	1 / 5	9.4E-03	5.0E-03	9.4E-03	7.8E-03	7.8E-03	--	3.0E-02	1.1E-01	No
Organic Semivolatiles												
Benz(*a*)anthracene	56-55-3	mg/kg	1 / 5	8.2E-02	1.7E-01	8.2E-02	2.1E-01	8.2E-02	--	6.2E-01	2.1E+00	No
Benzo(*a*)pyrene	50-32-8	mg/kg	1 / 5	5.4E-02	1.6E-01	5.4E-02	2.2E-01	5.4E-02	--	6.2E-02	2.1E-01	No
Benzo(*b*)fluoranthene	205-99-2	mg/kg	2 / 5	5.4E-02	1.4E-01	7.9E-02	2.0E-01	7.9E-02	--	6.2E-01	2.1E+00	No
Benzo(*k*)fluoranthene	207-08-9	mg/kg	1 / 5	5.0E-02	1.6E-01	5.0E-02	2.2E-01	5.0E-02	--	6.2E+00	2.1E+01	No
Chrysene	218-01-9	mg/kg	2 / 5	7.5E-02	1.4E-01	8.3E-02	2.0E-01	8.3E-02	--	6.2E+01	2.1E+02	No
Fluoranthene	206-44-0	mg/kg	2 / 5	7.3E-02	1.5E-01	1.3E-01	2.0E-01	1.3E-01	--	2.3E+02	2.2E+03	No
Phenanthrene	85-01-8	mg/kg	1 / 5	7.4E-02	1.7E-01	7.4E-02	2.1E-01	7.4E-02	--	--	--	Yes
Pyrene	129-00-0	mg/kg	2 / 5	8.0E-02	1.5E-01	8.9E-02	2.0E-01	8.9E-02	--	2.3E+02	2.9E+03	No
Explosives Handling Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	130 / 130	2.5E+03	8.9E+03	3.5E+04	9.5E+03	9.5E+03	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	14 / 100	5.1E-01	2.4E+00	1.6E+02	5.1E+00	5.1E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	129 / 130	4.5E+00	1.3E+01	3.4E+01	1.3E+01	1.3E+01	1.5E+01	3.9E-01	1.6E+00	Yes

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Barium	7440-39-3	mg/kg	130 / 130	1.6E+01	1.1E+02	1.3E+03	1.4E+02	1.4E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	94 / 100	2.6E-01	7.6E-01	4.6E+00	8.7E-01	8.7E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	125 / 129	5.4E-02	1.3E+00	2.9E+01	1.7E+00	1.7E+00	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	100 / 100	5.1E+02	1.2E+04	2.0E+05	1.7E+04	1.7E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	130 / 130	4.9E+00	2.1E+01	3.2E+02	2.6E+01	2.6E+01	1.7E+01	2.1E+02	4.5E+02	Yes
Chromium, Hexavalent	18540-29-9	mg/kg	1 / 1	1.1E+00	1.1E+00	1.1E+00	--	1.1E+00	--	2.2E+01	6.4E+01	No
Cobalt	7440-48-4	mg/kg	100 / 100	1.9E+00	9.0E+00	2.9E+01	9.7E+00	9.7E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	100 / 100	3.3E+00	2.7E+01	3.0E+02	3.3E+01	3.3E+01	1.8E+01	3.1E+02	4.1E+03	No
Cyanide	57-12-5	mg/kg	5 / 14	1.6E-01	2.8E-01	3.8E-01	3.0E-01	3.0E-01	--	1.2E+02	1.2E+03	No
Iron	7439-89-6	mg/kg	100 / 100	8.1E+03	2.3E+04	1.8E+05	2.6E+04	2.6E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	130 / 130	3.6E+00	1.1E+02	2.6E+03	1.5E+02	1.5E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	100 / 100	7.8E+02	3.1E+03	2.7E+04	3.7E+03	3.7E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	130 / 130	7.5E+01	7.7E+02	4.8E+03	8.7E+02	8.7E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	80 / 130	9.7E-03	4.0E-02	6.7E-01	4.9E-02	4.9E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	99 / 100	3.1E+00	2.0E+01	7.7E+01	2.1E+01	2.1E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	100 / 100	2.7E+02	7.4E+02	1.3E+03	7.7E+02	7.7E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	80 / 130	3.5E-01	9.4E-01	4.1E+00	1.0E+00	1.0E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	17 / 130	2.7E-01	3.4E-01	4.5E+00	4.1E-01	4.1E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	16 / 100	5.3E+01	2.8E+02	6.2E+02	2.9E+02	2.9E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	60 / 98	1.6E-01	4.0E-01	3.5E+00	4.9E-01	4.9E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	100 / 100	5.9E+00	1.5E+01	2.6E+01	1.5E+01	1.5E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	129 / 130	2.2E+01	1.4E+02	2.8E+03	1.8E+02	1.8E+02	6.2E+01	2.3E+03	3.1E+04	Yes
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	27 / 83	9.1E-02	2.4E+00	1.1E+02	4.6E+00	4.6E+00	--	1.8E+02	1.8E+03	No
1,3-Dinitrobenzene	99-65-0	mg/kg	2 / 83	1.4E+00	8.1E+00	4.7E+00	2.1E+01	4.7E+00	--	6.1E-01	6.2E+00	Yes
2,4,6-Trinitrotoluene	118-96-7	mg/kg	64 / 83	7.0E-02	5.0E+03	3.9E+05	1.3E+04	1.3E+04	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	17 / 83	8.3E-02	8.1E+00	1.2E+01	2.1E+01	1.2E+01	--	7.2E-01	2.5E+00	Yes
2,6-Dinitrotoluene	606-20-2	mg/kg	3 / 83	1.3E-01	8.4E+00	2.3E-01	2.1E+01	2.3E-01	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	31 / 48	1.4E-01	2.0E+00	7.7E+00	2.7E+00	2.7E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	17 / 48	1.4E-01	1.7E+01	6.5E+00	3.3E+01	6.5E+00	--	--	--	Yes
4-Nitrotoluene	99-99-0	mg/kg	1 / 83	2.2E-01	8.1E+00	2.2E-01	2.1E+01	2.2E-01	--	3.7E+01	1.8E+02	No
HMX	2691-41-0	mg/kg	3 / 83	2.4E+00	6.2E+01	1.4E+01	1.6E+02	1.4E+01	--	3.1E+02	3.1E+03	No
Nitrobenzene	98-95-3	mg/kg	2 / 83	1.5E-01	8.4E+00	6.5E-01	2.1E+01	6.5E-01	--	2.0E+00	1.0E+01	No

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Nitrocellulose	9004-70-0	mg/kg	4 / 8	2.3E+00	9.5E+00	5.3E+01	2.1E+01	2.1E+01	--	--	--	Yes
Nitroguanidine	556-88-7	mg/kg	4 / 8	4.2E-02	9.8E-02	1.3E-01	1.2E-01	1.2E-01	--	6.1E+02	6.2E+03	No
RDX	121-82-4	mg/kg	5 / 83	1.7E-01	3.2E+01	3.4E+01	8.2E+01	3.4E+01	--	4.4E+00	1.6E+01	Yes
Tetryl	479-45-8	mg/kg	1 / 78	3.0E+00	2.2E+01	3.0E+00	5.7E+01	3.0E+00	--	6.1E+01	6.2E+02	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	49 / 74	4.6E-02	2.1E+01	1.1E+03	4.6E+01	4.6E+01	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	6 / 74	7.5E-02	1.1E+00	1.4E+00	2.1E+00	1.4E+00	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	5 / 16	3.8E-03	5.1E-02	5.5E-01	1.1E-01	1.1E-01	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	1 / 16	1.1E-02	1.5E-02	1.1E-02	2.6E-02	1.1E-02	--	1.7E+00	7.0E+00	No
Dieldrin	60-57-1	mg/kg	3 / 16	4.0E-03	8.8E-02	1.2E+00	2.2E-01	2.2E-01	--	3.0E-02	1.1E-01	Yes
Endosulfan II	3321-36-5	mg/kg	1 / 16	4.5E-03	1.4E-02	4.5E-03	2.6E-02	4.5E-03	--	3.7E+01	3.7E+02	No
Endosulfan Sulfate	115-29-7	mg/kg	1 / 16	5.1E-01	4.3E-02	5.1E-01	9.8E-02	9.8E-02	--	3.7E+01	3.7E+02	No
Endrin	72-20-8	mg/kg	2 / 16	1.0E-02	2.1E-01	3.2E+00	5.6E-01	5.6E-01	--	1.8E+00	1.8E+01	Yes
Endrin Aldehyde	7421-93-4	mg/kg	3 / 16	5.4E-03	4.4E-02	5.1E-01	1.0E-01	1.0E-01	--	1.8E+00	1.8E+01	No
Endrin Ketone	53494-70-5	mg/kg	1 / 16	1.4E-02	1.5E-02	1.4E-02	2.6E-02	1.4E-02	--	1.8E+00	1.8E+01	No
Heptachlor	76-44-8	mg/kg	2 / 16	1.1E-02	2.3E-02	1.8E-01	4.4E-02	4.4E-02	--	1.1E-01	3.8E-01	Yes
Heptachlor Epoxide	1024-57-3	mg/kg	1 / 16	9.4E-02	2.0E-02	9.4E-02	3.4E-02	3.4E-02	--	5.3E-02	1.9E-01	Yes
alpha-Chlordane	5103-71-9	mg/kg	1 / 16	5.9E-01	5.1E-02	5.9E-01	1.1E-01	1.1E-01	--	1.6E+00	6.5E+00	No
beta-BHC	319-85-7	mg/kg	1 / 16	3.0E-02	1.6E-02	3.0E-02	2.7E-02	2.7E-02	--	3.2E-01	1.3E+00	No
gamma-Chlordane	5103-74-2	mg/kg	4 / 16	4.1E-03	2.7E-02	1.4E-01	4.7E-02	4.7E-02	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
2-Methylnaphthalene	91-57-6	mg/kg	5 / 28	4.8E-02	3.5E-01	2.5E+00	5.3E-01	5.3E-01	--	--	--	Yes
Acenaphthene	83-32-9	mg/kg	6 / 28	6.6E-02	6.9E-01	1.1E+01	1.4E+00	1.4E+00	--	3.7E+02	2.9E+03	No
Acenaphthylene	208-96-8	mg/kg	2 / 28	5.4E-02	2.9E-01	5.8E-02	4.2E-01	5.8E-02	--	--	--	Yes
Anthracene	120-12-7	mg/kg	7 / 28	5.9E-02	1.2E+00	2.2E+01	2.6E+00	2.6E+00	--	2.2E+03	2.4E+04	No
Benz(*a*)anthracene	56-55-3	mg/kg	12 / 28	3.9E-02	1.7E+00	2.9E+01	3.5E+00	3.5E+00	--	6.2E-01	2.1E+00	Yes
Benzo(*a*)pyrene	50-32-8	mg/kg	11 / 28	3.6E-02	1.5E+00	2.3E+01	2.9E+00	2.9E+00	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	16 / 28	3.5E-02	1.8E+00	2.9E+01	3.6E+00	3.6E+00	--	6.2E-01	2.1E+00	Yes
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	8 / 28	8.0E-02	8.6E-01	1.2E+01	1.6E+00	1.6E+00	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	11 / 28	3.8E-02	1.1E+00	1.6E+01	2.1E+00	2.1E+00	--	6.2E+00	2.1E+01	Yes
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	6 / 28	6.2E-02	3.1E-01	1.2E+00	4.4E-01	4.4E-01	--	3.5E+01	1.2E+02	No
Carbazole	86-74-8	mg/kg	6 / 28	1.1E-01	8.2E-01	1.3E+01	1.6E+00	1.6E+00	--	2.4E+01	8.6E+01	No

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Chrysene	218-01-9	mg/kg	15 / 28	4.5E-02	1.7E+00	2.8E+01	3.4E+00	3.4E+00	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	1 / 28	1.9E-01	3.0E-01	1.9E-01	4.3E-01	1.9E-01	--	6.1E+02	6.2E+03	No
Dibenz(*a,h*)anthracene	53-70-3	mg/kg	6 / 28	1.2E-01	4.4E-01	4.1E+00	7.0E-01	7.0E-01	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	4 / 28	5.7E-02	6.0E-01	8.8E+00	1.1E+00	1.1E+00	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	16 / 28	5.7E-02	3.7E+00	7.1E+01	8.0E+00	8.0E+00	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	7 / 28	5.8E-02	7.7E-01	1.3E+01	1.6E+00	1.6E+00	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	7 / 28	1.3E-01	8.8E-01	1.2E+01	1.6E+00	1.6E+00	--	6.2E-01	2.1E+00	Yes
Naphthalene	91-20-3	mg/kg	6 / 28	4.3E-02	4.1E-01	4.7E+00	7.0E-01	7.0E-01	--	5.6E+00	1.9E+01	No
Phenanthrene	85-01-8	mg/kg	12 / 28	6.3E-02	3.4E+00	7.2E+01	7.8E+00	7.8E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	17 / 28	4.4E-02	3.0E+00	5.8E+01	6.6E+00	6.6E+00	--	2.3E+02	2.9E+03	No
Organic Volatiles												
2-Butanone	78-93-3	mg/kg	1 / 27	1.3E-02	9.9E-03	1.3E-02	1.1E-02	1.1E-02	--	7.3E+02	2.7E+03	No
Acetone	67-64-1	mg/kg	2 / 26	3.4E-02	1.9E-02	2.1E-01	3.2E-02	3.2E-02	--	1.6E+02	6.0E+02	No
Chloromethane	74-87-3	mg/kg	1 / 27	5.1E-03	2.9E-03	5.1E-03	3.1E-03	3.1E-03	--	1.2E+00	2.6E+00	No
Toluene	108-88-3	mg/kg	12 / 27	6.6E-04	4.6E-03	3.8E-02	7.0E-03	7.0E-03	--	6.6E+01	2.2E+02	No
Packaging and Shipping Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	7 / 7	4.5E+03	1.0E+04	2.4E+04	1.9E+04	1.9E+04	1.8E+04	7.6E+03	9.2E+04	Yes
Antimony	7440-36-0	mg/kg	1 / 7	3.4E+01	5.2E+00	3.4E+01	1.4E+01	1.4E+01	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	7 / 7	6.1E+00	1.1E+01	1.7E+01	1.4E+01	1.4E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	7 / 7	3.3E+01	2.0E+02	8.2E+02	1.7E+03	8.2E+02	8.8E+01	5.4E+02	6.7E+03	Yes
Beryllium	7440-41-7	mg/kg	5 / 7	4.5E-01	1.0E+00	3.4E+00	9.9E+00	3.4E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	7 / 7	2.4E-01	5.7E+00	3.7E+01	1.6E+01	1.6E+01	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	7 / 7	9.4E+02	2.7E+04	1.3E+05	5.1E+06	1.3E+05	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	7 / 7	8.7E+00	2.9E+01	1.4E+02	6.3E+01	6.3E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	7 / 7	4.6E+00	5.9E+00	7.6E+00	7.1E+00	7.1E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	7 / 7	1.1E+01	2.9E+01	1.2E+02	5.7E+01	5.7E+01	1.8E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	7 / 7	1.1E+04	1.6E+04	1.9E+04	1.8E+04	1.8E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	7 / 7	1.5E+01	2.5E+02	1.6E+03	6.8E+02	6.8E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	7 / 7	1.0E+03	3.8E+03	1.2E+04	1.4E+04	1.2E+04	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	7 / 7	2.5E+02	1.0E+03	3.3E+03	3.3E+03	3.3E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	7 / 7	1.5E-02	1.5E-01	5.9E-01	1.2E+00	5.9E-01	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	7 / 7	1.1E+01	1.4E+01	2.0E+01	1.7E+01	1.7E+01	2.1E+01	1.6E+02	2.0E+03	No

