

Appendix H

DRAS Reports

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H.1 – DRAS v.2 Run for Delisting COCs

Site and WMU Information

Delisting Petition Number:

DL-

File Name:

2-20-08, COCs 14 Metals, Max values used

Petitioner's Name:

Peoria Disposal Company

Address 1:

4349 W. Southport Road

Address 2:

City, State:

Peoria,

Zip Code:

61615

Analysis Performed by:

RMT Inc.

Date of Analysis:

Feb-20-2008

Waste Description:

EAF Dust Stabilized Residue

Waste Code:

K061

WMU Type:

Landfill

Waste Volume (yd³):

95000

Active Life (years):

20

Risk Factor:

1.00E-06

HQ Factor:

1.00E+00

Select Chemicals of Concern to be Modeled (Steps 4 5)

Chemical Name	CAS Number	TCLP Concentration (mg/L)	TCLP Detection Limit	Total Concentration (mg/kg)	Total Detection Limit	Maximum Contaminant Level (MCL) (mg/L)	Carcinogenic Slope Factor - Oral (CSFo) (kg-day/mg)	Carcinogenic Slope Factor - Inhalation (CSFi) (kg-day/mg)	Reference Dose - Oral (RFDo) (mg/kg-day)	Reference Dose - Inhalation (RFDi) (mg/m ³)	Bio-concentration Factor (BCF) (L/kg)	Soil Saturation Level (SOILSAT) (mg/kg)	Toxicity Characteristic Level (TCL) (mg/L)	Henry's Law Coefficient (H) (atm·m ³ /mol·K)	Diffusion Coefficient in Water (Dw) (cm ² /sec)
Barium	7440-39-3	6.30E-01	0.00E+00	2.00E+02	0.00E+00	2.00E+00	0.00E+00	0.00E+00	2.00E-01	1.43E-03	1.00E+00	0.00E+00	1.00E+02	0.00E+00	8.26E-06
Beryllium	7440-41-8	3.40E-04	0.00E+00	2.30E-01	0.00E+00	4.00E-03	0.00E+00	8.40E+00	2.00E-03	6.00E-06	4.20E+01	0.00E+00	0.00E+00	0.00E+00	5.08E-05
Cadmium	7440-43-9	9.20E-02	0.00E+00	2.10E+02	0.00E+00	5.00E-03	0.00E+00	6.30E+00	5.00E-04	0.00E+00	2.50E+02	0.00E+00	1.00E+00	0.00E+00	9.45E-06
Selenium	7782-49-2	3.80E-02	0.00E+00	9.00E+01	0.00E+00	5.00E-02	0.00E+00	0.00E+00	5.00E-03	0.00E+00	1.29E+02	0.00E+00	1.00E+00	0.00E+00	1.20E-05
Lead	7439-92-1	3.60E-01	0.00E+00	9.60E+03	0.00E+00	1.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E+00	0.00E+00	6.28E-06
Thallium	7440-28-0	9.30E-03	0.00E+00	1.40E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	6.60E-05	0.00E+00	1.40E+03	0.00E+00	0.00E+00	0.00E+00	6.84E-06
Vanadium	7440-62-2	1.00E-02	0.00E+00	1.80E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-06
Nickel	7440-02-0	6.90E-02	0.00E+00	1.70E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	3.08E+02	0.00E+00	0.00E+00	0.00E+00	1.46E-05
Silver	7440-22-4	7.50E-04	0.00E+00	2.50E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-03	0.00E+00	2.04E+02	0.00E+00	5.00E+00	0.00E+00	9.71E-06
Zinc	7440-68-6	4.10E+00	0.00E+00	1.20E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-01	0.00E+00	6.54E+02	0.00E+00	0.00E+00	0.00E+00	1.36E-05
Chromium	7440-47-4	9.50E-02	0.00E+00	1.80E+03	0.00E+00	1.00E-01	0.00E+00	0.00E+00	1.50E+00	0.00E+00	2.83E+02	0.00E+00	5.00E+00	0.00E+00	8.00E-06
Mercury	7439-97-6	2.40E-02	0.00E+00	1.50E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	1.00E-04	6.60E-05	0.00E+00	0.00E+00	2.00E-01	7.10E-03	3.01E-05
Antimony	7440-38-0	2.10E-02	0.00E+00	3.20E+01	0.00E+00	6.00E-03	0.00E+00	0.00E+00	4.80E-04	0.00E+00	4.00E+01	0.00E+00	0.00E+00	0.00E+00	8.96E-06
Arsenic	7440-38-2	3.70E-03	0.00E+00	2.20E+01	0.00E+00	1.00E-02	1.50E+00	1.51E+01	3.00E-04	0.00E+00	2.00E+01	0.00E+00	5.00E+00	0.00E+00	1.24E-05

Select Chemicals of Concern to be Modeled (Steps 4-5)

Diffusion Coefficient in Air (Da) (cm ² /sec)	Solubility (SOL) (mg/L)	Landfill Dilution Attenuation Factor (DAFLF)	Surface Impoundment Dilution Attenuation Factor (DAFSI)	Time to reach steady state (T*) (hrs)	Skin Permeability Coefficient (Kpw) (cm/hr)	Tau (T) (hrs)	Bunge Coefficient (B) (unitless)	Organic/Inorganic	Bio-accumulation Factor (BAF) (L/kg)	Chronic Ecological Threshold (Aquatic TRV) (mg/L)	Carcinogen/Noncarcinogen	Molecular Weight (MW) (gm/mol)	Vapor Pressure (Vp) (atm)	Surface Water Partition Coefficient (Kdsw) (L/kg)
7.14E-02	0.00E+00	2.78E+01	1.11E+01	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	3.90E-03	Noncarcinogen	1.37E+02	0.00E+00	4.10E+01
4.39E-01	0.00E+00	1.04E+02	4.14E+01	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	5.10E-03	Noncarcinogen	9.01E+00	0.00E+00	7.90E+02
4.18E-02	0.00E+00	3.00E+01	1.20E+01	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	2.20E-03	Noncarcinogen	1.12E+02	0.00E+00	4.50E+00
1.03E-01	0.00E+00	1.16E+01	4.80E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	5.00E-03	Noncarcinogen	7.90E+01	0.00E+00	4.30E+00
5.43E-02	0.00E+00	5.00E+03	2.00E+03	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	2.50E-03	Noncarcinogen	2.07E+02	0.00E+00	9.00E+02
5.48E-02	0.00E+00	4.40E+01	1.67E+01	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	4.00E-03	Noncarcinogen	2.04E+02	0.00E+00	7.10E+01
8.00E-02	0.00E+00	8.03E-01	3.19E+01	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.90E-02	Noncarcinogen	5.09E+01	0.00E+00	5.00E+01
1.26E-01	0.00E+00	3.76E+01	1.50E+01	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	5.20E-02	Noncarcinogen	5.87E+01	0.00E+00	6.50E+01
8.39E-02	0.00E+00	2.05E+01	8.20E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.20E-01	Noncarcinogen	1.08E+02	0.00E+00	8.30E+00
1.17E-01	0.00E+00	2.49E+01	9.80E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.20E-01	Noncarcinogen	8.54E+01	0.00E+00	6.20E+00
8.09E-02	0.00E+00	3.85E+03	1.53E+03	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	7.40E-02	Noncarcinogen	5.20E+01	0.00E+00	1.80E+06
1.09E-02	5.62E-02	7.45E+01	2.96E+01	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.02E+06	7.70E-04	Noncarcinogen	2.01E+02	2.83E-06	1.00E+05
7.73E-02	0.00E+00	3.43E+01	1.36E+01	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.60E-01	Noncarcinogen	1.22E+02	0.00E+00	4.50E+01
1.07E-01	0.00E+00	1.92E+01	7.70E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.50E-01	Carcinogen	7.49E+01	0.00E+00	2.90E+01

List of COCs with Altered Chemical Properties

Chemical Name	CAS Number	Parameter Modified	Parameter Symbol	Parameter Units	Original Value	Modified Value
Barium	7440-39-3	Oral Reference Dose	RFD _o	mg/kg-day	0.07	0.2
Barium	7440-39-3	Inhalation Reference Dose	RFC	mg/m ³	0.0005	0.00143
Beryllium	7440-41-8	Inhalation Reference Dose	RFC	mg/m ³	0.00002	0.000006
Thallium	7440-28-0	Oral Reference Dose	RFD _o	mg/kg-day	0.00008	0.000066
Vanadium	7440-62-2	Oral Reference Dose	RFD _o	mg/kg-day	0.007	0.001
Arsenic	7440-38-2	Maximum Concentration Level	MCL	mg/L	0.05	0.01

Pathways Exceeding the Delisting Limits

Exceeding Pathways Analysis - Chemicals that exceed the delisting level listed by exceeding pathway							
Chemical Name	CAS Number	Actual TCLP Concentration (mg/L)	Limiting TCLP Concentration (mg/L)	Limiting TCLP Pathway	Actual Total Concentration (mg/kg)	Limiting Total Concentration (mg/Kg)	Limiting Total Pathway
Mercury	7439-97-6	---	---	---	1.50E+00	9.01E-02	Fish Ingestion
Arsenic	7440-38-2	3.70E-03	9.36E-04	GW Ingestion	---	---	---

Limiting Pathways

Detection Limit Analysis - Toxicity of Petitioned Waste cannot be confirmed if Detection Limits fall below maximum allowable concentration					
Chemical Name	CAS Number	Maximum Allowable TCLP Concentration (mg/L)	Maximum Allowable TCLP Pathway	Maximum Allowable Total Concentration (mg/Kg)	Maximum Allowable Total Pathway
Barium	7440-39-3	5.57E+01	MCL	2.62E+06	Air Particulate Inhalation
Beryllium	7440-41-8	4.16E-01	MCL	1.10E+04	Air Particulate Inhalation
Cadmium	7440-43-9	1.50E-01	MCL	4.02E+03	Fish Ingestion
Selenium	7782-49-2	5.80E-01	MCL	7.79E+04	Fish Ingestion
Lead	7439-92-1	7.50E+01	MCL	4.39E+04	Air Particulate Inhalation
Thallium	7440-28-0	8.80E-02	MCL	9.47E+01	Fish Ingestion
Vanadium	7440-62-2	3.02E+00	Groundwater Ingestion	1.28E+05	Soil Ingestion
Nickel	7440-02-0	2.83E+01	Groundwater Ingestion	1.30E+05	Fish Ingestion
Silver	7440-22-4	3.84E+00	Groundwater Ingestion	4.93E+04	Fish Ingestion
Zinc	7440-66-6	2.80E+02	Groundwater Ingestion	9.22E+05	Fish Ingestion
Chromium	7440-47-4	3.85E+02	MCL	4.77E+05	Fish Ingestion
Mercury	7439-97-6	8.14E-02	Groundwater Inhalation	9.01E-02	Fish Ingestion
Antimony	7440-36-0	2.06E-01	MCL	2.01E+04	Fish Ingestion
Arsenic	7440-38-2	9.36E-04	Groundwater Ingestion	1.68E+02	Fish Ingestion

Aggregate Risk and Hazard Quotient Results

Chemical Name	CAS Number	Petitioned Waste Aggregate Non-carcinogenic Hazard			Petitioned Waste Aggregate Carcinogenic Risk		
		Aggregate HI-Groundwater Pathways	Aggregate HI-Surface Pathways	Total Aggregate Hazard Index	Aggregate Risk-Groundwater Pathways	Aggregate Risk-Surface Pathways	Total Aggregate Risk
Barium	7440-39-3	3.01E-03	8.51E-05	3.10E-03	---	---	---
Beryllium	7440-41-8	4.35E-05	2.19E-05	6.55E-05	---	1.62E-10	1.62E-10
Cadmium	7440-43-9	1.63E-01	3.68E-03	1.67E-01	---	1.11E-07	1.11E-07
Selenium	7782-49-2	1.75E-02	1.58E-04	1.76E-02	---	---	---
Lead	7439-92-1	---	---	---	---	---	---
Thallium	7440-28-0	8.53E-02	1.86E-04	8.55E-02	---	---	---
Vanadium	7440-62-2	3.32E-03	1.58E-03	4.89E-03	---	---	---
Nickel	7440-02-0	2.44E-03	7.45E-05	2.52E-03	---	---	---
Silver	7440-22-4	1.95E-04	4.38E-05	2.39E-04	---	---	---
Zinc	7440-66-6	1.46E-02	3.51E-03	1.81E-02	---	---	---
Chromium	7440-47-4	4.38E-07	9.95E-06	1.04E-05	---	---	---
Mercury	7439-97-6	5.82E-01	3.48E+00	4.06E+00	---	---	---
Antimony	7440-36-0	4.08E-02	8.54E-04	4.16E-02	---	---	---
Arsenic	7440-38-2	1.71E-02	6.43E-04	1.77E-02	3.95E-06	7.16E-08	4.02E-06
All Waste Constituents Excluding Non-detect Risk	---	9.30E-01	3.49E+00	4.42E+00	3.95E-06	1.83E-07	4.13E-06

Results for Analysis: 2-20-08, COCs 14 Metals, Max values used

Aggregate Risk and Hazard Quotient Results

		Petitioned Waste Aggregate Non-carcinogenic Hazard			Petitioned Waste Aggregate Carcinogenic Risk		
Chemical Name	CAS Number	Aggregate HI-Groundwater Pathways	Aggregate HI-Surface Pathways	Total Aggregate Hazard Index	Aggregate Risk-Groundwater Pathways	Aggregate Risk-Surface Pathways	Total Aggregate Risk
All Waste Constituents Including Non-detect Risk		9.30E-01	3.49E+00	4.42E+00	3.95E-06	1.83E-07	4.13E-06

Maximum Allowable TCLP Concentrations - Groundwater Exposure Pathways

Chemical Name Risk Factor = 1.00E-06 HQ Factor = 1.00E+00 * = Detection Limit	Waste Stream TCLP Concentration (mg/L)	Dilution Attenuation Factor (DAF)	Waste Volume Adjusted DAF	Maximum Allowable Concentration (mg/L)	DL	Max. Allowable Concentration Based on Groundwater Ingestion Pathway	Max. Allowable Concentration Based on Groundwater Inhalation Pathway	Max. Allowable Concentration Based on Adult Groundwater Dermal Absorption Pathway	Max. Allowable Concentration Based on Child Groundwater Dermal Absorption Pathway	Max. Allowable Concentration Based on MCL
Lead	3.60E-01	5.00E+03	5.00E+03	7.50E+01		---	---	---	---	7.50E+01
Mercury	2.40E-02	7.45E+01	7.45E+01	8.14E-02		2.80E-01	8.14E-02	---	---	1.49E-01
Nickel	6.90E-02	3.76E+01	3.76E+01	2.83E+01		2.83E+01	---	---	---	---
Silver	7.50E-04	2.05E+01	2.05E+01	3.84E+00		3.84E+00	---	---	---	---
Thallium	9.30E-03	4.40E+01	4.40E+01	8.80E-02		1.09E-01	---	---	---	8.80E-02
Antimony	2.10E-02	3.43E+01	3.43E+01	2.06E-01		5.15E-01	---	---	---	2.06E-01
Arsenic	3.70E-03	1.92E+01	1.92E+01	9.36E-04		9.36E-04	---	---	---	1.92E-01
Barium	6.30E-01	2.78E+01	2.78E+01	5.57E+01		2.09E+02	---	---	---	5.57E+01
Beryllium	3.40E-04	1.04E+02	1.04E+02	4.16E-01		7.81E+00	---	---	---	4.16E-01
Cadmium	9.20E-02	3.00E+01	3.00E+01	1.50E-01		5.63E-01	---	---	---	1.50E-01
Chromium	9.50E-02	3.85E+03	3.85E+03	3.85E+02		2.17E+05	---	---	---	3.85E+02
Vanadium	1.00E-02	8.03E+01	8.03E+01	3.02E+00		3.02E+00	---	---	---	---
Zinc	4.10E+00	2.49E+01	2.49E+01	2.80E+02		2.80E+02	---	---	---	---
Selenium	3.80E-02	1.16E+01	1.16E+01	5.80E-01		2.18E+00	---	---	---	5.80E-01

Groundwater Pathway Risk

Chemical Name	Petitioned Waste Carcinogenic Risk - Groundwater Exposure Pathways					
	Waste Stream TCLP Concentration (mg/L)	Groundwater Ingestion Pathway	Groundwater Inhalation Pathway	Groundwater Dermal Absorption Pathway - Adult	Groundwater Dermal Absorption Pathway - Child	Groundwater Pathway Aggregate Risk
Barium	6.30E-01	---	---	---	---	---
Beryllium	3.40E-04	---	---	---	---	---
Cadmium	9.20E-02	---	---	---	---	---
Selenium	3.80E-02	---	---	---	---	---
Lead	3.60E-01	---	---	---	---	---
Thallium	9.30E-03	---	---	---	---	---
Vanadium	1.00E-02	---	---	---	---	---
Nickel	6.90E-02	---	---	---	---	---
Silver	7.50E-04	---	---	---	---	---
Zinc	4.10E+00	---	---	---	---	---
Chromium	9.50E-02	---	---	---	---	---
Mercury	2.40E-02	---	---	---	---	---
Antimony	2.10E-02	---	---	---	---	---
Arsenic	3.70E-03	3.95E-06	---	---	---	3.95E-06
All Waste Constituents	---	3.95E-06	---	---	---	3.95E-06

