



# Contaminated Land Management and Control Guidelines No. 1: Malaysian Recommended Site Screening Levels for Contaminated Land

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## FOREWORD



Under the Ninth Malaysia Plan (2006-2010), the Department of Environment, initiated a study on the Criteria and Standards for Managing and Restoring Contaminated Land in Malaysia. As a result of the study, a contaminated land management framework which includes soil screening guidelines values and a series of guidelines were developed to enable proper assessment and management of contaminated site in Malaysia. This guideline document is the first in a series of documents on contaminated land management produced by the Department of Environment Malaysia. Contaminated Land Management and Control Guidelines No. 1: Malaysian Recommended Site Screening Levels for Contaminated Land.

The recommended site screening levels of the United States Environmental Protection Agency (USEPA) are adopted as the site screening levels to determine if subsurface contamination detected has the potential in causing unacceptable human health risk. The site screening levels are to support the assessment and management of contaminated sites in Malaysia. The site screening levels is the criteria to be used to determine if an area of land is contaminated, to assess the need for remediation measure and to develop remediation targets, i.e. target clean-up concentrations of chemicals of potential concerns (COPCs) at contaminated sites.

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## List of Abbreviations

DAF	Dilution-Attenuation Factor
DOE	Department of Environment
RAP	Remediation Action Plan
RCLM	Registered Contaminated Land Manager
RESA	Registered Environmental Site Assessor
RQRA	Registered Qualitative Risk Assessor
RRAS	Registered Risk Assessment Specialist
RRPM	Registered Remediation Project Manager
RRS	Registered Remediation Specialist
SLs	Screening Levels
SSLs	Site Screening Levels
SSTLs	Site-Specific Target Levels
USEPA	United States Environmental Protection Agency

# 1.0 Introduction

## 1.1 Purpose

The purpose of this document is to establish a practical and nationally consistent framework in the management of contaminated lands in Malaysia. This framework is defined through a series of three guidelines with different focuses, and this guideline shall be complemented in its application by incorporating the remaining two guidelines that include:-

- Contaminated Land Management and Control Guidelines No. 2: Assessing and Reporting Contaminated Sites; and
- Contaminated Land Management and Control Guidelines No. 3: Remediation of Contaminated Sites.

This document explains the management processes of the entire contaminated land management framework and specifies criteria to be used for the assessment of contaminated land.

## 1.2 Scope of Application

The contaminated land management framework shall apply to:-

- Any land that is currently being used or was previously used, to perform polluting activities with the potential to cause soil and groundwater contamination. Polluting activities are defined as any activity involving extract/mining, manufacture, storage, usage, handling and land disposal of chemicals and hazardous or scheduled waste as part of their operating processes; or
- Any land that will involve a change of land use from polluting activities to non polluting activities or from non polluting activities to polluting activities.

A list of industries that have a potential of contaminating subsurface soil and groundwater is provided in **Appendix A**.

### 1.3 Definition

Specific to this document, criteria and standards are defined as follows:-

Criteria: A set of numerical limits provided as concentrations of substances in soil and groundwater which is intended to be used for the assessment of soil and groundwater contamination. Specifically, the criteria will help to determine if the soil and groundwater underneath a subject area is impacted.

Standards: Narrative statement on the requirement and application related to the implementation of the contaminated land management framework. This includes all statements contained in this document that specifies requirements for all elements comprised in the contaminated land management framework.

Definitions applicable to contaminated land management are provided below:

“Contaminant” means any direct or indirect alteration of the physical, chemical, biological or radiological properties of the soil and groundwater by discharging, emitting, or depositing environmentally hazardous substances, pollutants or wastes that affect adversely the beneficial use of a land and cause a condition which is hazardous or potentially hazardous to human health and safety; and environmental well being.

“Contaminated Land” means a site at which substances occur at concentrations:

- Above natural occurring metal concentrations and pose or are likely to pose an immediate or long term hazard to human health or the environment, or
- Exceed concentrations specified in the Site Screening Levels.

“Consultant” means any qualified personnel who meet the qualification requirements set forth in Section 3.0 of this document that carries out any environmental site assessment and/or remediation at the subject property.



“Current or historical onsite operation” means any activities or operations carried out in the present or in the past, either by the land owner(s), or by any other parties regardless of whether such activities or operations are allowed or consented to by the land owner(s), that have a direct or indirect impact to the subsurface soil and groundwater environment.

“Due diligence” means the process of assessing the environmental conditions of a property (land parcel, building, factory and/or business etc.), usually in connection with a property transaction.

“Environmental liability” means an obligation that legally binds an individual or company to be responsible for and pay for any direct or indirect costs incurred as a result of damage or contamination caused on the environment.

“Environmental site assessment” means a characterization of a site through an evaluation of its physical and environmental context (for example, subsurface geology, soil properties and structures, hydrology, and surface characteristics) to determine if a release has occurred, the levels of the chemical(s) of concern in the environmental media, and the likely physical distribution of the chemical(s) of concern.

“Land owner(s)” means the person or company who legally owns the subject land under the provision of the National Land Code.

“Naturally Occurring Metal Concentrations” means metal concentrations that exist in the soil and groundwater as a result of natural mineralization, weathering or any naturally occurring chemical processes of minerals contained in the soil matrix.

“Site Screening Levels” means the soil and groundwater criteria or concentrations adopted under the contaminated land management framework that define if a land has a potential soil and groundwater contamination concern.

“Site Specific Target Levels” means the desired soil and groundwater concentrations to be achieved that are protective of human health and ecological well being based on the current and foreseeable future land uses, and human or ecological exposures at site.

“Orphan land” means any contaminated land wherein its responsible party cannot be identified.

“Polluter” means the person or the company that causes damage or contamination to the environment.

“Polluting activities” are defined as any activities of business or trade involving extract/mine, manufacture, storage, use, handling and land disposal of chemicals, pollutants and scheduled waste as part of their operating processes.

“Polluter Pays Principle” means the principle that the party responsible for producing or causing pollution should also be responsible for paying for the damage and pollution done to the natural environment.

“Remediation” means any action undertaken to eliminate, reduce, control or mitigate the risk resulting from contamination of the soil and/or groundwater media.

“Responsible party” means a person or a company responsible to undertake any actions to investigate, assess, reduce, eliminate or control the risks posed by subsurface contamination.

“Risk-based approach” means an approach that emphasizes on potential current and future risks associated with the presence of contaminants in the soil and groundwater matrix. This is an approach applicable for various processes of contaminated land management, including contaminated land planning and management, site assessment, remediation and closure.

## **2.0 Contaminated Land Management Standard**

In general, there are two different types of land categories identified under the contaminated land management framework, i.e.:

- Land with identified responsible party.
- Land with no identified responsible party, or government-owned land with contamination that is not feasible for clean up under the current conditions due to resource availability. This applies to only landfill, former mining land, agricultural land, dumping sites and orphan land.

The first category of land classification is mainly applicable to lands with an identified responsible party, of which a typical contaminated land management procedure shall be applied. A typical contaminated land management procedure is a process of performing a site assessment and remediation, if necessary, as defined in the “Contaminated Land Management and Control Guidelines No. 2: Assessing and Reporting Contaminated Sites” and the “Contaminated Land Management and Control Guidelines No. 3: Remediation of Contaminated Sites”.

The second category of land classification would require a contaminated land management plan. The contaminated land management plan shall include appropriate risk control measures.

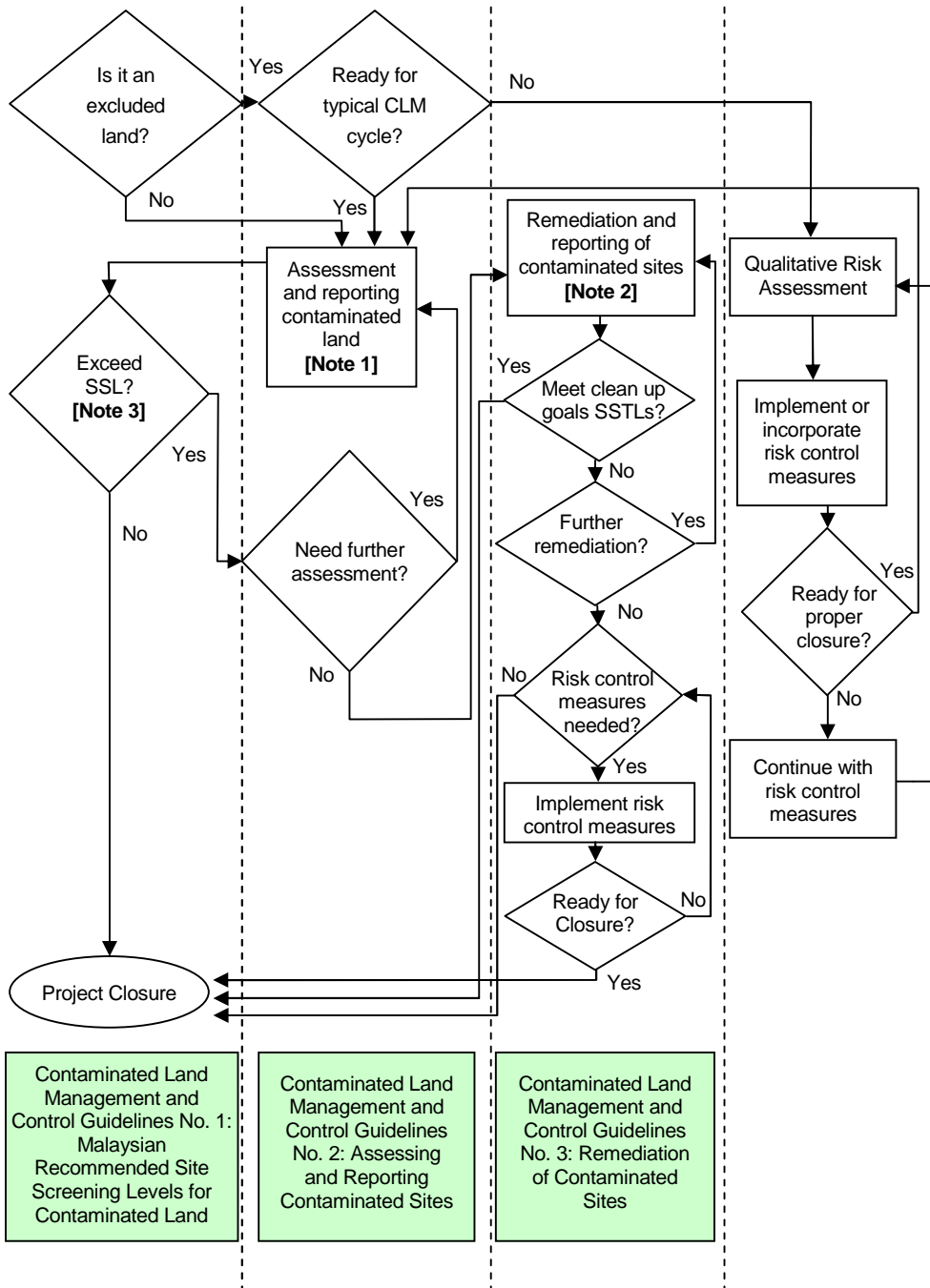
### **2.1 General Guiding Principles**

In general, the “Polluter Pay Principle” and “Risk-Based Approach” apply for all the guidelines developed under this study. The Polluter Pay Principle defines the responsibility for performing and paying for site assessments and remediation. In general, a polluter can be the land owner, the property occupant/users and/or chemical/product/waste owner.

The risk-based approach is the principle applied to site assessment, remediation and planning/managing contaminated land and should be adopted as the strategy in planning and managing contaminated land. Essentially, a risk-based approach highlights potential current and

future risks associated with the presence of contaminants in the soil and groundwater matrix and recommends corrective actions to mitigate and/or control incremental risk to the level acceptable from human health and ecological perspectives.

The overall contaminated land management framework, incorporating the application of other guidelines is shown in Figure 1.



**Figure 1: Flowchart for overall contaminated land management framework**

**Note:**

1. Refer to Contaminated Land Management and Control Guidelines No. 2: Assessing and Reporting Contaminated Sites.
2. Refer to Contaminated Land Management and Control Guidelines No. 3: Remediation of Contaminated Sites.
3. SSLs denotes for “Site Screening Levels”, the level or concentration above which would indicate potential subsurface impact. It is important to note that SSLs is NOT the clean up target level.

**2.2 Responsibility to Conform to the Contaminated Land Management Framework**

The contaminated land management framework has taken into consideration the nature of different type of land uses that would be of subsurface contamination concerns.

It is the responsibility of the current land owner(s) to determine if there is any presence of subsurface contamination in their land. In the event if land contamination is detected, it is the responsibility of the land owner(s) to determine if there is any unacceptable human health risk to the onsite and offsite human receptors and ecological risks to the well being of the surrounding ecological environment. If the risk is concluded to be unacceptable, it is the responsibility of the land owner(s) to propose a remediation action plan (RAP), implement, construct, operate and maintain appropriate remediation actions in order to address the risk arising from the presence of the identified subsurface contamination.