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Potassium	7440-09-7	mg/kg	7 / 7	4.1E+02	6.3E+02	9.4E+02	8.6E+02	8.6E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	3 / 7	4.5E-01	8.9E-01	7.7E-01	1.1E+00	7.7E-01	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 7	2.8E+01	4.2E+00	2.8E+01	1.2E+01	1.2E+01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	2 / 7	8.9E+01	2.7E+02	3.6E+02	3.3E+02	3.3E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	7 / 7	2.4E-01	2.7E-01	3.0E-01	2.9E-01	2.9E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	7 / 7	4.8E+00	9.9E+00	1.4E+01	1.2E+01	1.2E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	7 / 7	5.4E+01	3.4E+02	1.5E+03	2.6E+03	1.5E+03	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	1 / 3	2.2E+00	8.2E-01	2.2E+00	2.8E+00	2.2E+00	--	1.8E+02	1.8E+03	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	2 / 3	6.8E-02	2.7E+02	8.2E+02	1.0E+133	8.2E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 3	1.4E+00	5.5E-01	1.4E+00	1.8E+00	1.4E+00	--	7.2E-01	2.5E+00	Yes
Nitroguanidine	556-88-7	mg/kg	3 / 6	4.5E-02	1.1E-01	1.4E-01	1.4E-01	1.4E-01	--	6.1E+02	6.2E+03	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	6 / 7	4.6E-02	1.3E+01	9.1E+01	1.3E+06	9.1E+01	--	1.1E-01	7.4E-01	Yes
Organic Semivolatiles												
Benz(*a*)anthracene	56-55-3	mg/kg	1 / 1	1.7E-01	1.7E-01	1.7E-01	--	1.7E-01	--	6.2E-01	2.1E+00	No
Benzo(*a*)pyrene	50-32-8	mg/kg	1 / 1	2.1E-01	2.1E-01	2.1E-01	--	2.1E-01	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	1 / 1	3.2E-01	3.2E-01	3.2E-01	--	3.2E-01	--	6.2E-01	2.1E+00	No
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	1 / 1	9.9E-02	9.9E-02	9.9E-02	--	9.9E-02	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	1 / 1	1.2E-01	1.2E-01	1.2E-01	--	1.2E-01	--	6.2E+00	2.1E+01	No
Benzoic Acid	65-85-0	mg/kg	1 / 1	2.1E-01	2.1E-01	2.1E-01	--	2.1E-01	--	2.4E+04	2.5E+05	No
Chrysene	218-01-9	mg/kg	1 / 1	2.0E-01	2.0E-01	2.0E-01	--	2.0E-01	--	6.2E+01	2.1E+02	No
Fluoranthene	206-44-0	mg/kg	1 / 1	4.4E-01	4.4E-01	4.4E-01	--	4.4E-01	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	1 / 1	7.4E-02	7.4E-02	7.4E-02	--	7.4E-02	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	1 / 1	1.0E-01	1.0E-01	1.0E-01	--	1.0E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	1 / 1	2.6E-01	2.6E-01	2.6E-01	--	2.6E-01	--	--	--	Yes
Pyrene	129-00-0	mg/kg	1 / 1	4.9E-01	4.9E-01	4.9E-01	--	4.9E-01	--	2.3E+02	2.9E+03	No
Perimeter Area												
Inorganics												
Aluminum	7429-90-5	mg/kg	21 / 21	4.5E+03	1.1E+04	1.7E+04	1.2E+04	1.2E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	2 / 18	1.3E+00	8.8E-01	5.4E+00	1.4E+00	1.4E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	21 / 21	6.3E+00	1.1E+01	2.4E+01	1.3E+01	1.3E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	21 / 21	4.6E+01	1.2E+02	7.7E+02	1.8E+02	1.8E+02	8.8E+01	5.4E+02	6.7E+03	Yes

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Beryllium	7440-41-7	mg/kg	17 / 18	4.3E-01	6.6E-01	1.5E+00	8.3E-01	8.3E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	13 / 21	7.0E-02	5.2E+00	7.7E+01	1.2E+01	1.2E+01	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	18 / 18	1.8E+02	7.3E+03	4.0E+04	5.4E+04	4.0E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	21 / 21	6.0E+00	2.3E+01	1.1E+02	3.3E+01	3.3E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	18 / 18	3.6E+00	7.8E+00	1.5E+01	9.3E+00	9.3E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	18 / 18	6.1E+00	1.7E+01	5.5E+01	2.3E+01	2.3E+01	1.8E+01	3.1E+02	4.1E+03	No
Cyanide	57-12-5	mg/kg	1 / 2	2.4E+00	1.3E+00	2.4E+00	8.0E+00	2.4E+00	--	1.2E+02	1.2E+03	No
Iron	7439-89-6	mg/kg	18 / 18	9.9E+03	2.0E+04	3.3E+04	2.3E+04	2.3E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	21 / 21	1.4E+01	1.8E+02	2.5E+03	3.9E+02	3.9E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	18 / 18	9.4E+02	2.6E+03	8.0E+03	3.4E+03	3.4E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	21 / 21	1.3E+02	7.6E+02	1.9E+03	9.4E+02	9.4E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	18 / 21	1.2E-02	4.3E-02	1.0E-01	5.2E-02	5.2E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	18 / 18	6.8E+00	1.5E+01	3.6E+01	1.8E+01	1.8E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	18 / 18	2.9E+02	6.1E+02	1.1E+03	7.4E+02	7.4E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	9 / 21	4.0E-01	1.0E+00	1.9E+00	1.2E+00	1.2E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 21	4.0E-01	2.7E-01	4.0E-01	2.9E-01	2.9E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	3 / 18	1.1E+02	2.6E+02	1.6E+02	2.9E+02	1.6E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	12 / 18	2.2E-01	2.6E-01	4.2E-01	3.0E-01	3.0E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	18 / 18	6.4E+00	1.9E+01	2.9E+01	2.2E+01	2.2E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	21 / 21	3.6E+01	1.3E+02	1.4E+03	2.4E+02	2.4E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	3 / 5	1.0E-01	3.7E-01	9.1E-01	9.2E+00	9.1E-01	--	1.8E+02	1.8E+03	No
1,3-Dinitrobenzene	99-65-0	mg/kg	1 / 5	8.2E-02	3.4E-01	8.2E-02	8.3E-01	8.2E-02	--	6.1E-01	6.2E+00	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	4 / 5	8.3E-01	1.0E+02	5.0E+02	3.8E+13	5.0E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 5	7.1E-01	4.7E-01	7.1E-01	9.5E-01	7.1E-01	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	3 / 5	2.6E-01	2.6E+00	7.9E+00	5.3E+03	7.9E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	3 / 5	5.2E-01	1.2E+01	6.9E+00	2.7E+07	6.9E+00	--	--	--	Yes
HMX	2691-41-0	mg/kg	2 / 5	3.3E+00	2.2E+00	4.6E+00	4.0E+00	4.0E+00	--	3.1E+02	3.1E+03	No
Nitrocellulose	9004-70-0	mg/kg	1 / 1	6.1E+01	6.1E+01	6.1E+01	--	6.1E+01	--	--	--	Yes
Nitroguanidine	556-88-7	mg/kg	1 / 1	5.1E+00	5.1E+00	5.1E+00	--	5.1E+00	--	6.1E+02	6.2E+03	No
RDX	121-82-4	mg/kg	2 / 5	2.2E+01	1.3E+01	3.8E+01	2.9E+01	2.9E+01	--	4.4E+00	1.6E+01	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	3 / 8	1.5E+00	1.6E+01	1.1E+02	4.2E+01	4.2E+01	--	1.1E-01	7.4E-01	Yes

Table Q-5. Summary of COPC Screening for Load Line 3 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 Pesticides												
4,4'-DDE	72-55-9	mg/kg	1 / 2	3.2E+00	1.6E+00	3.2E+00	1.2E+01	3.2E+00	--	1.7E+00	7.0E+00	Yes
Dieldrin	60-57-1	mg/kg	1 / 2	2.0E-02	5.5E-02	2.0E-02	2.8E-01	2.0E-02	--	3.0E-02	1.1E-01	No
Endrin Aldehyde	7421-93-4	mg/kg	1 / 2	1.7E+00	8.5E-01	1.7E+00	6.2E+00	1.7E+00	--	1.8E+00	1.8E+01	No
Heptachlor	76-44-8	mg/kg	1 / 2	1.8E-01	9.0E-02	1.8E-01	6.6E-01	1.8E-01	--	1.1E-01	3.8E-01	Yes
Methoxychlor	72-43-5	mg/kg	1 / 2	4.3E-01	2.2E-01	4.3E-01	1.6E+00	4.3E-01	--	3.1E+01	3.1E+02	No
gamma-Chlordane	5103-74-2	mg/kg	1 / 2	7.1E-01	3.6E-01	7.1E-01	2.6E+00	7.1E-01	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
Anthracene	120-12-7	mg/kg	1 / 3	1.5E-01	1.7E-01	1.5E-01	2.0E-01	1.5E-01	--	2.2E+03	2.4E+04	No
Benz(*a*)anthracene	56-55-3	mg/kg	2 / 3	2.3E-01	3.7E-01	6.9E-01	7.2E+01	6.9E-01	--	6.2E-01	2.1E+00	Yes
Benzo(*a*)pyrene	50-32-8	mg/kg	2 / 3	2.7E-01	3.9E-01	7.0E-01	3.4E+01	7.0E-01	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	2 / 3	8.4E-01	6.7E-01	9.8E-01	1.4E+00	9.8E-01	--	6.2E-01	2.1E+00	Yes
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	2 / 3	2.0E-01	2.5E-01	3.6E-01	9.7E-01	3.6E-01	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	2 / 3	2.1E-01	2.5E-01	3.5E-01	8.8E-01	3.5E-01	--	6.2E+00	2.1E+01	No
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	1 / 3	1.1E-01	1.6E-01	1.1E-01	2.4E-01	1.1E-01	--	3.5E+01	1.2E+02	No
Chrysene	218-01-9	mg/kg	2 / 3	5.2E-01	4.9E-01	7.6E-01	9.8E-01	7.6E-01	--	6.2E+01	2.1E+02	No
Di-n-butyl phthalate	84-74-2	mg/kg	1 / 3	3.1E-01	2.3E-01	3.1E-01	3.5E-01	3.1E-01	--	6.1E+02	6.2E+03	No
Dibenz(*a,h*)anthracene	53-70-3	mg/kg	2 / 3	6.6E-02	1.2E-01	9.7E-02	2.1E+00	9.7E-02	--	6.2E-02	2.1E-01	Yes
Fluoranthene	206-44-0	mg/kg	2 / 3	4.1E-01	6.0E-01	1.2E+00	4.0E+03	1.2E+00	--	2.3E+02	2.2E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	2 / 3	1.9E-01	2.4E-01	3.5E-01	9.3E-01	3.5E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	2 / 3	1.4E-01	2.8E-01	5.0E-01	2.2E+01	5.0E-01	--	--	--	Yes
Pyrene	129-00-0	mg/kg	2 / 3	4.1E-01	6.0E-01	1.2E+00	4.0E+03	1.2E+00	--	2.3E+02	2.9E+03	No
Organic Volatiles												
Benzene	71-43-2	mg/kg	1 / 4	1.9E-03	2.6E-03	1.9E-03	3.1E-03	1.9E-03	--	6.0E-01	1.3E+00	No
Toluene	108-88-3	mg/kg	1 / 4	9.4E-03	4.5E-03	9.4E-03	8.3E-03	8.3E-03	--	6.6E+01	2.2E+02	No
Preparation and Receiving Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	18 / 18	3.4E+03	8.9E+03	1.7E+04	1.1E+04	1.1E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	7 / 18	1.0E+00	2.5E+00	1.8E+01	4.3E+00	4.3E+00	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	18 / 18	5.2E+00	1.2E+01	2.4E+01	1.4E+01	1.4E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	18 / 18	2.1E+01	9.1E+01	2.2E+02	1.4E+02	1.4E+02	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	16 / 18	3.1E-01	7.3E-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	17 / 18	7.2E-02	1.5E+00	6.8E+00	5.9E+00	5.9E+00	--	3.7E+00	4.5E+01	Yes