Results for Analysis: 2-20-08, COCs 14 Metals, Max values used

Groundwater Pathway Hazard Quotient

Chemical Name	Waste Stream TCLP Concentration (mg/L)	Petitioned Waste Non-carcinogenic Hazard Quotient - Groundwater Exposure Pathways				Groundwater Pathway Aggregate Hazard Quotient
		Groundwater Ingestion Pathway	Groundwater Inhalation Pathway	Groundwater Dermal Absorption Pathway - Adult	Groundwater Dermal Absorption Pathway - Child	
Barium	6.30E-01	3.01E-03	---	---	---	3.01E-03
Beryllium	3.40E-04	4.35E-05	---	---	---	4.35E-05
Cadmium	9.20E-02	1.63E-01	---	---	---	1.63E-01
Selenium	3.80E-02	1.75E-02	---	---	---	1.75E-02
Lead	3.60E-01	---	---	---	---	---
Thallium	9.30E-03	8.53E-02	---	---	---	8.53E-02
Vanadium	1.00E-02	3.32E-03	---	---	---	3.32E-03
Nickel	6.90E-02	2.44E-03	---	---	---	2.44E-03
Silver	7.50E-04	1.95E-04	---	---	---	1.95E-04
Zinc	4.10E+00	1.46E-02	---	---	---	1.46E-02
Chromium	9.50E-02	4.38E-07	---	---	---	4.38E-07
Mercury	2.40E-02	8.58E-02	4.96E-01	---	---	5.82E-01
Antimony	2.10E-02	4.08E-02	---	---	---	4.08E-02
Arsenic	3.70E-03	1.71E-02	---	---	---	1.71E-02
All Waste Constituents	---	4.33E-01	4.96E-01	---	---	9.30E-01

Results for Analysis: 2-20-08, COCs 14 Metals, Max values used

Maximum Allowable Total Concentrations - Surface Exposure Pathways

Chemical Name Risk Factor = 1.00E-06 HQ Factor = 1.00E+00 * = Detection Limit	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/Kg)						
		Maximum Allowable Total Concentration (mg/kg)	DL	Surface Water Ingestion Pathway	Air Particulate Inhalation Pathway	Fish Ingestion Pathway	Soil Ingestion Pathway	Air Volatile Inhalation Pathway
Barium	2.00E+02	2.62E+06		4.14E+08	2.62E+06	4.02E+08	2.57E+07	---
Beryllium	2.30E-01	1.42E+03		---	1.42E+03	---	---	---
Cadmium	2.10E+02	1.90E+03		---	1.90E+03	---	---	---
Selenium	9.00E+01	7.79E+04		1.04E+07	---	7.79E+04	6.42E+05	---
Lead	9.60E+03	4.39E+04		---	4.39E+04	---	1.64E+05	---
Thallium	1.40E+00	9.47E+01		1.37E+05	---	9.47E+01	8.48E+03	---
Vanadium	1.80E+02	1.28E+05		2.07E+06	---	2.01E+06	1.28E+05	---
Nickel	1.70E+02	1.30E+05		4.14E+07	---	1.30E+05	2.57E+06	---
Silver	2.50E+01	4.93E+04		1.04E+07	---	4.93E+04	6.42E+05	---
Zinc	1.20E+05	9.22E+05		6.21E+08	---	9.22E+05	3.85E+07	---
Chromium	1.80E+03	4.77E+05		3.11E+09	---	4.77E+05	1.93E+08	---
Mercury	1.50E+00	9.01E-02		2.07E+05	1.57E+05	9.01E-02	1.28E+04	2.12E+04
Antimony	3.90E+01	2.01E+04		8.29E+05	---	2.01E+04	5.14E+04	---
Arsenic	2.20E+01	1.68E+02		2.69E+03	7.91E+02	1.68E+02	7.58E+02	---

Surface Pathway Risk

Chemical Name	Waste Stream Total Concentration (mg/Kg)	Petitioned Waste Carcinogenic Risk - Surface Water Exposure Pathways					Surface Pathway Aggregate Cancer Risk
		Surface Water Ingestion Pathway	Air Particulate Inhalation Pathway	Fish Ingestion Pathway	Soil Ingestion Pathway	Air Volatile Inhalation Pathway	
Barium	2.00E+02	---	---	---	---	---	---
Beryllium	2.30E-01	---	1.62E-10	---	---	---	1.62E-10
Cadmium	2.10E+02	---	1.11E-07	---	---	---	1.11E-07
Selenium	9.00E+01	---	---	---	---	---	---
Lead	9.60E+03	---	---	---	---	---	---
Thallium	1.40E+00	---	---	---	---	---	---
Vanadium	1.80E+02	---	---	---	---	---	---
Nickel	1.70E+02	---	---	---	---	---	---
Silver	2.50E+01	---	---	---	---	---	---
Zinc	1.20E+05	---	---	---	---	---	---
Chromium	1.80E+03	---	---	---	---	---	---
Mercury	1.50E+00	---	---	---	---	---	---
Antimony	3.90E+01	---	---	---	---	---	---
Arsenic	2.20E+01	8.18E-09	2.78E-08	6.56E-09	2.90E-08	---	7.16E-08
All Waste Constituents	---	8.18E-09	1.39E-07	6.56E-09	2.90E-08	---	1.83E-07

Surface Pathway Hazard Quotient

		Petitioned Waste Non-carcinogenic Hazard Quotient - Surface Water Exposure Pathways					
Chemical Name	Waste Stream Total Concentration (mg/Kg)	Surface Water Ingestion Pathway	Air Particulate Inhalation Pathway	Fish Ingestion Pathway	Soil Ingestion Pathway	Air Volatile Inhalation Pathway	Surface Pathway Aggregate Hazard Quotient
Barium	2.00E+02	4.83E-07	7.64E-05	4.97E-07	7.78E-06	---	8.51E-05
Beryllium	2.30E-01	5.55E-08	2.09E-05	5.67E-08	8.95E-07	---	2.19E-05
Cadmium	2.10E+02	2.03E-04	---	2.09E-04	3.27E-03	---	3.68E-03
Selenium	9.00E+01	8.69E-06	---	8.95E-06	1.40E-04	---	1.58E-04
Lead	9.60E+03	---	---	---	---	---	---
Thallium	1.40E+00	1.02E-05	---	1.05E-05	1.65E-04	---	1.86E-04
Vanadium	1.80E+02	8.69E-05	---	8.95E-05	1.40E-03	---	1.58E-03
Nickel	1.70E+02	4.10E-06	---	4.22E-06	6.62E-05	---	7.45E-05
Silver	2.50E+01	2.41E-06	---	2.49E-06	3.89E-05	---	4.38E-05
Zinc	1.20E+05	1.93E-04	---	1.99E-04	3.11E-03	---	3.51E-03
Chromium	1.80E+03	5.79E-07	---	2.67E-08	9.34E-06	---	9.95E-06
Mercury	1.50E+00	7.24E-06	9.52E-06	3.48E+00	1.17E-04	7.06E-09	3.48E+00
Antimony	3.90E+01	4.71E-05	---	4.85E-05	7.59E-04	---	8.54E-04
Arsenic	2.20E+01	3.54E-05	---	3.65E-05	5.71E-04	---	6.43E-04
All Waste Constituents	---	5.99E-04	1.07E-04	3.48E+00	9.66E-03	7.06E-09	3.49E+00

Results for Analysis: 2-20-08, COCs 14 Metals, Max values used

□1

Toxicity Characteristic, Soil Saturation, and Ecological Values

Chemical Name	CAS Number	Toxicity Characteristic Rule		Soil Saturation		Ecological Screen	
		Allowable TC Concentration (mg/L)	Waste Constituent TCLP Concentration (mg/L)	Allowable Soil Saturation Concentration (mg/Kg)	Actual Soil Concentration (mg/Kg)	Allowable Aquatic Concentration (mg/L)	Predicted Ambient Concentration (mg/L)
Lead	7439-92-1	---	---	---	---	2.50E-03	1.77E-02
Zinc	7440-66-6	---	---	---	---	1.20E-01	2.24E-01

Results for Analysis: 2-20-08, COCs 14 Metals, Max values used

H.2 – DRAS v.2 Run for Arsenic at 1×10^{-4} Risk

Site and WMU Information

Delisting Petition Number: DL-

File Name: 2-20-08, Arsenic, Max values used

Petitioner's Name: Peoria Disposal Company

Address 1: 4349 W. Southport Road

Address 2:

City, State: Peoria,

Zip Code: 61615

Analysis Performed by: RMT Inc.

Date of Analysis: Feb-20-2008

Waste Description: EAF Dust Stabilized Residue

Waste Code: K061

WMU Type: Landfill

Waste Volume (yd³): 95000

Active Life (years): 20

Risk Factor: 1.00E-04

HQ Factor: 1.00E+00

List of COCs with Altered Chemical Properties

Chemical Name	CAS Number	Parameter Modified	Parameter Symbol	Parameter Units	Original Value	Modified Value
Arsenic	7440-38-2	Maximum Concentration Level	MCL	mg/L	0.05	0.01

Results for Analysis: 2-20-08, Arsenic, Max values used

Limiting Pathways

Detection Limit Analysis - Toxicity of Petitioned Waste cannot be confirmed if Detection Limits fall below maximum allowable concentration.					
Chemical Name	CAS Number	Maximum Allowable TCLP Concentration (mg/L)	Maximum Allowable TCLP Pathway	Maximum Allowable Total Concentration (mg/Kg)	Maximum Allowable Total Pathway
Arsenic	7440-38-2	9.36E-02	Groundwater Ingestion	1.68E+04	Fish Ingestion

Results for Analysis: 2-20-08, Arsenic, Max values used

H.3 – DRAS v.2 Run for Screening Levels to Identify COCs

Site and WMU Information

Delisting Petition Number:

DL-

File Name:

Updated DRAS 2-19-08, Max values used

Petitioner's Name:

Peoria Disposal Company

Address 1:

4349 W. Southport Road

Address 2:

City, State:

Peoria,

Zip Code:

61615

Analysis Performed by:

RMT Inc.

Date of Analysis:

Feb-19-2008

Waste Description:

EAF Dust Stabilized Residue

Waste Code:

K061

WMU Type:

Landfill

Waste Volume (yd³):

95000

Active Life (years):

20

Risk Factor:

1.00E-06

HQ Factor:

1.00E+00

List of COCs with Altered Chemical Properties

Chemical Name	CAS Number	Parameter Modified	Parameter Symbol	Parameter Units	Original Value	Modified Value
Fluorene	86-73-7	Inhalation Reference Dose	RFC	mg/m ³	0	0.04
nitroaniline 2-	88-74-4	Oral Reference Dose	RFD _o	mg/kg-day	0	0.003
nitroaniline 2-	88-74-4	Inhalation Reference Dose	RFC	mg/m ³	0.0002	0.00003
Naphthalene	91-20-3	Inhalation Carcinogenic Slope Factor	CSFi	1/(mg/kg-day)	0	0.35
Naphthalene	91-20-3	Inhalation Reference Dose	RFC	mg/m ³	0.003	0.00086
Bis(2-ethylhexyl)phthalate	117-81-7	Inhalation Carcinogenic Slope Factor	CSFi	1/(mg/kg-day)	0	0.014
Bis(2-ethylhexyl)phthalate	117-81-7	Inhalation Reference Dose	RFC	mg/m ³	0	0.02
Dimethyl phthalate	131-11-3	Landfill Dilution Attenuation Factor	DAFLF	L/mg	1	18
Dibenzofuran	132-64-9	Oral Reference Dose	RFD _o	mg/kg-day	0.004	0.002
Dibenzofuran	132-64-9	Inhalation Reference Dose	RFC	mg/m ³	0	0.002
Fluoranthene	206-44-0	Inhalation Reference Dose	RFC	mg/m ³	0	0.04
Butylbenzylphthalate	85-68-7	Inhalation Reference Dose	RFC	mg/m ³	0	0.2
N-Nitrosodiphenylamine	86-30-6	Inhalation Carcinogenic Slope Factor	CSFi	1/(mg/kg-day)	0	0.0049
N-Nitrosodiphenylamine	86-30-6	Oral Reference Dose	RFD _o	mg/kg-day	0	0.02
N-Nitrosodiphenylamine	86-30-6	Inhalation Reference Dose	RFC	mg/m ³	0	0.02
Anthracene	120-12-7	Inhalation Reference Dose	RFC	mg/m ³	0	0.3
Pyrene	129-00-0	Inhalation Reference Dose	RFC	mg/m ³	0	0.03
Arsenic	7440-38-2	Maximum Concentration Level	MCL	mg/L	0.05	0.01
Barium	7440-39-3	Oral Reference Dose	RFD _o	mg/kg-day	0.07	0.2
Barium	7440-39-3	Inhalation Reference Dose	RFC	mg/m ³	0.0005	0.00143
Beryllium	7440-41-8	Inhalation Reference Dose	RFC	mg/m ³	0.00002	0.000006

Results for Analysis: Updated DRAS 2-19-08, Max values used

□1

List of COCs with Altered Chemical Properties

Chemical Name	CAS Number	Parameter Modified	Parameter Symbol	Parameter Units	Original Value	Modified Value
Di-n-octyl phthalate	117-84-0	Oral Reference Dose	RFD _o	mg/kg-day	0.02	0.04
Di-n-octyl phthalate	117-84-0	Inhalation Reference Dose	RFC	mg/m ³	0	0.04
TCDD, 2,3,7,8-	1746-01-6	Maximum Concentration Level	MCL	mg/L	0	0.00000003
Isophorone	78-59-1	Oral Carcinogenic Slope Factor	CSF _o	1/(mg/kg-day)	0.00095	0.001
Isophorone	78-59-1	Inhalation Carcinogenic Slope Factor	CSF _i	1/(mg/kg-day)	0	0.00095
Isophorone	78-59-1	Inhalation Reference Dose	RFC	mg/m ³	0	0.2
Acenaphthene	83-32-9	Inhalation Reference Dose	RFC	mg/m ³	0	0.06
Phenol	108-95-2	Oral Reference Dose	RFD _o	mg/kg-day	0.6	0.3
Benzyl alcohol	100-51-6	Inhalation Reference Dose	RFC	mg/m ³	0	0.3
Toluene	108-88-3	Oral Reference Dose	RFD _o	mg/kg-day	0.2	0.08
Toluene	108-88-3	Inhalation Reference Dose	RFC	mg/m ³	0	1.43
Thallium	7440-28-0	Oral Reference Dose	RFD _o	mg/kg-day	0.00008	0.000066
Tin	7440-31-5	Landfill Dilution Attenuation Factor	DAFLF	L/mg	0	10
Acetone	67-64-1	Oral Reference Dose	RFD _o	mg/kg-day	0.1	0.9
Benzene	71-43-2	Maximum Concentration Level	MCL	mg/L	0.01	0.005
Benzene	71-43-2	Oral Carcinogenic Slope Factor	CSF _o	1/(mg/kg-day)	0.029	0.055
Benzene	71-43-2	Inhalation Carcinogenic Slope Factor	CSF _i	1/(mg/kg-day)	0.029	0.027
Benzene	71-43-2	Oral Reference Dose	RFD _o	mg/kg-day	0.001	0.004
Benzene	71-43-2	Inhalation Reference Dose	RFC	mg/m ³	0.009	0.0086
Vanadium	7440-62-2	Oral Reference Dose	RFD _o	mg/kg-day	0.007	0.001
Cobalt	7440-48-4	Inhalation Carcinogenic Slope Factor	CSF _i	1/(mg/kg-day)	0	9.8

List of COCs with Altered Chemical Properties

Chemical Name	CAS Number	Parameter Modified	Parameter Symbol	Parameter Units	Original Value	Modified Value
Cobalt	7440-48-4	Oral Reference Dose	RFD _o	mg/kg-day	0.06	0.02
Cobalt	7440-48-4	Inhalation Reference Dose	RFD _i	mg/m ³	0	0.000006
Cobalt	7440-48-4	Landfill Dilution Attenuation Factor	DAFLF	L/mg	0	10

Limiting Pathways

Detection Limit Analysis - Toxicity of Petitioned Waste cannot be confirmed if Detection Limits fall below maximum allowable concentration					
Chemical Name	CAS Number	Maximum Allowable TCLP Concentration (mg/L)	Maximum Allowable TCLP Pathway	Maximum Allowable Total Concentration (mg/Kg)	Maximum Allowable Total Pathway
Fluorene	86-73-7	5.55E+00	Groundwater Child Dermal	8.98E+05	Fish Ingestion
Pentachlorophenol	87-86-5	2.79E-03	Groundwater Adult Dermal	9.47E+03	Soil Ingestion
nitroaniline 2-	88-74-4	2.03E+00	Groundwater Ingestion	3.95E+02	Air Volatile Inhalation
Naphthalene	91-20-3	3.72E-01	Groundwater Inhalation	1.38E+03	Air Volatile Inhalation
Pyridine	110-86-1	7.13E-01	Groundwater Ingestion	1.28E+05	Soil Ingestion
Nickel	7440-02-0	2.83E+01	Groundwater Ingestion	1.30E+05	Fish Ingestion
Bis(2-ethylhexyl)phthalate	117-81-7	6.10E-02	Groundwater Adult Dermal	2.72E+03	Fish Ingestion
Di-n-butyl phthalate	84-74-2	1.65E+01	Groundwater Child Dermal	3.60E+04	Fish Ingestion
Phenanthrene	85-01-8	---	Not Applicable	---	Not Applicable
Dimethyl phthalate	131-11-3	6.76E+03	Groundwater Ingestion	1.28E+09	Soil Ingestion
Dibenz(a,h)anthracene	53-70-3	3.80E-06	Groundwater Adult Dermal	1.56E+02	Soil Ingestion
Dibenzofuran	132-64-9	1.04E-01	Groundwater Child Dermal	2.57E+05	Soil Ingestion
Fluoranthene	206-44-0	1.61E+00	Groundwater Child Dermal	8.03E+05	Fish Ingestion
Butylbenzylphthalate	85-68-7	2.90E+01	Groundwater Child Dermal	1.69E+05	Fish Ingestion
Benzo(b)fluoranthene	205-99-2	7.29E-05	Groundwater Adult Dermal	1.56E+03	Soil Ingestion