In the event the current land owner(s) confirms through a properly conducted environmental site assessment, that the subsurface contamination is not caused by its current or historical onsite operations, it is the responsibility of the land owner(s) to identify the polluter(s) who will be directly responsible for the subsequent remediation actions to be implemented at the subject property.

The identified polluter suspected of causing the subsurface contamination is allowed to conduct a separate investigation and/or assessment to ascertain the current land owner(s) findings. Unless the

identified polluter can confirm that the subsurface contamination was not caused by its activities or operations, the identified polluter will be responsible for the subsequent remediation actions to be implemented at the subject property. In the same context, if the polluter identified is no longer in operation in Malaysia, the responsibility for subsequent remediation actions shall be borne by the current land owner(s).

It is the duty of the seller or owner of a land property to disclose all soil and groundwater information related to the subject land. It is the responsibility of the buyer of a property to perform a soil and groundwater assessment as part of the due diligence process prior to the transaction.

In the event of a dispute on the responsibility in cleaning up a contaminated site, the Director-General of Environmental Quality has the authority to decide the parties that will be responsible for the remediation of such subsurface contamination.

It is the responsibility of the identified responsible parties to undertake any actions as specified in the series of guidelines under the contaminated land management framework.

### **2.3 Reporting Requirement and Governing Authority**

The Department of Environment (DOE) is the governing authority for the contaminated land management framework. It is the responsibility of the land owner(s) to notify the DOE on any subsurface contamination related to its land property. The notification form is provided in **Appendix B**.

In the event if a polluter other than the current land owner is confirmed, a notification letter to relinquish the responsibility of subsequent assessment or remediation actions shall be initiated by the current land owner and acknowledged by the identified polluter or responsible party.

The DOE has the authority to request any supplemental information related to subsurface contamination at the subject property, or instruct any actions as deemed necessary to minimize the impact of subsurface contamination detected at a property.

The DOE may decide on any necessary actions to address the risks posed by subsurface contamination.

## **2.4 Contaminated Land Closure**

It is the responsibility of the responsible party to submit a contaminated land closure application to DOE together with relevant technical justifications.



### **3.0 Contaminated Land Assessment Criteria**

The criteria for contaminated land assessment is intended to be used as a screening level; any exceedances are considered indicative of potential subsurface contamination, and there may be adverse impacts to the health of human receptors using, occupying or residing at the subject land.

As the criteria are meant for screening purposes only, it is therefore referred to as “Site Screening Levels” (hereinafter termed as “SSLs”) under this guideline. In developing the SSLs, the Regional Screening Levels (SLs) developed by the United States Environmental Protection Agency (USEPA) were referred. The SSLs is provided in **Appendix C**.

In the event a site clean up is required, the responsible parties shall justify the Site-Specific Target Levels (SSTLs) that are protective of human health and ecological well being. The SSTLs can be derived through scientifically defensible risk assessment approaches. Details on risk assessment are available in the “Contaminated Land Management and Control Guidelines No. 2: Assessing and Reporting Contaminated Sites”.

The responsible parties may choose to adopt the SSLs to be the SSTLs, if the exposure scenario of the subject land is consistent with the SSLs exposure assumptions. In the event if the contaminant detected is not defined in the SSLs, the responsible party shall propose an appropriate SSLs, either by referring to other International standards or develop a Tier 1 SSLs in accordance with the risk assessment procedures stipulated in the “Contaminated Land Management and Control Guidelines No. 2: Assessing and Reporting Contaminated Sites”.

#### **3.1 Application of Site Screening Levels**

The USEPA SLs table provides the SSLs for four different categories of scenarios that direct contact exposure pathways, i.e.:-

- i. Residential soil
- ii. Industrial soil

- iii. Ambient air
- iv. Tap water

Soil and groundwater concentrations will be compared against the respective SSLs depending on the land use and exposure scenarios at the subject land property. The USEPA SLs table provides the inter-calculating table which details the initial pathway-specific SSLs (e.g.: ingestion, dermal contact and inhalation pathways). Depending on the exposure scenario of the subject land, the initial pathway-specific SSLs can be used as SSLs.

### **3.1.1 Residential and Industrial Soil**

The SSLs for residential and industrial soil has taken into consideration of the following exposure scenarios:-

- Soil ingestion
- Dermal contact
- Vapour and particulates inhalation

### **3.1.2 Residential and Industrial Ambient Air**

The SSLs for ambient air had been developed for both the residential and industrial land uses.

### **3.1.3 Tap Water**

The SSLs for tap water is based on a typical exposure scenario of domestic water usage under residential land use. Exposure pathways incorporated in the calculation of SSLs for tap water includes the following:-

- Ingestion through drinking of groundwater
- Inhalation through domestic usages

### 3.2 Natural Occurring Background Metals Concentrations

As metal concentrations can be a result of a natural occurring phenomenon, metal concentrations shall be assessed carefully to determine if the detected concentrations are naturally occurring or from anthropogenic sources. Natural occurring background metals concentrations can be assessed through:-

- Review of previous information on background metals concentrations and geochemistry of site geological formation
- Collection of verification background samples

In the event natural occurring background metals concentrations are higher than the SSLs, it is the responsibility of the responsible parties to justify the basis of such claims and notify the DOE. Without DOE's endorsement in confirming that the metal concentrations are indeed attributed to a natural occurrence phenomenon, the responsible parties shall manage the risk posed by the subsurface contamination at the subject land property based on the findings of the screening against the SSLs only.

A typical range of natural occurring metal concentrations are provided in **Appendix D**.

## 4.0 Qualification Requirement

It is the responsibility of the responsible parties to ensure the quality of any work undertaken under the contaminated land management framework. All consultants or individuals involved in the assessment and remediation of the contaminated land management shall fulfil the qualification requirements as specified in this section.

### 4.1 Qualified Personnel

**Table 1: Qualified personnel and their requirements**

Qualified Personnel	Qualification Requirements
Registered Environmental Site Assessor (RESA)	<ul style="list-style-type: none"> <li>▪ Relevant science or engineering degree;</li> <li>▪ Minimum 3 years working experience in CLM activities or attended a professional training workshop on the subject matter; and</li> <li>▪ Completed a minimum of 5 ESA projects.</li> </ul>
Registered Qualitative Risk Assessor (RQRA)	<ul style="list-style-type: none"> <li>▪ Relevant science or engineering degree;</li> <li>▪ Minimum 3 years working experience in CLM activities or attended a professional training workshop on the subject matter; and</li> <li>▪ Completed a minimum of 5 qualitative risk assessment projects.</li> </ul>
Registered Risk Assessment Specialist (RRAS)	<ul style="list-style-type: none"> <li>▪ Relevant science or engineering degree;</li> <li>▪ Minimum 5 years working experience in CLM activities ; and</li> <li>▪ Completed a minimum of 5 environmental risk assessment projects.</li> </ul>
Registered Remediation Specialist (RRS)	<ul style="list-style-type: none"> <li>▪ Relevant science or engineering degree;</li> <li>▪ Minimum 5 years working experience in CLM activities ; and</li> <li>▪ Completed a minimum of 5 remediation projects.</li> </ul>

Qualified Personnel	Qualification Requirements
Registered Remediation Project Manager (RRPM)	<ul style="list-style-type: none"> <li>▪ Relevant science or engineering degree;</li> <li>▪ Minimum 8 years working experience in CLM activities ; and</li> <li>▪ Managed and completed a minimum of 5 remediation projects.</li> </ul>
Registered Contaminated Land Manager (RCLM)	<ul style="list-style-type: none"> <li>▪ Relevant science or engineering degree;</li> <li>▪ Minimum 10 years working experience in CLM activities ; and</li> <li>▪ Managed and completed a minimum of 10 remediation projects.</li> </ul>

All qualified personnel shall be registered with the DOE and strictly adhere to the professional code of conduct, failing which the registration shall be removed.

#### 4.2 Registered Consulting Firm

All consulting firms performing any activities under the contaminated land management framework shall be registered with the DOE. The minimum requirement for a qualified contaminated land consulting firm include:-

- A minimum of three qualified personnel;
- Completed a minimum of 10 soil and groundwater contamination projects; and
- Possess a minimum of no less than RM1,000,000 professional liability insurance coverage.

**LIST OF POTENTIALLY POLLUTING ACTIVITIES**

**LIST OF INDUSTRIES THAT CAN POTENTIALLY CONTAMINATED  
SUBSURFACE SOIL AND GROUNDWATER**

This list shows the main industrial activities or site usages that could cause soil and groundwater contamination. Whether or not a specific site is contaminated will depend on the past and present management of hazardous substances. Although a property has been used for an activity or industry that does not appear on the list, it may still be contaminated, for example as a result of neighboring activities.

1. Abrasive blasting
2. Acid or alkali plant
3. Agrichemical spray contractor
4. Agricultural land
5. Airport
6. Analysts – commercial analytical laboratory
7. Asbestos products
8. Asphalt or bitumen
9. Battery manufacturing or recycling
10. Brake lining manufacturer
11. Cement or lime manufacturing
12. Chemical manufacturing and storage
13. Coal and coke yard
14. Concrete and cement
15. Drum and tank re-conditioning
16. Electrical transformers
17. Electronics – manufacturing, repairing, reconditioning
18. Engine re-conditioning
19. Explosive production or bulk storage
20. Fertilizer manufacturing

21. Gasworks
22. Landfill site
23. Livestock dips or spray races
24. Metal surface treatment or coating
25. Mining and mineral processing
26. Motor vehicle workshop
27. Paint manufacturing and formulation
28. Pesticides formulation, packaging and/or distribution
29. Toxic and Hazardous waste storage, reuse, recycling, recovery, treatment and disposal
30. Herbicides formulation, packaging and/or distribution
31. Other agrichemical formulation, packaging and/or distribution
32. Petroleum industries
33. Pharmaceutical manufacturing
34. Port activities
35. Printing
36. Railway yard
37. Sawmill
38. Service station
39. Shipyard
40. Smelting or refining
41. Transport depot
42. Storage tanks for fuel and chemicals
43. Storage, reuse, recycling, recovery, treatment or disposal for wastes other than toxic and hazardous wastes.
44. Wood treatment or disposal
45. Wool, hide and skin production
46. Any site that has been, or could have been, subject to the migration of hazardous substances present in the soil or water on adjacent sites
47. Any other facility or activity that stores, uses or disposes of hazardous substances

**NOTIFICATION OF SUBSURFACE CONTAMINATION**

For Office Use DOE Reference No.:
--------------------------------------

**A. Respondent Details**

Name:  
Company / Designation:  
Organization:  
Address:

Telephone No. Fax No:  
Email Address:

**B. General Site Details**

Site Name:  
Site Address:  
Postcode: District:  
Town/city: State:

Site Owner or Site Legal Representative:  
Name:  
Tel No: Fax No:  
Email:

**C. Land Details**

Total Area: m<sup>2</sup> Land Status, if available:  
Site Coordinates: Longitude:  
Latitude:  
Land Lot Number(s):  
Local Council: District:



**Current Landuse:** *(Please tick (✓) the answer of choice)*

Agricultural  Commercial  Industrial  Residential

Mining  Landfill  Others   
*(Please specify)*

**Surrounding Landuse:** *(Please tick (✓) the answer of choice)*

Agricultural  Commercial  Industrial  Residential

Mining  Landfill  Others   
*(Please specify)*

**Surrounding Neighbors' Information**

Direction      Neighboring Properties

**Surrounding Water Bodies**

Name or type of the water body (i.e. sea, river, lake etc.)	Approximate Distance from the site (m)	Direction (N, S, E, W, NE, NW, SE, SW)

**Site Landuse History**

*Please indicate name(s) of previous owner(s) of this site*

Years (period of time)	Landuse	Owner(s)

**D. Site Geology and Hydrogeology\***

*Please provide as much descriptions as you can for the following questions:*

**Surrounding Topography:** Flat / Undulating / Hilly

**Predominant Soil type beneath the site:** Clay / Silt / Sand

**Groundwater level:**  
**(meter below ground surface)** m bgs

**Groundwater Flow Direction:** N / S / E / W / NE / NW / SE / SW

**Groundwater Monitoring Wells:** YES / NO

**E. Site Assessment\***

**Surrounding Features**

<b>Surrounding Features</b>	<b>Direction</b>	<b>Distance [m]</b>
<b>Residential area</b>		
<b>Hospital</b>		
<b>Recreational areas</b>		
<b>Schools</b>		
<b>Agricultural land/Fish Farm</b>		

**Well Information**

Please include information for well located with the site and surrounding area

Well No.	Direction (N, S, E, W, NE, NW, SE, SW)	Distance (m)	Well Depth (m)	Provided with Water Treatment #	Water Usage (agricultural/ domestic/ industrial/ drinking)	Water Quality Testing #	Any Complaint on Water Quality?#
				Yes/No	Agr/Dom/ Ind/Drink	Yes/No	Yes/No
				Yes/No	Agr/Dom/ Ind/Drink	Yes/No	Yes/No
				Yes/No	Agr/Dom/ Ind/Drink	Yes/No	Yes/No
				Yes/No	Agr/Dom/ Ind/Drink	Yes/No	Yes/No
				Yes/No	Agr/Dom/ Ind/Drink	Yes/No	Yes/No

# Please strike out irrelevant choices

**Chemical Storage Onsite**

Please list down types of chemical stored onsite (please include only chemical storage of more than 200 liter)

Chemicals #	Physical Form #	Storage Type #	Storage Quantity [Litre or Kg]
	Liquid/Slurry/ Powder	Loose/Bags/Container/ Carboy/AST/UST	L/Kg
	Liquid/Slurry/ Powder	Loose/Bags/Container/ Carboy/AST/UST	L/Kg
	Liquid/Slurry/ Powder	Loose/Bags/Container/ Carboy/AST/UST	L/Kg
	Liquid/Slurry/ Powder	Loose/Bags/Container/ Carboy/AST/UST	L/Kg
	Liquid/Slurry/ Powder	Loose/Bags/Container/ Carboy/AST/UST	L/Kg

# Please strike out irrelevant choices. If none of the choices provided match the actual answer, please choose the closest possible choice and indicate separately on this questionnaires.