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Calcium	7440-70-2	mg/kg	18 / 18	6.1E+02	2.9E+04	1.5E+05	4.8E+04	4.8E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	18 / 18	6.9E+00	1.7E+01	5.1E+01	2.1E+01	2.1E+01	1.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	18 / 18	2.9E+00	6.7E+00	1.3E+01	7.7E+00	7.7E+00	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	18 / 18	1.6E+01	5.9E+01	3.3E+02	9.1E+01	9.1E+01	1.8E+01	3.1E+02	4.1E+03	Yes
Cyanide	57-12-5	mg/kg	2 / 5	1.2E-01	2.4E-01	6.8E-01	4.9E-01	4.9E-01	--	1.2E+02	1.2E+03	No
Iron	7439-89-6	mg/kg	18 / 18	9.0E+03	1.9E+04	2.9E+04	2.1E+04	2.1E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	18 / 18	1.1E+01	1.2E+02	6.3E+02	2.9E+02	2.9E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	18 / 18	1.2E+03	3.3E+03	1.4E+04	4.5E+03	4.5E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	18 / 18	2.1E+02	5.6E+02	1.6E+03	7.4E+02	7.4E+02	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	12 / 18	1.1E-02	4.8E-02	1.5E-01	7.3E-02	7.3E-02	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	18 / 18	1.1E+01	1.6E+01	2.7E+01	1.9E+01	1.9E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	18 / 18	3.7E+02	7.4E+02	1.4E+03	9.1E+02	9.1E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	5 / 18	4.3E-01	9.8E-01	1.0E+00	1.1E+00	1.0E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	1 / 18	2.9E-01	2.6E-01	2.9E-01	2.9E-01	2.9E-01	--	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	9 / 18	5.7E+01	2.2E+02	2.9E+02	2.6E+02	2.6E+02	1.2E+02	--	--	No
Thallium	6533-73-9	mg/kg	14 / 18	1.1E-01	3.8E-01	1.1E+00	5.4E-01	5.4E-01	--	5.2E-01	6.7E+00	Yes
Vanadium	7440-62-2	mg/kg	18 / 18	5.3E+00	1.3E+01	2.2E+01	1.4E+01	1.4E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	18 / 18	5.3E+01	1.4E+02	4.6E+02	1.9E+02	1.9E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
2,4,6-Trinitrotoluene	118-96-7	mg/kg	4 / 10	1.4E-01	2.5E-01	1.2E+00	4.4E-01	4.4E-01	--	3.1E+00	3.1E+01	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	2 / 7	2.3E-01	1.6E-01	2.8E-01	2.1E-01	2.1E-01	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	2 / 7	2.7E-01	2.2E-01	6.5E-01	3.7E-01	3.7E-01	--	--	--	Yes
HMX	2691-41-0	mg/kg	1 / 10	1.9E+00	6.4E-01	1.9E+00	9.7E-01	9.7E-01	--	3.1E+02	3.1E+03	No
Nitrocellulose	9004-70-0	mg/kg	2 / 2	4.0E+00	1.6E+01	2.8E+01	9.1E+01	2.8E+01	--	--	--	Yes
Nitroguanidine	556-88-7	mg/kg	1 / 2	8.4E-02	1.0E-01	8.4E-02	2.3E-01	8.4E-02	--	6.1E+02	6.2E+03	No
RDX	121-82-4	mg/kg	1 / 10	3.1E+01	3.4E+00	3.1E+01	9.0E+00	9.0E+00	--	4.4E+00	1.6E+01	Yes
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	10 / 15	4.5E-02	1.3E+00	1.4E+01	1.2E+01	1.2E+01	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	2 / 15	1.9E-01	1.3E-01	2.3E-01	2.4E-01	2.3E-01	--	2.2E-01	7.4E-01	Yes
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	2 / 5	1.1E-02	6.9E-03	1.2E-02	1.2E-02	1.2E-02	--	1.7E+00	7.0E+00	No
4,4'-DDT	50-29-3	mg/kg	2 / 5	2.2E-02	2.1E-02	7.7E-02	5.2E-02	5.2E-02	--	1.7E+00	7.0E+00	No
Endrin Aldehyde	7421-93-4	mg/kg	2 / 5	4.8E-03	5.3E-03	1.0E-02	9.2E-03	9.2E-03	--	1.8E+00	1.8E+01	No

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Heptachlor	76-44-8	mg/kg	1 / 5	1.6E-03	3.4E-03	1.6E-03	6.8E-03	1.6E-03	--	1.1E-01	3.8E-01	No
Organic Semivolatiles												
Anthracene	120-12-7	mg/kg	1 / 9	8.6E-02	1.8E-01	8.6E-02	2.0E-01	8.6E-02	--	2.2E+03	2.4E+04	No
Benz(*a*)anthracene	56-55-3	mg/kg	3 / 9	1.1E-01	2.5E-01	5.4E-01	3.4E-01	3.4E-01	--	6.2E-01	2.1E+00	No
Benzo(*a*)pyrene	50-32-8	mg/kg	3 / 9	1.2E-01	2.7E-01	6.1E-01	3.7E-01	3.7E-01	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	3 / 9	1.6E-01	3.3E-01	9.6E-01	5.2E-01	5.2E-01	--	6.2E-01	2.1E+00	Yes
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	3 / 9	6.7E-02	1.9E-01	3.2E-01	2.4E-01	2.4E-01	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	4 / 9	6.2E-02	1.9E-01	3.9E-01	2.6E-01	2.6E-01	--	6.2E+00	2.1E+01	No
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	1 / 9	2.4E-01	1.9E-01	2.4E-01	2.1E-01	2.1E-01	--	3.5E+01	1.2E+02	No
Butyl Benzyl Phthalate	85-68-7	mg/kg	1 / 9	8.8E-02	1.8E-01	8.8E-02	2.0E-01	8.8E-02	--	1.2E+03	1.2E+04	No
Chrysene	218-01-9	mg/kg	3 / 9	1.2E-01	2.5E-01	5.1E-01	3.4E-01	3.4E-01	--	6.2E+01	2.1E+02	No
Di-n-butyl Phthalate	84-74-2	mg/kg	2 / 9	1.1E-01	1.9E-01	2.7E-01	2.1E-01	2.1E-01	--	6.1E+02	6.2E+03	No
Dibenz(*a,h*)anthracene	53-70-3	mg/kg	2 / 9	6.9E-02	1.6E-01	8.3E-02	1.9E-01	8.3E-02	--	6.2E-02	2.1E-01	Yes
Fluoranthene	206-44-0	mg/kg	4 / 9	5.1E-02	3.1E-01	7.8E-01	4.8E-01	4.8E-01	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	1 / 9	5.5E-02	1.7E-01	5.5E-02	2.0E-01	5.5E-02	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	2 / 9	2.4E-01	2.1E-01	3.2E-01	2.4E-01	2.4E-01	--	6.2E-01	2.1E+00	No
Phenanthrene	85-01-8	mg/kg	3 / 9	1.3E-01	1.8E-01	1.9E-01	1.9E-01	1.9E-01	--	--	--	Yes
Pyrene	129-00-0	mg/kg	3 / 9	2.5E-01	3.2E-01	8.9E-01	4.8E-01	4.8E-01	--	2.3E+02	2.9E+03	No
Organic Volatiles												
2-Butanone	78-93-3	mg/kg	1 / 9	6.9E-03	8.0E-03	6.9E-03	1.1E-02	6.9E-03	--	7.3E+02	2.7E+03	No
Acetone	67-64-1	mg/kg	2 / 9	3.3E-03	1.4E-02	6.6E-02	2.6E-02	2.6E-02	--	1.6E+02	6.0E+02	No
Methylene Chloride	75-09-2	mg/kg	2 / 9	2.0E-03	3.8E-03	4.0E-03	5.4E-03	4.0E-03	--	9.1E+00	2.1E+01	No
Toluene	108-88-3	mg/kg	2 / 9	1.1E-03	2.4E-03	1.4E-03	2.9E-03	1.4E-03	--	6.6E+01	2.2E+02	No
West Ditches												
Inorganics												
Aluminum	7429-90-5	mg/kg	16 / 16	5.4E+03	9.5E+03	1.4E+04	1.1E+04	1.1E+04	1.8E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	1 / 11	1.8E+02	1.7E+01	1.8E+02	4.6E+01	4.6E+01	9.6E-01	3.1E+00	4.1E+01	Yes
Arsenic	7440-38-2	mg/kg	16 / 16	9.6E+00	1.5E+01	2.2E+01	1.7E+01	1.7E+01	1.5E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	16 / 16	5.6E+01	8.6E+01	1.9E+02	1.0E+02	1.0E+02	8.8E+01	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	11 / 11	5.0E-01	8.5E-01	1.4E+00	1.0E+00	1.0E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	15 / 16	1.1E-01	7.1E-01	1.9E+00	9.6E-01	9.6E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	11 / 11	8.3E+02	5.6E+03	1.5E+04	1.3E+04	1.3E+04	1.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	16 / 16	7.4E+00	2.0E+01	1.1E+02	3.1E+01	3.1E+01	1.7E+01	2.1E+02	4.5E+02	No

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Cobalt	7440-48-4	mg/kg	11 / 11	6.6E+00	1.2E+01	3.1E+01	1.6E+01	1.6E+01	1.0E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	11 / 11	9.9E+00	1.1E+02	1.1E+03	2.9E+02	2.9E+02	1.8E+01	3.1E+02	4.1E+03	Yes
Iron	7439-89-6	mg/kg	11 / 11	1.7E+04	2.3E+04	2.7E+04	2.5E+04	2.5E+04	2.3E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	16 / 16	1.7E+01	8.3E+01	8.7E+02	1.8E+02	1.8E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	11 / 11	1.3E+03	2.0E+03	4.1E+03	2.4E+03	2.4E+03	3.0E+03	--	--	No
Manganese	7439-96-5	mg/kg	16 / 16	2.1E+02	1.2E+03	4.6E+03	2.0E+03	2.0E+03	1.5E+03	1.8E+02	1.9E+03	Yes
Mercury	7487-94-6	mg/kg	11 / 16	2.2E-02	6.0E-02	2.3E-01	1.1E-01	1.1E-01	3.6E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	11 / 11	1.3E+01	1.8E+01	3.1E+01	2.2E+01	2.2E+01	2.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	11 / 11	3.6E+02	6.7E+02	9.7E+02	7.7E+02	7.7E+02	9.3E+02	--	--	No
Selenium	7782-49-2	mg/kg	10 / 16	4.4E-01	1.5E+00	3.6E+00	1.9E+00	1.9E+00	1.4E+00	3.9E+01	5.1E+02	No
Silver	7440-22-4	mg/kg	4 / 16	2.3E-01	3.6E-01	1.5E+00	5.1E-01	5.1E-01	--	3.9E+01	5.1E+02	No
Thallium	6533-73-9	mg/kg	6 / 11	2.6E-01	2.7E-01	4.4E-01	3.3E-01	3.3E-01	--	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	11 / 11	1.4E+01	2.0E+01	2.8E+01	2.2E+01	2.2E+01	3.1E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	16 / 16	5.2E+01	2.0E+02	5.6E+02	3.2E+02	3.2E+02	6.2E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	1 / 10	4.5E-01	1.6E-01	4.5E-01	2.2E-01	2.2E-01	--	1.8E+02	1.8E+03	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	7 / 10	3.2E-01	1.2E+01	1.1E+02	3.2E+01	3.2E+01	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 10	4.7E-02	1.3E-01	4.7E-02	1.6E-01	4.7E-02	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	4 / 5	1.2E-01	8.2E-01	3.2E+00	9.8E+01	3.2E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	3 / 5	2.3E-01	3.0E+00	8.2E-01	1.7E+04	8.2E-01	--	--	--	Yes
Nitroguanidine	556-88-7	mg/kg	1 / 1	4.3E-02	4.3E-02	4.3E-02	--	4.3E-02	--	6.1E+02	6.2E+03	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	6 / 9	5.0E-02	5.1E+00	3.6E+01	1.3E+01	1.3E+01	--	1.1E-01	7.4E-01	Yes
PCB-1260	11096-82-5	mg/kg	1 / 9	2.2E-01	3.3E-01	2.2E-01	7.4E-01	2.2E-01	--	2.2E-01	7.4E-01	No
Organic Pesticides												
4,4'-DDE	72-55-9	mg/kg	2 / 5	5.3E-02	6.1E-02	1.3E-01	1.0E-01	1.0E-01	--	1.7E+00	7.0E+00	No
Dieldrin	60-57-1	mg/kg	1 / 5	5.8E-02	3.7E-02	5.8E-02	6.2E-02	5.8E-02	--	3.0E-02	1.1E-01	Yes
Endrin Aldehyde	7421-93-4	mg/kg	1 / 5	5.3E-02	3.6E-02	5.3E-02	6.0E-02	5.3E-02	--	1.8E+00	1.8E+01	No
Endrin Ketone	53494-70-5	mg/kg	1 / 5	1.9E-02	3.2E-02	1.9E-02	5.2E-02	1.9E-02	--	1.8E+00	1.8E+01	No
beta-BHC	319-85-7	mg/kg	1 / 5	1.2E-01	4.3E-02	1.2E-01	8.8E-02	8.8E-02	--	3.2E-01	1.3E+00	No
gamma-Chlordane	5103-74-2	mg/kg	1 / 5	5.9E-02	3.7E-02	5.9E-02	6.2E-02	5.9E-02	--	1.6E+00	6.5E+00	No
Organic Semivolatiles												
Acenaphthene	83-32-9	mg/kg	3 / 5	8.8E-02	1.6E-01	1.8E-01	2.1E-01	1.8E-01	--	3.7E+02	2.9E+03	No