Limiting Pathways

Detection Limit Analysis - Toxicity of Petitioned Waste cannot be confirmed if Detection Limits fall below maximum allowable concentration					
Chemical Name	CAS Number	Maximum Allowable TCLP Concentration (mg/L)	Maximum Allowable TCLP Pathway	Maximum Allowable Total Concentration (mg/Kg)	Maximum Allowable Total Pathway
Mercury	7439-97-6	8.14E-02	Groundwater Inhalation	9.01E-02	Fish Ingestion
Benzo (ghi) perylene	191-24-2	---	Not Applicable	---	Not Applicable
N-Nitrosodiphenylamine	86-30-6	2.69E-01	Groundwater Ingestion	2.32E+03	Air Volatile Inhalation
Indeno(1,2,3-cd) pyrene	193-39-5	4.11E-05	Groundwater Adult Dermal	1.56E+03	Soil Ingestion
Anthracene	120-12-7	2.50E+01	Groundwater Child Dermal	2.27E+05	Fish Ingestion
Pyrene	129-00-0	1.23E+00	Groundwater Child Dermal	4.78E+03	Fish Ingestion
Antimony	7440-36-0	2.06E-01	MCL	2.01E+04	Fish Ingestion
Arsenic	7440-38-2	9.36E-04	Groundwater Ingestion	1.68E+02	Fish Ingestion
Barium	7440-39-3	5.57E+01	MCL	2.62E+06	Air Particulate Inhalation
Beryllium	7440-41-8	4.16E-01	MCL	1.10E+04	Air Particulate Inhalation
Cadmium	7440-43-9	1.50E-01	MCL	4.02E+03	Fish Ingestion
Di-n-octyl phthalate	117-84-0	7.00E-02	Groundwater Child Dermal	2.57E+01	Fish Ingestion
TCDD, 2,3,7,8-	1746-01-6	2.05E-10	Groundwater Adult Dermal	7.58E-03	Soil Ingestion
Benz(a)anthracene	56-55-3	1.31E-04	Groundwater Adult Dermal	1.56E+03	Soil Ingestion
Chloro-3-methylphenol 4-	59-50-7	---	Not Applicable	---	Not Applicable

Results for Analysis: Updated DRAS 2-19-08, Max values used

□2

Limiting Pathways

Detection Limit Analysis - Toxicity of Petitioned Waste cannot be confirmed if Detection Limits fall below maximum allowable concentration					
Chemical Name	CAS Number	Maximum Allowable TCLP Concentration (mg/L)	Maximum Allowable TCLP Pathway	Maximum Allowable Total Concentration (mg/Kg)	Maximum Allowable Total Pathway
Isophorone	78-59-1	1.32E+00	Groundwater Ingestion	2.51E+03	Air Volatile Inhalation
Acenaphthene	83-32-9	1.25E+01	Groundwater Child Dermal	1.98E+05	Fish Ingestion
Methylnaphthalene 2-	91-57-6	---	Not Applicable	---	Not Applicable
Copper	7440-50-8	9.11E+03	MCL	5.14E+06	Soil Ingestion
Phenol	108-95-2	2.14E+02	Groundwater Ingestion	3.85E+07	Soil Ingestion
Selenium	7782-49-2	5.80E-01	MCL	7.79E+04	Fish Ingestion
Benzo(k)fluoranthene	207-08-9	1.01E-03	Groundwater Adult Dermal	1.56E+04	Soil Ingestion
Acenaphthylene	208-96-8	---	Not Applicable	---	Not Applicable
Trichlorophenol, 2,4,5-	95-95-4	2.86E+01	Groundwater Child Dermal	3.91E+05	Fish Ingestion
Lead	7439-92-1	7.50E+01	MCL	4.39E+04	Air Particulate Inhalation
Diethyl phthalate	84-66-2	6.91E+02	Groundwater Ingestion	6.57E+05	Fish Ingestion
Silver	7440-22-4	3.84E+00	Groundwater Ingestion	4.93E+04	Fish Ingestion
Benzyl alcohol	100-51-6	2.14E+02	Groundwater Ingestion	4.08E+05	Air Volatile Inhalation
Bromophenyl-phenyl ether, 4-	101-55-3	1.22E+01	Groundwater Child Dermal	7.21E+03	Fish Ingestion
Toluene	108-88-3	1.90E+01	MCL	6.11E+03	Air Volatile Inhalation

Limiting Pathways

Detection Limit Analysis - Toxicity of Petitioned Waste cannot be confirmed if Detection Limits fall below maximum allowable concentration					
Chemical Name	CAS Number	Maximum Allowable TCLP Concentration (mg/L)	Maximum Allowable TCLP Pathway	Maximum Allowable Total Concentration (mg/Kg)	Maximum Allowable Total Pathway
Thallium	7440-28-0	8.80E-02	MCL	9.47E+01	Fish Ingestion
Tin	7440-31-5	2.25E+02	Groundwater Ingestion	7.71E+07	Soil Ingestion
Acetone	67-64-1	6.42E+02	Groundwater Ingestion	1.16E+08	Soil Ingestion
Benzene	71-43-2	2.39E-02	Groundwater Ingestion	3.00E-01	Air Volatile Inhalation
Vanadium	7440-62-2	3.02E+00	Groundwater Ingestion	1.28E+05	Soil Ingestion
Zinc	7440-66-6	2.80E+02	Groundwater Ingestion	9.22E+05	Fish Ingestion
Chromium	7440-47-4	3.85E+02	MCL	4.77E+05	Fish Ingestion
Cobalt	7440-48-4	7.51E+00	Groundwater Ingestion	1.10E+04	Air Particulate Inhalation
Chrysene	218-01-9	1.39E-02	Groundwater Adult Dermal	1.56E+05	Soil Ingestion
Benzo(a)pyrene	50-32-8	8.06E-06	Groundwater Adult Dermal	1.56E+02	Soil Ingestion

H.4 – D/F Worksheet and Summary

Dioxin/Furan Summary

Modeling of Fish Tissue Ingestion Pathway for Dioxin TEQs

Background

As presented earlier, the DRAS v.2 model has a confirmed error in the fish ingestion pathway that is particularly problematic for those compounds which have a tendency to bioaccumulate. As a result of this known error in the available DRAS v.2 model, Todd Ramaly, USEPA Region 5 provided a spreadsheet calculation model that could be used as a substitute evaluation tool. The spreadsheet calculation model corrects the error in the DRAS v.2 model and incorporates updates to modeling approach anticipated for the updated DRAS v.3 model.

Surface Water/Fish Tissue Ingestion Pathway

Exposure through the surface water pathway, and ultimately the fish ingestion pathway, is assumed to result from erosion of hazardous materials from the surface of a solid waste landfill and transport of these constituents to nearby surface water bodies. The initial component of the calculations rely on the universal soil loss equation (USLE; Wischmeier and Smith 1978) to compute long-term soil and waste erosion from a landfill in which delisted waste is being disposed. The amount of soil delivered to surface water is estimated using a sediment delivery ratio; which is translated into estimates of dissolved surface water concentrations and projected fish tissue concentrations through application of conservative partitioning and bioaccumulation values. In the final component of the calculations, modeled fish tissue concentrations are incorporated into an ingestion pathway model to assess potential risk and arrive at a delisting level.

The following table presents site-specific information that was used to modify generic assumptions in the fish tissue ingestion pathway calculation model provided for use. The conservative generic modeling assumptions were maintained for all other inputs.

Site Specific Model Assumptions

MODEL VARIABLE	GENERIC INPUT	SITE-SPECIFIC INPUT	RATIONALE
USLE Assumptions			
Waste Volume (cy/year)	80,000	95,000	Increased to 95,000 to match DRAS model run
Period of Waste Exposure (day)	30	10	The disposal area is covered on a daily basis. Value assumes deviation from standard practice 10 days/year.
Rainfall Erosion Potential, R (1/year)	300	175	Modified to reflect areas-specific value – taken from Figure B-1 of DRAS guidance document.
Support Practice Factor, P	1.0	0.5	Surface is contour terraced – original assumption assumes no management practice
Distance to Stream (meter)	100	335	Value modified to reflect site-specific conditions – 1,100 ft to Indian Creek

Site Specific Model Assumptions

MODEL VARIABLE	GENERIC INPUT	SITE-SPECIFIC INPUT	RATIONALE
Dietary Exposure/Risk Model Assumptions			
Fraction of fish intake from this source (F)	1.0	0.5	Assumes 50% of all freshwater fish consumption for an individual is taken from Indian Creek
Fish consumption rate (CR)	0.02 kg/day	0.06 kg/day	Fish consumption value reflects recommended freshwater fish consumption/day (EFH, 1997) Modified from 0.02 kg/day which is a recommended total (marine/freshwater) fish consumption rate

The attached spreadsheet presents the results of the site-specific USLE and dietary exposure/risk modeling of the maximum dioxin TEQ concentration (160 ng/kg wet weight) observed in treated waste samples. The modeled fish tissue dioxin TEQ concentration for fish in Indian Creek is 0.87 ng/kg. Estimated carcinogenic risk posed through a conservative fish ingestion scenario is 2×10^{-6} .

Discussion of Results

As shown in the following table, the modeled fish tissue concentration, which is likely an overestimate given the compounding of conservative assumptions, is consistent with national background TEQ concentrations in fish tissues.

Background Dioxin Concentrations in Fish Tissue

CATEGORY/DESCRIPTION	MAXIMUM OBSERVED CONCENTRATION	AVERAGE CONCENTRATION
DIOXIN TEQ (in ng/kg wet weight)		
NASQAN (background) ⁽¹⁾	7.18	1.12
Background ⁽¹⁾	3.02	0.59
Agricultural ⁽¹⁾	4.44	1.02
North American Background ⁽²⁾	--	1.16
DRAS Modeled fish tissue concentrations in Indian Creek⁽³⁾	0.87	

⁽¹⁾ Excerpted from the National Survey of Chemical Residues in Fish (USEPA, September 1992)

⁽²⁾ Reported in USEPA's Dioxin Reassessment (USEPA, 1994)

⁽³⁾ Modified DRAS v.3 spreadsheet model (original provided by Todd Ramaly, USEPA Region 5) of PDC waste materials

Dioxin/furans have been found throughout the world in practically all media including air, soil, water, sediment, fish and shellfish, and other food products such as meat and dairy products. The highest levels of these compounds are found in soils, sediments, and biota; very low levels are found in water and air. The widespread occurrence is not unexpected considering the numerous natural and anthropogenic sources that emit these compounds into the atmosphere, and the overall resistance of these compounds to biotic and abiotic transformation. Modeled dioxin TEQ concentrations in fish tissue are consistent with background and therefore, not expected to pose an unacceptable risk.

INPUT VARIABLES

OUTPUT VARIABLES

Rationale modification of assumptions

Waste Volume (cy/year)	95000	Increased from 80000 in original provided	Slope Length	708.69878
Landfill Lifetime (year)	20		Topographic Factor, LS	1.4241904
Period of Waste Exposure (day)	10	Covered daily Modified from 30 days in original	Soil eroded (kg/acre/year)	3.39E+04
Rainfall Erosion Potential, R (1/year)	175	Figure B-1 for Peoria area modified from 300 in original Value is supportable for Silty	Sedimentary Delivery Ratio, Sd	0.21
Soil Erodibility, K (ton/acre)	0.3	Clay Loam - Not modified	Soil Delivered to Stream, As (kg/acre/year)	7.27E+03
Percent slope	5.00%		Percentage of Eroded Waste in Soil	0.0014
Cover & Management Factor, C	1		Annual Waste Eroded, Aw (kg/acre/year)	9.95E+00
Support Practice Factor, P	0.5	contour terracing - Modified from original which assumes no management practice	Waste Conc. - 2nd Order Stream, (kg/L)	1.39E-07
Distance to Stream (meter)	335	1100 ft to Indian Creek	Waste Conc. - 5th Order Stream, (kg/L)	1.35E-09
Percentage of Waste Exposed	0.0014		Dilution factor - 2nd Order Stream, (L/Kg)	7.19E+06
2nd order Stream Volume (L/year)	3.30E+09		Dilution factor - 5th Order Stream, (L/Kg)	7.41E+08
5th order Stream Volume (L/year)	3.40E+11			
Concentration Reduction Factor Due to Addition of Reagents	1			
CALCULATIONS			fraction organic carbon in suspended solids =	0.075 assumption
Area (acre)	46.12		minimum TSS level (erosion input only) to 2nd order stream =	101.55072 mg/L
Slope Length (ft)	708.69878			
Slope Length-Exponent, m	0.5			
Topographic Factor, LS	1.4241904			101.55072 mg/L
Soil Eroded (ton/acre/year)	37.384998			
Soil Eroded (kg/acre/year)	33915.67			
Sed. Delivery Ratio, Sd	0.21			
Soil Delivered to S.W. (kg/acre/year)	7.27E+03			

Assumptions		fraction organic carbon in suspended solids =		0.075					
		background TSS concentration in stream =		10 mg/L					
		Concentration	Concentration		Kdsw		2nd order stream		Edible Portion
Total Constituent		(Fifth order	(Second order	log Koc	sometimes Koc(BCF for metals etc)	Surface Water			Fish Tissue
Constituent	Concentration	Stream)	Stream)	(log Kow	(or Kow for	BAF	Concentration	TEF	Concentration from
	(mg/Kg)	(mg/L)	(mg/L)	for organics)	organics)	freely dissolved	(freely dissolved)	TEQdfp-WHO98	freely dissolved
2,3,7,8-TCDD	1.60E-04	2.16E-13	2.23E-11	5.31	2.02E+05	9.16E+05	9.46E-13	1	8.66E-07

Estimating Lake Trout Fish Lipid Content

From Table 1, Appendix I, EPA-820-B-95-005			sample weighted percent
	% lipid	samples	
Lake Superior	11.42%	44	0.66%
	10.46%	71	0.97%
	9.21%	28	0.34%
Lake Erie	13.00%	5	0.08%
Lake Ontario	3.38%	98	0.43%
Lake Michigan	11.88%	28	0.43%
	17.25%	156	3.51%
	16.58%	13	0.28%
	8.81%	3	0.03%
	12.01%	9	0.14%
	12.71%	311	5.16%
		766	12.04% sample weighted mean of mean lipid content trophic level 4

From Table 2, Appendix I, EPA-820-B-95-005

Lake Superior	10.61%
Lake Huron	14.12%
Lakes St. Claire and Erie	13.00%
Lake Michigan	13.70%
Lake Ontario	14.53%

13.19% average lipid content of Lake Trout weighing each lake equally
trophic level 4

From Table 10, EPA-820-B-95-005

Mean TCDD BAF (in fish lipids and referenced to chemical concentration freely dissolved) 9.00E+06 salmonids

To convert to a BAF for lipids in the edible portion only, multiply by the lipid concentrations above

1.08E+06 from sample weighted mean of mean lipid content
1.19E+06 from average lipid content of Lake Trout weighing each lake equally

Summary

To conservatively evaluate the bioaccumulation of chemicals in fish for the purpose of conservative human health comparison, EPA assumed subpopulations could be exposed to trophic level 4 Lake trout (a fatty species).

9.16E+05 current value in DRAS
10.18% lipid content assumed in DRAS

The BAF in DRAS is consistent and actually a little less than that implied by the fish lipid concentrations given in the report.

Dietary Exposure/Risk Modeling

target hazard quotient (HQ) = 1 unitless
 target cancer risk (CR) = 1.00E-06 unitless
 chemical concentration in fish lipid tissue (Clipids) = constituent mg/kg

fraction of fish intake from this source (F) = 0.5 unitless
 fish consumption rate (CR) = 0.006 kg/day

exposure duration (ED) = 30 years
 exposure frequency (EF) = 350 days/year
 cancer slope factor (CSF) = ical specific kg-day/mg

body weight (BW) = 72 kg
 noncarcinogenic averaging time (AT) = 30 years
 carcinogenic averaging time (AT) = 75 years
 drinking water ingestion rate (adult) = 2 L/day

age-adjusted drinking water ingestion factor (IFWadj) = 1.07 L yr/kg day

Rationale modification of assumptions

Assumes 50% of all freshwater fish consumption is from Indian Creek
 Fish consumption value reflects recommended freshwater fish consumption/day - modified from 0.02 kg/day which is a recommended total (marine/freshwater) fish consumption rate.

COPC	Waste Conc mg/kg	Rfd mg/kg day	CSFo kg day/mg	5th order stream concentration mg/L	SWing HQ	SWing CR	SWing DL	Fish Concentration Edible Portion mg/kg	Fishing HQ	Fishing CR	Fishing DL
2,3,7,8-TCDD	1.60E-04		1.50E+05	2.16E-13			0.00E+00	8.66E-07		2.08E-06	7.70E-05

0.87 ng/kg
 See table on observed dioxin concentrations in background fish. Modeled concentration consistent with background.

H.5 – DRAS v.3 Data

DRAS v.3 Provided Tables and Summary

Although a beta version of DRAS v.3 is currently being used by the USEPA-5, the USEPA-5 verified that DRAS v.3 with all remaining contractor modifications would not be available to PDC before its Adjusted Standard Petition submittal. Both USEPA-5 and IEPA agreed this Petition use the DRAS v.2 with updates provided by USEPA-5. Of particular relevance to this Petition, Todd Ramaly of the USEPA-5 stated that the DRAS v.2 model incorrectly calculates the risk to human health for constituents with a tendency to bioaccumulate via the surface/fish ingestion pathway. This is a critical surface exposure pathway for mercury and dioxin/furans. According to Mr. Ramaly, this model function could not be repaired in DRAS v.2 with user input/updates; rather, he recommended provisional DRAS v.3 outputs to more correctly evaluate the risk posed by mercury from the disposal of the EAFDSR. Mr. Ramaly stated that the DRAS v.3 model basis incorporates current regulatory and scientific positions regarding mercury uptake into biological tissues. To assist in the evaluation, Mr. Ramaly provided provisional DRAS v.3 generated screening levels for all database constituents (including mercury), based on the maximum annual generation volume of 95,000 cubic yards of EAFDSR (see Appendix C). This table, shown in this Appendix, indicates that 9.35 milligrams per kilogram (mg/kg) is an appropriate safe screening level for total mercury. As such, the modeled hazard attributable to total mercury in the DRAS v.2 model must be ignored and a 9.35 mg/kg comparison value should be used instead. As a comparison value 9.35 mg/kg mercury translates in the DRAS model to a hazard quotient of 1.0.