**Waste Generation**

Please list down type of wastes (liquid scheduled waste/ slurry/ chemicals)

Waste [Scheduled Waste No.]	Physical Form#	Storage Methods (Metal drums/ plastic containers/ etc.)	Disposal Location #	Disposal Methods	Quantity Generated per Year [Litre/Yr, or Tonnes/Yr]
	Liquid/Slurry/ Solid		Onsite / Offsite		
	Liquid/Slurry/ Solid		Onsite / Offsite		
	Liquid/Slurry/ Solid		Onsite / Offsite		
	Liquid/Slurry/ Solid		Onsite / Offsite		
	Liquid/Slurry/ Solid		Onsite / Offsite		

# Please strike out irrelevant choices

**History of Major Spillage / Leakage Incident:**

Please list down details of the known event of major spillage or leakage. Please include only those spillage and leakage involving more than 50 liters.

Year	Chemicals	Quantity	Paved Ground or Unpaved Ground? #	Was Secondary Containment Provided Onsite?#	Any Potential Impact to Soil and Groundwater #	Action Taken
			Paved/ Unpaved	Yes/No	Yes/No	
			Paved/ Unpaved	Yes/No	Yes/No	
			Paved/ Unpaved	Yes/No	Yes/No	
			Paved/ Unpaved	Yes/No	Yes/No	
			Paved/ Unpaved	Yes/No	Yes/No	

**Sign of Contamination:**

Any sign of contamination onsite? YES/ NO

Note: Signs of contamination may include, but not limited to:

- Oil or chemical stain on unpaved ground
- Sign of oil or unknown chemical substances in drain/ river
- Accumulation of liquid/ chemical/ oil on the ground
- Complaint by neighbors on groundwater quality
- Seepage of chemicals from ground or any underground utilities
- Incompatible amount of product loss and product recovered

Please provide descriptions below:

**F. Monitoring\***

Was there any environmental assessment conducted onsite? Yes/No

If Yes, please specify:

Year:

Scope:

Is there any groundwater monitoring well available onsite? Yes/ No

Number of monitoring well:

**Soil Monitoring**

Please provide sample analysis details if there was any monitoring/ sampling conducted before.

Date	Sampling Locations	Parameters	Results

**Groundwater Monitoring**

Please provide sample analysis details if there was any monitoring/ sampling conducted before.

Date	Sampling Locations	Parameters	Results

**G. Remediation\***

**Historical Remediation**

Date Started:

Date Completion:

***Chemicals of Concerns (COCs)***

- 1.
- 2.
- 3.
- 4.
- 5.

**Remediation Techniques:**

**Present Remediation**

Date Started:

Date Completion:

***Chemicals of Concerns (COCs)***

- 1.
- 2.
- 3.
- 4.
- 5.

**Remediation Technologies:**

I, hereby declare that all information given in this notification is to the best of my knowledge and belief true and correct.

Signature:.....

Name:.....

Designation:.....

Date:.....

I/C No.:.....

---

\*Please add attachment if necessary.

## GENERIC SSLs SUMMARY TABLES

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; H = HEAST; W = WHO; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; c = cancer; \* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit; s = Concentration may exceed soil saturation concentration (Csat); SSL values are based on DAF=1

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Acephate	30560-19-1	5.6E+01	c**	2.0E+03	c*					7.7E+00	c*
Acetaldehyde	75-07-0	1.1E+01	c**	5.3E+02	c**	1.1E+00	c**	5.6E+01	c**	2.2E+00	c**
Acetochlor	34256-82-1	1.2E+03	n	1.2E+04	n					7.3E+02	n
Acetone	67-64-1	6.1E+04	n	6.1E+05	nms	3.2E+04	n	1.4E+05	n	2.2E+04	n
Acetone Cyanohydrin	75-86-5	2.0E+02	n	2.1E+03	n	6.3E+01	n	2.6E+02	n	5.8E+01	n
Acetonitrile	75-05-8	8.7E+02	n	3.7E+03	n	6.3E+01	n	2.6E+02	n	1.3E+02	n
Acetophenone	98-86-2	7.8E+03	ns	1.0E+05	nms					3.7E+03	n
Acrolein	107-02-8	1.6E-01	n	6.8E-01	n	2.1E-02	n	8.8E-02	n	4.2E-02	n
Acrylamide	79-06-1	1.1E-01	c	3.8E+00	c	1.9E-03	c	9.4E-02	c	1.5E-02	c
Acrylic Acid	79-10-7	3.0E+04	n	2.9E+05	nm	1.0E+00	n	4.4E+00	n	1.8E+04	n
Acrylonitrile	107-13-1	2.4E-01	c*	1.2E+01	c*	3.6E-02	c*	1.8E+00	c*	4.5E-02	c*
Adiponitrile	111-69-3	8.5E+06	nm	3.6E+07	nm	6.3E+00	n	2.6E+01	n		
Alachlor	15972-60-8	8.7E+00	c*	3.1E+02	c					1.2E+00	c
ALAR	1596-84-5	9.2E+03	n	9.2E+04	n					5.5E+03	n
Aldicarb	116-06-3	6.1E+01	n	6.2E+02	N					3.7E+01	n



Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Aldicarb Sulfone	1646-88-4	6.1E+01	n	6.2E+02	n					3.7E+01	n
Aldrin	309-00-2	2.9E-02	c*	1.0E+00	c	5.0E-04	c	2.5E-02	c	4.0E-03	c
Allyl	74223-64-6	1.5E+04	n	1.5E+05	nm					9.1E+03	n
Allyl Alcohol	107-18-6	3.1E+02	n	3.1E+03	n	3.1E-01	n	1.3E+00	n	1.8E+02	n
Allyl Chloride	107-05-1	1.8E+00	n	7.7E+00	n	1.0E+00	n	4.4E+00	n	2.1E+00	n
Aluminum	7429-90-5	7.7E+04	n	9.9E+05	nm	5.2E+00	n	2.2E+01	n	3.7E+04	n
Aluminum Phosphide	20859-73-8	3.1E+01	n	4.1E+02	n					1.5E+01	n
Amdro	67485-29-4	1.8E+01	n	1.8E+02	n					1.1E+01	n
Ametryn	834-12-8	5.5E+02	n	5.5E+03	n					3.3E+02	n
Aminophenol, m-	591-27-5	4.9E+03	n	4.9E+04	n					2.9E+03	n
Aminophenol, p-	123-30-8	1.2E+03	n	1.2E+04	n					7.3E+02	n
Amitraz	33089-61-1	1.5E+02	n	1.5E+03	n					9.1E+01	n
Ammonia	7664-41-7	1.4E+08	nm	6.0E+08	nm	1.0E+02	n	4.4E+02	n		
Ammonium Perchlorate	7790-98-9	5.5E+01	n	7.2E+02	n					2.6E+01	n
Ammonium Sulfamate	7773-06-0	1.6E+04	n	2.0E+05	nm					7.3E+03	n
Aniline	62-53-3	8.5E+01	c**	3.0E+03	c*	1.0E+00	n	4.4E+00	n	1.2E+01	c*
Antimony (metallic)	7440-36-0	3.1E+01	n	4.1E+02	n					1.5E+01	n
Antimony Pentoxide	1314-60-9	3.9E+01	n	5.1E+02	n					1.8E+01	n
Antimony Potassium Tartrate	11071-15-1	7.0E+01	n	9.2E+02	n					3.3E+01	n
Antimony Tetroxide	1332-81-6	3.1E+01	n	4.1E+02	n					1.5E+01	n
Antimony Trioxide	1309-64-4	3.1E+01	n	4.1E+02	n	2.1E-01	n	8.8E-01	n	1.5E+01	n
Apollo	74115-24-5	7.9E+02	n	8.0E+03	n					4.7E+02	n
Aramite	140-57-8	1.9E+01	c	6.9E+02	c	3.4E-01	c	1.7E+01	c	2.7E+00	c
Arsenic, Inorganic	7440-38-2	3.9E-01	c*	1.6E+01	c	5.7E-04	c*	2.9E-02	c*	4.5E-02	c