Table Q-5. Summary of COPC Screening for Load Line 3 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?
Acenaphthylene	208-96-8	mg/kg	1 / 5	2.1E-01	2.5E-01	2.1E-01	3.4E-01	2.1E-01	--	--	--	Yes
Anthracene	120-12-7	mg/kg	3 / 5	1.8E-01	4.0E-01	8.6E-01	1.5E+00	8.6E-01	--	2.2E+03	2.4E+04	No
Benz(*a*)anthracene	56-55-3	mg/kg	5 / 5	1.1E-01	1.9E+00	5.3E+00	2.1E+03	5.3E+00	--	6.2E-01	2.1E+00	Yes
Benzo(*a*)pyrene	50-32-8	mg/kg	5 / 5	9.9E-02	1.7E+00	4.5E+00	2.2E+03	4.5E+00	--	6.2E-02	2.1E-01	Yes
Benzo(*b*)fluoranthene	205-99-2	mg/kg	5 / 5	1.8E-01	2.5E+00	6.5E+00	2.1E+03	6.5E+00	--	6.2E-01	2.1E+00	Yes
Benzo(*g,h,i*)perylene	191-24-2	mg/kg	5 / 5	7.1E-02	7.3E-01	1.6E+00	1.3E+02	1.6E+00	--	--	--	Yes
Benzo(*k*)fluoranthene	207-08-9	mg/kg	4 / 5	1.2E-01	1.0E+00	2.6E+00	1.5E+02	2.6E+00	--	6.2E+00	2.1E+01	No
Benzoic Acid	65-85-0	mg/kg	1 / 5	3.0E-01	1.1E+00	3.0E-01	1.7E+00	3.0E-01	--	2.4E+04	2.5E+05	No
Carbazole	86-74-8	mg/kg	3 / 5	1.9E-01	2.2E-01	2.9E-01	2.6E-01	2.6E-01	--	2.4E+01	8.6E+01	No
Chrysene	218-01-9	mg/kg	5 / 5	1.5E-01	2.0E+00	5.5E+00	5.5E+02	5.5E+00	--	6.2E+01	2.1E+02	No
Dibenz(*a,h*)anthracene	53-70-3	mg/kg	3 / 5	1.4E-01	3.3E-01	6.7E-01	1.1E+00	6.7E-01	--	6.2E-02	2.1E-01	Yes
Dibenzofuran	132-64-9	mg/kg	1 / 5	1.1E-01	2.3E-01	1.1E-01	3.4E-01	1.1E-01	--	2.9E+01	3.1E+02	No
Fluoranthene	206-44-0	mg/kg	5 / 5	2.2E-01	3.9E+00	1.0E+01	4.8E+03	1.0E+01	--	2.3E+02	2.2E+03	No
Fluorene	86-73-7	mg/kg	3 / 5	7.3E-02	2.2E-01	3.2E-01	3.0E-01	3.0E-01	--	2.7E+02	2.6E+03	No
Indeno(1,2,3-*cd*)pyrene	193-39-5	mg/kg	4 / 5	1.5E-01	8.1E-01	1.9E+00	2.7E+01	1.9E+00	--	6.2E-01	2.1E+00	Yes
Phenanthrene	85-01-8	mg/kg	5 / 5	9.1E-02	1.5E+00	3.3E+00	1.4E+03	3.3E+00	--	--	--	Yes
Pyrene	129-00-0	mg/kg	5 / 5	2.1E-01	3.2E+00	8.0E+00	2.6E+03	8.0E+00	--	2.3E+02	2.9E+03	No

BHC = Benzene hexachloride.
CAS = Chemical Abstracts Service.
COPC = Chemical of potential concern.
DDE = Dichlorodiphonyldichloroethylene.
DDT = Dichlorodiphenyltrichloroethane.
DLA = Defense Logistics Agency.
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 3 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												
Inorganics												
Aluminum	7429-90-5	mg/kg	22 / 22	4.6E+03	8.6E+03	1.9E+04	9.8E+03	9.8E+03	2.0E+04	7.6E+03	9.2E+04	No
Antimony	7440-36-0	mg/kg	1 / 22	4.2E+00	7.2E-01	4.2E+00	1.0E+00	1.0E+00	9.6E-01	3.1E+00	4.1E+01	No
Arsenic	7440-38-2	mg/kg	22 / 22	6.0E+00	1.3E+01	2.4E+01	1.5E+01	1.5E+01	2.0E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	22 / 22	3.0E+01	7.8E+01	4.3E+02	1.1E+02	1.1E+02	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	20 / 22	3.0E-01	7.2E-01	2.6E+00	9.8E-01	9.8E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	20 / 22	5.4E-02	6.4E-01	3.1E+00	1.3E+00	1.3E+00	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	22 / 22	7.7E+02	1.0E+04	1.1E+05	1.8E+04	1.8E+04	3.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	22 / 22	8.4E+00	1.8E+01	4.0E+01	2.1E+01	2.1E+01	2.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	22 / 22	4.0E+00	8.8E+00	1.5E+01	1.0E+01	1.0E+01	2.3E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	22 / 22	1.4E+01	2.1E+01	5.5E+01	2.5E+01	2.5E+01	3.2E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	22 / 22	1.4E+04	2.1E+04	3.3E+04	2.3E+04	2.3E+04	3.5E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	22 / 22	1.2E+01	5.7E+01	2.8E+02	8.3E+01	8.3E+01	1.9E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	22 / 22	1.4E+03	2.8E+03	1.2E+04	3.6E+03	3.6E+03	8.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	22 / 22	3.0E+02	6.7E+02	2.2E+03	8.1E+02	8.1E+02	3.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	16 / 22	9.7E-03	5.4E-02	6.7E-01	1.1E-01	1.1E-01	4.4E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	22 / 22	1.1E+01	2.1E+01	4.8E+01	2.4E+01	2.4E+01	6.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	22 / 22	4.6E+02	7.6E+02	1.1E+03	8.3E+02	8.3E+02	3.4E+03	--	--	No
Selenium	7782-49-2	mg/kg	8 / 22	4.3E-01	9.6E-01	1.0E+00	1.1E+00	1.0E+00	1.5E+00	3.9E+01	5.1E+02	No
Sodium	7440-23-5	mg/kg	1 / 22	2.3E+02	2.8E+02	2.3E+02	2.9E+02	2.3E+02	1.5E+02	--	--	No
Thallium	6533-73-9	mg/kg	12 / 20	2.2E-01	3.0E-01	6.7E-01	3.6E-01	3.6E-01	9.1E-01	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	22 / 22	9.0E+00	1.4E+01	2.2E+01	1.5E+01	1.5E+01	3.8E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	22 / 22	5.0E+01	8.5E+01	2.2E+02	1.0E+02	1.0E+02	9.3E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	9 / 13	9.1E-02	1.6E+00	9.3E+00	2.9E+00	2.9E+00	--	1.8E+02	1.8E+03	No
1,3-Dinitrobenzene	99-65-0	mg/kg	1 / 13	1.4E+00	2.7E-01	1.4E+00	4.5E-01	4.5E-01	--	6.1E-01	6.2E+00	Yes
2,4,6-Trinitrotoluene	118-96-7	mg/kg	12 / 13	2.8E-01	7.1E+01	2.7E+02	1.2E+02	1.2E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	5 / 13	2.8E-01	3.6E-01	1.5E+00	5.6E-01	5.6E-01	--	7.2E-01	2.5E+00	Yes
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	12 / 13	1.4E-01	1.8E+00	5.8E+00	6.9E+00	5.8E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	6 / 13	2.1E-01	6.8E+00	1.4E+00	1.2E+01	1.4E+00	--	--	--	Yes
HMX	2691-41-0	mg/kg	1 / 13	3.9E+00	6.3E-01	3.9E+00	1.1E+00	1.1E+00	--	3.1E+02	3.1E+03	No
Nitrobenzene	98-95-3	mg/kg	2 / 13	1.5E-01	2.2E-01	6.5E-01	2.9E-01	2.9E-01	--	2.0E+00	1.0E+01	No

Table Q-6. Summary of COPC Screening for Load Line 3 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?
RDX	121-82-4	mg/kg	3 / 13	1.7E-01	6.0E-01	3.3E+00	1.0E+00	1.0E+00	--	4.4E+00	1.6E+01	No
Tetryl	479-45-8	mg/kg	1 / 13	3.0E+00	6.6E-01	3.0E+00	1.0E+00	1.0E+00	--	6.1E+01	6.2E+02	No
Organic PCBs												
PCB-1254	11097-69-1	mg/kg	2 / 3	4.9E+00	1.3E+01	3.5E+01	2.4E+66	3.5E+01	--	1.1E-01	7.4E-01	Yes
Perimeter Area												
Inorganics												
Aluminum	7429-90-5	mg/kg	2 / 2	1.0E+04	1.2E+04	1.3E+04	2.0E+04	1.3E+04	2.0E+04	7.6E+03	9.2E+04	No
Arsenic	7440-38-2	mg/kg	2 / 2	9.3E+00	1.7E+01	2.4E+01	6.4E+01	2.4E+01	2.0E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	2 / 2	9.6E+01	1.9E+02	2.8E+02	7.7E+02	2.8E+02	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	2 / 2	6.9E-01	1.1E+00	1.5E+00	3.7E+00	1.5E+00	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	1 / 2	2.1E+01	1.0E+01	2.1E+01	7.5E+01	2.1E+01	--	3.7E+00	4.5E+01	Yes
Calcium	7440-70-2	mg/kg	2 / 2	1.1E+04	2.2E+04	3.3E+04	9.0E+04	3.3E+04	3.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	2 / 2	2.1E+01	3.5E+01	4.8E+01	1.2E+02	4.8E+01	2.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	2 / 2	5.4E+00	8.2E+00	1.1E+01	2.6E+01	1.1E+01	2.3E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	2 / 2	1.3E+01	2.3E+01	3.2E+01	8.4E+01	3.2E+01	3.2E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	2 / 2	1.9E+04	2.1E+04	2.2E+04	3.1E+04	2.2E+04	3.5E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	2 / 2	1.8E+01	2.7E+02	5.3E+02	1.9E+03	5.3E+02	1.9E+01	4.0E+02	7.5E+02	Yes
Magnesium	7439-95-4	mg/kg	2 / 2	3.2E+03	4.0E+03	4.8E+03	9.0E+03	4.8E+03	8.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	2 / 2	9.1E+02	1.3E+03	1.6E+03	3.5E+03	1.6E+03	3.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	2 / 2	3.2E-02	3.8E-02	4.3E-02	7.2E-02	4.3E-02	4.4E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	2 / 2	1.3E+01	2.5E+01	3.6E+01	9.8E+01	3.6E+01	6.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	2 / 2	7.7E+02	8.9E+02	1.0E+03	1.6E+03	1.0E+03	3.4E+03	--	--	No
Sodium	7440-23-5	mg/kg	1 / 2	1.6E+02	2.2E+02	1.6E+02	5.7E+02	1.6E+02	1.5E+02	--	--	No
Thallium	6533-73-9	mg/kg	1 / 2	3.4E-01	2.6E-01	3.4E-01	7.8E-01	3.4E-01	9.1E-01	5.2E-01	6.7E+00	No
Vanadium	7440-62-2	mg/kg	2 / 2	9.7E+00	1.6E+01	2.2E+01	5.3E+01	2.2E+01	3.8E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	2 / 2	4.7E+01	2.1E+02	3.8E+02	1.3E+03	3.8E+02	9.3E+01	2.3E+03	3.1E+04	No
Organic Explosives												
1,3,5-Trinitrobenzene	99-35-4	mg/kg	2 / 2	6.1E-01	7.6E-01	9.1E-01	1.7E+00	9.1E-01	--	1.8E+02	1.8E+03	No
1,3-Dinitrobenzene	99-65-0	mg/kg	1 / 2	8.2E-02	6.7E-01	8.2E-02	4.4E+00	8.2E-02	--	6.1E-01	6.2E+00	No
2,4,6-Trinitrotoluene	118-96-7	mg/kg	2 / 2	6.2E+00	2.5E+02	5.0E+02	1.8E+03	5.0E+02	--	3.1E+00	3.1E+01	Yes
2,4-Dinitrotoluene	121-14-2	mg/kg	1 / 2	7.1E-01	9.8E-01	7.1E-01	2.7E+00	7.1E-01	--	7.2E-01	2.5E+00	No
2-Amino-4,6-Dinitrotoluene	35572-78-2	mg/kg	1 / 2	7.9E+00	5.2E+00	7.9E+00	2.3E+01	7.9E+00	--	--	--	Yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	mg/kg	1 / 2	6.9E+00	2.8E+01	6.9E+00	1.6E+02	6.9E+00	--	--	--	Yes