USEPA-5 provided two tables of provisional concentrations, generated by the DRAS v.3 for the following scenarios:

- 72,000 tons of EAFDSR waste disposed per year (expected annual generation); and
- 95,000 tons of EAFDSR waste disposed per year (maximum generation)

Both tables were generated using the same risk values of 1×10^{-6} individual risk and a hazard quotient of 1.0. RMT performed a cursory review of the DRAS v.3 data but since the DRAS v.3 model is not available to anyone but USEPA, a full assessment regarding the different values will not be fully discussed. PCBs were not detected so do not need a review. RMT noted the following in its review:

- VOCs – There is no reported data results from this Petition sampling that shows any VOC constituents above totals or TCLP (20x rule) levels listed in the DRAS v.3 provisional concentrations;
- sVOCs – None of the sVOCs reported in the data results exceeded the updated DRAS v.3 maximum allowable total concentrations. Four polycyclic aromatic hydrocarbons

(PAHs) were non-detect for their TCLP analysis but their MDLs were above the DRAS v.3 screening. Again, this is not a problem since a comparison of the MDLs to the Illinois Tiered Approach for Corrective Action (TACO), under 35 IAC 742 indicates that these detection limits are well below the TACO screening criteria.

- Dioxins & furans – Refer to H.4 for an analysis and discussion regarding dioxins & furans.
- Metals – None of the Petition data for the metals exceeded the updated DRAS v.3 maximum allowable total concentrations, except for chromium. Since the model is not available, an evaluation as to what pathway is driving this value is unknown. None of the Petition data for the metals exceeded the updated DRAS v.3 maximum allowable TCLP concentrations, except for arsenic and one data point for cadmium slightly exceeded the DRAS v.3 level (0.092 mg/L reported versus 0.0911 mg/L in DRAS v.3). Since the DRAS v.3 model is not available, an evaluation as to what pathway is driving the total chromium value is unknown. This isn't a problem since the DRAS v.2 with its updated toxicity values shows the totals and TCLP concentrations reported for chromium and for cadmium do not exceed any screening criteria and have an individual level of risk below 1×10^{-6} . The arsenic TCLP value for DRAS v.3 is the same as in the updated DRAS v.2 and is discussed in detail in Section 6.3.2.

Chemical Name

PDC - 95,000 cubic yards CR = 1E-6, HQ=1

Risk Factor = 1.00E-06
HQ Factor = 1.00E+00

0.125 Air Particulate Correction Factor

Chemical Name	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Correct Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
* = Detection Limit												
Acenaphthene	1.00E+00	2.33E+05	*	1.24E+08	3.92E+09	4.90E+08	2.33E+05	7.60E+07	9.33E+10	233000	10.6	
Acenaphthylene	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Acetaldehyde [Ethanal]	1.00E+00	2.13E+06	*	---	1.70E+07	2.13E+06	---	---	---	2125000	---	
Acetone (2-propanone)	1.00E+00	1.14E+09	*	1.86E+09	---	---	4.52E+09	1.14E+09	---	1140000000	520	
Acetonitrile (methyl cyanide)	1.00E+00	1.32E+06	*	3.52E+07	1.11E+09	1.39E+08	1.05E+08	2.15E+07	1.32E+06	1320000	9.83	
Acetophenone	1.00E+00	1.94E+07	*	2.07E+08	---	---	1.94E+07	1.27E+08	---	194000000	---	
Acrolein	1.00E+00	1.31E+02	*	1.04E+06	3.73E+05	4.66E+04	1.73E+06	6.33E+05	1.31E+02	131	5.04E+26	
Acrylamide	1.00E+00	8.96E+02	*	8.96E+02	2.92E+04	3.65E+03	1.12E+03	2.49E+03	3.50E+05	896	0.000325	
Acrylonitrile	1.00E+00	1.94E+02	*	7.47E+03	5.52E+05	6.90E+04	1.94E+02	2.08E+04	4.70E+02	194	0.00227	
Aldrin	1.00E+00	1.37E-03	*	2.37E+02	7.65E+03	9.56E+02	1.37E-03	6.59E+02	5.07E+07	0.00137	4980000	
Aniline (benzenamine)	1.00E+00	2.70E+05	*	7.08E+05	1.87E+07	2.34E+06	2.70E+05	1.97E+06	2.41E+06	270000	0.197	
Anthracene	1.00E+00	4.22E+05	*	6.21E+08	1.96E+10	2.45E+09	4.22E+05	3.80E+08	7.72E+13	422000	25.9	
Antimony	1.00E+00	2.05E+04	*	8.29E+05	---	---	2.05E+04	5.07E+05	---	20500	0.109	
Aramite	1.00E+00	1.61E+05	*	1.61E+05	5.28E+06	6.60E+05	2.01E+05	4.48E+05	---	161000	1.59E+22	
Arsenic	1.00E+00	1.70E+02	*	2.69E+03	8.72E+03	1.09E+03	1.70E+02	7.47E+03	---	170	0.000902	5
Arsenic (III)	1.00E+00	1.70E+02	*	2.69E+03	8.72E+03	1.09E+03	1.70E+02	7.47E+03	---	170	0.000902	5
Arsenic (V)	1.00E+00	1.70E+02	*	2.69E+03	8.72E+03	1.09E+03	1.70E+02	7.47E+03	---	170	0.00204	5
Atrazine	1.00E+00	4.07E+02	*	1.82E+04	5.97E+05	7.46E+04	4.07E+02	5.05E+04	2.08E+11	407	0.005	
Barium	1.00E+00	1.17E+06	*	4.14E+08	9.33E+06	1.17E+06	4.10E+08	2.53E+08	---	1166250	36	100
Benz(a)anthracene	1.00E+00	1.35E+01	*	5.53E+03	4.23E+05	5.29E+04	1.35E+01	1.54E+04	2.82E+11	13.5	0.00701	
Benzaldehyde	1.00E+00	2.58E+07	*	2.07E+08	6.53E+09	8.16E+08	2.58E+07	1.27E+08	5.10E+08	25800000	57.8	
Benzene	1.00E+00	3.24E+03	*	7.33E+04	4.86E+06	6.08E+05	3.69E+03	2.04E+05	3.24E+03	3240	0.0205	0.5
Benzidine	1.00E+00	2.50E-01	*	1.75E+01	5.71E+02	7.14E+01	2.50E-01	4.87E+01	---	0.25	0.00000489	
Benzo(a)pyrene	1.00E+00	2.39E+01	*	5.53E+02	4.23E+04	5.29E+03	2.39E+01	1.54E+03	9.12E+11	23.9	2.63	
Benzo(b)fluoranthene	1.00E+00	2.07E+02	*	5.53E+03	4.23E+05	5.29E+04	2.07E+02	1.54E+04	5.29E+11	207	22.4	
Benzo(ghi)perylene	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Benzo(k)fluoranthene	1.00E+00	2.03E+03	*	5.53E+04	4.23E+06	5.29E+05	2.03E+03	1.54E+05	4.25E+14	2030	6.68E+16	
Benzoc acid	1.00E+00	5.09E+08	*	8.29E+09	2.61E+11	3.26E+10	5.09E+08	5.07E+09	3.55E+12	509000000	2310	
Benzyl alcohol	1.00E+00	1.49E+08	*	6.21E+08	1.96E+10	2.45E+09	1.49E+08	3.80E+08	1.43E+10	149000000	173	
Benzyl chloride	1.00E+00	2.37E+04	*	2.37E+04	1.89E+08	2.36E+07	2.67E+04	6.59E+04	1.31E+07	23700	4.3E+26	
Beryllium	1.00E+00	1.95E+03	*	4.14E+06	1.56E+04	1.95E+03	1.31E+05	2.53E+06	---	1950	0.078	
Bis (2-Chloroethoxy) methane	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Bis(2-chloroethyl)ether	1.00E+00	7.98E+02	*	3.67E+03	1.19E+05	1.49E+04	7.98E+02	1.02E+04	8.20E+03	798	0.0111	
Bis(2-chloroisopropyl)ether	1.00E+00	1.50E+06	*	8.29E+07	---	---	1.50E+06	5.07E+07	---	1500000	22.8	
Bis(2-ethylhexyl)phthalate	1.00E+00	1.46E+04	*	2.88E+05	9.38E+06	1.17E+06	1.46E+04	8.00E+05	1.63E+11	14600	3.21E+27	
Bromodichloromethane	1.00E+00	3.98E+03	*	6.51E+04	2.12E+06	2.65E+05	3.98E+03	1.81E+05	4.29E+03	3980	0.0136	
Bromomethane (Methyl bromide)	1.00E+00	4.75E+03	*	2.90E+06	9.33E+07	1.17E+07	6.80E+05	1.77E+06	4.75E+03	4750	1.1E+22	
Bromophenyl-phenyl ether 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Butanol n-	1.00E+00	2.53E+06	*	2.07E+08	1.70E+08	2.13E+07	1.68E+08	1.27E+08	2.53E+06	2530000	32	
Butyl benzyl phthalate	1.00E+00	2.53E+05	*	4.14E+08	1.31E+10	1.64E+09	2.53E+05	2.53E+08	1.22E+14	253000	40	
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	1.00E+00	2.52E+04	*	2.07E+06	6.53E+07	8.16E+06	2.52E+04	1.27E+06	2.61E+07	25200	0.106	
Cadmium	1.00E+00	2.60E+03	*	1.04E+06	2.08E+04	2.60E+03	4.03E+03	6.33E+05	---	2600	0.0911	1
Carbon disulfide	1.00E+00	2.81E+06	*	2.07E+08	1.31E+10	1.64E+09	1.30E+07	1.27E+08	2.81E+06	2810000	56.4	
Carbon tetrachloride	1.00E+00	1.30E+03	*	3.10E+04	2.50E+06	3.13E+05	1.30E+03	8.62E+04	2.34E+03	1300	0.0141	0.5
Chlordane	1.00E+00	1.30E-01	*	1.15E+04	3.75E+05	4.69E+04	1.30E-01	3.20E+04	1.66E+09	0.13	1620	0.03
Chlorine	1.00E+00	4.66E+05	*	2.07E+08	3.73E+06	4.66E+05	2.01E+08	1.27E+08	---	466250	57.8	
Chloro-1,3-butadiene, 2- (Chloroprene)	1.00E+00	3.86E+04	*	4.14E+07	1.31E+08	1.64E+07	3.67E+06	2.53E+07	3.86E+04	38600	0.548	
Chloro-3-methylphenol 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Chloroaniline p-	1.00E+00	5.20E+05	*	8.29E+06	---	---	5.20E+05	5.07E+06	---	520000	2.31	
Chlorobenzene	1.00E+00	5.22E+05	*	4.14E+07	1.11E+09	1.39E+08	5.22E+05	2.53E+07	7.41E+06	522000	1.51	100
Chlorobenzilate	1.00E+00	1.01E+01	*	1.49E+04	4.86E+05	6.08E+04	1.01E+01	4.15E+04	2.38E+10	10.1	0.082	
Chlorodibromomethane	1.00E+00	4.28E+03	*	4.80E+04	1.56E+06	1.95E+05	4.28E+03	1.33E+05	1.46E+04	4280	0.0139	
Chlorodifluoromethane	1.00E+00	1.47E+07	*	2.90E+10	9.15E+11	1.14E+11	7.24E+09	1.77E+10	1.47E+07	14700000	3720	
Chloroethane [Ethyl chloride]	1.00E+00	1.08E+05	*	8.29E+08	1.87E+11	2.34E+10	6.08E+06	5.07E+08	1.08E+05	108000	231	
Chloroform	1.00E+00	7.45E+02	*	2.07E+07	1.62E+06	2.03E+05	5.60E+06	1.27E+07	7.45E+02	745	0.00801	6
Chloromethane (Methyl chloride)	1.00E+00	3.47E+04	*	---	1.70E+09	2.13E+08	---	---	3.47E+04	34700	6.06	
Chloronaphthalene 2-	1.00E+00	1.90E+05	*	1.66E+08	---	---	1.90E+05	1.01E+08	---	190000	10.2	
Chlorophenol 2-	1.00E+00	3.93E+05	*	1.04E+07	---	---	3.93E+05	6.33E+06	---	393000	2.89	
Chlorophenyl-phenyl ether 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Chloropropene 3- (Allyl Chloride)	1.00E+00	4.83E+01	*	5.92E+05	1.87E+07	2.34E+06	1.56E+05	3.62E+05	4.83E+01	48.3	5.19E+27	

Chemical Name

PDC - 95,000 cubic yards CR = 1E-6, HQ=1

Risk Factor = 1.00E-06

HQ Factor = 1.00E+00

0.125 Air Particulate Correction Factor

* = Detection Limit	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Correct Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
Chromium	1.00E+00	3.91E+02	*	6.21E+06	3.13E+03	3.91E+02	3.04E+04	3.80E+06	---	391.25	2.27	5
Chromium (III) (Chromic Ion)	1.00E+00	1.52E+07	*	3.11E+09	---	---	1.52E+07	1.90E+09	---	15200000	2.33	5
Chromium (VI) (+6)	1.00E+00	5.59E+01	*	6.21E+06	4.47E+02	5.59E+01	3.04E+04	3.80E+06	---	55.875	2.27	5
Chrysenes	1.00E+00	1.30E+03	*	5.53E+05	4.23E+07	5.29E+06	1.30E+03	1.54E+06	2.04E+09	1300	0.701	
Cobalt	1.00E+00	1.68E+03	*	4.14E+07	1.34E+04	1.68E+03	4.02E+07	2.53E+07	---	1675	13.6	
Copper	1.00E+00	5.07E+07	*	8.29E+07	---	---	8.13E+07	5.07E+07	---	50700000	25.9	
Cresol m-	1.00E+00	5.56E+06	*	1.04E+08	---	---	5.56E+06	6.33E+07	---	5560000	28.9	200
Cresol o-	1.00E+00	4.99E+06	*	1.04E+08	---	---	4.99E+06	6.33E+07	---	4990000	28.9	200
Cresol p-	1.00E+00	5.75E+05	*	1.04E+07	---	---	5.75E+05	6.33E+06	---	575000	2.89	200
Cumene (Isopropylbenzene)	1.00E+00	8.12E+05	*	2.07E+08	7.19E+09	8.99E+08	8.12E+05	1.27E+08	1.17E+08	812000	23.6	
Cyanide	1.00E+00	6.35E+04	*	4.14E+07	---	---	6.35E+04	2.53E+07	---	63500	3.08	
Cyclotetramethylene-tetranitramine	1.00E+00	6.33E+07	*	1.04E+08	3.27E+09	4.09E+08	1.01E+08	6.33E+07	---	63300000	28.9	
DDD	1.00E+00	1.04E-01	*	1.68E+04	5.47E+05	6.84E+04	1.04E-01	4.67E+04	6.75E+10	0.104	2.2E+25	
DDE	1.00E+00	1.07E-01	*	1.19E+04	---	---	1.07E-01	3.30E+04	---	0.107	1.62E+16	
DDT p,p'-	1.00E+00	8.45E-01	*	1.19E+04	3.87E+05	4.84E+04	8.45E-01	3.30E+04	1.09E+11	0.845	9.72E+24	
Diallate	1.00E+00	8.45E+00	*	6.61E+04	2.15E+06	2.69E+05	8.45E+00	1.84E+05	3.79E+08	8.45	2430000	
Diazinon	1.00E+00	5.73E+03	*	1.86E+06	5.88E+07	7.35E+06	5.73E+03	1.14E+06	7.75E+10	5730	0.514	
Dibenz(a,h)anthracene	1.00E+00	4.35E+01	*	5.53E+02	4.23E+04	5.29E+03	4.35E+01	1.54E+03	2.38E+14	43.5	37000000000	
Dibenzofuran	1.00E+00	2.53E+06	*	4.14E+06	1.31E+08	1.64E+07	4.02E+06	2.53E+06	---	2530000	0.0148	
Dibromo-3-chloropropane 1,2-	1.00E+00	2.16E+01	*	6.11E+02	1.99E+04	2.49E+03	2.16E+01	1.70E+03	3.58E+03	21.6	0.000265	
Dichlorobenzene 1,2-	1.00E+00	7.48E+05	*	1.86E+08	3.73E+09	4.66E+08	7.48E+05	1.14E+08	2.63E+08	748000	9.3	
Dichlorobenzene 1,3-	1.00E+00	2.18E+05	*	6.21E+07	---	---	2.18E+05	3.80E+07	---	218000	8.02	
Dichlorobenzene 1,4-	1.00E+00	9.26E+02	*	1.68E+05	5.97E+06	7.46E+05	9.26E+02	4.67E+05	5.37E+05	926	0.034	7.5
Dichlorobenzidine 3,3'-	1.00E+00	3.75E+01	*	8.96E+03	---	---	3.75E+01	2.49E+04	---	37.5	0.00253	
Dichlorodifluoromethane (Freon 12)	1.00E+00	4.72E+04	*	4.14E+08	3.73E+09	4.66E+08	1.56E+07	2.53E+08	4.72E+04	47200	15.9	
Dichloroethane 1,1-	1.00E+00	3.22E+06	*	---	9.33E+09	1.17E+09	---	---	3.22E+06	3220000	52.9	
Dichloroethane 1,2-	1.00E+00	1.44E+03	*	4.43E+04	1.44E+06	1.80E+05	7.26E+03	1.23E+05	1.44E+03	1440	0.0107	0.5
Dichloroethylene 1,1-	1.00E+00	4.93E+05	*	1.04E+08	3.73E+09	4.66E+08	4.24E+06	6.33E+07	4.93E+05	493000	0.108	0.7
Dichloroethylene cis-1,2-	1.00E+00	1.07E+06	*	2.07E+07	---	---	1.07E+06	1.27E+07	---	1070000	1.08	
Dichloroethylene trans-1,2-	1.00E+00	2.13E+06	*	4.14E+07	---	---	2.13E+06	2.53E+07	---	2130000	1.54	
Dichlorophenol 2,4-	1.00E+00	5.09E+04	*	6.21E+06	---	---	5.09E+04	3.80E+06	---	50900	1.7	
Dichlorophenol 2,6-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Dichlorophenoxyacetic acid 2,4-(2,4-D)	1.00E+00	3.35E+05	*	2.07E+07	6.53E+08	8.16E+07	3.35E+05	1.27E+07	2.73E+09	335000	1.08	10
Dichloropropane 1,2-	1.00E+00	2.45E+03	*	5.93E+04	7.47E+07	9.34E+06	2.45E+03	1.65E+05	1.22E+05	2450	0.0338	
Dichloropropene 1,3-(mixture of isomers)	1.00E+00	4.03E+03	*	4.03E+04	9.38E+06	1.17E+06	4.03E+03	1.12E+05	2.50E+04	4030	0.0113	
Dichloropropene cis-1,3-	1.00E+00	9.52E+03	*	4.03E+04	9.38E+06	1.17E+06	9.52E+03	1.12E+05	2.75E+04	9520	7.31E+26	
Dichloropropene trans-1,3-	1.00E+00	9.52E+03	*	4.03E+04	9.38E+06	1.17E+06	9.52E+03	1.12E+05	2.75E+04	9520	7.31E+26	
Dichlorvos	1.00E+00	2.41E+03	*	1.39E+04	4.53E+05	5.66E+04	2.41E+03	3.86E+04	9.69E+05	2410	0.00388	
Dieldrin	1.00E+00	2.07E-02	*	2.52E+02	8.15E+03	1.02E+03	2.07E-02	7.00E+02	9.14E+08	0.0207	1.7E+24	
Diethyl phthalate	1.00E+00	6.58E+05	*	1.66E+09	---	---	6.58E+05	1.01E+09	---	658000	1000	
Diethylstilbestrol	1.00E+00	6.83E-04	*	8.58E-01	2.79E+01	3.49E+00	6.83E-04	2.38E+00	7.08E+08	0.000683	7.85E-08	
Dimethoate	1.00E+00	2.53E+05	*	4.14E+05	1.31E+07	1.64E+06	4.02E+05	2.53E+05	2.51E+11	253000	16900	
Dimethoxybenzidine 3,3'-	1.00E+00	2.57E+04	*	2.88E+05	---	---	2.57E+04	8.00E+05	---	25700	0.0804	
Dimethyl phthalate	1.00E+00	1.95E+09	*	2.07E+10	---	---	1.95E+09	1.27E+10	---	1950000000	5780	
Dimethylbenz(a)anthracene, 7,12-	1.00E+00	2.26E+00	*	1.61E+01	---	---	2.26E+00	4.48E+01	---	2.26	4.68E+12	
Dimethylbenzidine 3,3'-	1.00E+00	1.23E+02	*	1.75E+03	5.71E+04	7.14E+03	1.23E+02	4.87E+03	1.76E+10	123	0.000483	
Dimethylphenol, 2,4-	1.00E+00	1.10E+06	*	4.14E+07	1.31E+09	1.64E+08	1.10E+06	2.53E+07	8.40E+08	1100000	11.3	
DI-n-butyl phthalate	1.00E+00	3.80E+04	*	2.07E+08	---	---	3.80E+04	1.27E+08	---	38000	24.6	
Dinitrobenzene 1,3-	1.00E+00	2.72E+03	*	2.07E+05	---	---	2.72E+03	1.27E+05	---	2720	0.0578	
Dinitromethylphenol, 4,6-,2-	1.00E+00	1.27E+05	*	2.07E+05	6.53E+06	8.16E+05	2.01E+05	1.27E+05	8.57E+09	127000	0.0582	
Dinitrophenol 2,4-	1.00E+00	2.53E+06	*	4.14E+06	---	---	1.72E+07	2.53E+06	---	2530000	1.16	
Dinitrotoluene 2,4-	1.00E+00	1.25E+03	*	5.93E+03	---	---	1.25E+03	1.65E+04	---	1250	0.00166	0.13
Dinitrotoluene 2,6-	1.00E+00	1.25E+03	*	5.93E+03	---	---	1.25E+03	1.65E+04	---	1250	0.00166	
DI-n-octyl phthalate	1.00E+00	5.07E+07	*	8.29E+07	2.61E+09	3.26E+08	6.53E+08	5.07E+07	6.53E+13	50700000	2.59E+27	
Dioxane 1,4-	1.00E+00	2.24E+04	*	3.67E+05	1.19E+07	1.49E+06	1.24E+06	1.02E+06	2.24E+04	22400	0.102	
Diphenylamine	1.00E+00	6.06E+05	*	5.18E+07	1.63E+09	2.04E+08	6.06E+05	3.17E+07	1.93E+10	606000	9.65	
Diphenylhydrazine 1,2-	1.00E+00	6.28E+01	*	5.04E+03	1.64E+05	2.05E+04	6.28E+01	1.40E+04	4.85E+08	62.8	0.00139	
Disulfoton	1.00E+00	1.37E+02	*	8.29E+04	---	---	1.37E+02	5.07E+04	---	137	3.5E+15	
Endosulfan (Endosulfan I and II,mixture)	1.00E+00	4.97E+04	*	1.24E+07	---	---	4.97E+04	7.60E+06	---	49700	3.58	
Endrin	1.00E+00	9.71E+01	*	6.21E+05	---	---	9.71E+01	3.80E+05	---	97.1	61200000000	0.02