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Arsine	7784-42-1	7.1E+04	n	3.0E+05	nm	5.2E-02	n	2.2E-01	n		
Assure	76578-14-8	5.5E+02	n	5.5E+03	n					3.3E+02	n
Asulam	3337-71-1	3.1E+03	n	3.1E+04	n					1.8E+03	n
Atrazine	1912-24-9	2.1E+00	c	7.5E+01	c					2.9E-01	c
Avermectin B1	65195-55-3	2.4E+01	n	2.5E+02	n					1.5E+01	n
Azobenzene	103-33-3	4.9E+00	c	2.2E+02	c	7.8E-02	c	4.0E+00	c	1.2E-01	c
Barium	7440-39-3	1.5E+04	n	1.9E+05	nm	5.2E-01	n	2.2E+00	n	7.3E+03	n
Baygon	114-26-1	2.4E+02	n	2.5E+03	n					1.5E+02	n
Bayleton	43121-43-3	1.8E+03	n	1.8E+04	n					1.1E+03	n
Baythroid	68359-37-5	1.5E+03	n	1.5E+04	n					9.1E+02	n
Benefin	1861-40-1	1.8E+04	n	1.8E+05	nm					1.1E+04	n
Benomyl	17804-35-2	3.1E+03	n	3.1E+04	n					1.8E+03	n
Bentazon	25057-89-0	1.8E+03	n	1.8E+04	n					1.1E+03	n
Benzaldehyde	100-52-7	7.8E+03	ns	1.0E+05	nms					3.7E+03	n
Benzene	71-43-2	1.1E+00	c*	5.6E+01	c*	3.1E-01	c	1.6E+01	c*	4.1E-01	c
Benzenethiol	108-98-5	7.8E-01	n	1.0E+01	n					3.7E-01	n
Benzidine	92-87-5	5.0E-04	c	7.5E-02	c	1.4E-05	c	1.8E-03	c	9.4E-05	c
Benzoic Acid	65-85-0	2.4E+05	nm	2.5E+06	nm					1.5E+05	n
Benzotrichloride	98-07-7	4.9E-02	c	2.2E+00	c					5.2E-03	c
Benzyl Alcohol	100-51-6	3.1E+04	n	3.1E+05	nm					1.8E+04	n
Benzyl Chloride	100-44-7	3.8E+00	c**	1.7E+02	c**	1.0E+00	n	4.4E+00	n	4.0E-01	c**
Beryllium and compounds	7440-41-7	1.6E+02	n	2.0E+03	n	1.0E-03	c*	5.1E-02	c*	7.3E+01	n
Bidrin	141-66-2	6.1E+00	n	6.2E+01	n					3.7E+00	n
Bifenox	42576-02-3	5.5E+02	n	5.5E+03	n					3.3E+02	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Biphenrin	82657-04-3	9.2E+02	n	9.2E+03	n					5.5E+02	n
Biphenyl, 1,1'-	92-52-4	3.9E+03	ns	5.1E+04	ns					1.8E+03	n
Bis(2-chloroethoxy)methane	111-91-1	1.8E+02	n	1.8E+03	n					1.1E+02	n
Bis(2-chloroethyl)ether	111-44-4	1.9E-01	c	9.0E+00	c	7.4E-03	c	3.7E-01	c	1.2E-02	c
Bis(2-chloro-1-methylethyl) ether	108-60-1	3.5E+00	c	1.7E+02	c	2.4E-01	c	1.2E+01	c	3.2E-01	c
Bis(2-ethylhexyl)phthalate	117-81-7	3.5E+01	c*	1.2E+03	c*					4.8E+00	c
Bis(chloromethyl)ether	542-88-1	2.7E-04	c	1.3E-02	c	3.9E-05	c	2.0E-03	c	6.2E-05	c
Bisphenol A	80-05-7	3.1E+03	n	3.1E+04	n					1.8E+03	n
Boron And Borates Only	7440-42-8	1.6E+04	n	2.0E+05	nm	2.1E+01	n	8.8E+01	n	7.3E+03	n
Boron Trifluoride	7637-07-2	9.9E+05	nm	4.2E+06	nm	7.3E-01	n	3.1E+00	n		
Bromate	15541-45-4	9.1E-01	c	4.1E+01	c					9.6E-02	c
Bromobenzene	108-86-1	9.4E+01	n	4.1E+02	n	1.0E+01	n	4.4E+01	n	2.0E+01	n
Bromodichloromethane	75-27-4	1.0E+01	c	4.6E+02	c					1.1E+00	c
Bromoform	75-25-2	6.1E+01	c*	2.2E+03	c*	2.2E+00	c	1.1E+02	c	8.5E+00	c*
Bromomethane	74-83-9	7.9E+00	n	3.5E+01	n	5.2E+00	n	2.2E+01	n	8.7E+00	n
Bromophos	2104-96-3	3.1E+02	n	3.1E+03	n					1.8E+02	n
Bromoxnyl	1689-84-5	1.2E+03	n	1.2E+04	n					7.3E+02	n
Bromoxnyl Octanoate	1689-99-2	1.2E+03	n	1.2E+04	n					7.3E+02	n
Butadiene, 1,3-	106-99-0	7.7E-02	c*	3.9E+00	c*	8.1E-02	c*	4.1E+00	c*	1.6E-01	c*
Butanol, N-	71-36-3	6.1E+03	n	6.2E+04	n					3.7E+03	n
Butyl Benzyl Phthlate	85-68-7	2.6E+02	c*	9.1E+03	c					3.5E+01	c
Butylate	2008-41-5	3.1E+03	n	3.1E+04	n					1.8E+03	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Butylphthalyl Butylglycolate	85-70-1	6.1E+04	n	6.2E+05	nm					3.7E+04	n
Cacodylic Acid	75-60-5	1.2E+03	n	1.2E+04	n					7.3E+02	n
Cadmium (Diet)	7440-43-9	7.0E+01	n	8.1E+02	n						
Cadmium (Water)	7440-43-9					1.4E-03	c	6.8E-02	c	1.8E+01	n
Caprolactam	105-60-2	3.1E+04	n	3.1E+05	nm					1.8E+04	n
Captafol	2425-06-1	3.2E+00	c*	1.1E+02	c	5.7E-02	c	2.9E+00	c	4.5E-01	c
Captan	133-06-2	2.1E+02	c*	7.5E+03	c	3.7E+00	c	1.9E+02	c	2.9E+01	c
Carbaryl	63-25-2	6.1E+03	n	6.2E+04	n					3.7E+03	n
Carbofuran	1563-66-2	3.1E+02	n	3.1E+03	n					1.8E+02	n
Carbon Disulfide	75-15-0	6.7E+02	ns	3.0E+03	ns	7.3E+02	n	3.1E+03	n	1.0E+03	n
Carbon Tetrachloride	56-23-5	2.5E-01	c	1.3E+01	c	1.6E-01	c	8.2E+00	c	2.0E-01	c
Carbosulfan	55285-14-8	6.1E+02	n	6.2E+03	n					3.7E+02	n
Carboxin	5234-68-4	6.1E+03	n	6.2E+04	n					3.7E+03	n
Chloral Hydrate	302-17-0	6.1E+03	n	6.2E+04	n					3.7E+03	n
Chloramben	133-90-4	9.2E+02	n	9.2E+03	n					5.5E+02	n
Chloranil	118-75-2	1.2E+00	c	4.3E+01	c					1.7E-01	c
Chlordane	12789-03-6	1.6E+00	c*	6.5E+01	c*	2.4E-02	c*	1.2E+00	c*	1.9E-01	c*
Chlordecone (Kepone)	143-50-0	3.0E-02	c	1.1E+00	c	5.3E-04	c	2.7E-02	c	4.2E-03	c
Chlorimuron, Ethyl-	90982-32-4	1.2E+03	n	1.2E+04	n					7.3E+02	n
Chlorine	7782-50-5	7.5E+03	n	9.1E+04	n	1.5E-01	n	6.4E-01	n	3.7E+03	n
Chlorine Dioxide	10049-04-4	2.3E+03	n	3.0E+04	n	2.1E-01	n	8.8E-01	n	1.1E+03	n
Chlorite (Sodium Salt)	7758-19-2	2.3E+03	n	3.1E+04	n					1.1E+03	n
Chloro-1,1-difluoroethane, 1-	75-68-3	5.9E+04	ns	2.5E+05	nms	5.2E+04	n	2.2E+05	n	1.0E+05	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Chloro-1,3-butadiene, 2-	126-99-8	8.6E+00	n	3.6E+01	n	7.3E+00	n	3.1E+01	n	1.4E+01	n
Chloro-2-methylaniline HCl, 4-	3165-93-3	1.1E+00	c	3.7E+01	c					1.5E-01	c
Chloro-2-methylaniline, 4-	95-69-2	1.8E+00	c	6.4E+01	c	3.2E-02	c	1.6E+00	c	2.5E-01	c
Chloroacetic Acid	79-11-8	1.2E+02	n	1.2E+03	n					7.3E+01	n
Chloroacetophenone, 2-	532-27-4	4.3E+04	n	1.8E+05	nm	3.1E-02	n	1.3E-01	n		
Chloroaniline, p-	106-47-8	9.0E+00	c*	3.2E+02	c*					1.2E+00	c
Chlorobenzene	108-90-7	3.1E+02	n	1.5E+03	ns	5.2E+01	n	2.2E+02	n	9.1E+01	n
Chlorobenzilate	510-15-6	4.4E+00	c	1.6E+02	c	7.8E-02	c	4.0E+00	c	6.1E-01	c
Chlorobenzotrifluoride, 4-	98-56-6	2.1E+02	n	2.4E+03	ns	3.1E+02	n	1.3E+03	n	9.3E+01	n
Chlorobutane, 1-	109-69-3	3.1E+03	ns	4.1E+04	ns					1.5E+03	n
Chlorodifluoromethane	75-45-6	5.3E+04	ns	2.2E+05	nms	5.2E+04	n	2.2E+05	n	1.0E+05	n
Chloroform	67-66-3	3.0E-01	c	1.5E+01	c	1.1E-01	c	5.3E+00	c	1.9E-01	c
Chloromethane	74-87-3	1.7E+00	c*	8.4E+01	c*	1.4E+00	c*	6.8E+01	c*	1.8E+00	c
Chloronaphthalene, Beta-	91-58-7	6.3E+03	ns	8.2E+04	ns					2.9E+03	n
Chloronitrobenzene, o-	88-73-3	5.0E+01	c**	1.8E+03	c**	7.3E-02	n	3.1E-01	n	6.9E+00	c**
Chloronitrobenzene, p-	100-00-5	6.1E+01	n	2.7E+03	c**	6.3E-01	n	2.6E+00	n	1.1E+01	c**
Chlorophenol, 2-	95-57-8	3.9E+02	n	5.1E+03	n					1.8E+02	n
Chlorothalonil	1897-45-6	1.6E+02	c**	5.6E+03	c*	2.7E+00	c	1.4E+02	c	2.2E+01	c*
Chlorotoluene, o-	95-49-8	1.6E+03	ns	2.0E+04	ns					7.3E+02	n
Chlorotoluene, p-	106-43-4	5.5E+03	ns	7.2E+04	ns					2.6E+03	n
Chlorpropham	101-21-3	1.2E+04	n	1.2E+05	nm					7.3E+03	n
Chlorpyrifos	2921-88-2	1.8E+02	n	1.8E+03	n					1.1E+02	n
Chlorpyrifos Methyl	5598-13-0	6.1E+02	n	6.2E+03	n					3.7E+02	n
Chlorsulfuron	64902-72-3	3.1E+03	n	3.1E+04	n					1.8E+03	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Chlorthiophos	60238-56-4	4.9E+01	n	4.9E+02	n					2.9E+01	n
Chromium (III) (Insoluble Salts)	16065-83-1	1.2E+05	nm	1.5E+06	nm					5.5E+04	n
Chromium VI (chromic acid mists)	18540-29-9					2.9E-05	c	1.5E-03	c	1.1E+02	n
Chromium VI (particulates)	18540-29-9	3.9E+01	c**	2.0E+03	c*	2.9E-05	c	1.5E-03	c		
Chromium, Total (1:6 ratio Cr VI : Cr III)	7440-47-3	2.8E+02	c	1.4E+04	c	2.0E-04	c	1.0E-02	c		
Cobalt	7440-48-4	2.3E+01	n	3.0E+02	n	2.7E-04	c*	1.4E-02	c*	1.1E+01	n
Coke Oven Emissions	8007-45-2					1.5E-03	c	2.0E-01	c		
Copper	7440-50-8	3.1E+03	n	4.1E+04	n					1.5E+03	n
Cresol, m-	108-39-4	3.1E+03	n	3.1E+04	n					1.8E+03	n
Cresol, o-	95-48-7	3.1E+03	n	3.1E+04	n					1.8E+03	n
Cresol, p-	106-44-5	3.1E+02	n	3.1E+03	n					1.8E+02	n
Crotonaldehyde, trans-	123-73-9	3.4E-01	c	1.5E+01	c					3.5E-02	c
Cumene	98-82-8	2.2E+03	ns	1.1E+04	ns	4.2E+02	n	1.8E+03	n	6.8E+02	n
Cyanazine	21725-46-2	5.8E-01	c	2.1E+01	c					8.0E-02	c
Cyclohexane	110-82-7	7.2E+03	ns	3.0E+04	ns	6.3E+03	n	2.6E+04	n	1.3E+04	n
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	2.1E+01	c	7.5E+02	c					2.9E+00	c
Cyclohexanone	108-94-1	3.1E+05	nm	3.1E+06	nm					1.8E+05	n
Cyclohexylamine	108-91-8	1.2E+04	n	1.2E+05	nm					7.3E+03	n
Cyhalothrin/karate	68085-85-8	3.1E+02	n	3.1E+03	n					1.8E+02	n
Cypermethrin	52315-07-8	6.1E+02	n	6.2E+03	n					3.7E+02	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Cyromazine	66215-27-8	4.6E+02	n	4.6E+03	n					2.7E+02	n
<b>Cyanides</b>				0.0E+00				0.0E+00			
Calcium Cyanide	592-01-8	3.1E+03	n	4.1E+04	n					1.5E+03	n
Copper Cyanide	544-92-3	3.9E+02	n	5.1E+03	n					1.8E+02	n
Cyanide (CN-)	57-12-5	1.6E+03	n	2.0E+04	n					7.3E+02	n
Cyanogen	460-19-5	3.1E+03	n	4.1E+04	n					1.5E+03	n
Cyanogen Bromide	506-68-3	7.0E+03	n	9.2E+04	n					3.3E+03	n
Cyanogen Chloride	506-77-4	3.9E+03	n	5.1E+04	n					1.8E+03	n
Hydrogen Cyanide	74-90-8	1.6E+03	n	2.0E+04	n	3.1E+00	n	1.3E+01	n	6.2E+00	n
Potassium Cyanide	151-50-8	3.9E+03	n	5.1E+04	n					1.8E+03	n
Potassium Silver Cyanide	506-61-6	1.6E+04	n	2.0E+05	nm					7.3E+03	n
Silver Cyanide	506-64-9	7.8E+03	n	1.0E+05	nm					3.7E+03	n
Sodium Cyanide	143-33-9	3.1E+03	n	4.1E+04	n					1.5E+03	n
Thiocyanate	463-56-9	1.6E+01	n	2.0E+02	n					7.3E+00	n
Zinc Cyanide	557-21-1	3.9E+03	n	5.1E+04	n					1.8E+03	n
Dacthal	1861-32-1	6.1E+02	n	6.2E+03	n					3.7E+02	n
Dalapon	75-99-0	1.8E+03	n	1.8E+04	n					1.1E+03	n
DDD	72-54-8	2.0E+00	c	7.2E+01	c					2.8E-01	c
DDE, p,p'-	72-55-9	1.4E+00	c	5.1E+01	c					2.0E-01	c
DDT	50-29-3	1.7E+00	c*	7.0E+01	c*	2.5E-02	c	1.3E+00	c	2.0E-01	c*
Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	4.3E+02	n	2.5E+04	c**					9.6E+01	c**
Demeton	8065-48-3	2.4E+00	n	2.5E+01	n					1.5E+00	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Di(2-ethylhexyl)adipate	103-23-1	4.0E+02	c*	1.4E+04	c					5.6E+01	c
Diallate	2303-16-4	8.0E+00	c	2.8E+02	c					1.1E+00	c
Diazinon	333-41-5	5.5E+01	n	5.5E+02	n					3.3E+01	n
Dibromo-3-chloropropane, 1,2-	96-12-8	5.6E-03	c	7.3E-01	c	1.6E-04	c	2.0E-02	c	3.2E-04	c
Dibromobenzene, 1,4-	106-37-6	6.1E+02	n	6.2E+03	n					3.7E+02	n
Dibromochloromethane	124-48-1	5.8E+00	c	2.1E+02	c					8.0E-01	c
Dibromoethane, 1,2-	106-93-4	3.4E-02	c	1.7E+00	c	4.1E-03	c	2.0E-01	c	6.5E-03	c
Dibromomethane (Methylene Bromide)	74-95-3	7.8E+02	n	1.0E+04	ns					3.7E+02	n
Dibutyl Phthalate	84-74-2	6.1E+03	n	6.2E+04	n					3.7E+03	n
Dibutyltin Compounds	NA	1.8E+01	n	1.8E+02	n					1.1E+01	n
Dicamba	1918-00-9	1.8E+03	n	1.8E+04	n					1.1E+03	n
Dichloro-2-butene, 1,4-	764-41-0	3.2E-03	c	1.6E-01	c	9.4E-04	c	4.7E-02	c	1.9E-03	c
Dichloroacetic Acid	79-43-6	9.7E+00	c*	3.4E+02	c*					1.3E+00	c
Dichlorobenzene, 1,2-	95-50-1	2.0E+03	ns	1.0E+04	ns	2.1E+02	n	8.8E+02	n	3.7E+02	n
Dichlorobenzene, 1,4-	106-46-7	2.6E+00	c	1.3E+02	c	2.2E-01	c	1.1E+01	c	4.3E-01	c
Dichlorobenzidine, 3,3'-	91-94-1	1.1E+00	c	3.8E+01	c					1.5E-01	c
Dichlorodifluoromethane	75-71-8	1.9E+02	n	7.8E+02	n	2.1E+02	n	8.8E+02	n	3.9E+02	n
Dichloroethane, 1,1-	75-34-3	3.4E+00	c	1.7E+02	c	1.5E+00	c	7.7E+01	c	2.4E+00	c
Dichloroethane, 1,2-	107-06-2	4.5E-01	c	2.2E+01	c	9.4E-02	c	4.7E+00	c	1.5E-01	c
Dichloroethylene, 1,1-	75-35-4	2.5E+02	n	1.1E+03	n	2.1E+02	n	8.8E+02	n	3.4E+02	n
Dichloroethylene, 1,2- (Mixed Isomers)	540-59-0	7.0E+02	n	9.2E+03	ns					3.3E+02	n



Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Dichloroethylene, 1,2-cis-	156-59-2	7.8E+02	n	1.0E+04	ns					3.7E+02	n
Dichloroethylene, 1,2-trans-	156-60-5	1.1E+02	n	5.0E+02	n	6.3E+01	n	2.6E+02	n	1.1E+02	n
Dichlorophenol, 2,4-	120-83-2	1.8E+02	n	1.8E+03	n					1.1E+02	n
Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	6.9E+02	n	7.7E+03	n					3.7E+02	n
Dichlorophenoxy)butyric Acid, 4-(2,4-	94-82-6	4.9E+02	n	4.9E+03	n					2.9E+02	n
Dichloropropane, 1,2-	78-87-5	9.3E-01	c*	4.7E+01	c*	2.4E-01	c*	1.2E+01	c*	3.9E-01	c*
Dichloropropane, 1,3-	142-28-9	1.6E+03	n	2.0E+04	ns					7.3E+02	n
Dichloropropanol, 2,3-	616-23-9	1.8E+02	n	1.8E+03	n					1.1E+02	n
Dichloropropene, 1,3-	542-75-6	1.7E+00	c*	8.4E+01	c*	6.1E-01	c*	3.1E+01	c*	4.3E-01	c*
Dichlorvos	62-73-7	1.7E+00	c*	5.9E+01	c*	5.2E-01	n	2.2E+00	n	2.3E-01	c*
Dicyclopentadiene	77-73-6	2.9E+01	n	1.3E+02	n	7.3E+00	n	3.1E+01	n	1.4E+01	n
Dieldrin	60-57-1	3.0E-02	c	1.1E+00	c	5.3E-04	c	2.7E-02	c	4.2E-03	c
Diesel Engine Exhaust	NA					5.2E+00	n	2.2E+01	n		
Diethyl Phthalate	84-66-2	4.9E+04	n	4.9E+05	nm					2.9E+04	n
Diethylene Glycol Monobutyl Ether	112-34-5	6.1E+02	n	6.2E+03	n	2.1E+01	n	8.8E+01	n	3.7E+02	n
Diethylene Glycol Monoethyl Ether	111-90-0	3.7E+03	n	3.7E+04	n	3.1E+00	n	1.3E+01	n	2.2E+03	n
Diethylformamide	617-84-5	6.1E+01	n	6.2E+02	n					3.7E+01	n
Diethylstilbestrol	56-53-1	1.4E-03	c	4.9E-02	c	2.4E-05	c	1.2E-03	c	1.9E-04	c
Difenzoquat	43222-48-6	4.9E+03	n	4.9E+04	n					2.9E+03	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Diflubenzuron	35367-38-5	1.2E+03	n	1.2E+04	n					7.3E+02	n
Difluoroethane, 1,1-	75-37-6	5.3E+04	ns	2.2E+05	nms	4.2E+04	n	1.8E+05	n	8.3E+04	n
Diisopropyl Ether	108-20-3	1.2E+03	n	5.1E+03	ns	4.2E+02	n	1.8E+03	n	8.3E+02	n
Diisopropyl Methylphosphonate	1445-75-6	6.3E+03	ns	8.2E+04	ns					2.9E+03	n
Dimethipin	55290-64-7	1.2E+03	n	1.2E+04	n					7.3E+02	n
Dimethoate	60-51-5	1.2E+01	n	1.2E+02	n					7.3E+00	n
Dimethoxybenzidine, 3,3'-	119-90-4	3.5E+01	c	1.2E+03	c					4.8E+00	c
Dimethyl methylphosphonate	756-79-6	2.9E+02	c*	1.0E+04	c*					4.0E+01	c*
Dimethylaniline HCl, 2,4-	21436-96-4	8.4E-01	c	3.0E+01	c					1.2E-01	c
Dimethylaniline, 2,4-	95-68-1	6.5E-01	c	2.3E+01	c					9.0E-02	c
Dimethylaniline, N,N-	121-69-7	1.6E+02	n	2.0E+03	ns					7.3E+01	n
Dimethylbenzidine, 3,3'-	119-93-7	4.4E-02	c	1.6E+00	c					6.1E-03	c
Dimethylformamide	68-12-2	6.1E+03	n	6.2E+04	n	3.1E+01	n	1.3E+02	n	3.7E+03	n
Dimethylphenol, 2,4-	105-67-9	1.2E+03	n	1.2E+04	n					7.3E+02	n
Dimethylphenol, 2,6-	576-26-1	3.7E+01	n	3.7E+02	n					2.2E+01	n
Dimethylphenol, 3,4-	95-65-8	6.1E+01	n	6.2E+02	n					3.7E+01	n
Dimethylterephthalate	120-61-6	7.8E+03	ns	1.0E+05	nms					3.7E+03	n
Dinitro-o-cresol, 4,6-	534-52-1	6.1E+00	n	6.2E+01	n					3.7E+00	n
Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5	1.2E+02	n	1.2E+03	n					7.3E+01	n
Dinitrobenzene, 1,2-	528-29-0	6.1E+00	n	6.2E+01	n					3.7E+00	n
Dinitrobenzene, 1,3-	99-65-0	6.1E+00	n	6.2E+01	n					3.7E+00	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Dinitrobenzene, 1,4-	100-25-4	6.1E+00	n	6.2E+01	n					3.7E+00	n
Dinitrophenol, 2,4-	51-28-5	1.2E+02	n	1.2E+03	n					7.3E+01	n
Dinitrotoluene Mixture, 2,4/2,6-	25321-14-6	7.1E-01	c	2.5E+01	c					9.9E-02	c
Dinitrotoluene, 2,4-	121-14-2	1.2E+02	n	1.2E+03	n					7.3E+01	n
Dinitrotoluene, 2,6-	606-20-2	6.1E+01	n	6.2E+02	n					3.7E+01	n
Dinitrotoluene, 2-Amino-4,6-	35572-78-2	1.5E+02	n	2.0E+03	n					7.3E+01	n
Dinitrotoluene, 4-Amino-2,6-	19406-51-0	1.5E+02	n	1.9E+03	n					7.3E+01	n
Dinoseb	88-85-7	6.1E+01	n	6.2E+02	n					3.7E+01	n
Dioxane, 1,4-	123-91-1	4.4E+01	c	1.6E+03	c	3.8E+03	n	1.6E+04	n	6.1E+00	c
Diphenamid	957-51-7	1.8E+03	n	1.8E+04	n					1.1E+03	n
Diphenyl Sulfone	127-63-9	1.8E+02	n	1.8E+03	n					1.1E+02	n
Diphenylamine	122-39-4	1.5E+03	n	1.5E+04	n					9.1E+02	n
Diphenylhydrazine, 1,2-	122-66-7	6.1E-01	c	2.2E+01	c	1.1E-02	c	5.6E-01	c	8.4E-02	c
Diquat	85-00-7	1.3E+02	n	1.4E+03	n					8.0E+01	n
Direct Black 38	1937-37-7	6.6E-02	c	2.3E+00	c	1.2E-03	c	5.8E-02	c	9.1E-03	c
Direct Blue 6	2602-46-2	6.6E-02	c	2.3E+00	c	1.2E-03	c	5.8E-02	c	9.1E-03	c
Direct Brown 95	16071-86-6	7.2E-02	c	2.6E+00	c	1.3E-03	c	6.5E-02	c	1.0E-02	c
Disulfoton	298-04-4	2.4E+00	n	2.5E+01	n					1.5E+00	n
Dithiane, 1,4-	505-29-3	6.1E+02	n	6.2E+03	n					3.7E+02	n
Diuron	330-54-1	1.2E+02	n	1.2E+03	n					7.3E+01	n
Dodine	2439-10-3	2.4E+02	n	2.5E+03	n					1.5E+02	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
<b>Dioxins</b>				0.0E+00				0.0E+00			
Hexachlorodibenzo-p-dioxin	34465-46-8	4.5E-05	c	1.8E-03	c	6.4E-07	c	3.2E-05	c	5.2E-06	c
Hexachlorodibenzo-p-dioxin, Mixture	NA	9.4E-05	c	3.9E-03	c	1.9E-06	c	9.4E-05	c	1.1E-05	c
HpCDD, 2,3,7,8-OCDD	37871-00-4 3268-87-9	4.5E-04 1.5E-02	c c	1.8E-02 6.1E-01	c c	6.4E-06 2.1E-04	c c	3.2E-04 1.1E-02	c c	5.2E-05 1.7E-03	c c
PeCDD, 2,3,7,8-TCDD, 2,3,7,8-Endosulfan	36088-22-9 1746-01-6 115-29-7	4.5E-06 4.5E-06 3.7E+02	c c* n	1.8E-04 1.8E-04 3.7E+03	c c* n	6.4E-08 6.4E-08	c c	3.2E-06 3.2E-06	c c	5.2E-07 5.2E-07 2.2E+02	c c* n
Endothall	145-73-3	1.2E+03	n	1.2E+04	n					7.3E+02	n
Endrin	72-20-8	1.8E+01	n	1.8E+02	n					1.1E+01	n
Epichlorohydrin	106-89-8	1.8E+01	n	7.7E+01	n	1.0E+00	n	4.4E+00	n	2.1E+00	n
Epoxybutane, 1,2-EPTC	106-88-7 759-94-4	1.5E+02 2.0E+03	n ns	6.4E+02 2.6E+04	n ns	2.1E+01	n	8.8E+01	n	4.2E+01 9.1E+02	n n
Ethephon	16672-87-0	3.1E+02	n	3.1E+03	n					1.8E+02	n
Ethion	563-12-2	3.1E+01	n	3.1E+02	n					1.8E+01	n
Ethoxyethanol Acetate, 2-Ethoxyethanol, 2-	111-15-9 110-80-5	1.8E+04 2.4E+04	n n	1.8E+05 2.5E+05	nm nm	2.1E+02	n	8.8E+02	n	1.1E+04 1.5E+04	n n
Ethyl Acetate	141-78-6	7.0E+04	ns	9.2E+05	nms					3.3E+04	n
Ethyl Acrylate	140-88-5	1.3E+01	c	6.0E+02	c					1.4E+00	c
Ethyl Chloride	75-00-3	1.5E+04	ns	6.2E+04	ns	1.0E+04	n	4.4E+04	n	2.1E+04	n
Ethyl Ether	60-29-7	1.6E+04	ns	2.0E+05	nms					7.3E+03	n
Ethyl Methacrylate	97-63-2	7.0E+03	ns	9.2E+04	ns					3.3E+03	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Ethyl-p-nitrophenyl Phosphonate	2104-64-5	6.1E-01	n	6.2E+00	n					3.7E-01	n
Ethylbenzene	100-41-4	5.7E+00	c	2.9E+02	c	9.7E-01	c	4.9E+01	c	1.5E+00	c
Ethylene Cyanohydrin	109-78-4	1.8E+03	n	1.8E+04	n					1.1E+03	n
Ethylene Diamine	107-15-3	5.5E+03	n	5.5E+04	n					3.3E+03	n
Ethylene Glycol	107-21-1	1.2E+05	nm	1.2E+06	nm	4.2E+02	n	1.8E+03	n	7.3E+04	n
Ethylene Glycol Monobutyl Ether	111-76-2	3.1E+04	n	3.1E+05	nm	1.4E+04	n	5.7E+04	n	1.8E+04	n
Ethylene Oxide	75-21-8	1.6E-01	c	8.0E+00	c	2.8E-02	c	1.4E+00	c	4.4E-02	c
Ethylene Thiourea	96-45-7	4.9E+00	n	3.8E+02	c**	1.9E-01	c	9.4E+00	c	1.5E+00	c**
Ethylphthalyl Ethyl Glycolate	84-72-0	1.8E+05	nm	1.8E+06	nm					1.1E+05	n
Express	101200-48-0	4.9E+02	n	4.9E+03	n					2.9E+02	n
Fenamiphos	22224-92-6	1.5E+01	n	1.5E+02	n					9.1E+00	n
Fenpropathrin	39515-41-8	1.5E+03	n	1.5E+04	n					9.1E+02	n
Fluometuron	2164-17-2	7.9E+02	n	8.0E+03	n					4.7E+02	n
Fluorine (Soluble Fluoride)	7782-41-4	4.7E+03	n	6.1E+04	n					2.2E+03	n
Fluridone	59756-60-4	4.9E+03	n	4.9E+04	n					2.9E+03	n
Flurprimidol	56425-91-3	1.2E+03	n	1.2E+04	n					7.3E+02	n
Flutolanil	66332-96-5	3.7E+03	n	3.7E+04	n					2.2E+03	n
Fluvalinate	69409-94-5	6.1E+02	n	6.2E+03	n					3.7E+02	n
Folpet	133-07-3	1.4E+02	c*	4.9E+03	c					1.9E+01	c
Fomesafen	72178-02-0	2.6E+00	c	9.1E+01	c					3.5E-01	c
Fonofos	944-22-9	1.2E+02	n	1.2E+03	n					7.3E+01	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Formaldehyde	50-00-0	1.2E+04	n	1.2E+05	nm	1.9E-01	c*	9.4E+00	c*	7.3E+03	n
Formic Acid	64-18-6	1.2E+05	nm	1.2E+06	nm	3.1E+00	n	1.3E+01	n	7.3E+04	n
Fosetyl-AL	39148-24-8	1.8E+05	nm	1.8E+06	nm					1.1E+05	n
Furazolidone	67-45-8	1.3E-01	c	4.5E+00	c					1.8E-02	c
Furfural	98-01-1	1.8E+02	n	1.8E+03	n	5.2E+01	n	2.2E+02	n	1.1E+02	n
Furium	531-82-8	3.2E-01	c	1.1E+01	c	5.7E-03	c	2.9E-01	c	4.5E-02	c
Furmecyclox	60568-05-0	1.6E+01	c	5.7E+02	c					2.2E+00	c
<b>Furans</b>				0.0E+00				0.0E+00			
Furan	110-00-9	7.8E+01	n	1.0E+03	n					3.7E+01	n
HpCDF, 2,3,7,8-	38998-75-3	3.7E-04	c	1.3E-02	c	6.4E-06	c	3.2E-04	c	5.2E-05	c
HxCDF, 2,3,7,8-	55684-94-1	3.7E-05	c	1.3E-03	c	6.4E-07	c	3.2E-05	c	5.2E-06	c
OCDF	39001-02-0	1.2E-02	c	4.4E-01	c	2.1E-04	c	1.1E-02	c	1.7E-03	c
PeCDF, 1,2,3,7,8-	57117-41-6	1.2E-04	c	4.4E-03	c	2.1E-06	c	1.1E-04	c	1.7E-05	c
PeCDF, 2,3,4,7,8-	57117-31-4	1.2E-05	c	4.4E-04	c	2.1E-07	c	1.1E-05	c	1.7E-06	c
TCDF, 2,3,7,8-	51207-31-9	3.7E-05	c	1.3E-03	c	6.4E-07	c	3.2E-05	c	5.2E-06	c
Glufosinate, Ammonium	77182-82-2	2.4E+01	n	2.5E+02	n					1.5E+01	n
Glycidyl	765-34-4	2.4E+01	n	2.5E+02	n	1.0E+00	n	4.4E+00	n	1.5E+01	n
Glyphosate	1071-83-6	6.1E+03	n	6.2E+04	n					3.7E+03	n
Goal	42874-03-3	1.8E+02	n	1.8E+03	n					1.1E+02	n
Haloxyfop, Methyl	69806-40-2	3.1E+00	n	3.1E+01	n					1.8E+00	n
Harmony	79277-27-3	7.9E+02	n	8.0E+03	n					4.7E+02	n
Heptachlor	76-44-8	1.1E-01	c	3.8E+00	c	1.9E-03	c	9.4E-02	c	1.5E-02	c
Heptachlor Epoxide	1024-57-3	5.3E-02	c*	1.9E+00	c*	9.4E-04	c	4.7E-02	c	7.4E-03	c*