Table Q-6. Summary of COPC Screening for Load Line 3 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?
HMX	2691-41-0	mg/kg	1 / 2	4.6E+00	3.6E+00	4.6E+00	1.0E+01	4.6E+00	--	3.1E+02	3.1E+03	No
RDX	121-82-4	mg/kg	1 / 2	3.8E+01	2.0E+01	3.8E+01	1.3E+02	3.8E+01	--	4.4E+00	1.6E+01	Yes
Preparation and Receiving Areas												
Inorganics												
Aluminum	7429-90-5	mg/kg	3 / 3	5.5E+03	6.9E+03	7.6E+03	8.8E+03	7.6E+03	2.0E+04	7.6E+03	9.2E+04	No
Arsenic	7440-38-2	mg/kg	3 / 3	1.3E+01	1.8E+01	2.4E+01	5.6E+01	2.4E+01	2.0E+01	3.9E-01	1.6E+00	Yes
Barium	7440-39-3	mg/kg	3 / 3	2.1E+01	4.0E+01	5.5E+01	7.0E+01	5.5E+01	1.2E+02	5.4E+02	6.7E+03	No
Beryllium	7440-41-7	mg/kg	3 / 3	3.4E-01	4.5E-01	5.8E-01	1.0E+00	5.8E-01	8.8E-01	1.5E+01	1.9E+02	No
Cadmium	7440-43-9	mg/kg	2 / 3	1.3E-01	2.5E-01	3.2E-01	4.2E-01	3.2E-01	--	3.7E+00	4.5E+01	No
Calcium	7440-70-2	mg/kg	3 / 3	6.1E+02	6.1E+03	1.6E+04	4.5E+15	1.6E+04	3.6E+04	--	--	No
Chromium	7440-47-3	mg/kg	3 / 3	6.9E+00	9.8E+00	1.2E+01	1.4E+01	1.2E+01	2.7E+01	2.1E+02	4.5E+02	No
Cobalt	7440-48-4	mg/kg	3 / 3	5.5E+00	6.7E+00	7.8E+00	8.7E+00	7.8E+00	2.3E+01	1.4E+02	1.3E+03	No
Copper	7440-50-8	mg/kg	3 / 3	1.6E+01	2.2E+01	2.5E+01	3.0E+01	2.5E+01	3.2E+01	3.1E+02	4.1E+03	No
Iron	7439-89-6	mg/kg	3 / 3	1.7E+04	2.0E+04	2.2E+04	2.7E+04	2.2E+04	3.5E+04	2.3E+03	3.1E+04	No
Lead	7439-92-1	mg/kg	3 / 3	1.1E+01	2.5E+01	4.1E+01	5.1E+01	4.1E+01	1.9E+01	4.0E+02	7.5E+02	No
Magnesium	7439-95-4	mg/kg	3 / 3	1.3E+03	2.0E+03	2.8E+03	8.7E+03	2.8E+03	8.8E+03	--	--	No
Manganese	7439-96-5	mg/kg	3 / 3	2.5E+02	3.4E+02	4.8E+02	1.2E+03	4.8E+02	3.0E+03	1.8E+02	1.9E+03	No
Mercury	7487-94-6	mg/kg	1 / 3	1.3E-02	4.4E-02	1.3E-02	9.0E-02	1.3E-02	4.4E-02	2.3E+00	3.1E+01	No
Nickel	7440-02-0	mg/kg	3 / 3	1.2E+01	1.7E+01	2.0E+01	2.3E+01	2.0E+01	6.1E+01	1.6E+02	2.0E+03	No
Potassium	7440-09-7	mg/kg	3 / 3	3.7E+02	6.1E+02	7.4E+02	9.6E+02	7.4E+02	3.4E+03	--	--	No
Vanadium	7440-62-2	mg/kg	3 / 3	9.4E+00	1.1E+01	1.3E+01	1.5E+01	1.3E+01	3.8E+01	5.5E+01	7.2E+02	No
Zinc	7440-66-6	mg/kg	3 / 3	5.8E+01	7.3E+01	1.0E+02	2.3E+02	1.0E+02	9.3E+01	2.3E+03	3.1E+04	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.
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 3 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	--
Copper	0.001	3.1E-04	--
Manganese	0.001	1.3E-03	--
Thallium (as Thallium Carbomate)	0.001	1.6E-04	--
Zinc	0.001	3.4E-04	--
Organics			
1,3-Dinitrobenzene	0.1	2.1E-03	--
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
4,4'-DDE	0.1	9.2E-01	--
Benz(*a*)anthracene	0.13	9.5E-01	--
Benzo(*a*)pyrene	0.13	1.2E+00	--
Benzo(*b*)fluoranthene	0.13	7.0E-01	--
Benzo(*k*)fluoranthene	0.13	1.2E+00	--
Carbon Tetrachloride	0.01	2.2E-02	--
Dibenz(*a,h*)anthracene	0.13	1.7E+00	--
Dieldrin	0.1	4.5E-02	--
Endrin	0.1	4.5E-02	--
Heptachlor	0.1	2.2E-01	--
Heptachlor Epoxide	0.1	2.8E-02	--
Indeno(1,2,3-*cd*)pyrene	0.13	2.2E+00	--
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 U.S. Environmental Protection Agency (EPA) Region V (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 (VFs) 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.
DDE = Dichlorodiphonyldichloroethylene.
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 3 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
Inorganics								
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 = 1,000
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 = 1,000
Cadmium (diet)	1.0E-03	High	0.025	2.5E-05	--	Oral, oral-water	Renal toxicity, osteomalacia, osteoporosis, and significant proteinuria	(O) UF = 1,000
Chromium (as Cr III)	1.5E+00	Low (O)	0.013	2.0E-02	--	Oral (rat)	Reduced liver/spleen weight	(O) UF = 100
Copper	4.0E-02	NA	1	4.0E-02	--	NA	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 = 1,000
Thallium	8.0E-05	Low	1	8.0E-05	--	Oral (rat)	Increased levels of SGOT and LDH	UF = 3,000
Zinc	3.0E-01	Medium	0.3	9.0E-02	--	Oral	(O) copper deficiency & hypochromic microcytic anemia (I) pulmonary & gastrointestinal effects (human)	UF = 3
Organics								
1,3-Dinitrobenzene	1.0E-04	Low	1	1.0E-04	--	Oral (rat)	Increased splenic weight	(O) UF = 3,000
2,4,6-Trinitrotoluene	5.0E-04	Medium	1	5.0E-04	--	Oral (dog)	Liver effects	UF = 1,000

Table Q-8. Noncarcinogenic RfDs for Load Line 3 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
2,4-Dinitrotoluene	2.0E-03	High	1	2.0E-03	--	Oral (dog)	Neurotoxicity, biliary tract	UF = 100
2-Methylnaphthalene	4.0E-03	Low	1	4.0E-03	--	Oral (mice)	Pulmonary alveolar proteinosis	(O) UF = 1,000
Carbon Tetrachloride	7.0E-04	Medium	1	7.0E-04	--	Oral (rat)	Liver lesions	UF = 1,000
Dieldrin	5.0E-05	Medium	1	5.0E-05	--	Oral (rat)	Liver lesions (rat)	UF = 100
Endrin	3.0E-04	Medium	1	3.0E-04	--	Oral (dog)	Histological lesions in liver	UF = 100
Heptachlor	5.0E-04	Low	1	5.0E-04	--	Oral (rat)	Liver weight increases in males	UF = 300
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 = 1,000
PCB-1254	2.0E-05	NA	0.8	2.0E-05	--	Oral: (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 U.S. Environmental Protection Agency (EPA) 2000.

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

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

PCB = Polychlorinated biphenyl.

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

UF = Uncertainty factor.

NA = Not available.

-- = No value available.

Table Q-9. Cancer Slope Factors for Load Line 3 COPCs

COPC	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	% GI Absorption[a]	Dermal Slope Factor $(mg/kg\text{-}d)^{-1}$	Inhalation Slope Factor $(mg/kg\text{-}d)^{-1}$	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
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)
4,4'-DDE	3.4E-01	1	3.4E-01	--	B2	--	Hepatocellular carcinoma (mouse)
Benz(*a*)anthracene	7.3E-01	0.58	7.3E-01	3.1E-01	B2	0.1	Stomach tumors (mouse)
Benzo(*a*)pyrene	7.3E+00	0.58	7.3E+00	3.1E+00	B2	1	Stomach, nasal cavity, larynx, tracheak, and pharnyx
Benzo(*b*)fluoranthene	7.3E-01	0.58	7.3E-01	3.1E-01	B2	0.1	Tumors
Benzo(*k*)fluoranthene	7.3E-02	0.58	7.3E-02	3.1E-02	B2	0.01	Tumors (mouse)
Carbon Tetrachloride	1.3E-01	1	1.3E-01	5.3E-02	B2	--	Liver tumors (mouse)
Dibenz(*a,h*)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	4.5E+00	1	4.5E+00	4.6E+00	B2	--	Hepatocellular carcinoma (mouse)
Heptachlor Epoxide	9.1E+00	1	9.1E+00	9.1E+00	B2	--	Hepatocellular carcinoma (mouse)
Indeno(1,2,3-*cd*)pyrene	7.3E-01	0.58	7.3E-01	3.1E-01	B2	0.1	Tumors
PCB-1254	2.0E+00	0.8	2.0E+00	2.0E+00	B2	--	Liver hepatocellular adenomas, carcinomas, cholangiiomas, or cholangiocarcinomas (rat)
PCB-1260	2.0E+00	0.8	2.0E+00	2.0E+00	B2	--	Liver hepatocellular adenomas, carcinomas, cholangiiomas, 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 U.S. Environmental Protection Agency (EPA) 2000.

BHC = Benzene hexachloride.

COPC = Chemical of potential concern.

DDE = Dichlorodiphonyldichloroethylene.

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 3

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									
Inorganics									
Manganese	1.5E+00	--	1.9E+01	--	--	--	1.4E+00	--	1.4E+00
Organic Explosives									
2,4,6-Trinitrotoluene	1.6E-02	3.1E-02	6.3E+00	1.2E+01	--	--	1.6E-02	3.0E-02	1.6E-02
RDX	9.8E-02	8.3E-03	1.2E+02	9.9E+00	--	--	9.8E-02	8.3E-03	8.3E-03
Organic Pesticides									
Heptachlor Epoxide	4.3E-04	1.0E-04	6.4E-03	1.5E-03	--	--	4.0E-04	9.4E-05	9.4E-05
beta-BHC	--	5.1E-04	--	7.5E-03	--	--	--	4.8E-04	4.8E-04
Organic Volatiles									
Carbon Tetrachloride	2.3E-02	7.1E-03	4.2E-01	1.3E-01	--	3.5E-03	2.2E-02	2.3E-03	2.3E-03
Resident Farmer Adult									
Inorganics									
Manganese	1.7E-01	--	2.2E+00	--	--	--	1.6E-01	--	1.6E-01
Organic Explosives									
2,4,6-Trinitrotoluene	1.8E-03	2.8E-03	7.0E-01	1.1E+00	--	--	1.8E-03	2.8E-03	1.8E-03
RDX	1.1E-02	7.7E-04	1.3E+01	9.1E-01	--	--	1.1E-02	7.7E-04	7.7E-04
Organic Pesticides									
Heptachlor Epoxide	4.7E-05	9.4E-06	7.1E-04	1.4E-04	--	--	4.4E-05	8.8E-06	8.8E-06
beta-BHC	--	4.7E-05	--	7.0E-04	--	--	--	4.4E-05	4.4E-05
Organic Volatiles									
Carbon Tetrachloride	2.6E-03	6.6E-04	4.7E-02	1.2E-02	--	3.2E-04	2.4E-03	2.1E-04	2.1E-04
Resident Farmer Child									
Inorganics									
Manganese	4.8E-02	--	1.0E+00	--	--	--	4.6E-02	--	4.6E-02
Organic Explosives									
2,4,6-Trinitrotoluene	5.2E-04	4.1E-03	3.4E-01	2.6E+00	--	--	5.2E-04	4.0E-03	5.2E-04
RDX	3.1E-03	1.1E-03	6.2E+00	2.2E+00	--	--	3.1E-03	1.1E-03	1.1E-03

Table Q-10. Screening Risk-based RGOs for Groundwater (mg/L) COPCs at Load Line 3

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									
Heptachlor Epoxide	1.4E-05	1.3E-05	3.4E-04	3.4E-04	--	--	1.3E-05	1.3E-05	1.3E-05
beta-BHC	--	6.8E-05	--	1.7E-03	--	--	--	6.5E-05	6.5E-05
Organic Volatiles									
Carbon Tetrachloride	7.3E-04	9.4E-04	2.3E-02	2.9E-02	--	7.0E-04	7.1E-04	3.9E-04	3.9E-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).

BHC = Benzene hexachloride.

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-11. Screening Risk-based RGOs for Surface Water (mg/L) COPCs at Load Line 3

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									
Inorganics									
Arsenic	5.1E-01	3.2E-02	2.0E+00	1.2E-01	--	--	4.1E-01	2.5E-02	2.5E-02
Manganese	7.8E+01	--	1.9E+01	--	--	--	1.5E+01	--	1.5E+01
Hunter/Trapper/Fisher									
Inorganics									
Arsenic	2.2E+00	1.1E-01	2.4E+00	1.2E-01	--	--	1.1E+00	5.9E-02	5.9E-02
Manganese	3.4E+02	--	2.2E+01	--	--	--	2.1E+01	--	2.1E+01
National Guard Trainee									
Inorganics									
Arsenic	2.0E-01	1.2E-02	1.3E-01	8.0E-03	--	--	7.8E-02	4.8E-03	4.8E-03
Manganese	3.0E+01	--	1.2E+00	--	--	--	1.1E+00	--	1.1E+00
Resident Farmer Adult									
Inorganics									
Arsenic	2.2E-02	1.1E-03	8.0E-02	4.1E-03	--	--	1.7E-02	8.9E-04	8.9E-04
Manganese	3.4E+00	--	7.4E-01	--	--	--	6.0E-01	--	6.0E-01
Resident Farmer Child									
Inorganics									
Arsenic	4.7E-03	1.2E-03	4.4E-02	1.1E-02	--	--	4.2E-03	1.1E-03	1.1E-03
Manganese	7.2E-01	--	4.1E-01	--	--	--	2.6E-01	--	2.6E-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-17).