Chemical Name

PDC - 95,000 cubic yards CR = 1E-6, HQ=1

Risk Factor = 1.00E-06
HQ Factor = 1.00E+00

0.125 Air Particulate Correction Factor

* = Detection Limit	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Correct Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
Epchlorohydrin	1.00E+00	8.58E+04	*	4.07E+05	1.87E+07	2.34E+06	5.56E+05	1.13E+06	8.58E+04	85800	7.38E+27	
Ethoxyethanol 2-	1.00E+00	4.76E+07	*	8.29E+08	3.73E+09	4.66E+08	3.66E+09	5.07E+08	4.76E+07	47600000	231	
Ethyl acetate	1.00E+00	1.14E+09	*	1.86E+09	---	---	1.83E+09	1.14E+09	---	1140000000	13500	
Ethyl ether	1.00E+00	2.55E+06	*	4.14E+08	1.31E+10	1.64E+09	3.09E+08	2.53E+08	2.55E+06	2550000	92.1	
Ethyl methacrylate	1.00E+00	1.90E+07	*	1.86E+08	5.88E+09	7.35E+08	1.90E+07	1.14E+08	2.11E+07	19000000	243	
Ethyl methanesulfonate	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Ethylbenzene	1.00E+00	1.45E+06	*	2.07E+08	1.89E+10	2.36E+09	1.45E+06	1.27E+08	1.44E+08	1450000	10.9	
Ethylene dibromide (1,2-Dibromoethane)	1.00E+00	2.00E+02	*	2.02E+03	6.25E+04	7.81E+03	2.00E+02	5.60E+03	1.17E+03	200	0.0768	
Ethylene thiourea	1.00E+00	3.67E+04	*	3.67E+04	1.19E+06	1.49E+05	4.57E+04	1.01E+05	1.13E+06	36700	0.0102	
Fluoranthene	1.00E+00	2.27E+06	*	8.29E+07	2.61E+09	3.26E+08	2.27E+06	5.07E+07	3.34E+13	2270000	2.46	
Fluorene	1.00E+00	1.15E+06	*	8.29E+07	2.61E+09	3.26E+08	1.15E+06	5.07E+07	4.04E+11	1150000	4.91	
Fluoride	1.00E+00	7.60E+07	*	1.24E+08	---	---	---	7.60E+07	---	76000000	39.2	
Formaldehyde	1.00E+00	7.88E+01	*	3.11E+08	2.85E+06	3.56E+05	2.82E+08	1.90E+08	7.88E+01	78.8	12.3	
Formic acid	1.00E+00	2.18E+05	*	4.14E+09	5.62E+07	7.03E+06	1.75E+10	2.53E+09	2.18E+05	218000	37.1	
Furan	1.00E+00	6.71E+05	*	2.07E+06	---	---	6.71E+05	1.27E+06	---	671000	0.578	
HCH, (Hexachlorocyclohexane) (Lindane) gamma-	1.00E+00	2.80E+00	*	3.10E+03	1.01E+05	1.26E+04	2.80E+00	8.62E+03	1.98E+06	2.8	1.02E+17	0.4
HCH, alpha- (Hexachlorocyclohexane alpha-BHC)	1.00E+00	1.87E+00	*	6.40E+02	2.08E+04	2.60E+03	1.87E+00	1.78E+03	5.10E+07	1.87	1.05E+19	
HCH, beta- (Hexachlorocyclohexane beta-BHC)	1.00E+00	6.22E+00	*	2.24E+03	7.29E+04	9.11E+03	6.22E+00	6.23E+03	1.56E+10	6.22	0.000634	
Heptachlor	1.00E+00	1.86E-01	*	8.96E+02	2.89E+04	3.61E+03	1.86E-01	2.49E+03	1.22E+07	0.186	1.31E+24	0.008
Heptachlor epoxide	1.00E+00	1.97E-01	*	4.43E+02	1.44E+04	1.80E+03	1.97E-01	1.23E+03	3.69E+08	0.197	5.62E+24	0.008
Hexachloro-1,3-butadiene	1.00E+00	1.41E+01	*	5.17E+04	1.68E+06	2.10E+05	1.41E+01	1.44E+05	1.22E+06	14.1	0.00817	0.5
Hexachlorobenzene	1.00E+00	2.15E-01	*	2.52E+03	8.15E+04	1.02E+04	2.15E-01	7.00E+03	9.53E+08	0.215	0.00899	0.13
Hexachlorocyclopentadiene	1.00E+00	3.06E+04	*	1.24E+07	3.72E+06	4.65E+05	3.06E+04	7.60E+06	6.69E+06	30600	1.25E+27	
Hexachloroethane	1.00E+00	6.07E+02	*	2.88E+05	9.38E+06	1.17E+06	6.07E+02	8.00E+05	2.74E+06	607	0.0835	3
Hexachlorophene	1.00E+00	5.00E+03	*	6.21E+05	---	---	5.00E+03	3.80E+05	---	5000	0.00494	
Hexachloropropene	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Hexahydro-1,3,5-trinitro-1,3,5-triazine	1.00E+00	3.67E+04	*	3.67E+04	1.19E+06	1.49E+05	4.57E+04	1.02E+05	---	36700	0.0102	
Indeno (1,2,3-cd) pyrene	1.00E+00	7.57E+01	*	5.53E+03	4.23E+05	5.29E+04	7.57E+01	1.54E+04	3.27E+14	75.7	246000000	
Iron	1.00E+00	3.80E+08	*	6.21E+08	---	---	6.04E+08	3.80E+08	---	380000000	11.2	
Isobutyl alcohol	1.00E+00	1.67E+08	*	6.21E+08	1.96E+10	2.45E+09	6.03E+08	3.80E+08	1.67E+08	167000000	173	
Isophorone	1.00E+00	4.61E+05	*	4.25E+06	1.38E+08	1.73E+07	4.61E+05	1.18E+07	2.71E+07	461000	1.18	
Kepon	1.00E+00	2.29E+00	*	5.04E+02	1.64E+04	2.05E+03	2.29E+00	1.40E+03	8.15E+08	2.29	0.000152	
Lead	1.00E+00	5.60E+04	*	---	4.48E+05	5.60E+04	---	1.62E+06	---	56000	0.702	5
Magnesium	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Malathion	1.00E+00	1.10E+06	*	4.14E+07	1.31E+09	1.64E+08	1.10E+06	2.53E+07	1.97E+13	1100000	11.6	
Manganese	1.00E+00	1.14E+05	*	4.97E+07	9.15E+05	1.14E+05	4.83E+07	3.04E+07	---	114375	15.7	
Mercury (Fish Pathway Only)	1.00E+00	9.35E+00	*	---	---	---	9.35E+00	---	---	9.35	---	
Mercury (Total)	1.00E+00	3.80E+05	*	6.21E+05	5.60E+06	7.00E+05	---	3.80E+05	7.39E+08	380000	0.0292	0.2
Methacrylonitrile	1.00E+00	2.08E+04	*	2.07E+05	1.31E+07	1.64E+06	1.32E+05	1.27E+05	2.08E+04	20800	0.0631	
Methanol	1.00E+00	6.33E+08	*	1.04E+09	---	---	5.91E+09	6.33E+08	---	633000000	289	
Methoxychlor	1.00E+00	1.20E+04	*	1.04E+07	3.27E+08	4.09E+07	1.20E+04	6.33E+06	3.41E+13	12000	3.13E+28	10
Methyl acetate	1.00E+00	1.27E+09	*	2.07E+09	---	---	1.52E+09	1.27E+09	---	1270000000	578	
Methyl ethyl ketone	1.00E+00	9.93E+07	*	1.24E+09	9.15E+10	1.14E+10	1.26E+09	7.60E+08	9.93E+07	99300000	347	200
Methyl isobutyl ketone	1.00E+00	3.40E+07	*	1.66E+08	5.62E+10	7.03E+09	3.40E+07	1.01E+08	1.99E+08	34000000	46.3	
Methyl methacrylate	1.00E+00	2.53E+07	*	2.90E+09	1.31E+10	1.64E+09	8.80E+08	1.77E+09	2.53E+07	25300000	1110	
Methyl parathion	1.00E+00	5.80E+03	*	5.18E+05	1.63E+07	2.04E+06	5.80E+03	3.17E+05	1.94E+11	5800	7370000000	
Methylcholanthrene 3-	1.00E+00	8.50E-03	*	1.83E+02	---	---	8.50E-03	5.09E+02	---	0.0085	9.9E+22	
Methylene bromide (Dibromomethane)	1.00E+00	2.13E+04	*	2.07E+07	6.53E+08	8.16E+07	2.01E+06	1.27E+07	2.13E+04	21300	5.07	
Methylene Chloride (Dichloromethane)	1.00E+00	1.69E+04	*	5.38E+05	8.00E+07	1.00E+07	1.27E+05	1.49E+06	1.69E+04	16900	0.079	
Methylnaphthalene 2-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Molybdenum	1.00E+00	6.33E+06	*	1.04E+07	---	---	1.01E+07	6.33E+06	---	6330000	3.33	
Naphthalene	1.00E+00	4.69E+04	*	4.14E+07	3.75E+05	4.69E+04	1.95E+05	2.53E+07	3.23E+05	46875	0.00327	
Naphthoquinone 1,4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Naphthylamine, 2-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Nickel	1.00E+00	1.95E+04	*	4.14E+07	1.56E+05	1.95E+04	1.35E+05	2.53E+07	---	19500	13.5	
Nitroaniline 2-	1.00E+00	2.45E+05	*	6.21E+06	1.96E+06	2.45E+05	4.03E+05	3.80E+06	1.38E+07	245000	1.73	
Nitroaniline 3-	1.00E+00	4.05E+04	*	1.92E+05	6.25E+06	7.81E+05	4.05E+04	3.80E+05	7.51E+07	40500	0.0536	
Nitroaniline 4-	1.00E+00	4.79E+04	*	1.92E+05	6.25E+06	7.81E+05	4.79E+04	5.34E+05	---	47900	0.0536	
Nitrobenzene	1.00E+00	1.71E+05	*	1.04E+06	3.73E+07	4.66E+06	1.71E+05	6.33E+05	1.32E+07	171000	0.289	2
Nitro-o-toluidine, 5- (Methyl-5-nitroaniline 2-)	1.00E+00	1.22E+05	*	1.22E+05	3.98E+06	4.98E+05	1.52E+05	3.40E+05	---	122000	0.0341	