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Hexabromobenzene	87-82-1	1.2E+02	n	1.2E+03	n					7.3E+01	n
Hexachlorobenzene	118-74-1	3.0E-01	c	1.1E+01	c	5.3E-03	c	2.7E-01	c	4.2E-02	c
Hexachlorobutadiene	87-68-3	6.2E+00	c**	2.2E+02	c*	1.1E-01	c	5.6E+00	c	8.6E-01	c*
Hexachlorocyclohexane, Alpha-	319-84-6	7.7E-02	c	2.7E+00	c	1.4E-03	c	6.8E-02	c	1.1E-02	c
Hexachlorocyclohexane, Beta-	319-85-7	2.7E-01	c	9.6E+00	c	4.6E-03	c	2.3E-01	c	3.7E-02	c
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	5.2E-01	c*	2.1E+01	c	7.8E-03	c	4.0E-01	c	6.1E-02	c
Hexachlorocyclohexane, Technical	608-73-1	2.7E-01	c	9.6E+00	c	4.8E-03	c	2.4E-01	c	3.7E-02	c
Hexachlorocyclopentadiene	77-47-4	3.7E+02	n	3.7E+03	n	2.1E-01	n	8.8E-01	n	2.2E+02	n
Hexachloroethane	67-72-1	3.5E+01	c**	1.2E+03	c**	6.1E-01	c	3.1E+01	c	4.8E+00	c**
Hexachlorophene	70-30-4	1.8E+01	n	1.8E+02	n					1.1E+01	n
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	5.5E+00	c*	2.4E+02	c					6.1E-01	c
Hexamethylene Diisocyanate, 1,6-	822-06-0	3.7E+00	n	1.6E+01	n	1.0E-02	n	4.4E-02	n	2.1E-02	n
Hexane, N-	110-54-3	5.7E+02	ns	2.6E+03	ns	7.3E+02	n	3.1E+03	n	8.8E+02	n
Hexanedioic Acid	124-04-9	1.2E+05	nm	1.2E+06	nm					7.3E+04	n
Hexazinone	51235-04-2	2.0E+03	n	2.0E+04	n					1.2E+03	n
Hydrazine	302-01-2	2.1E-01	c	9.5E+00	c	5.0E-04	c	2.5E-02	c	2.2E-02	c
Hydrazine Sulfate	10034-93-2	2.1E-01	c	9.5E+00	c	5.0E-04	c	2.5E-02	c	2.2E-02	c

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Hydrogen Chloride	7647-01-0	2.8E+07	nm	1.2E+08	nm	2.1E+01	n	8.8E+01	n		
Hydrogen Sulfide	7783-06-4	2.8E+06	nm	1.2E+07	nm	2.1E+00	n	8.8E+00	n		
Hydroquinone	123-31-9	8.7E+00	c	3.1E+02	c					1.2E+00	c
Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2	1.6E+01	n	2.0E+02	n					7.3E+00	n
Imazalil	35554-44-0	7.9E+02	n	8.0E+03	n					4.7E+02	n
Imazaquin	81335-37-7	1.5E+04	n	1.5E+05	nm					9.1E+03	n
Iprodione	36734-19-7	2.4E+03	n	2.5E+04	n					1.5E+03	n
Iron	7439-89-6	5.5E+04	n	7.2E+05	nm					2.6E+04	n
Isobutyl Alcohol	78-83-1	2.3E+04	ns	3.1E+05	nms					1.1E+04	n
Isophorone	78-59-1	5.1E+02	c*	1.8E+04	c*	2.1E+03	n	8.8E+03	n	7.1E+01	c
Isopropalin	33820-53-0	9.2E+02	n	9.2E+03	n					5.5E+02	n
Isopropyl Methyl Phosphonic Acid	1832-54-8	6.1E+03	n	6.2E+04	n					3.7E+03	n
Isoxaben	82558-50-7	3.1E+03	n	3.1E+04	n					1.8E+03	n
Kerb	23950-58-5	4.6E+03	n	4.6E+04	n					2.7E+03	n
Lactofen	77501-63-4	1.2E+02	n	1.2E+03	n					7.3E+01	n
Linuron	330-55-2	1.2E+02	n	1.2E+03	n					7.3E+01	n
Lithium	7439-93-2	1.6E+02	n	2.0E+03	n					7.3E+01	n
Lithium Perchlorate	7791-03-9	5.5E+01	n	7.2E+02	n					2.6E+01	n
Londax	83055-99-6	1.2E+04	n	1.2E+05	nm					7.3E+03	n
<b>Lead Compounds</b>				0.0E+00				0.0E+00			
Lead and Compounds	7439-92-1	4.0E+02	n	8.0E+02	n						



Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Tetraethyl Lead	78-00-2	6.1E-03	n	6.2E-02	n					3.7E-03	n
Malathion	121-75-5	1.2E+03	n	1.2E+04	n					7.3E+02	n
Maleic Anhydride	108-31-6	6.1E+03	n	6.1E+04	n	7.3E-01	n	3.1E+00	n	3.7E+03	n
Maleic Hydrazide	123-33-1	3.1E+04	n	3.1E+05	nm					1.8E+04	n
Malononitrile	109-77-3	6.1E+00	n	6.2E+01	n					3.7E+00	n
Mancozeb	8018-01-7	1.8E+03	n	1.8E+04	n					1.1E+03	n
Maneb	12427-38-2	3.1E+02	n	3.1E+03	n					1.8E+02	n
Manganese (Diet)	7439-96-5										
Manganese (Water)	7439-96-5	1.8E+03	n	2.3E+04	n	5.2E-02	n	2.2E-01	n	8.8E+02	n
MCPA	94-74-6	3.1E+01	n	3.1E+02	n					1.8E+01	n
MCPB	94-81-5	6.1E+02	n	6.2E+03	n					3.7E+02	n
MCPP	93-65-2	6.1E+01	n	6.2E+02	n					3.7E+01	n
Mephosfolan	950-10-7	5.5E+00	n	5.5E+01	n					3.3E+00	n
Mepiquat Chloride	24307-26-4	1.8E+03	n	1.8E+04	n					1.1E+03	n
Merphos	150-50-5	1.8E+00	n	1.8E+01	n					1.1E+00	n
Merphos Oxide	78-48-8	1.8E+00	n	1.8E+01	n					1.1E+00	n
Metalaxyl	57837-19-1	3.7E+03	n	3.7E+04	n					2.2E+03	n
Methacrylonitrile	126-98-7	3.2E+00	n	1.8E+01	n	7.3E-01	n	3.1E+00	n	1.0E+00	n
Methamidophos	10265-92-6	3.1E+00	n	3.1E+01	n					1.8E+00	n
Methanol	67-56-1	3.1E+04	n	3.1E+05	nm	4.2E+03	n	1.8E+04	n	1.8E+04	n
Methidathion	950-37-8	6.1E+01	n	6.2E+02	n					3.7E+01	n
Methomyl	16752-77-5	1.5E+03	n	1.5E+04	n					9.1E+02	n
Methoxy-5-nitroaniline, 2-	99-59-2	9.9E+00	c	3.5E+02	c	1.7E-01	c	8.8E+00	c	1.4E+00	c