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-12. Screening Risk-based RGOs for Sediment (mg/kg) COPCs at Load Line 3

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									
Inorganics									
Antimony	4.1E+03	--	1.0E+04	--	--	--	2.9E+03	--	2.9E+03
Organic PCBs									
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
Organic Semivolatiles									
Benzo(*a*)pyrene	--	3.9E+01	--	5.1E+00	--	1.0E+06	--	4.5E+00	4.5E+00
Hunter/Trapper/Fisher									
Inorganics									
Antimony	7.7E+03	--	1.4E+04	--	--	--	5.0E+03	--	5.0E+03
Organic PCBs									
PCB-1254	3.8E+02	2.2E+02	3.3E+01	1.9E+01	--	1.0E+06	3.1E+01	1.8E+01	1.8E+01
Organic Semivolatiles									
Benzo(*a*)pyrene	--	6.1E+01	--	5.8E+00	--	1.0E+06	--	5.3E+00	5.3E+00
National Guard Trainee									
Inorganics									
Antimony	2.6E+02	--	4.0E+03	--	--	--	2.5E+02	--	2.5E+02
Organic PCBs									
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
Organic Semivolatiles									
Benzo(*a*)pyrene	--	2.5E+00	--	2.0E+00	--	2.2E+01	--	1.0E+00	1.0E+00
Resident Farmer Adult									
Inorganics									
Antimony	2.9E+01	--	1.9E+02	--	--	--	2.5E+01	--	2.5E+01
Organic PCBs									
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
Organic Semivolatiles									
Benzo(*a*)pyrene	--	2.3E-01	--	7.9E-02	--	1.5E+04	--	5.9E-02	5.9E-02

Table Q-12. Screening Risk-based RGOs for Sediment (mg/kg) COPCs at Load Line 3

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 Child									
Inorganics									
Antimony	3.1E+00	--	2.1E+02	--	--	--	3.1E+00	--	3.1E+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
Organic Semivolatiles									
Benzo(*a*)pyrene	--	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.

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-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 3

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									
Inorganics									
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
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
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
Organic Explosives									
1,3-Dinitrobenzene	1.0E+03	--	1.7E+02	--	--	--	1.5E+02	--	1.5E+02
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
RDX	3.1E+04	2.6E+03	5.2E+03	4.4E+02	--	--	4.4E+03	3.7E+02	3.7E+02
Organic PCBs									
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
Organic Pesticides									
4,4'-DDE	--	8.4E+02	--	1.4E+02	--	--	--	1.2E+02	1.2E+02
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
Endrin	3.1E+03	--	5.2E+02	--	--	--	4.4E+02	--	4.4E+02
Heptachlor	5.1E+03	6.4E+01	8.6E+02	1.1E+01	--	7.6E+05	7.4E+02	9.2E+00	9.2E+00
Heptachlor Epoxide	1.3E+02	3.1E+01	2.2E+01	5.3E+00	--	3.8E+05	1.9E+01	4.5E+00	4.5E+00
Organic Semivolatiles									
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
Benzo(*k*)fluoranthene	--	3.9E+03	--	5.1E+02	--	1.0E+06	--	4.5E+02	4.5E+02

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 3

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}	
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									
Inorganics									
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
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
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
Organic Explosives									
1,3-Dinitrobenzene	1.9E+03	--	2.1E+02	--	--	--	1.9E+02	--	1.9E+02
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
RDX	5.7E+04	4.1E+03	6.4E+03	4.5E+02	--	--	5.8E+03	4.1E+02	4.1E+02
Organic PCBs									
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
Organic Pesticides									
4,4'-DDE	--	1.3E+03	--	1.5E+02	--	--	--	1.3E+02	1.3E+02
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
Endrin	5.7E+03	--	6.4E+02	--	--	--	5.8E+02	--	5.8E+02
Heptachlor	9.6E+03	9.9E+01	1.1E+03	1.1E+01	--	1.0E+06	9.6E+02	1.0E+01	1.0E+01
Heptachlor Epoxide	2.5E+02	4.9E+01	2.8E+01	5.5E+00	--	1.0E+06	2.5E+01	4.9E+00	4.9E+00
Organic Semivolatiles									
2-Methylnaphthalene	7.7E+04	--	8.5E+03	--	--	--	7.7E+03	--	7.7E+03
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

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 3

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(*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									
Inorganics									
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
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
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
Organic Explosives									
1,3-Dinitrobenzene	7.3E+00	--	3.2E+00	--	--	--	2.2E+00	--	2.2E+00
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
RDX	2.2E+02	1.5E+01	9.6E+01	6.8E+00	--	--	6.7E+01	4.7E+00	4.7E+00
Organic PCBs									
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
Organic Pesticides									
4,4'-DDE	--	5.0E+00	--	2.2E+00	--	--	--	1.5E+00	1.5E+00
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
Endrin	2.2E+01	--	9.6E+00	--	--	--	6.7E+00	--	6.7E+00
Heptachlor	3.7E+01	3.8E-01	1.6E+01	1.7E-01	--	1.0E+04	1.1E+01	1.2E-01	1.2E-01
Heptachlor Epoxide	9.5E-01	1.9E-01	4.2E-01	8.2E-02	--	5.0E+03	2.9E-01	5.7E-02	5.7E-02
Organic Semivolatiles									
2-Methylnaphthalene	2.9E+02	--	1.3E+02	--	--	--	8.9E+01	--	8.9E+01

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 3

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	--	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
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
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									
1,3-Dinitrobenzene	7.8E-01	--	3.6E+00	--	--	--	6.4E-01	--	6.4E-01
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
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
Organic Pesticides									
4,4'-DDE	--	2.7E+00	--	1.2E+01	--	--	--	2.2E+00	2.2E+00
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
Endrin	2.3E+00	--	1.1E+01	--	--	--	1.9E+00	--	1.9E+00
Heptachlor	3.9E+00	2.0E-01	1.8E+01	9.2E-01	--	2.2E+04	3.2E+00	1.7E-01	1.7E-01
Heptachlor Epoxide	1.0E-01	1.0E-01	4.6E-01	4.6E-01	--	1.1E+04	8.3E-02	8.2E-02	8.2E-02

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 3

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	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
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
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									
1,3-Dinitrobenzene	2.5E+02	--	4.4E+00	--	--	--	4.3E+00	--	4.3E+00
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
RDX	7.4E+03	6.2E+02	1.3E+02	1.1E+01	--	--	1.3E+02	1.1E+01	1.1E+01
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									
4,4'-DDE	--	2.0E+02	--	3.6E+00	--	--	--	3.6E+00	3.6E+00
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
Endrin	7.4E+02	--	1.3E+01	--	--	--	1.3E+01	--	1.3E+01

Table Q-13. Screening Risk-based RGOs for Shallow Surface Soil (mg/kg) COPCs at Load Line 3

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}	
Heptachlor	1.2E+03	1.5E+01	2.2E+01	2.8E-01	--	4.1E+05	2.2E+01	2.7E-01	2.7E-01
Heptachlor Epoxide	3.2E+01	7.5E+00	5.8E-01	1.4E-01	--	2.0E+05	5.6E-01	1.3E-01	1.3E-01
Organic Semivolatiles									
2-Methylnaphthalene	9.8E+03	--	1.8E+02	--	--	--	1.7E+02	--	1.7E+02
Benz(*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).

COC = Chemical of concern.

COPC = Chemical of potential concern.

DDE = Dichlorodiphonyldichloroethylene.

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 3

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									
Inorganics									
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
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
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
Organic Explosives									
1,3-Dinitrobenzene	6.6E+01	--	6.6E+01	--	--	--	3.3E+01	--	3.3E+01
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
RDX	2.0E+03	1.7E+02	2.0E+03	1.7E+02	--	--	9.9E+02	8.4E+01	8.4E+01
Organic PCBs									
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
Organic Pesticides									
4,4'-DDE	--	5.4E+01	--	5.4E+01	--	--	--	2.7E+01	2.7E+01
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
Endrin	2.0E+02	--	2.0E+02	--	--	--	9.9E+01	--	9.9E+01
Heptachlor	3.3E+02	4.1E+00	3.3E+02	4.1E+00	--	1.5E+01	1.6E+02	1.8E+00	1.8E+00
Heptachlor Epoxide	8.5E+00	2.0E+00	8.6E+00	2.0E+00	--	7.6E+00	4.3E+00	8.9E-01	8.9E-01
Organic Semivolatiles									
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

Table Q-14. Screening Risk-based RGOs for Deep Surface Soil (mg/kg) COPCs at Load Line 3

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(*b*)fluoranthene	--	2.5E+01	--	2.0E+01	--	2.2E+02	--	1.0E+01	1.0E+01
Benzo(*k*)fluoranthene	--	2.5E+02	--	2.0E+02	--	2.2E+03	--	1.0E+02	1.0E+02
Dibenz(*a,h*)anthracene	--	2.5E+00	--	2.0E+00	--	2.2E+01	--	1.0E+00	1.0E+00
Indeno(1,2,3-*cd*)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).

COC = Chemical of concern.

COPC = Chemical of potential concern.

DDE = Dichlorodiphonyldichloroethylene.

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 3

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									
Inorganics									
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
Organic Explosives									
1,3-Dinitrobenzene	7.3E+00	--	3.2E+00	--	--	--	2.2E+00	--	2.2E+00
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
RDX	2.2E+02	1.5E+01	9.6E+01	6.8E+00	--	--	6.7E+01	4.7E+00	4.7E+00
Organic PCBs									
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
Resident Farmer Child									
Inorganics									
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
Organic Explosives									
1,3-Dinitrobenzene	7.8E-01	--	3.6E+00	--	--	--	6.4E-01	--	6.4E-01
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
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

[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.

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-16. Determination of Groundwater (mg/L) COCs at Load Line 3

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									
Inorganics									
Manganese	12 / 12	2.2E+00	1.3E+00	1.4E+00	No	1.6E-01	Yes	4.6E-02	Yes
Organic Explosives									
2,4,6-Trinitrotoluene	2 / 12	8.2E-02	1.9E-02	1.6E-02	Yes	1.8E-03	Yes	5.2E-04	Yes
RDX	3 / 12	7.7E-03	2.1E-03	8.3E-03	No	7.7E-04	Yes	1.1E-03	Yes
Organic Pesticides									
Heptachlor Epoxide	1 / 12	7.5E-05	3.7E-05	9.4E-05	No	8.8E-06	Yes	1.3E-05	Yes
beta-BHC	1 / 12	1.5E-04	5.4E-05	4.8E-04	No	4.4E-05	Yes	6.5E-05	No
Organic Volatiles									
Carbon Tetrachloride	2 / 12	2.5E-04	2.5E-04	2.3E-03	No	2.1E-04	Yes	3.9E-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.

BHC = Benzene hexachloride.

COPC = Chemical of potential concern.

EPC = Exposure point concentration.

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

Table Q-17. Determination of Surface Water (mg/L) COCs at Load Line 3

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] ?
Cobb's Pond Tributary													
Inorganics													
Arsenic	2 / 2	4.7E-03	4.7E-03	2.5E-02	No	4.8E-03	No	5.9E-02	No	8.9E-04	Yes	1.1E-03	Yes
Manganese	2 / 2	7.8E+00	7.8E+00	1.5E+01	No	1.1E+00	Yes	2.1E+01	No	6.0E-01	Yes	2.6E-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-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.

Table Q-18. Determination of Sediment (mg/kg) COCs at Load Line 3

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] ?
Cobb's Pond Tributary													
Inorganics													
Antimony	2 / 5	1.8E+01	1.2E+01	2.9E+03	No	2.5E+02	No	5.0E+03	No	2.5E+01	No	3.1E+00	Yes
Organic PCBs													
PCB-1254	1 / 5	1.8E-01	1.2E-01	1.5E+01	No	3.5E+00	No	1.8E+01	No	2.0E-01	No	1.2E-01	Yes
Organic Semivolatiles													
Benzo(*a*)pyrene	1 / 1	1.4E-01	1.4E-01	4.5E+00	No	1.0E+00	No	5.3E+00	No	5.9E-02	Yes	9.7E-02	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-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.

PCB = Polychlorinated biphenyl.

Table Q-19. Determination of Shallow Surface Soil (mg/kg) COCs at Load Line 3

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] ?
Change Houses													
Inorganics													
Aluminum	6 / 6	1.9E+04	1.6E+04	1.0E+06	No	1.0E+06	No	1.0E+06	No	7.0E+04	No	7.8E+03	Yes
Manganese	6 / 6	2.4E+03	2.0E+03	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Organic PCBs													
PCB-1254	4 / 6	6.3E+00	6.3E+00	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	1.2E-01	Yes
DLA Tanks													
Inorganics													
Antimony	13 / 19	8.3E+02	1.3E+02	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	Yes	3.1E+00	Yes
Arsenic	19 / 19	1.6E+01	1.2E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes
Manganese	19 / 19	2.5E+03	1.3E+03	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Thallium	6 / 19	2.7E+00	5.8E-01	1.3E+02	No	7.7E+02	No	1.4E+03	No	5.7E+00	No	6.2E-01	No
Explosives Handling Areas													
Inorganics													
Aluminum	108 / 108	3.5E+04	9.7E+03	1.0E+06	No	1.0E+06	No	1.0E+06	No	7.0E+04	No	7.8E+03	Yes
Antimony	13 / 78	1.6E+02	6.3E+00	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	No	3.1E+00	Yes
Arsenic	107 / 108	3.4E+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	108 / 108	1.3E+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	105 / 107	2.9E+01	2.0E+00	1.1E+02	No	3.0E+03	No	4.2E+03	No	3.8E+01	No	7.2E+00	No
Chromium	108 / 108	3.2E+02	2.8E+01	8.4E+04	No	1.0E+06	No	1.0E+06	No	4.0E+04	No	1.0E+04	No
Manganese	108 / 108	4.8E+03	9.0E+02	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Thallium	48 / 78	3.5E+00	5.3E-01	1.3E+02	No	7.7E+02	No	1.4E+03	No	5.7E+00	No	6.2E-01	No
Zinc	107 / 108	2.8E+03	2.0E+02	2.6E+05	No	1.0E+06	No	1.0E+06	No	2.0E+04	No	2.3E+03	No
Organic Explosives													
1,3-Dinitrobenzene	1 / 70	4.7E+00	4.7E+00	4.3E+00	Yes	1.5E+02	No	1.9E+02	No	2.2E+00	Yes	6.4E-01	Yes
2,4,6-Trinitrotoluene	52 / 70	3.9E+05	1.5E+04	2.2E+01	Yes	7.4E+02	Yes	9.6E+02	Yes	1.1E+01	Yes	3.2E+00	Yes
2,4-Dinitrotoluene	12 / 70	1.2E+01	1.2E+01	1.8E+00	Yes	6.1E+01	No	6.6E+01	No	7.6E-01	Yes	1.1E+00	Yes
RDX	2 / 70	3.4E+01	3.4E+01	1.1E+01	Yes	3.7E+02	No	4.1E+02	No	4.7E+00	Yes	6.8E+00	Yes
Organic PCBs													
PCB-1254	47 / 71	1.1E+03	4.8E+01	4.4E-01	Yes	1.5E+01	Yes	1.6E+01	Yes	2.0E-01	Yes	1.2E-01	Yes
PCB-1260	6 / 71	1.4E+00	1.4E+00	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	3.5E-01	Yes