Chemical Name PDC - 95,000 cubic yards CR = 1E-6, HQ=1

Risk Factor = 1.00E-06
HQ Factor = 1.00E+00

0.125 Air Particulate Correction Factor

Chemical Name	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Correct Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
* = Detection Limit												
Nitrophenol 2-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nitrophenol 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nitropropane 2-	1.00E+00	5.38E+01	*	4.29E+02	1.40E+04	1.75E+03	7.43E+02	1.19E+03	5.38E+01	53.8	0.00012	---
Nitroquinoline-1-oxide, 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nitrosodiethylamine N-	1.00E+00	2.69E+01	*	2.69E+01	8.75E+02	1.09E+02	5.32E+01	7.47E+01	3.14E+01	26.9	0.0000075	---
Nitrosodimethylamine N-	1.00E+00	4.84E+01	*	7.91E+01	2.68E+03	3.35E+02	1.33E+02	2.20E+02	4.84E+01	48.4	0.0000221	---
Nitroso-di-n-butylamine N-	1.00E+00	2.34E+01	*	7.47E+02	2.34E+04	2.93E+03	2.34E+01	2.08E+03	4.57E+03	23.4	0.000206	---
Nitroso-di-n-propylamine N-	1.00E+00	1.09E+02	*	5.76E+02	1.88E+04	2.35E+03	1.09E+02	1.60E+03	4.18E+02	109	0.000161	---
Nitrosodiphenylamine N-	1.00E+00	8.79E+02	*	8.23E+05	2.68E+07	3.35E+06	8.79E+03	2.29E+06	2.50E+07	8790	0.227	---
Nitrosomethylethylamine N-	1.00E+00	7.37E+01	*	1.83E+02	5.97E+03	7.46E+02	7.37E+01	5.09E+02	2.15E+02	73.7	0.0000512	---
Nitrosomorpholine N-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nitrosopiperidine N-	1.00E+00	4.29E+02	*	4.29E+02	---	---	6.52E+02	1.19E+03	---	429	0.00012	---
Nitrosopyrrolidine N-	1.00E+00	1.92E+03	*	1.92E+03	6.15E+04	7.69E+03	1.26E+04	5.34E+03	2.76E+04	1920	0.000536	---
Octamethyl pyrophosphoramidate	1.00E+00	2.53E+06	*	4.14E+06	1.31E+08	1.64E+07	4.02E+07	2.53E+06	1.49E+10	2530000	1.31	---
Parathion (ethyl)	1.00E+00	5.37E+04	*	1.24E+07	---	---	5.37E+04	7.60E+06	---	53700	1.93E+29	---
Pentachlorobenzene	1.00E+00	9.42E+01	*	1.66E+06	---	---	9.42E+01	1.01E+06	---	94.2	3.82	---
Pentachloroethane	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Pentachloronitrobenzene (PCNB)	1.00E+00	5.01E+01	*	1.55E+04	---	---	5.01E+01	4.31E+04	---	50.1	0.005	---
Pentachlorophenol	1.00E+00	1.07E+02	*	3.36E+04	---	---	1.07E+02	9.34E+04	---	107	0.00242	100
Phenacetin	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Phenanthrene	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Phenol	1.00E+00	7.73E+07	*	6.21E+08	---	---	7.73E+07	3.80E+08	---	77300000	173	---
Phenyl mercuric acetate	1.00E+00	1.08E+04	*	1.66E+05	---	---	1.08E+04	1.01E+05	---	10800	0.0463	---
Phenylenediamine 1,3-	1.00E+00	7.60E+06	*	1.24E+07	---	---	1.21E+07	7.60E+06	---	7600000	3.47	---
Phorate	1.00E+00	9.09E+02	*	4.14E+05	---	---	9.09E+02	2.53E+05	---	909	5.41E+27	---
Picoline a-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Polychlorinated biphenyls (Aroclors)	1.00E+00	1.66E-02	*	2.02E+03	6.56E+04	8.20E+03	1.66E-02	5.60E+03	1.90E+07	0.0166	26800000	---
Pronamide	1.00E+00	5.65E+05	*	1.55E+08	4.90E+09	6.13E+08	5.65E+05	9.50E+07	5.83E+11	565000	46.2	---
Pyrene	1.00E+00	1.71E+04	*	6.21E+07	1.96E+09	2.45E+08	1.71E+04	3.80E+07	4.85E+13	17100	4.45	---
Pyridine	1.00E+00	1.06E+06	*	2.07E+06	---	---	1.06E+06	1.27E+06	---	1060000	0.578	5
SAFROLE	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Selenium	1.00E+00	7.81E+04	*	1.04E+07	---	---	7.81E+04	6.33E+06	---	78100	0.89	1
Selenium(+4)	1.00E+00	7.81E+04	*	1.04E+07	---	---	7.81E+04	6.33E+06	---	78100	0.89	1
Selenium(+6)	1.00E+00	7.81E+04	*	1.04E+07	---	---	7.81E+04	6.33E+06	---	78100	0.955	1
Silver	1.00E+00	4.95E+05	*	1.04E+07	---	---	4.95E+05	6.33E+06	---	495000	8.61	5
Strychnine and salts	1.00E+00	3.56E+04	*	6.21E+05	---	---	3.56E+04	3.80E+05	---	35600	0.173	---
Styrene	1.00E+00	4.06E+06	*	4.14E+08	1.89E+10	2.36E+09	4.06E+06	2.53E+08	2.18E+08	4060000	1.51	---
Tetrachlorobenzene 1,2,4,5-	1.00E+00	1.69E+02	*	6.21E+05	---	---	1.69E+02	3.80E+05	---	169	0.0301	---
Tetrachlorodibenzo-p-dioxin (TCDD) 2,3,7,8-	1.00E+00	3.47E-06	*	2.69E-02	8.75E-01	1.09E-01	3.47E-06	7.47E-02	1.67E+08	0.00000347	4.03	---
Tetrachloroethane 1,1,1,2-	1.00E+00	3.31E+03	*	1.55E+05	5.05E+06	6.31E+05	3.31E+03	4.31E+05	4.54E+04	3310	0.0551	---
Tetrachloroethane 1,1,2,2-	1.00E+00	5.82E+00	*	2.02E+04	6.56E+05	8.20E+04	5.82E+00	5.60E+04	1.38E+04	5.82	4.61	---
Tetrachloroethylene	1.00E+00	1.86E+02	*	7.47E+03	6.25E+06	7.81E+05	1.86E+02	2.08E+04	1.64E+04	186	0.00204	0.7
Tetrachlorophenol 2,3,4,6-	1.00E+00	3.73E+04	*	6.21E+07	1.96E+09	2.45E+08	3.73E+04	3.80E+07	3.82E+10	37300	4.52	---
Tetraethyl dithiopyrophosphate (Sulfotep)	1.00E+00	4.32E+03	*	1.04E+06	3.27E+07	4.09E+06	4.32E+03	6.33E+05	2.92E+09	4320	1.88E+28	---
Thallium	1.00E+00	9.79E+01	*	1.37E+05	---	---	9.79E+01	8.36E+04	---	97.9	0.0842	---
Thionazin	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Tin	1.00E+00	7.60E+08	*	1.24E+09	---	---	1.21E+09	7.60E+08	---	760000000	38700000	---
Toluene	1.00E+00	2.58E+06	*	1.66E+08	9.33E+10	1.17E+10	2.58E+06	1.01E+08	2.14E+08	2580000	15.1	---
Toluenediamine 2,4-	1.00E+00	3.42E+01	*	1.26E+03	4.10E+04	5.13E+03	3.42E+01	3.50E+03	4.09E+07	34.2	0.000352	---
Toluidine o-	1.00E+00	3.41E+03	*	1.68E+04	---	---	3.41E+03	4.67E+04	---	3410	0.00469	---
Toluidine p-	1.00E+00	7.57E+03	*	2.12E+04	6.91E+05	8.64E+04	7.57E+03	5.90E+04	1.64E+05	7570	0.00592	---
Toxaphene (chlorinated camphenes)	1.00E+00	2.19E-02	*	3.67E+03	1.19E+05	1.49E+04	2.19E-02	1.02E+04	4.40E+04	0.0219	33200	0.5
Tribromomethane (Bromoform)	1.00E+00	1.78E+04	*	5.11E+05	3.41E+07	4.26E+06	1.78E+04	1.42E+06	9.30E+05	17800	0.152	---
Trichloro-1,2,2-trifluoro-ethane 1,1,2-	1.00E+00	6.08E+07	*	6.21E+10	5.60E+11	7.00E+10	7.69E+08	3.80E+10	6.08E+07	60800000	2570	---
Trichlorobenzene 1,2,4-	1.00E+00	3.36E+04	*	2.07E+07	6.53E+07	8.16E+06	3.36E+04	1.27E+07	2.04E+07	33600	0.991	---
Trichloroethane 1,1,1-	1.00E+00	1.39E+07	*	5.80E+08	4.12E+10	5.15E+09	1.39E+07	3.55E+08	1.85E+07	13900000	11600	---
Trichloroethane 1,1,2-	1.00E+00	3.83E+03	*	7.08E+04	2.34E+06	2.93E+05	3.83E+03	1.97E+05	8.98E+03	3830	0.0193	---
Trichloroethylene (Trichloroethylene 1,1,2-)	1.00E+00	9.30E+03	*	3.10E+05	1.88E+07	2.35E+06	9.30E+03	8.62E+05	2.69E+04	9300	0.0775	0.5
Trichlorofluoromethane (Freon 11)	1.00E+00	7.58E+05	*	6.21E+08	1.31E+10	1.64E+09	1.23E+07	3.80E+08	7.58E+05	758000	54	---
Trichlorophenol 2,4,5-	1.00E+00	4.07E+05	*	2.07E+08	---	---	4.07E+05	1.27E+08	---	407000	22.9	400

Chemical Name PDC - 95,000 cubic yards CR = 1E-6, HQ=1

Risk Factor = 1.00E-06
 HQ Factor = 1.00E+00

0.125 Air Particulate Correction Factor

	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Correct Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
* = Detection Limit												
Trichlorophenol 2,4,6-	1.00E+00	5.20E+02	*	2.07E+05	6.53E+06	8.16E+05	5.20E+02	1.27E+05	6.21E+07	520	0.0318	2
Trichlorophenoxy)propionic acid 2-(2,4,5- (Silvex)	1.00E+00	1.34E+05	*	1.66E+07	5.23E+08	6.54E+07	1.34E+05	1.01E+07	2.71E+12	134000	0.77	1
Trichlorophenoxyacetic acid 2,4,5-	1.00E+00	2.74E+05	*	2.07E+07	6.53E+08	8.16E+07	2.74E+05	1.27E+07	2.68E+13	274000	5.78	
Trichloropropane 1,2,3-	1.00E+00	8.35E+01	*	2.02E+03	9.15E+07	1.14E+07	8.35E+01	5.60E+03	2.42E+06	83.5	0.000775	
Triethylphosphorothiate o,o,o-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Trinitrobenzene (Trinitrobenzene 1,3,5-) sym-	1.00E+00	1.30E+07	*	6.21E+07	---	---	1.30E+07	3.80E+07	---	13000000	17.3	
Trinitrotoluene 2,4,6-	1.00E+00	1.73E+04	*	1.34E+05	4.38E+06	5.48E+05	1.73E+04	3.74E+05	2.13E+09	17300	0.0375	
Tris (2,3-dibromopropyl) phosphate	1.00E+00	1.50E+01	*	1.75E+03	---	---	1.50E+01	4.87E+03	---	15	0.047	
Vanadium	1.00E+00	1.27E+06	*	2.07E+06	---	---	2.06E+06	1.27E+06	---	1270000	0.976	
Vinyl acetate	1.00E+00	2.32E+06	*	2.07E+09	3.73E+09	4.66E+08	1.01E+09	1.27E+09	2.32E+06	2320000	29	
Vinyl chloride	1.00E+00	1.27E+02	*	2.88E+03	4.23E+06	5.29E+05	8.22E+02	8.00E+03	1.27E+02	127	0.000804	0.2
Xylenes (total)	1.00E+00	5.42E+06	*	4.14E+08	1.89E+09	2.36E+08	5.42E+06	2.53E+08	1.67E+07	5420000	9.56	
Zinc	1.00E+00	9.25E+05	*	6.21E+08	---	---	9.25E+05	3.80E+08	---	925000	197	

Chemical Name

Peoria Disposal 72,000 cubic yards per year, CR 1E-6, HQ=1.0

Risk Factor = 1.00E-06

air particulate correction factor= 0.125

HQ Factor = 1.00E+00

* = Detection Limit	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Corrected Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
Acenaphthene	1.00E+00	2.85E+05	*	1.57E+08	5.01E+09	6.26E+08	2.85E+05	9.73E+07	1.08E+11	285000	10.6	
Acenaphthylene	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Acetaldehyde [Ethanal]	1.00E+00	2.73E+06	*	---	2.18E+07	2.73E+06	---	---	---	2725000	---	
Acetone (2-propanone)	1.00E+00	1.46E+09	*	2.36E+09	---	---	5.72E+09	1.46E+09	---	1460000000	520	
Acetonitrile (methyl cyanide)	1.00E+00	1.53E+06	*	4.45E+07	1.42E+09	1.78E+08	1.33E+08	2.76E+07	1.53E+06	1530000	9.83	
Acetophenone	1.00E+00	2.45E+07	*	2.62E+08	---	---	2.45E+07	1.62E+08	---	24500000	---	
Acrolein	1.00E+00	1.52E+02	*	1.31E+06	4.77E+05	5.96E+04	2.19E+06	8.11E+05	1.52E+02	152	5.04E+26	
Acrylamide	1.00E+00	1.13E+03	*	1.13E+03	3.73E+04	4.66E+03	1.41E+03	3.19E+03	4.05E+05	1130	0.000325	
Acrylonitrile	1.00E+00	2.45E+02	*	9.44E+03	7.05E+05	8.81E+04	2.45E+02	2.66E+04	5.45E+02	245	0.00227	
Aldrin	1.00E+00	1.51E-03	*	3.00E+02	9.79E+03	1.22E+03	1.51E-03	8.44E+02	5.87E+07	0.00151	4980000	
Aniline (benzenamine)	1.00E+00	3.41E+05	*	8.95E+05	2.39E+07	2.99E+06	3.41E+05	2.52E+06	2.79E+06	341000	0.197	
Anthracene	1.00E+00	4.84E+05	*	7.86E+08	2.51E+10	3.14E+09	4.84E+05	4.87E+08	8.94E+13	484000	25.9	
Antimony	1.00E+00	2.58E+04	*	1.05E+06	---	---	2.58E+04	6.49E+05	---	25800	0.109	
Aramite	1.00E+00	2.04E+05	*	2.04E+05	6.75E+06	8.44E+05	2.54E+05	5.74E+05	---	204000	1.59E+22	
Arsenic	1.00E+00	2.14E+02	*	3.40E+03	1.12E+04	1.40E+03	2.14E+02	9.57E+03	---	214	0.000902	5
Arsenic (III)	1.00E+00	2.14E+02	*	3.40E+03	1.12E+04	1.40E+03	2.14E+02	9.57E+03	---	214	0.000902	5
Arsenic (V)	1.00E+00	2.14E+02	*	3.40E+03	1.12E+04	1.40E+03	2.14E+02	9.57E+03	---	214	0.00204	5
Atrazine	1.00E+00	5.13E+02	*	2.30E+04	7.63E+05	9.54E+04	5.13E+02	6.46E+04	2.41E+11	513	0.005	
Barium	1.00E+00	1.49E+06	*	5.24E+08	1.19E+07	1.49E+06	5.16E+08	3.24E+08	---	1487500	36	100
Benz(a)anthracene	1.00E+00	1.39E+01	*	6.99E+03	5.41E+05	6.76E+04	1.39E+01	1.97E+04	3.26E+11	13.9	0.00701	
Benzaldehyde	1.00E+00	3.26E+07	*	2.62E+08	8.36E+09	1.05E+09	3.26E+07	1.62E+08	5.91E+08	32600000	57.8	
Benzene	1.00E+00	3.75E+03	*	9.27E+04	6.22E+06	7.78E+05	4.67E+03	2.61E+05	3.75E+03	3750	0.0205	0.5
Benzidine	1.00E+00	3.16E-01	*	2.22E+01	7.30E+02	9.13E+01	3.16E-01	6.24E+01	---	0.316	0.0000489	
Benzo(a)pyrene	1.00E+00	2.42E+01	*	6.99E+02	5.41E+04	6.76E+03	2.42E+01	1.97E+03	1.06E+12	24.2	2.63	
Benzo(b)fluoranthene	1.00E+00	2.10E+02	*	6.99E+03	5.41E+05	6.76E+04	2.10E+02	1.97E+04	6.12E+11	210	22.4	
Benzo(ghi)perylene	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Benzo(k)fluoranthene	1.00E+00	2.06E+03	*	6.99E+04	5.41E+06	6.76E+05	2.06E+03	1.97E+05	4.92E+14	2060	6.68E+16	
Benzoic acid	1.00E+00	6.44E+08	*	1.05E+10	3.34E+11	4.18E+10	6.44E+08	6.49E+09	4.11E+12	644000000	2310	
Benzyl alcohol	1.00E+00	1.89E+08	*	7.86E+08	2.51E+10	3.14E+09	1.89E+08	4.87E+08	1.66E+10	189000000	173	
Benzyl chloride	1.00E+00	3.00E+04	*	3.00E+04	2.42E+08	3.03E+07	3.38E+04	8.44E+04	1.51E+07	30000	4.3E+26	
Beryllium	1.00E+00	2.50E+03	*	5.24E+06	2.00E+04	2.50E+03	1.56E+05	3.24E+06	---	2500	0.078	
Bis (2-Chloroethoxy) methane	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Bis(2-chloroethyl)ether	1.00E+00	1.01E+03	*	4.64E+03	1.53E+05	1.91E+04	1.01E+03	1.30E+04	9.49E+03	1010	0.0111	
Bis(2-chloroisopropyl)ether	1.00E+00	1.89E+06	*	1.05E+08	---	---	1.89E+06	6.49E+07	---	1890000	22.8	
Bis(2-ethylhexyl)phthalate	1.00E+00	1.54E+04	*	3.64E+05	1.20E+07	1.50E+06	1.54E+04	1.03E+06	1.88E+11	15400	3.21E+27	
Bromodichloromethane	1.00E+00	4.97E+03	*	8.23E+04	2.71E+06	3.39E+05	5.03E+03	2.31E+05	4.97E+03	4970	0.0136	
Bromomethane (Methyl bromide)	1.00E+00	5.50E+03	*	3.67E+06	1.19E+08	1.49E+07	8.60E+05	2.27E+06	5.50E+03	5500	1.1E+22	
Bromophenyl-phenyl ether 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Butanol n-	1.00E+00	2.94E+06	*	2.62E+08	2.17E+08	2.71E+07	2.12E+08	1.62E+08	2.94E+06	2940000	32	
Butyl benzyl phthalate	1.00E+00	2.99E+05	*	5.24E+08	1.67E+10	2.09E+09	2.99E+05	3.24E+08	1.42E+14	299000	40	
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	1.00E+00	3.19E+04	*	2.62E+06	8.36E+07	1.05E+07	3.19E+04	1.62E+06	3.03E+07	31900	0.106	
Cadmium	1.00E+00	3.33E+03	*	1.31E+06	2.66E+04	3.33E+03	5.09E+03	8.11E+05	---	3325	0.0911	1
Carbon disulfide	1.00E+00	3.25E+06	*	2.62E+08	1.67E+10	2.09E+09	1.31E+07	1.62E+08	3.25E+06	3250000	56.4	
Carbon tetrachloride	1.00E+00	1.64E+03	*	3.92E+04	3.20E+06	4.00E+05	1.64E+03	1.10E+05	2.71E+03	1640	0.0141	0.5
Chlordane	1.00E+00	1.43E-01	*	1.46E+04	4.80E+05	6.00E+04	1.43E-01	4.10E+04	1.92E+09	0.143	1620	0.03
Chlorine	1.00E+00	5.96E+05	*	2.62E+08	4.77E+06	5.96E+05	2.54E+08	1.62E+08	---	596250	57.8	
Chloro-1,3-butadiene, 2- (Chloroprene)	1.00E+00	4.47E+04	*	5.24E+07	1.67E+08	2.09E+07	4.64E+06	3.24E+07	4.47E+04	44700	0.548	
Chloro-3-methylphenol 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Chloroaniline p-	1.00E+00	6.57E+05	*	1.05E+07	---	---	6.57E+05	6.49E+06	---	657000	2.31	
Chlorobenzene	1.00E+00	6.59E+05	*	5.24E+07	1.42E+09	1.78E+08	6.59E+05	3.24E+07	8.58E+06	659000	1.51	100
Chlorobenzilate	1.00E+00	1.26E+01	*	1.89E+04	6.22E+05	7.78E+04	1.26E+01	5.32E+04	2.75E+10	12.6	0.082	
Chlorodibromomethane	1.00E+00	5.41E+03	*	6.07E+04	2.00E+06	2.50E+05	5.41E+03	1.71E+05	1.69E+04	5410	0.0139	