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Methoxychlor	72-43-5	3.1E+02	n	3.1E+03	n					1.8E+02	n
Methoxyethanol Acetate, 2-	110-49-6	1.2E+02	n	1.2E+03	n					7.3E+01	n
Methoxyethanol, 2-	109-86-4	1.8E+02	n	1.8E+03	n	2.1E+01	n	8.8E+01	n	1.1E+02	n
Methyl Acetate	79-20-9	7.8E+04	ns	1.0E+06	nms					3.7E+04	n
Methyl Acrylate	96-33-3	2.3E+03	n	3.1E+04	ns					1.1E+03	n
Methyl Ethyl Ketone (2-Butanone)	78-93-3	2.8E+04	ns	1.9E+05	nms	5.2E+03	n	2.2E+04	n	7.1E+03	n
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	5.3E+03	ns	5.2E+04	ns	3.1E+03	n	1.3E+04	n	2.0E+03	n
Methyl Methacrylate	80-62-6	4.7E+03	ns	2.0E+04	ns	7.3E+02	n	3.1E+03	n	1.4E+03	n
Methyl Parathion	298-00-0	1.5E+01	n	1.5E+02	n					9.1E+00	n
Methyl Styrene (Mixed Isomers)	25013-15-4	1.9E+02	n	1.1E+03	ns	4.2E+01	n	1.8E+02	n	6.0E+01	n
Methyl tert-Butyl Ether (MTBE)	1634-04-4	3.9E+01	c	1.9E+03	c	9.4E+00	c	4.7E+02	c	1.2E+01	c
Methyl-5-Nitroaniline, 2-	99-55-8	1.5E+01	c	5.2E+02	c					2.0E+00	c
Methylaniline Hydrochloride, 2-	636-21-5	3.7E+00	c	1.3E+02	c	6.6E-02	c	3.3E+00	c	5.2E-01	c
Methylarsonic acid	124-58-3	6.1E+02	n	6.2E+03	n					3.7E+02	n
Methylene Chloride	75-09-2	1.1E+01	c	5.4E+02	c	5.2E+00	c	2.6E+02	c	4.8E+00	c
Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	1.2E+00	c	1.7E+02	c*	2.2E-03	c	2.9E-01	c	2.2E-01	c
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-61-1	1.1E+01	c	3.7E+02	c					1.5E+00	c

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Methylenebisbenzenamine, 4,4'-	101-77-9	3.0E-01	c	1.1E+01	c	5.3E-03	c	2.7E-01	c	4.2E-02	c
Methylenediphenyl Diisocyanate	101-68-8	8.5E+05	nm	3.6E+06	nm	6.3E-01	n	2.6E+00	n		
Methylstyrene, Alpha-	98-83-9	5.5E+03	ns	7.2E+04	ns					2.6E+03	n
Metolachlor	51218-45-2	9.2E+03	n	9.2E+04	n					5.5E+03	n
Metribuzin	21087-64-9	1.5E+03	n	1.5E+04	n					9.1E+02	n
Mirex	2385-85-5	2.7E-02	c	9.6E-01	c	4.8E-04	c	2.4E-02	c	3.7E-03	c
Molinate	2212-67-1	1.2E+02	n	1.2E+03	n					7.3E+01	n
Molybdenum	7439-98-7	3.9E+02	n	5.1E+03	n					1.8E+02	n
Monochloramine	10599-90-3	7.8E+03	n	1.0E+05	nm					3.7E+03	n
Monomethylaniline	100-61-8	1.2E+02	n	1.2E+03	n					7.3E+01	n
<b>Mercury Compounds</b>				0.0E+00				0.0E+00			
Mercuric Chloride	7487-94-7	2.3E+01	n	3.1E+02	n					1.1E+01	n
Mercuric Sulfide	1344-48-5	2.3E+01	n	3.1E+02	n					1.1E+01	n
Mercury (elemental)	7439-97-6	6.7E+00	ns	2.8E+01	ns	3.1E-01	n	1.3E+00	n	6.3E-01	n
Mercury, Inorganic Salts	NA	2.3E+01	n	3.1E+02	n					1.1E+01	n
Methyl Mercury	22967-92-6	7.8E+00	n	1.0E+02	n					3.7E+00	n
Phenylmercuric Acetate	62-38-4	4.9E+00	n	4.9E+01	n					2.9E+00	n
N,N'-Diphenyl-1,4-benzenediamine	74-31-7	1.8E+01	n	1.8E+02	n					1.1E+01	n
Naled	300-76-5	1.2E+02	n	1.2E+03	n					7.3E+01	n
Napropamide	15299-99-7	6.1E+03	n	6.2E+04	n					3.7E+03	n
Nickel Refinery Dust	NA	1.4E+04	c	6.9E+05	c	1.0E-02	c	5.1E-01	c		

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Nickel Soluble Salts	7440-02-0	1.6E+03	n	2.0E+04	n						
Nickel Sub sulfide	12035-72-2	6.9E+03	c	3.5E+05	c	5.1E-03	c	2.6E-01	c	7.3E+02	n
Nitrate	14797-55-8	1.3E+05	nm	1.6E+06	nm					5.8E+04	n
Nitrite	14797-65-0	7.8E+03	n	1.0E+05	nm					3.7E+03	n
Nitroaniline, 3-	99-09-2	1.8E+01	n	8.2E+02	c**	1.0E+00	n	4.4E+00	n	3.2E+00	c**
Nitroaniline, 4-	100-01-6	2.3E+01	c**	8.2E+02	c*	4.2E+00	n	1.8E+01	n	3.2E+00	c*
Nitrobenzene	98-95-3	3.1E+01	n	2.8E+02	n	2.1E+00	n	8.8E+00	n	3.4E+00	n
Nitrofurantoin	67-20-9	4.3E+03	n	4.3E+04	n					2.6E+03	n
Nitrofurazone	59-87-0	3.7E-01	c	1.3E+01	c	6.6E-03	c	3.3E-01	c	5.2E-02	c
Nitroglycerin	55-63-0	6.1E+00	n	6.2E+01	n					3.7E+00	n
Nitroguanidine	556-88-7	6.1E+03	n	6.2E+04	n					3.7E+03	n
Nitromethane	75-52-5	4.7E+00	c*	2.4E+02	c*	2.7E-01	c*	1.4E+01	c*	5.4E-01	c*
Nitropropane, 2-	79-46-9	1.2E-02	c	6.0E-01	c	9.0E-04	c	4.5E-02	c	1.8E-03	c
Nitroso-di-N-butylamine, N-	924-16-3	9.3E-02	c	4.3E+00	c	1.5E-03	c	7.7E-02	c	2.4E-03	c
Nitroso-di-N-propylamine, N-	621-64-7	6.9E-02	c	2.5E+00	c					9.6E-03	c
Nitroso-N-ethylurea, N-	759-73-9	4.3E-03	c	6.4E-01	c	1.2E-04	c	1.6E-02	c	8.0E-04	c
Nitrosodiethanolamine, N-	1116-54-7	1.7E-01	c	6.2E+00	c					2.4E-02	c
Nitrosodiethylamine, N-	55-18-5	7.7E-04	c	1.1E-01	c	2.2E-05	c	2.9E-03	c	1.4E-04	c
Nitrosodimethylamine, N-	62-75-9	2.3E-03	c	3.4E-01	c	6.9E-05	c	8.8E-03	c	4.2E-04	c
Nitrosodiphenylamine, N-	86-30-6	9.9E+01	c	3.5E+03	c					1.4E+01	c
Nitrosomethylethylamine, N-	10595-95-6	2.2E-02	c	7.8E-01	c					3.1E-03	c

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Nitrosopyrrolidine, N-	930-55-2	2.3E-01	c	8.2E+00	c	4.0E-03	c	2.0E-01	c	3.2E-02	c
Nitrotoluene, m-	99-08-1	1.2E+03	n	1.2E+04	n					7.3E+02	n
Nitrotoluene, o-	88-72-2	2.9E+00	c*	1.3E+02	c*					3.1E-01	c
Nitrotoluene, p-	99-99-0	3.0E+01	c**	1.1E+03	c*					4.2E+00	c*
Norflurazon	27314-13-2	2.4E+03	n	2.5E+04	n					1.5E+03	n
Nustar	85509-19-9	4.3E+01	n	4.3E+02	n					2.6E+01	n
Octabromodiphenyl Ether	32536-52-0	1.8E+02	n	1.8E+03	n					1.1E+02	n
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	2691-41-0	3.8E+03	n	4.9E+04	n					1.8E+03	n
Octamethylpyrophosphoramide	152-16-9	1.2E+02	n	1.2E+03	n					7.3E+01	n
Oryzalin	19044-88-3	3.1E+03	n	3.1E+04	n					1.8E+03	n
Oxadiazon	19666-30-9	3.1E+02	n	3.1E+03	n					1.8E+02	n
Oxamyl	23135-22-0	1.5E+03	n	1.5E+04	n					9.1E+02	n
Paclobutrazol	76738-62-0	7.9E+02	n	8.0E+03	n					4.7E+02	n
Paraquat Dichloride	1910-42-5	2.7E+02	n	2.8E+03	n					1.6E+02	n
Parathion	56-38-2	3.7E+02	n	3.7E+03	n					2.2E+02	n
Pebulate	1114-71-2	3.1E+03	n	3.1E+04	n					1.8E+03	n
Pendimethalin	40487-42-1	2.4E+03	n	2.5E+04	n					1.5E+03	n
Pentabromodiphenyl Ether	32534-81-9	1.2E+02	n	1.2E+03	n					7.3E+01	n
Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9	7.8E+00	n	1.0E+02	n					3.7E+00	n
Pentachlorobenzene	608-93-5	4.9E+01	n	4.9E+02	n					2.9E+01	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Pentachloroethane	76-01-7	5.4E+00	c	1.9E+02	c					7.5E-01	c
Pentachloronitrobenzene	82-68-8	1.9E+00	c*	6.6E+01	c					2.6E-01	c
Pentachlorophenol	87-86-5	3.0E+00	c	9.0E+01	c					5.6E-01	c
Perchlorate and Perchlorate Salts	14797-73-0	5.5E+01	n	7.2E+02	n					2.6E+01	n
Permethrin	52645-53-1	3.1E+03	n	3.1E+04	n					1.8E+03	n
Phenmedipham	13684-63-4	1.5E+04	n	1.5E+05	nm					9.1E+03	n
Phenol	108-95-2	1.8E+04	n	1.8E+05	nm	2.1E+02	n	8.8E+02	n	1.1E+04	n
Phenylenediamine, m-	108-45-2	3.7E+02	n	3.7E+03	n					2.2E+02	n
Phenylenediamine, o-	95-54-5	1.0E+01	c	3.7E+02	c					1.4E+00	c
Phenylenediamine, p-	106-50-3	1.2E+04	n	1.2E+05	nm					6.9E+03	n
Phenylphenol, 2-	90-43-7	2.5E+02	c	8.9E+03	c					3.5E+01	c
Phorate	298-02-2	1.2E+01	n	1.2E+02	n					7.3E+00	n
Phosgene	75-44-5	4.0E-01	n	1.7E+00	n	3.1E-01	n	1.3E+00	n		
Phosmet	732-11-6	1.2E+03	n	1.2E+04	n					7.3E+02	n
Phosphine	7803-51-2	2.3E+01	n	3.1E+02	n	3.1E-01	n	1.3E+00	n	1.1E+01	n
Phosphoric Acid	7664-38-2	1.4E+07	nm	6.0E+07	nm	1.0E+01	n	4.4E+01	n		
Phosphorus, White	7723-14-0	1.6E+00	n	2.0E+01	n					7.3E-01	n
Phthalic Acid, P-	100-21-0	6.1E+04	n	6.2E+05	nm					3.7E+04	n
Phthalic Anhydride	85-44-9	1.2E+05	nm	1.2E+06	nm	2.1E+01	n	8.8E+01	n	7.3E+04	n
Picloram	1918-02-1	4.3E+03	n	4.3E+04	n					2.6E+03	n
Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3	1.2E+02	n	1.2E+03	n					7.3E+01	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Pirimiphos, Methyl	29232-93-7	6.1E+02	n	6.2E+03	n					3.7E+02	n
Polybrominated Biphenyls	59536-65-1	1.6E-02	c*	5.7E-01	c*	2.8E-04	c	1.4E-02	c	2.2E-03	c
Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	8.5E+05	nm	3.6E+06	nm	6.3E-01	n	2.6E+00	n		
Potassium Perchlorate	7778-74-7	5.5E+01	n	7.2E+02	n					2.6E+01	n
Prochloraz	67747-09-5	3.2E+00	c	1.1E+02	c					4.5E-01	c
Profluralin	26399-36-0	3.7E+02	n	3.7E+03	n					2.2E+02	n
Prometon	1610-18-0	9.2E+02	n	9.2E+03	n					5.5E+02	n
Prometryn	7287-19-6	2.4E+02	n	2.5E+03	n					1.5E+02	n
Propachlor	1918-16-7	7.9E+02	n	8.0E+03	n					4.7E+02	n
Propanil	709-98-8	3.1E+02	n	3.1E+03	n					1.8E+02	n
Propargite	2312-35-8	1.2E+03	n	1.2E+04	n					7.3E+02	n
Propargyl Alcohol	107-19-7	1.2E+02	n	1.2E+03	n					7.3E+01	n
Propazine	139-40-2	1.2E+03	n	1.2E+04	n					7.3E+02	n
Propham	122-42-9	1.2E+03	n	1.2E+04	n					7.3E+02	n
Propiconazole	60207-90-1	7.9E+02	n	8.0E+03	n					4.7E+02	n
Propylene Glycol	57-55-6	1.2E+06	nm	1.2E+07	nm					7.3E+05	n
Propylene Glycol Dinitrate	6423-43-4	6.0E+01	n	2.5E+02	n	2.8E-01	n	1.2E+00	n	5.7E-01	n
Propylene Glycol Monoethyl Ether	1569-02-4	4.3E+04	n	4.3E+05	nm					2.6E+04	n
Propylene Glycol Monomethyl Ether	107-98-2	4.3E+04	n	4.3E+05	nm	2.1E+03	n	8.8E+03	n	2.6E+04	n
Propylene Oxide	75-56-9	1.9E+00	c	8.7E+01	c	6.6E-01	c*	3.3E+01	c*	2.3E-01	c