Table Q-19. Determination of Shallow Surface Soil (mg/kg) COCs at Load Line 3

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] ?
Organic Pesticides													
Dieldrin	3 / 16	1.2E+00	2.2E-01	7.6E-02	Yes	2.6E+00	No	2.8E+00	No	3.2E-02	Yes	4.7E-02	Yes
Endrin	2 / 16	3.2E+00	5.6E-01	1.3E+01	No	4.4E+02	No	5.8E+02	No	6.7E+00	No	1.9E+00	No
Heptachlor	2 / 16	1.8E-01	4.4E-02	2.7E-01	No	9.2E+00	No	1.0E+01	No	1.2E-01	No	1.7E-01	No
Heptachlor epoxide	1 / 16	9.4E-02	3.4E-02	1.3E-01	No	4.5E+00	No	4.9E+00	No	5.7E-02	No	8.2E-02	No
Organic Semivolatiles													
2-Methylnaphthalene	5 / 28	2.5E+00	5.3E-01	1.7E+02	No	5.9E+03	No	7.7E+03	No	8.9E+01	No	2.6E+01	No
Benz(*a*)anthracene	12 / 28	2.9E+01	3.5E+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 / 28	2.3E+01	2.9E+00	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Benzo(*b*)fluoranthene	16 / 28	2.9E+01	3.6E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
Benzo(*k*)fluoranthene	11 / 28	1.6E+01	2.1E+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	6 / 28	4.1E+00	7.0E-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	7 / 28	1.2E+01	1.6E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
Packaging and Shipping Areas													
Inorganics													
Aluminum	7 / 7	2.4E+04	1.9E+04	1.0E+06	No	1.0E+06	No	1.0E+06	No	7.0E+04	No	7.8E+03	Yes
Antimony	1 / 7	3.4E+01	1.4E+01	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	No	3.1E+00	Yes
Arsenic	7 / 7	1.7E+01	1.4E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes
Barium	7 / 7	8.2E+02	8.2E+02	1.9E+04	No	3.8E+05	No	5.8E+05	No	3.8E+03	No	5.3E+02	Yes
Cadmium	7 / 7	3.7E+01	1.6E+01	1.1E+02	No	3.0E+03	No	4.2E+03	No	3.8E+01	No	7.2E+00	Yes
Manganese	7 / 7	3.3E+03	3.3E+03	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	Yes	3.3E+02	Yes
Organic Explosives													
2,4,6-Trinitrotoluene	2 / 3	8.2E+02	8.2E+02	2.2E+01	Yes	7.4E+02	Yes	9.6E+02	No	1.1E+01	Yes	3.2E+00	Yes
2,4-Dinitrotoluene	1 / 3	1.4E+00	1.4E+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	6 / 7	9.1E+01	9.1E+01	4.4E-01	Yes	1.5E+01	Yes	1.6E+01	Yes	2.0E-01	Yes	1.2E-01	Yes
Organic Semivolatiles													
Benzo(*a*)pyrene	1 / 1	2.1E-01	2.1E-01	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Perimeter Area													
Inorganics													
Antimony	2 / 16	5.4E+00	1.5E+00	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	No	3.1E+00	No

Table Q-19. Determination of Shallow Surface Soil (mg/kg) COCs at Load Line 3

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] ?
Arsenic	19 / 19	1.7E+01	1.2E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes
Barium	19 / 19	7.7E+02	1.7E+02	1.9E+04	No	3.8E+05	No	5.8E+05	No	3.8E+03	No	5.3E+02	No
Cadmium	12 / 19	7.7E+01	1.2E+01	1.1E+02	No	3.0E+03	No	4.2E+03	No	3.8E+01	No	7.2E+00	Yes
Manganese	19 / 19	1.9E+03	1.1E+03	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Organic Explosives													
RDX	1 / 3	2.2E+01	2.2E+01	1.1E+01	Yes	3.7E+02	No	4.1E+02	No	4.7E+00	Yes	6.8E+00	Yes
Organic PCBs													
PCB-1254	3 / 8	1.1E+02	4.2E+01	4.4E-01	Yes	1.5E+01	Yes	1.6E+01	Yes	2.0E-01	Yes	1.2E-01	Yes
Organic Pesticides													
4,4'-DDE	1 / 2	3.2E+00	3.2E+00	3.6E+00	No	1.2E+02	No	1.3E+02	No	1.5E+00	Yes	2.2E+00	Yes
Heptachlor	1 / 2	1.8E-01	1.8E-01	2.7E-01	No	9.2E+00	No	1.0E+01	No	1.2E-01	Yes	1.7E-01	Yes
Organic Semivolatiles													
Benz(*a*)anthracene	2 / 3	6.9E-01	6.9E-01	1.3E+00	No	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	No
Benzo(*a*)pyrene	2 / 3	7.0E-01	7.0E-01	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Benzo(*b*)fluoranthene	2 / 3	9.8E-01	9.8E-01	1.3E+00	No	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
Dibenz(*a,h*)anthracene	2 / 3	9.7E-02	9.7E-02	1.3E-01	No	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	No
Preparation and Receiving Areas													
Inorganics													
Antimony	7 / 15	1.8E+01	5.1E+00	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	No	3.1E+00	Yes
Arsenic	15 / 15	1.6E+01	1.3E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes
Cadmium	15 / 15	6.8E+00	6.8E+00	1.1E+02	No	3.0E+03	No	4.2E+03	No	3.8E+01	No	7.2E+00	No
Copper	15 / 15	3.3E+02	1.1E+02	6.3E+04	No	3.9E+05	No	7.0E+05	No	2.9E+03	No	3.1E+02	No
Manganese	15 / 15	1.6E+03	9.3E+02	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Thallium	14 / 15	1.1E+00	6.5E-01	1.3E+02	No	7.7E+02	No	1.4E+03	No	5.7E+00	No	6.2E-01	Yes
Organic Explosives													
RDX	1 / 10	3.1E+01	9.0E+00	1.1E+01	No	3.7E+02	No	4.1E+02	No	4.7E+00	Yes	6.8E+00	Yes
Organic PCBs													
PCB-1254	10 / 15	1.4E+01	1.2E+01	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	1.2E-01	Yes
PCB-1260	2 / 15	2.3E-01	2.3E-01	4.4E-01	No	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	3.5E-01	No
Organic Semivolatiles													
Benzo(*a*)pyrene	3 / 9	6.1E-01	3.7E-01	1.3E-01	Yes	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes

Table Q-19. Determination of Shallow Surface Soil (mg/kg) COCs at Load Line 3

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] ?
Benzo(*b*)fluoranthene	3 / 9	9.6E-01	5.2E-01	1.3E+00	No	4.5E+01	No	4.8E+01	No	5.9E-01	No	9.7E-01	No
Dibenz(*a,h*)anthracene	2 / 9	8.3E-02	8.3E-02	1.3E-01	No	4.5E+00	No	4.8E+00	No	5.9E-02	Yes	9.7E-02	No
West Ditches													
Inorganics													
Antimony	1 / 11	1.8E+02	4.6E+01	2.1E+02	No	2.9E+03	No	4.8E+03	No	2.5E+01	Yes	3.1E+00	Yes
Arsenic	16 / 16	2.2E+01	1.7E+01	2.6E+00	Yes	6.9E+01	No	8.1E+01	No	6.7E-01	Yes	5.7E-01	Yes
Copper	11 / 11	1.1E+03	2.9E+02	6.3E+04	No	3.9E+05	No	7.0E+05	No	2.9E+03	No	3.1E+02	No
Manganese	16 / 16	4.6E+03	2.0E+03	7.5E+03	No	1.7E+05	No	2.6E+05	No	2.0E+03	No	3.3E+02	Yes
Organic Explosives													
2,4,6-Trinitrotoluene	7 / 10	1.1E+02	3.2E+01	2.2E+01	Yes	7.4E+02	No	9.6E+02	No	1.1E+01	Yes	3.2E+00	Yes
Organic PCBs													
PCB-1254	6 / 9	3.6E+01	1.3E+01	4.4E-01	Yes	1.5E+01	No	1.6E+01	No	2.0E-01	Yes	1.2E-01	Yes
Organic Pesticides													
Dieldrin	1 / 5	5.8E-02	5.8E-02	7.6E-02	No	2.6E+00	No	2.8E+00	No	3.2E-02	Yes	4.7E-02	Yes
Organic Semivolatiles													
Benz(*a*)anthracene	5 / 5	5.3E+00	5.3E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
Benzo(*a*)pyrene	5 / 5	4.5E+00	4.5E+00	1.3E-01	Yes	4.5E+00	Yes	4.8E+00	No	5.9E-02	Yes	9.7E-02	Yes
Benzo(*b*)fluoranthene	5 / 5	6.5E+00	6.5E+00	1.3E+00	Yes	4.5E+01	No	4.8E+01	No	5.9E-01	Yes	9.7E-01	Yes
Dibenz(*a,h*)anthracene	3 / 5	6.7E-01	6.7E-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	4 / 5	1.9E+00	1.9E+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.

COPC = Chemical of potential concern.

DDE = Dichlorodiphonyldichloroethylene.

DLA = Defense Logistics Agency.

EPC = Exposure point concentration.

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 3

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO[a]	COC[b] ?
Change Houses					
Inorganics					
Aluminum	6 / 6	1.9E+04	1.6E+04	3.5E+03	Yes
Manganese	6 / 6	2.4E+03	2.0E+03	3.5E+01	Yes
Organic PCBs					
PCB-1254	4 / 6	6.3E+00	6.3E+00	3.5E+00	Yes
DLA Tanks					
Inorganics					
Antimony	13 / 19	8.3E+02	1.3E+02	2.5E+02	No
Arsenic	19 / 19	1.6E+01	1.2E+01	3.1E+00	Yes
Manganese	19 / 19	2.5E+03	1.3E+03	3.5E+01	Yes
Thallium	6 / 19	2.7E+00	5.8E-01	5.2E+01	No
Explosives Handling Areas					
Inorganics					
Aluminum	130 / 130	3.5E+04	9.5E+03	3.5E+03	Yes
Antimony	14 / 100	1.6E+02	5.1E+00	2.5E+02	No
Arsenic	129 / 130	3.4E+01	1.3E+01	3.1E+00	Yes
Barium	130 / 130	1.3E+03	1.4E+02	3.5E+02	No
Cadmium	125 / 129	2.9E+01	1.7E+00	1.1E+01	No
Chromium	130 / 130	3.2E+02	2.6E+01	5.6E+05	No
Manganese	130 / 130	4.8E+03	8.7E+02	3.5E+01	Yes
Thallium	60 / 98	3.5E+00	4.9E-01	5.2E+01	No
Zinc	129 / 130	2.8E+03	1.8E+02	1.9E+05	No
Organic Explosives					
1,3-Dinitrobenzene	2 / 83	4.7E+00	4.7E+00	3.3E+01	No
2,4,6-Trinitrotoluene	64 / 83	3.9E+05	1.3E+04	1.6E+02	Yes
2,4-Dinitrotoluene	17 / 83	1.2E+01	1.2E+01	1.4E+01	No
RDX	5 / 83	3.4E+01	3.4E+01	8.4E+01	No

Table Q-20. Determination of Deep Surface Soil (mg/kg) COCs at Load Line 3

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO[a]	COC[b] ?
Organic PCBs					
PCB-1254	49 / 74	1.1E+03	4.6E+01	3.5E+00	Yes
PCB-1260	6 / 74	1.4E+00	1.4E+00	3.5E+00	No
Organic Pesticides					
Dieldrin	3 / 16	1.2E+00	2.2E-01	5.1E-01	No
Endrin	2 / 16	3.2E+00	5.6E-01	9.9E+01	No
Heptachlor	2 / 16	1.8E-01	4.4E-02	1.8E+00	No
Heptachlor Epoxide	1 / 16	9.4E-02	3.4E-02	8.9E-01	No
Organic Semivolatiles					
2-Methylnaphthalene	5 / 28	2.5E+00	5.3E-01	1.3E+03	No
Benz(*a*)anthracene	12 / 28	2.9E+01	3.5E+00	1.0E+01	No
Benzo(*a*)pyrene	11 / 28	2.3E+01	2.9E+00	1.0E+00	Yes
Benzo(*b*)fluoranthene	16 / 28	2.9E+01	3.6E+00	1.0E+01	No
Benzo(*k*)fluoranthene	11 / 28	1.6E+01	2.1E+00	1.0E+02	No
Dibenz(*a,h*)anthracene	6 / 28	4.1E+00	7.0E-01	1.0E+00	No
Indeno(1,2,3-*cd*)pyrene	7 / 28	1.2E+01	1.6E+00	1.0E+01	No
Packaging and Shipping Areas					
Inorganics					
Aluminum	7 / 7	2.4E+04	1.9E+04	3.5E+03	Yes
Antimony	1 / 7	3.4E+01	1.4E+01	2.5E+02	No
Arsenic	7 / 7	1.7E+01	1.4E+01	3.1E+00	Yes
Barium	7 / 7	8.2E+02	8.2E+02	3.5E+02	Yes
Cadmium	7 / 7	3.7E+01	1.6E+01	1.1E+01	Yes
Manganese	7 / 7	3.3E+03	3.3E+03	3.5E+01	Yes
Organic Explosives					
2,4,6-Trinitrotoluene	2 / 3	8.2E+02	8.2E+02	1.6E+02	Yes
2,4-Dinitrotoluene	1 / 3	1.4E+00	1.4E+00	1.4E+01	No