Chemical Name

Peoria Disposal 72,000 cubic yards per year, CR 1E-6, HQ=1.0

Risk Factor = 1.00E-06

air particulate correction factor= 0.125

HQ Factor = 1.00E+00

	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Corrected Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
* = Detection Limit												
Chlorodifluoromethane	1.00E+00	1.70E+07	*	3.67E+10	1.17E+12	1.46E+11	9.15E+09	2.27E+10	1.70E+07	17000000	3720	
Chloroethane [Ethyl chloride]	1.00E+00	1.25E+05	*	1.05E+09	2.39E+11	2.99E+10	7.67E+06	6.49E+08	1.25E+05	125000	231	
Chloroform	1.00E+00	8.63E+02	*	2.62E+07	2.07E+06	2.59E+05	7.07E+06	1.62E+07	8.63E+02	863	0.00801	6
Chloromethane (Methyl chloride)	1.00E+00	4.01E+04	*	---	2.17E+09	2.71E+08	---	---	4.01E+04	40100	6.06	
chloronaphthalene 2-	1.00E+00	2.34E+05	*	2.10E+08	---	---	2.34E+05	1.30E+08	---	234000	10.2	
Chlorophenol 2-	1.00E+00	4.96E+05	*	1.31E+07	---	---	4.96E+05	8.11E+06	---	496000	2.89	
Chlorophenyl-phenyl ether 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Chloropropene 3- (Allyl Chloride)	1.00E+00	5.60E+01	*	7.49E+05	2.39E+07	2.99E+06	1.97E+05	4.64E+05	5.60E+01	56	5.19E+27	
Chromium	1.00E+00	5.00E+02	*	7.86E+06	4.00E+03	5.00E+02	3.84E+04	4.87E+06	---	500	2.27	
Chromium (III) (Chromic Ion)	1.00E+00	1.92E+07	*	3.93E+09	---	---	1.92E+07	2.43E+09	---	19200000	2.33	5
Chromium (VI) (+6)	1.00E+00	7.14E+01	*	7.86E+06	5.71E+02	7.14E+01	3.84E+04	4.87E+06	---	71.375	2.27	5
Chrysene	1.00E+00	1.33E+03	*	6.99E+05	5.41E+07	6.76E+06	1.33E+03	1.97E+06	2.36E+09	1330	0.701	
Cobalt	1.00E+00	2.14E+03	*	5.24E+07	1.71E+04	2.14E+03	5.08E+07	3.24E+07	---	2137.5	13.6	
Copper	1.00E+00	6.49E+07	*	1.05E+08	---	---	1.03E+08	6.49E+07	---	64900000	25.9	
Cresol m-	1.00E+00	7.03E+06	*	1.31E+08	---	---	7.03E+06	8.11E+07	---	7030000	28.9	200
Cresol o-	1.00E+00	6.30E+06	*	1.31E+08	---	---	6.30E+06	8.11E+07	---	6300000	28.9	200
Cresol p-	1.00E+00	7.27E+05	*	1.31E+07	---	---	7.27E+05	8.11E+06	---	727000	2.89	200
Cumene (Isopropylbenzene)	1.00E+00	9.75E+05	*	2.62E+08	9.19E+09	1.15E+09	9.75E+05	1.62E+08	1.35E+08	975000	23.6	
Cyanide	1.00E+00	8.03E+04	*	5.24E+07	---	---	8.03E+04	3.24E+07	---	80300	3.08	
Cyclotetramethylene-tetranitramine	1.00E+00	8.11E+07	*	1.31E+08	4.18E+09	5.23E+08	1.27E+08	8.11E+07	---	81100000	28.9	
DDD	1.00E+00	1.15E-01	*	2.12E+04	6.99E+05	8.74E+04	1.15E-01	5.98E+04	7.81E+10	0.115	2.2E+25	
DDE	1.00E+00	1.15E-01	*	1.50E+04	---	---	1.15E-01	4.22E+04	---	0.115	1.62E+16	
DDT p,p'-	1.00E+00	8.59E-01	*	1.50E+04	4.94E+05	6.18E+04	8.59E-01	4.22E+04	1.26E+11	0.859	9.72E+24	
Diallate	1.00E+00	9.68E+00	*	8.36E+04	2.75E+06	3.44E+05	9.68E+00	2.35E+05	4.39E+08	9.68	2430000	
Diazinon	1.00E+00	6.77E+03	*	2.36E+06	7.52E+07	9.40E+06	6.77E+03	1.46E+06	8.98E+10	6770	0.514	
Dibenz(a,h)anthracene	1.00E+00	4.40E+01	*	6.99E+02	5.41E+04	6.76E+03	4.40E+01	1.97E+03	2.76E+14	44	3.7E+10	
Dibenzofuran	1.00E+00	3.24E+06	*	5.24E+06	1.67E+08	2.09E+07	5.08E+06	3.24E+06	---	3240000	0.0148	
Dibromo-3-chloropropane 1,2-	1.00E+00	2.73E+01	*	7.73E+02	2.54E+04	3.18E+03	2.73E+01	2.17E+03	4.15E+03	27.3	0.000265	
Dichlorobenzene 1,2-	1.00E+00	9.44E+05	*	2.36E+08	4.77E+09	5.96E+08	9.44E+05	1.46E+08	3.04E+08	944000	9.3	
Dichlorobenzene 1,3-	1.00E+00	2.75E+05	*	7.86E+07	---	---	2.75E+05	4.87E+07	---	275000	8.02	
Dichlorobenzene 1,4-	1.00E+00	1.17E+03	*	2.12E+05	7.63E+06	9.54E+05	1.17E+03	5.98E+05	6.21E+05	1170	0.034	7.5
Dichlorobenzidine 3,3'-	1.00E+00	4.71E+01	*	1.13E+04	---	---	4.71E+01	3.19E+04	---	47.1	0.00253	
Dichlorodifluoromethane (Freon 12)	1.00E+00	5.47E+04	*	5.24E+08	4.77E+09	5.96E+08	1.97E+07	3.24E+08	5.47E+04	54700	15.9	
Dichloroethane 1,1-	1.00E+00	3.73E+06	*	---	1.19E+10	1.49E+09	---	---	3.73E+06	3730000	52.9	
Dichloroethane 1,2-	1.00E+00	1.67E+03	*	5.60E+04	1.84E+06	2.30E+05	9.18E+03	1.58E+05	1.67E+03	1670	0.0107	0.5
Dichloroethylene 1,1-	1.00E+00	5.71E+05	*	1.31E+08	4.77E+09	5.96E+08	5.35E+06	8.11E+07	5.71E+05	571000	0.108	0.7
Dichloroethylene cis-1,2-	1.00E+00	1.35E+06	*	2.62E+07	---	---	1.35E+06	1.62E+07	---	1350000	1.08	
Dichloroethylene trans-1,2-	1.00E+00	2.69E+06	*	5.24E+07	---	---	2.69E+06	3.24E+07	---	2690000	1.54	
Dichlorophenol 2,4-	1.00E+00	6.43E+04	*	7.86E+06	---	---	6.43E+04	4.87E+06	---	64300	1.7	
Dichlorophenol 2,6-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Dichlorophenoxyacetic acid 2,4-(2,4-D)	1.00E+00	4.22E+05	*	2.62E+07	8.36E+08	1.05E+08	4.22E+05	1.62E+07	3.16E+09	422000	1.08	10
Dichloropropane 1,2-	1.00E+00	3.10E+03	*	7.50E+04	9.55E+07	1.19E+07	3.10E+03	2.11E+05	1.41E+05	3100	0.0338	
Dichloropropene 1,3-(mixture of isomers)	1.00E+00	5.09E+03	*	5.10E+04	1.20E+07	1.50E+06	5.09E+03	1.44E+05	2.89E+04	5090	0.0113	
Dichloropropene cis-1,3-	1.00E+00	1.20E+04	*	5.10E+04	1.20E+07	1.50E+06	1.20E+04	1.44E+05	3.18E+04	12000	7.31E+26	
Dichloropropene trans-1,3-	1.00E+00	1.20E+04	*	5.10E+04	1.20E+07	1.50E+06	1.20E+04	1.44E+05	3.18E+04	12000	7.31E+26	
Dichlorvos	1.00E+00	3.05E+03	*	1.76E+04	5.79E+05	7.24E+04	3.05E+03	4.95E+04	1.12E+06	3050	0.00388	
Dieldrin	1.00E+00	2.37E-02	*	3.19E+02	1.04E+04	1.30E+03	2.37E-02	8.97E-02	1.06E+09	0.0237	1.7E+24	
Diethyl phthalate	1.00E+00	8.32E+05	*	2.10E+09	---	---	8.32E+05	1.30E+09	---	832000	1000	
Diethylstilbestrol	1.00E+00	7.28E-04	*	1.09E+00	3.57E+01	4.46E+00	7.28E-04	3.05E+00	8.20E+08	0.000728	7.85E-08	
Dimethoate	1.00E+00	3.24E+05	*	5.24E+05	1.67E+07	2.09E+06	5.09E+05	3.24E+05	2.91E+11	324000	16900	
Dimethoxybenzidine 3,3'-	1.00E+00	3.25E+04	*	3.64E+05	---	---	3.25E+04	1.03E+06	---	32500	0.0804	
Dimethyl phthalate	1.00E+00	2.47E+09	*	2.62E+10	---	---	2.47E+09	1.62E+10	---	2470000000	5780	

Chemical Name

Peoria Disposal 72,000 cubic yards per year, CR 1E-6, HQ=1.0

Risk Factor = 1.00E-06

air particulate correction factor= 0.125

HQ Factor = 1.00E+00

	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Corrected Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
* = Detection Limit												
Dimethylbenz(a)anthracene, 7,12-	1.00E+00	2.28E+00	*	2.04E+01	---	---	2.28E+00	5.74E+01	---	2.28	4.68E+12	
Dimethylbenzidine 3,3'-	1.00E+00	1.55E+02	*	2.22E+03	7.30E+04	9.13E+03	1.55E+02	6.24E+03	2.03E+10	155	0.000483	
Dimethylphenol, 2,4-	1.00E+00	1.39E+06	*	5.24E+07	1.67E+09	2.09E+08	1.39E+06	3.24E+07	9.73E+08	1390000	11.3	
Di-n-butyl phthalate	1.00E+00	4.75E+04	*	2.62E+08	---	---	4.75E+04	1.62E+08	---	47500	24.6	
Dinitrobenzene 1,3-	1.00E+00	3.44E+03	*	2.62E+05	---	---	3.44E+03	1.62E+05	---	3440	0.0578	
Dinitromethylphenol, 4,6-,2-	1.00E+00	1.62E+05	*	2.62E+05	8.36E+06	1.05E+06	2.54E+05	1.62E+05	9.92E+09	162000	0.0582	
Dinitrophenol 2,4-	1.00E+00	3.24E+06	*	5.24E+06	---	---	1.74E+07	3.24E+06	---	3240000	1.16	
Dinitrotoluene 2,4-	1.00E+00	1.58E+03	*	7.50E+03	---	---	1.58E+03	2.11E+04	---	1580	0.00166	0.13
Dinitrotoluene 2,6-	1.00E+00	1.58E+03	*	7.50E+03	---	---	1.58E+03	2.11E+04	---	1580	0.00166	
Di-n-octyl phthalate	1.00E+00	6.49E+07	*	1.05E+08	3.34E+09	4.18E+08	6.56E+08	6.49E+07	7.56E+13	64900000	2.59E+27	
Dioxane 1,4-	1.00E+00	2.59E+04	*	4.64E+05	1.53E+07	1.91E+06	1.57E+06	1.30E+06	2.59E+04	25900	0.102	
Diphenylamine	1.00E+00	7.66E+05	*	6.55E+07	2.09E+09	2.61E+08	7.66E+05	4.05E+07	2.24E+10	766000	9.65	
Diphenylhydrazine 1,2-	1.00E+00	7.93E+01	*	6.37E+03	2.10E+05	2.63E+04	7.93E+01	1.79E+04	5.62E+08	79.3	0.00139	
Disulfoton	1.00E+00	1.71E+02	*	1.05E+05	---	---	1.71E+02	6.49E+04	---	171	3.5E+15	
Endosulfan (Endosulfan I and II,mixture)	1.00E+00	6.20E+04	*	1.57E+07	---	---	6.20E+04	9.73E+06	---	62000	3.58	
Endrin	1.00E+00	1.16E+02	*	7.86E+05	---	---	1.16E+02	4.87E+05	---	116	6.12E+10	0.02
Epichlorohydrin	1.00E+00	9.94E+04	*	5.15E+05	2.39E+07	2.99E+06	7.03E+05	1.45E+06	9.94E+04	99400	7.38E+27	
Ethoxyethanol 2-	1.00E+00	5.51E+07	*	1.05E+09	4.77E+09	5.96E+08	4.62E+09	6.49E+08	5.51E+07	55100000	231	
Ethyl acetate	1.00E+00	1.46E+09	*	2.36E+09	---	---	2.31E+09	1.46E+09	---	146000000	13500	
Ethyl ether	1.00E+00	2.96E+06	*	5.24E+08	1.67E+10	2.09E+09	3.91E+08	3.24E+08	2.96E+06	2960000	92.1	
Ethyl methacrylate	1.00E+00	2.41E+07	*	2.36E+08	7.52E+09	9.40E+08	2.41E+07	1.46E+08	2.45E+07	24100000	243	
Ethyl methanesulfonate	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Ethylbenzene	1.00E+00	1.83E+06	*	2.62E+08	2.42E+10	3.03E+09	1.83E+06	1.62E+08	1.67E+08	1830000	10.9	
Ethylene dibromide (1,2-Dibromoethane)	1.00E+00	2.52E+02	*	2.55E+03	7.99E+04	9.99E+03	2.52E+02	7.18E+03	1.35E+03	252	0.0768	
Ethylene thiourea	1.00E+00	4.64E+04	*	4.64E+04	1.53E+06	1.91E+05	5.78E+04	1.30E+05	1.31E+06	46400	0.0102	
Fluoranthene	1.00E+00	2.50E+06	*	1.05E+08	3.34E+09	4.18E+08	2.50E+06	6.49E+07	3.87E+13	2500000	2.46	
Fluorene	1.00E+00	1.39E+06	*	1.05E+08	3.34E+09	4.18E+08	1.39E+06	6.49E+07	4.68E+11	1390000	4.91	
Fluoride	1.00E+00	9.73E+07	*	1.57E+08	---	---	---	9.73E+07	---	97300000	39.2	
Formaldehyde	1.00E+00	9.13E+01	*	3.93E+08	3.65E+06	4.56E+05	3.56E+08	2.43E+08	9.13E+01	91.3	12.3	
Formic acid	1.00E+00	2.52E+05	*	5.24E+09	7.19E+07	8.99E+06	2.21E+10	3.24E+09	2.52E+05	252000	37.1	
Furan	1.00E+00	8.48E+05	*	2.62E+06	---	---	8.48E+05	1.62E+06	---	848000	0.578	
HCH, (Hexachlorocyclohexane) (Lindane) gamma-	1.00E+00	3.44E+00	*	3.92E+03	1.29E+05	1.61E+04	3.44E+00	1.10E+04	2.29E+06	3.44	1.02E+17	0.4
HCH, alpha- (Hexachlorocyclohexane alpha-BHC)	1.00E+00	2.33E+00	*	8.09E+02	2.66E+04	3.33E+03	2.33E+00	2.28E+03	5.91E+07	2.33	1.05E+19	
HCH, beta- (Hexachlorocyclohexane beta-BHC)	1.00E+00	7.76E+00	*	2.83E+03	9.33E+04	1.17E+04	7.76E+00	7.97E+03	1.80E+10	7.76	0.000634	
Heptachlor	1.00E+00	2.23E-01	*	1.13E+03	3.69E+04	4.61E+03	2.23E-01	3.19E+03	1.42E+07	0.223	1.31E+24	0.008
Heptachlor epoxide	1.00E+00	2.39E-01	*	5.60E+02	1.84E+04	2.39E+03	2.39E-01	1.58E+03	4.27E+08	0.239	5.62E+24	0.008
Hexachloro-1,3-butadiene	1.00E+00	1.71E+01	*	6.54E+04	2.15E+06	2.69E+05	1.71E+01	1.84E+05	1.41E+06	17.1	0.00817	0.5
Hexachlorobenzene	1.00E+00	2.31E-01	*	3.19E+03	1.04E+05	1.30E+04	2.31E-01	8.97E+03	1.10E+09	0.231	0.00899	0.13
Hexachlorocyclopentadiene	1.00E+00	3.67E+04	*	1.57E+07	4.76E+06	5.95E+05	3.67E+04	9.73E+06	7.75E+06	36700	1.25E+27	
Hexachloroethane	1.00E+00	7.58E+02	*	3.64E+05	1.20E+07	1.50E+06	7.58E+02	1.03E+06	3.17E+06	758	0.0835	3
Hexachlorophene	1.00E+00	5.06E+03	*	7.86E+05	---	---	5.06E+03	4.87E+05	---	5060	0.00494	
Hexachloropropene	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Hexahydro-1,3,5-trinitro-1,3,5-triazine	1.00E+00	4.64E+04	*	4.64E+04	1.53E+06	1.91E+05	5.78E+04	1.30E+05	---	46400	0.0102	
Indeno (1,2,3-cd) pyrene	1.00E+00	7.63E+01	*	6.99E+03	5.41E+05	6.76E+04	7.63E+01	1.97E+04	3.78E+14	76.3	246000000	
Iron	1.00E+00	4.87E+08	*	7.86E+08	---	---	7.64E+08	4.87E+08	---	487000000	11.2	
Isobutyl alcohol	1.00E+00	1.94E+08	*	7.86E+08	2.51E+10	3.14E+09	7.63E+08	4.87E+08	1.94E+08	194000000	173	
Isophorone	1.00E+00	5.82E+05	*	5.37E+06	1.77E+08	2.21E+07	5.82E+05	1.51E+07	3.14E+07	582000	1.18	
Kepone	1.00E+00	2.40E+00	*	6.37E+02	2.10E+04	2.63E+03	2.40E+00	1.79E+03	9.43E+08	2.4	0.000152	
Lead	1.00E+00	7.15E+04	*	---	5.72E+05	7.15E+04	---	2.07E+06	---	71500	0.702	5
Magnesium	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Malathion	1.00E+00	1.39E+06	*	5.24E+07	1.67E+09	2.09E+08	1.39E+06	3.24E+07	2.28E+13	1390000	11.6	
Manganese	1.00E+00	1.46E+05	*	6.29E+07	1.17E+06	1.46E+05	6.11E+07	3.89E+07	---	146250	15.7	

Chemical Name

Peoria Disposal 72,000 cubic yards per year, CR 1E-6, HQ=1.0

Risk Factor = 1.00E-06
 HQ Factor = 1.00E+00

air particulate correction factor= 0.125

* = Detection Limit	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Corrected Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
Mercury (Fish Pathway Only)	1.00E+00	9.45E+00	*	---	---	---	9.45E+00	---	---	9.45	---	---
Mercury (Total)	1.00E+00	4.87E+05	*	7.86E+05	7.16E+06	8.95E+05	---	4.87E+05	8.56E+08	487000	0.0292	0.2
Methacrylonitrile	1.00E+00	2.41E+04	*	2.62E+05	1.67E+07	2.09E+06	1.67E+05	1.62E+05	2.41E+04	24100	0.0631	---
Methanol	1.00E+00	8.11E+08	*	1.31E+09	---	---	7.48E+09	8.11E+08	---	811000000	289	---
Methoxychlor	1.00E+00	1.29E+04	*	1.31E+07	4.18E+08	5.23E+07	1.29E+04	8.11E+06	3.95E+13	12900	3.13E+28	10
Methyl acetate	1.00E+00	1.62E+09	*	2.62E+09	---	---	1.93E+09	1.62E+09	---	1620000000	578	---
Methyl ethyl ketone	1.00E+00	1.15E+08	*	1.57E+09	1.17E+11	1.46E+10	1.59E+09	9.73E+08	1.15E+08	115000000	347	200
Methyl isobutyl ketone	1.00E+00	4.30E+07	*	2.10E+08	7.19E+10	8.99E+09	4.30E+07	1.30E+08	2.30E+08	43000000	46.3	---
Methyl methacrylate	1.00E+00	2.93E+07	*	3.67E+09	1.67E+10	2.09E+09	1.11E+09	2.27E+09	2.93E+07	29300000	1110	---
Methyl parathion	1.00E+00	7.32E+03	*	6.55E+05	2.09E+07	2.61E+06	7.32E+03	4.05E+05	2.25E+11	7320	7370000000	---
Methylcholanthrene 3-	1.00E+00	8.58E-03	*	2.32E+02	---	---	8.58E-03	6.52E+02	---	0.00858	9.9E+22	---
Methylene bromide (Dibromomethane)	1.00E+00	2.46E+04	*	2.62E+07	8.36E+08	1.05E+08	2.54E+06	1.62E+07	2.46E+04	24600	5.07	---
Methylene Chloride (Dichloromethane)	1.00E+00	1.96E+04	*	6.80E+05	1.02E+08	1.28E+07	1.60E+05	1.91E+06	1.96E+04	19600	0.079	---
Methylnaphthalene 2-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Molybdenum	1.00E+00	8.11E+06	*	1.31E+07	---	---	1.28E+07	8.11E+06	---	8110000	3.33	---
Naphthalene	1.00E+00	6.00E+04	*	5.24E+07	4.80E+05	6.00E+04	2.44E+05	3.24E+07	3.74E+05	60000	0.00327	---
Naphthaquinone 1,4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Naphthylamine, 2-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nickel	1.00E+00	2.50E+04	*	5.24E+07	2.00E+05	2.50E+04	1.69E+05	3.24E+07	---	25000	13.5	---
Nitroaniline 2-	1.00E+00	3.14E+05	*	7.86E+06	2.51E+06	3.14E+05	5.09E+05	4.87E+06	1.60E+07	313750	9.9E+22	1.73
Nitroaniline 3-	1.00E+00	5.11E+04	*	2.43E+05	7.99E+06	9.99E+05	5.11E+04	4.87E+05	8.69E+07	51100	0.0536	---
Nitroaniline 4-	1.00E+00	6.06E+04	*	2.43E+05	7.99E+06	9.99E+05	6.06E+04	6.83E+05	---	60600	0.0536	---
Nitrobenzene	1.00E+00	2.15E+05	*	1.31E+06	4.77E+07	5.96E+06	2.15E+05	8.11E+05	1.53E+07	215000	0.289	2
Nitro-o-toluidine, 5- (Methyl-5-nitroaniline 2-)	1.00E+00	1.55E+05	*	1.55E+05	5.09E+06	6.36E+05	1.93E+05	4.35E+05	---	155000	0.0341	---
Nitrophenol 2-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nitrophenol 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nitropropane 2-	1.00E+00	6.23E+01	*	5.43E+02	1.79E+04	2.24E+03	9.39E+02	1.53E+03	6.23E+01	62.3	0.00012	---
Nitroquinoline-1-oxide, 4-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nitrosodiethylamine N-	1.00E+00	3.40E+01	*	3.40E+01	1.12E+03	1.40E+02	6.73E+01	9.57E+01	3.63E+01	34	0.0000075	---
Nitrosodimethylamine N-	1.00E+00	5.61E+01	*	1.00E+02	3.43E+03	4.29E+02	1.68E+02	2.81E+02	5.61E+01	56.1	0.0000221	---
Nitroso-di-n-butylamine N-	1.00E+00	2.95E+01	*	9.44E+02	3.00E+04	3.75E+03	2.95E+01	2.66E+03	5.29E+03	29.5	0.000206	---
Nitroso-di-n-propylamine N-	1.00E+00	1.38E+02	*	7.29E+02	2.40E+04	3.00E+03	1.38E+02	2.05E+03	4.84E+02	138	0.000161	---
Nitrosodiphenylamine N-	1.00E+00	1.11E+04	*	1.04E+06	3.43E+07	4.29E+06	1.11E+04	2.93E+06	2.89E+07	11100	0.227	---
Nitrosomethylethylamine N-	1.00E+00	9.32E+01	*	2.32E+02	7.63E+03	9.54E+02	9.32E+01	6.52E+02	2.49E+02	93.2	0.0000512	---
Nitrosomorpholine N-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Nitrosopiperidine N-	1.00E+00	5.43E+02	*	5.43E+02	---	---	8.25E+02	1.53E+03	---	543	0.00012	---
Nitrosopyrrolidine N-	1.00E+00	2.43E+03	*	2.43E+03	7.86E+04	9.83E+03	1.59E+04	6.83E+03	3.20E+04	2430	0.000536	---
Octamethyl pyrophosphoramidate	1.00E+00	3.24E+06	*	5.24E+06	1.67E+08	2.09E+07	5.08E+07	3.24E+06	1.72E+10	3240000	1.31	---
Parathion (ethyl)	1.00E+00	6.56E+04	*	1.57E+07	---	---	6.56E+04	9.73E+06	---	65600	1.93E+29	---
Pentachlorobenzene	1.00E+00	1.06E+02	*	2.10E+06	---	---	1.06E+02	1.30E+06	---	106	3.82	---
Pentachloroethane	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Pentachloronitrobenzene (PCNB)	1.00E+00	6.12E+01	*	1.96E+04	---	---	6.12E+01	5.52E+04	---	61.2	0.005	---
Pentachlorophenol	1.00E+00	1.35E+02	*	4.25E+04	---	---	1.35E+02	1.20E+05	---	135	0.00242	100
Phenacetin	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Phenanthrene	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Phenol	1.00E+00	9.77E+07	*	7.86E+08	---	---	9.77E+07	4.87E+08	---	97700000	173	---
Phenyl mercuric acetate	1.00E+00	1.36E+04	*	2.10E+05	---	---	1.36E+04	1.30E+05	---	13600	0.0463	---
Phenylenediamine 1,3-	1.00E+00	9.73E+06	*	1.57E+07	---	---	1.53E+07	9.73E+06	---	9730000	3.47	---
Phorate	1.00E+00	1.14E+03	*	5.24E+05	---	---	1.14E+03	3.24E+05	---	1140	5.41E+27	---
Picoline a-	1.00E+00	---	*	---	---	---	---	---	---	---	---	---
Polychlorinated biphenyls (Aroclors)	1.00E+00	1.77E-02	*	2.55E+03	8.39E+04	1.05E+04	1.77E-02	7.18E+03	2.20E+07	0.0177	26800000	---
Pronamide	1.00E+00	7.11E+05	*	1.96E+08	6.27E+09	7.84E+08	7.11E+05	1.22E+08	6.75E+11	711000	46.2	---

Chemical Name

Peoria Disposal 72,000 cubic yards per year, CR 1E-6, HQ=1.0

Risk Factor = 1.00E-06

air particulate correction factor= 0.125

HQ Factor = 1.00E+00

* = Detection Limit	Waste Stream Total Concentration (mg/Kg)	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (waste) (mg/L)	Surface Water Ingestion	Air Particulate Inhalation	Corrected Air Particulate Inhalation	Fish Ingestion	Soil Ingestion	Air Volatile Inhalation	Maximum Allowable Total Concentration (mg/kg)	Delisting Level (Waste) (mg/L - Leachate)	Toxicity Characteristic (mg/L TCLP)
Pyrene	1.00E+00	1.85E+04	*	7.86E+07	2.51E+09	3.14E+08	1.85E+04	4.87E+07	5.62E+13	18500	4.45	
Pyridine	1.00E+00	1.34E+06	*	2.62E+06	---	---	1.34E+06	1.62E+06	---	1340000	0.578	5
SAFROLE	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Selenium	1.00E+00	9.87E+04	*	1.31E+07	---	---	9.87E+04	8.11E+06	---	98700	0.89	1
Selenium(+4)	1.00E+00	9.87E+04	*	1.31E+07	---	---	9.87E+04	8.11E+06	---	98700	0.89	1
Selenium(+6)	1.00E+00	9.87E+04	*	1.31E+07	---	---	9.87E+04	8.11E+06	---	98700	0.955	1
Silver	1.00E+00	6.25E+05	*	1.31E+07	---	---	6.25E+05	8.11E+06	---	625000	8.61	5
Strychnine and salts	1.00E+00	4.49E+04	*	7.86E+05	---	---	4.49E+04	4.87E+05	---	44900	0.173	
Styrene	1.00E+00	5.13E+06	*	5.24E+08	2.42E+10	3.03E+09	5.13E+06	3.24E+08	2.53E+08	5130000	1.51	
Tetrachlorobenzene 1,2,4,5-	1.00E+00	2.06E+02	*	7.86E+05	---	---	2.06E+02	4.87E+05	---	206	0.0301	
Tetrachlorodibenzo-p-dioxin (TCDD) 2,3,7,8-	1.00E+00	3.50E-06	*	3.40E-02	1.12E+00	1.40E-01	3.50E-06	9.57E-02	1.94E+08	0.0000035	4.03	
Tetrachloroethane 1,1,1,2-	1.00E+00	4.18E+03	*	1.96E+05	6.46E+06	8.08E+05	4.18E+03	5.52E+05	5.25E+04	4180	0.0551	
Tetrachloroethane 1,1,2,2-	1.00E+00	7.36E+00	*	2.55E+04	8.39E+05	1.05E+05	7.36E+00	7.18E+04	1.60E+04	7.36	4.61	
Tetrachloroethylene	1.00E+00	2.34E+02	*	9.44E+03	7.99E+06	9.99E+05	2.34E+02	2.66E+04	1.90E+04	234	0.00204	0.7
Tetrachlorophenol 2,3,4,6-	1.00E+00	4.71E+04	*	7.86E+07	2.51E+09	3.14E+08	4.71E+04	4.87E+07	4.42E+10	47100	4.52	
Tetraethyl dithiopyrophosphate (Sulfotep)	1.00E+00	5.27E+03	*	1.31E+06	4.18E+07	5.23E+06	5.27E+03	8.11E+05	3.39E+09	5270	1.88E+28	
Thallium	1.00E+00	1.23E+02	*	1.73E+05	---	---	1.23E+02	1.07E+05	---	123	0.0842	
Thionazin	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Tin	1.00E+00	9.73E+08	*	1.57E+09	---	---	1.53E+09	9.73E+08	---	973000000	38700000	
Toluene	1.00E+00	3.26E+06	*	2.10E+08	1.19E+11	1.49E+10	3.26E+06	1.30E+08	2.48E+08	3260000	15.1	
Toluenediamine 2,4-	1.00E+00	4.32E+01	*	1.59E+03	5.25E+04	6.56E+03	4.32E+01	4.48E+03	4.73E+07	43.2	0.000352	
Toluidine o-	1.00E+00	4.31E+03	*	2.12E+04	---	---	4.31E+03	5.98E+04	---	4310	0.00469	
Toluidine p-	1.00E+00	9.56E+03	*	2.68E+04	8.83E+05	1.10E+05	9.56E+03	7.55E+04	1.90E+05	9560	0.00592	
Toxaphene (chlorinated camphenes)	1.00E+00	2.26E-02	*	4.64E+03	1.53E+05	1.91E+04	2.26E-02	1.30E+04	5.09E+04	0.0226	33200	0.5
Tribromomethane (Bromoform)	1.00E+00	2.24E+04	*	6.46E+05	4.36E+07	5.45E+06	2.24E+04	1.82E+06	1.08E+06	22400	0.152	
Trichloro-1,2,2-trifluoro-ethane 1,1,2-	1.00E+00	7.05E+07	*	7.86E+10	7.16E+11	8.95E+10	9.64E+08	4.87E+10	7.05E+07	70500000	2570	
Trichlorobenzene 1,2,4-	1.00E+00	4.20E+04	*	2.62E+07	8.36E+07	1.05E+07	4.20E+04	1.62E+07	2.36E+07	42000	0.991	
Trichloroethane 1,1,1-	1.00E+00	1.75E+07	*	7.33E+08	5.26E+10	6.58E+09	1.75E+07	4.54E+08	2.14E+07	17500000	11600	
Trichloroethane 1,1,2-	1.00E+00	4.84E+03	*	8.95E+04	3.00E+06	3.75E+05	4.84E+03	2.52E+05	1.04E+04	4840	0.0193	
Trichloroethylene (Trichloroethylene 1,1,2-)	1.00E+00	1.18E+04	*	3.92E+05	2.40E+07	3.00E+06	1.18E+04	1.10E+06	3.11E+04	11800	0.0775	0.5
Trichlorofluoromethane (Freon 11)	1.00E+00	8.78E+05	*	7.86E+08	1.67E+10	2.09E+09	1.55E+07	4.87E+08	8.78E+05	878000	54	
Trichlorophenol 2,4,5-	1.00E+00	5.10E+05	*	2.62E+08	---	---	5.10E+05	1.62E+08	---	510000	22.9	400
Trichlorophenol 2,4,6-	1.00E+00	6.56E+02	*	2.62E+05	8.36E+06	1.05E+06	6.56E+02	1.62E+05	7.19E+07	656	0.0318	2
Trichlorophenoxypropionic acid 2-(2,4,5- (Silvex)	1.00E+00	1.66E+05	*	2.10E+07	6.68E+08	8.35E+07	1.66E+05	1.30E+07	3.13E+12	166000	0.77	1
Trichlorophenoxyacetic acid 2,4,5-	1.00E+00	3.42E+05	*	2.62E+07	8.36E+08	1.05E+08	3.42E+05	1.62E+07	3.10E+13	342000	5.78	
Trichloropropane 1,2,3-	1.00E+00	1.05E+02	*	2.55E+03	1.17E+08	1.46E+07	1.05E+02	7.18E+03	2.80E+06	105	0.000775	
Triethylphosphorothiate o,o,o-	1.00E+00	---	*	---	---	---	---	---	---	---	---	
Trinitrobenzene (Trinitrobenzene 1,3,5-) sym-	1.00E+00	1.64E+07	*	7.86E+07	---	---	1.64E+07	4.87E+07	---	16400000	17.3	
Trinitrotoluene 2,4,6-	1.00E+00	2.19E+04	*	1.70E+05	5.60E+06	7.00E+05	2.19E+04	4.78E+05	2.46E+09	21900	0.0375	
Tris (2,3-dibromopropyl) phosphate	1.00E+00	1.86E+01	*	2.22E+03	---	---	1.86E+01	6.24E+03	---	18.6	0.047	
Vanadium	1.00E+00	1.62E+06	*	2.62E+06	---	---	2.59E+06	1.62E+06	---	1620000	0.976	
Vinyl acetate	1.00E+00	2.69E+06	*	2.62E+09	4.77E+09	5.96E+08	1.27E+09	1.62E+09	2.69E+06	2690000	29	
Vinyl chloride	1.00E+00	1.47E+02	*	3.64E+03	5.41E+06	6.76E+05	1.04E+03	1.03E+04	1.47E+02	147	0.000804	0.2
Xylenes (total)	1.00E+00	6.84E+06	*	5.24E+08	2.42E+09	3.03E+08	6.84E+06	3.24E+08	1.93E+07	6840000	9.56	
Zinc	1.00E+00	1.17E+06	*	7.86E+08	---	---	1.17E+06	4.87E+08	---	1170000	197	