Table Q-20. Determination of Deep Surface Soil (mg/kg) COCs at Load Line 3

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO[a]	COC[b] ?
Organic PCBs					
PCB-1254	6 / 7	9.1E+01	9.1E+01	3.5E+00	Yes
Organic Semivolatiles					
Benzo(*a*)pyrene	1 / 1	2.1E-01	2.1E-01	1.0E+00	No
Perimeter Area					
Inorganics					
Antimony	2 / 18	5.4E+00	1.4E+00	2.5E+02	No
Arsenic	21 / 21	2.4E+01	1.3E+01	3.1E+00	Yes
Barium	21 / 21	7.7E+02	1.8E+02	3.5E+02	No
Cadmium	13 / 21	7.7E+01	1.2E+01	1.1E+01	Yes
Manganese	21 / 21	1.9E+03	9.4E+02	3.5E+01	Yes
Organic Explosives					
2,4,6-Trinitrotoluene	4 / 5	5.0E+02	5.0E+02	1.6E+02	Yes
RDX	2 / 5	3.8E+01	2.9E+01	8.4E+01	No
Organic PCBs					
PCB-1254	3 / 8	1.1E+02	4.2E+01	3.5E+00	Yes
Organic Pesticides					
4,4'-DDE	1 / 2	3.2E+00	3.2E+00	2.7E+01	No
Heptachlor	1 / 2	1.8E-01	1.8E-01	1.8E+00	No
Organic Semivolatiles					
Benz(*a*)anthracene	2 / 3	6.9E-01	6.9E-01	1.0E+01	No
Benzo(*a*)pyrene	2 / 3	7.0E-01	7.0E-01	1.0E+00	No
Benzo(*b*)fluoranthene	2 / 3	9.8E-01	9.8E-01	1.0E+01	No
Dibenz(*a,h*)anthracene	2 / 3	9.7E-02	9.7E-02	1.0E+00	No
Preparation and Receiving Areas					
Inorganics					
Antimony	7 / 18	1.8E+01	4.3E+00	2.5E+02	No
Arsenic	18 / 18	2.4E+01	1.4E+01	3.1E+00	Yes

Table Q-20. Determination of Deep Surface Soil (mg/kg) COCs at Load Line 3

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO[a]	COC[b] ?
Cadmium	17 / 18	6.8E+00	5.9E+00	1.1E+01	No
Copper	18 / 18	3.3E+02	9.1E+01	2.6E+04	No
Manganese	18 / 18	1.6E+03	7.4E+02	3.5E+01	Yes
Thallium	14 / 18	1.1E+00	5.4E-01	5.2E+01	No
Organic Explosives					
RDX	1 / 10	3.1E+01	9.0E+00	8.4E+01	No
Organic PCBs					
PCB-1254	10 / 15	1.4E+01	1.2E+01	3.5E+00	Yes
PCB-1260	2 / 15	2.3E-01	2.3E-01	3.5E+00	No
Organic Semivolatiles					
Benzo(*a*)pyrene	3 / 9	6.1E-01	3.7E-01	1.0E+00	No
Benzo(*b*)fluoranthene	3 / 9	9.6E-01	5.2E-01	1.0E+01	No
Dibenz(*a,h*)anthracene	2 / 9	8.3E-02	8.3E-02	1.0E+00	No
West Ditches					
Inorganics					
Antimony	1 / 11	1.8E+02	4.6E+01	2.5E+02	No
Arsenic	16 / 16	2.2E+01	1.7E+01	3.1E+00	Yes
Copper	11 / 11	1.1E+03	2.9E+02	2.6E+04	No
Manganese	16 / 16	4.6E+03	2.0E+03	3.5E+01	Yes
Organic Explosives					
2,4,6-Trinitrotoluene	7 / 10	1.1E+02	3.2E+01	1.6E+02	No
Organic PCBs					
PCB-1254	6 / 9	3.6E+01	1.3E+01	3.5E+00	Yes
Organic Pesticides					
Dieldrin	1 / 5	5.8E-02	5.8E-02	5.1E-01	No
Organic Semivolatiles					
Benz(*a*)anthracene	5 / 5	5.3E+00	5.3E+00	1.0E+01	No
Benzo(*a*)pyrene	5 / 5	4.5E+00	4.5E+00	1.0E+00	Yes

Table Q-20. Determination of Deep Surface Soil (mg/kg) COCs at Load Line 3

COPC	Frequency of Detection	Maximum Detected	EPC	National Guard Trainee	
				Screening RGO[a]	COC[b] ?
Benzo(*b*)fluoranthene	5 / 5	6.5E+00	6.5E+00	1.0E+01	No
Dibenz(*a,h*)anthracene	3 / 5	6.7E-01	6.7E-01	1.0E+00	No
Indeno(1,2,3-*cd*)pyrene	4 / 5	1.9E+00	1.9E+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.

COPC = Chemical of potential concern.

DDE = Dichlorodiphonyldichloroethylene.

DLA = Defense Logistics Agency.

EPC = Exposure point concentration.

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 3

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							
Inorganics							
Arsenic	22 / 22	2.4E+01	1.5E+01	6.7E-01	Yes	5.7E-01	Yes
Organic Explosives							
1,3-Dinitrobenzene	1 / 13	1.4E+00	4.5E-01	2.2E+00	No	6.4E-01	No
2,4,6-Trinitrotoluene	12 / 13	2.7E+02	1.2E+02	1.1E+01	Yes	3.2E+00	Yes
2,4-Dinitrotoluene	5 / 13	1.5E+00	5.6E-01	7.6E-01	No	1.1E+00	No
Organic PCBs							
PCB-1254	2 / 3	3.5E+01	3.5E+01	2.0E-01	Yes	1.2E-01	Yes
Perimeter Area							
Inorganics							
Arsenic	2 / 2	2.4E+01	2.4E+01	6.7E-01	Yes	5.7E-01	Yes
Cadmium	1 / 2	2.1E+01	2.1E+01	3.8E+01	No	7.2E+00	Yes
Organic Explosives							
2,4,6-Trinitrotoluene	2 / 2	5.0E+02	5.0E+02	1.1E+01	Yes	3.2E+00	Yes
RDX	1 / 2	3.8E+01	3.8E+01	4.7E+00	Yes	6.8E+00	Yes
Preparation and Receiving Areas							
Inorganics							
Arsenic	3 / 3	2.4E+01	2.4E+01	6.7E-01	Yes	5.7E-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-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.

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

Table Q-22. Calculations of Blood Lead Concentrations (PbBs) for Load Line 3 Shallow Surface Soil at the DLA Tanks
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation[a] 1*	PbB Equation[a] 2**	Description of Exposure Variable	Units	Security Guard/ Maintenance Worker GSDi = 1.8	Security Guard/ Maintenance Worker GSDi = 2.1	Resident Farmer Adult GSDi = 1.8	Resident Farmer Adult GSDi = 2.1	Resident Farmer Child[b] GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	300.6	300.6	300.6	300.6	300.6
$R_{fetal/maternal}$	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**	**3.2**	**2.7**	**3.6**	**3.1**	**7.0**
$PbB_{fetal, 0.95}$	**95th percentile PbB among fetuses of adult workers**			**ug/dL**	**7.5**	**8.2**	**8.5**	**9.4**	**--**
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**			**%**	**1.7%**	**2.8%**	**2.7%**	**4.2%**	**22.4%**

[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.

DLA = Defense Logistics Agency.
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 3 Shallow Surface Soil at the Explosives Handling Areas
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation[a] 1*	PbB Equation[a] 2**	Description of Exposure Variable	Units	Security Guard/ Maintenance Worker GSDi = 1.8	Security Guard/ Maintenance Worker GSDi = 2.1	Resident Farmer Adult GSDi = 1.8	Resident Farmer Adult GSDi = 2.1	Resident Farmer Child[b] GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	172.1	172.1	172.1	172.1	172.1
$R_{fetal/maternal}$	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**	**3.0**	**2.5**	**4.8**
$PbB_{fetal,\ 0.95}$	**95th percentile PbB among fetuses of adult workers**			**ug/dL**	**6.5**	**6.9**	**7.1**	**7.6**	**--**
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**			**%**	**0.9%**	**1.6%**	**1.3%**	**2.2%**	**6.1%**

[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 3 Shallow Surface Soil at the Packaging and Shipping Areas
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation[a] 1*	PbB Equation[a] 2**	Description of Exposure Variable	Units	Security Guard/ Maintenance Worker GSDi = 1.8	Security Guard/ Maintenance Worker GSDi = 2.1	Resident Farmer Adult GSDi = 1.8	Resident Farmer Adult GSDi = 2.1	Resident Farmer Child[b] GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	679.2	679.2	679.2	679.2	679.2
$R_{fetal/maternal}$	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**	**4.4**	**3.9**	**5.3**	**4.8**	**12.4**
$PbB_{fetal,0.95}$	**95th percentile PbB among fetuses of adult workers**			**ug/dL**	**10.5**	**12.0**	**12.6**	**14.7**	**--**
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**			**%**	**5.9%**	**8.1%**	**10.5%**	**13.1%**	**67.3%**

[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 3 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**			GSDi = 1.8	GSDi = 2.1	GSDi = 1.8	GSDi = 2.1	GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	399.8	399.8	399.8	399.8	399.8
$R_{fetal/maternal}$	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**	**3.5**	**3.0**	**4.0**	**3.5**	**8.5**
$PbB_{fetal, 0.95}$	**95th percentile PbB among fetuses of adult workers**			**ug/dL**	**8.3**	**9.2**	**9.6**	**10.8**	**--**
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**			**%**	**2.5%**	**3.9%**	**4.3%**	**6.2%**	**36.8%**

[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-26. Calculations of Blood Lead Concentrations (PbBs) for Load Line 3 Shallow Surface Soil at the Preparation and Receiving Areas
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation[a] 1*	PbB Equation[a] 2**	Description of Exposure Variable	Units	Security Guard/ Maintenance Worker GSDi = 1.8	Security Guard/ Maintenance Worker GSDi = 2.1	Resident Farmer Adult GSDi = 1.8	Resident Farmer Adult GSDi = 2.1	Resident Farmer Child[b] GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	398.2	398.2	398.2	398.2	398.2
$R_{fetal/maternal}$	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**	**3.5**	**3.0**	**4.0**	**3.5**	**8.5**
$PbB_{fetal,\ 0.95}$	**95th percentile PbB among fetuses of adult workers**			**ug/dL**	**8.3**	**9.2**	**9.5**	**10.8**	**--**
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**			**%**	**2.5%**	**3.9%**	**4.2%**	**6.1%**	**36.6%**

[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-27. Calculations of Blood Lead Concentrations (PbBs) for Load Line 3 Shallow Surface Soil at the West Ditches
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation[a] 1*	PbB Equation[a] 2**	Description of Exposure Variable	Units	Security Guard/ Maintenance Worker GSDi = 1.8	Security Guard/ Maintenance Worker GSDi = 2.1	Resident Farmer Adult GSDi = 1.8	Resident Farmer Adult GSDi = 2.1	Resident Farmer Child[b] GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	175.6	175.6	175.6	175.6	175.6
$R_{fetal/maternal}$	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**	**3.0**	**2.5**	**4.9**
$PbB_{fetal,\ 0.95}$	**95th percentile PbB among fetuses of adult workers**			**ug/dL**	**6.6**	**6.9**	**7.1**	**7.7**	**--**
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**			**%**	**0.9%**	**1.6%**	**1.3%**	**2.2%**	**6.4%**

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

Table Q-28. Calculations of Blood Lead Concentrations (PbBs) for Load Line 3 Subsurface Soil at the Perimeter Area
EPA Technical Review Workgroup for Lead, Adult Lead Committee

Exposure Variable	PbB Equation[a] 1*	PbB Equation[a] 2**	Description of Exposure Variable	Units	Resident Farmer Adult GSDi = 1.8	Resident Farmer Adult GSDi = 2.1	Resident Farmer Child[b] GSDi = 1.6
PbS	X	X	Soil lead concentration	mg/kg	530	530	530
$R_{fetal/maternal}$	X	X	Fetal/maternal PbB ratio	--	0.9	0.9	--
BKSF	X	X	Biokinetic Slope Factor	ug/dL per ug/d	0.4	0.4	--
GSD_i	X	X	Geometric standard deviation PbB	--	1.8	2.1	1.6
PbB_0	X	X	Baseline PbB	ug/dL	2.2	1.7	--
IR_S	X		Soil ingestion rate (including soil-derived indoor dust)	g/d	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	--
$EF_{S,D}$	X	X	Exposure frequency (same for soil and dust)	d/year	350	350	--
$AT_{S,D}$	X	X	Averaging time (same for soil and dust)	d/year	365	365	--
PbB	**PbB of receptor, geometric mean**			**ug/dL**	**4.6**	**4.1**	**10.4**
$PbB_{fetal, 0.95}$	**95th percentile PbB among fetuses of adult workers**			**ug/dL**	**11.0**	**12.6**	**--**
PbB_t	**Target PbB level of concern (e.g., 10 ug/dL)**			**ug/dL**	**10**	**10**	**10**
P(PbB > PbB_t)	**Probability that PbB > PbB_t, assuming lognormal distribution**			**%**	**6.9%**	**9.2%**	**53.3%**

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