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Pursuit	81335-77-5	1.5E+04	n	1.5E+05	nm					9.1E+03	n
Pydrin	51630-58-1	1.5E+03	n	1.5E+04	n					9.1E+02	n
Pyridine	110-86-1	7.8E+01	n	1.0E+03	n					3.7E+01	n
<b>Polychlorinated Biphenyls (PCBs)</b>				0.0E+00				0.0E+00			
Aroclor 1016	12674-11-2	3.9E+00	n	2.1E+02	c**	1.2E-01	c	6.1E+00	c	9.6E-01	c**
Aroclor 1221	11104-28-2	1.7E-01	c	6.2E+00	c	4.3E-03	c	2.1E-01	c	6.8E-03	c
Aroclor 1232	11141-16-5	1.7E-01	c	6.2E+00	c	4.3E-03	c	2.1E-01	c	6.8E-03	c
Aroclor 1242	53469-21-9	2.2E-01	c	7.4E+00	c	4.3E-03	c	2.1E-01	c	3.4E-02	c
Aroclor 1248	12672-29-6	2.2E-01	c	7.4E+00	c	4.3E-03	c	2.1E-01	c	3.4E-02	c
Aroclor 1254	11097-69-1	2.2E-01	c**	7.4E+00	c*	4.3E-03	c	2.1E-01	c	3.4E-02	c*
Aroclor 1260	11096-82-5	2.2E-01	c	7.4E+00	c	4.3E-03	c	2.1E-01	c	3.4E-02	c
Heptachlorobiphenyl, 2,2',3,3',4,4',5'- (PCB 170)	35065-30-6	3.4E-02	c	1.1E+00	c	6.4E-04	c	3.2E-02	c	5.2E-03	c
Heptachlorobiphenyl, 2,2',3,4,4',5,5'- (PCB 180)	35065-29-3	3.4E-01	c	1.1E+01	c	6.4E-03	c	3.2E-01	c	5.2E-02	c
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.1E-01	c	3.8E+00	c	2.1E-03	c	1.1E-01	c	1.7E-02	c
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.1E-01	c	3.8E+00	c	2.1E-03	c	1.1E-01	c	1.7E-02	c
Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	69782-90-7	1.1E-01	c	3.8E+00	c	2.1E-03	c	1.1E-01	c	1.7E-02	c
Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 156)	38380-08-4	1.1E-01	c	3.8E+00	c	2.1E-03	c	1.1E-01	c	1.7E-02	c



Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	1.1E-04	c	3.8E-03	c	2.1E-06	c	1.1E-04	c	1.7E-05	c
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.1E-01	c	3.8E+00	c	2.1E-03	c	1.1E-01	c	1.7E-02	c
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.1E-01	c	3.8E+00	c	2.1E-03	c	1.1E-01	c	1.7E-02	c
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.1E-01	c	3.8E+00	c	2.1E-03	c	1.1E-01	c	1.7E-02	c
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.1E-01	c	3.8E+00	c	2.1E-03	c	1.1E-01	c	1.7E-02	c
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.4E-05	c	1.1E-03	c	6.4E-07	c	3.2E-05	c	5.2E-06	c
Polychlorinated Biphenyls (high risk)	1336-36-3	2.4E-01	c	8.6E+00	c	4.3E-03	c	2.2E-01	c		
Polychlorinated Biphenyls (low risk)	1336-36-3					2.4E-02	c	1.2E+00	c	1.7E-01	c
Polychlorinated Biphenyls (lowest risk)	1336-36-3										
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	3.4E-02	c	1.1E+00	c	6.4E-04	c	3.2E-02	c	5.2E-03	c
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	1.1E-02	c	3.8E-01	c	2.1E-04	c	1.1E-02	c	1.7E-03	c
<b>Polynuclear Aromatic Hydrocarbons (PAHs)</b>				0.0E+00				0.0E+00			

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Acenaphthene	83-32-9	3.4E+03	n	3.3E+04	n					2.2E+03	n
Anthracene	120-12-7	1.7E+04	n	1.7E+05	nm					1.1E+04	n
Benz[a]anthracene	56-55-3	1.5E-01	c	2.1E+01	c	8.7E-03	c	1.1E+00	c	2.9E-02	c
Benzo[a]pyrene	50-32-8	1.5E-02	c	2.1E+00	c	8.7E-04	c	1.1E-01	c	2.9E-03	c
Benzo[b]fluoranthene	205-99-2	1.5E-01	c	2.1E+01	c	8.7E-03	c	1.1E+00	c	2.9E-02	c
Benzo[k]fluoranthene	207-08-9	1.5E+00	c	2.1E+02	c	8.7E-03	c	1.1E+00	c	2.9E-01	c
Chrysene	218-01-9	1.5E+01	c	2.1E+03	c	8.7E-02	c	1.1E+01	c	2.9E+00	c
Dibenz[a,h]anthracene	53-70-3	1.5E-02	c	2.1E+00	c	8.0E-04	c	1.0E-01	c	2.9E-03	c
Fluoranthene	206-44-0	2.3E+03	n	2.2E+04	n					1.5E+03	n
Fluorene	86-73-7	2.3E+03	n	2.2E+04	n					1.5E+03	n
Indeno[1,2,3-cd]pyrene	193-39-5	1.5E-01	c	2.1E+01	c	8.7E-03	c	1.1E+00	c	2.9E-02	c
Methylnaphthalene, 1-	90-12-0	2.2E+01	c	9.9E+02	c					2.3E+00	c
Methylnaphthalene, 2-	91-57-6	3.1E+02	n	4.1E+03	ns					1.5E+02	n
Naphthalene	91-20-3	3.9E+00	c*	2.0E+02	c*	7.2E-02	c*	3.6E+00	c*	1.4E-01	c*
Pyrene	129-00-0	1.7E+03	n	1.7E+04	n					1.1E+03	n
Quinalphos	13593-03-8	3.1E+01	n	3.1E+02	n					1.8E+01	n
Quinoline	91-22-5	1.6E-01	c	5.7E+00	c					2.2E-02	c
Refractory Ceramic Fibers	NA	4.3E+07	nm	1.8E+08	nm	3.1E+01	n	1.3E+02	n		
Resmethrin	10453-86-8	1.8E+03	n	1.8E+04	n					1.1E+03	n
Ronnel	299-84-3	3.1E+03	n	3.1E+04	n					1.8E+03	n
Rotenone	83-79-4	2.4E+02	n	2.5E+03	n					1.5E+02	n
Savey	78587-05-0	1.5E+03	n	1.5E+04	n					9.1E+02	n
Selenious Acid	7783-00-8	3.9E+02	n	5.1E+03	n					1.8E+02	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Selenium	7782-49-2	3.9E+02	n	5.1E+03	n					1.8E+02	n
Selenourea	630-10-4	3.1E+02	n	3.1E+03	n					1.8E+02	n
Sethoxydim	74051-80-2	5.5E+03	n	5.5E+04	n					3.3E+03	n
Silver	7440-22-4	3.9E+02	n	5.1E+03	n					1.8E+02	n
Simazine	122-34-9	4.0E+00	c*	1.4E+02	c					5.6E-01	c
Sodium Acifluorfen	62476-59-9	7.9E+02	n	8.0E+03	n					4.7E+02	n
Sodium Azide	26628-22-8	3.1E+02	n	4.1E+03	n					1.5E+02	n
Sodium Diethyldithiocarbamate	148-18-5	1.8E+00	c	6.4E+01	c					2.5E-01	c
Sodium Fluoroacetate	62-74-8	1.2E+00	n	1.2E+01	n					7.3E-01	n
Sodium Metavanadate	13718-26-8	7.8E+01	n	1.0E+03	n					3.7E+01	n
Sodium Perchlorate	7601-89-0	5.5E+01	n	7.2E+02	n					2.6E+01	n
Stirofos (Tetrachlorovinphos)	961-11-5	2.0E+01	c*	7.2E+02	c					2.8E+00	c
Strontium, Stable	7440-24-6	4.7E+04	n	6.1E+05	nm					2.2E+04	n
Strychnine	57-24-9	1.8E+01	n	1.8E+02	n					1.1E+01	n
Styrene	100-42-5	6.5E+03	ns	3.8E+04	ns	1.0E+03	n	4.4E+03	n	1.6E+03	n
Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9	3.1E+02	n	3.1E+03	n					1.8E+02	n
Sythane	88671-89-0	1.5E+03	n	1.5E+04	n					9.1E+02	n
TCMTB	21564-17-0	1.8E+03	n	1.8E+04	n					1.1E+03	n
Tebuthiuron	34014-18-1	4.3E+03	n	4.3E+04	n					2.6E+03	n
Temephos	3383-96-8	1.2E+03	n	1.2E+04	n					7.3E+02	n
Terbacil	5902-51-2	7.9E+02	n	8.0E+03	n					4.7E+02	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Terbufos	13071-79-9	1.5E+00	n	1.5E+01	n					9.1E-01	n
Terbutryn	886-50-0	6.1E+01	n	6.2E+02	n					3.7E+01	n
Tetrachlorobenzene, 1,2,4,5-	95-94-3	1.8E+01	n	1.8E+02	n					1.1E+01	n
Tetrachloroethane, 1,1,1,2-	630-20-6	2.0E+00	c	9.8E+01	c	3.3E-01	c	1.7E+01	c	5.2E-01	c
Tetrachloroethane, 1,1,2,2-	79-34-5	5.9E-01	c	2.9E+01	c	4.2E-02	c	2.1E+00	c	6.7E-02	c
Tetrachloroethylene	127-18-4	5.7E-01	c	2.7E+01	c	4.1E-01	c	2.1E+01	c	1.1E-01	c
Tetrachlorophenol, 2,3,4,6-	58-90-2	1.8E+03	n	1.8E+04	n					1.1E+03	n
Tetrachlorotoluene, p-alpha, alpha, alpha-	5216-25-1	2.4E-02	c	8.6E-01	c					3.4E-03	c
Tetraethyl Dithiopyrophosphate	3689-24-5	3.1E+01	n	3.1E+02	n					1.8E+01	n
Tetrafluoroethane, 1,1,1,2-Tetryl	811-97-2	1.1E+05	nms	4.7E+05	nms	8.3E+04	n	3.5E+05	n	1.7E+05	n
(Trinitrophenylmethylnitramine)	479-45-8	2.4E+02	n	2.5E+03	n					1.5E+02	n
Thallium (I) Nitrate	10102-45-1	7.0E+00	n	9.2E+01	n					3.3E+00	n
Thallium (Soluble Salts)	7440-28-0	5.1E+00	n	6.6E+01	n					2.4E+00	n
Thallium Acetate	563-68-8	7.0E+00	n	9.2E+01	n					3.3E+00	n
Thallium Carbonate	6533-73-9	6.3E+00	n	8.2E+01	n					2.9E+00	n
Thallium Chloride	7791-12-0	6.3E+00	n	8.2E+01	n					2.9E+00	n
Thallium Sulfate	7446-18-6	6.3E+00	n	8.2E+01	n					2.9E+00	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Thiobencarb	28249-77-6	6.1E+02	n	6.2E+03	n					3.7E+02	n
Thiofanox	39196-18-4	1.8E+01	n	1.8E+02	n					1.1E+01	n
Thiophanate, Methyl	23564-05-8	4.9E+03	n	4.9E+04	n					2.9E+03	n
Thiram	137-26-8	3.1E+02	n	3.1E+03	n					1.8E+02	n
Tin	7440-31-5	4.7E+04	n	6.1E+05	nm					2.2E+04	n
Toluene	108-88-3	5.0E+03	ns	4.6E+04	ns	5.2E+03	n	2.2E+04	n	2.3E+03	n
Toluene diisocyanate mixture (TDI)	26471-62-5	5.4E+01	n	2.3E+02	n	7.3E-02	n	3.1E-01	n	1.5E-01	n
Toluene-2,4-diamine	95-80-7	1.3E-01	c	4.5E+00	c	2.2E-03	c	1.1E-01	c	1.8E-02	c
Toluene-2,5-diamine	95-70-5	3.7E+04	n	3.7E+05	nm					2.2E+04	n
Toluene-2,6-diamine	823-40-5	1.8E+03	n	1.8E+04	n					1.1E+03	n
Toluidine, o- (Methylaniline, 2-)	95-53-4	2.7E+00	c	9.6E+01	c	4.8E-02	c	2.4E+00	c	3.7E-01	c
Toluidine, p-	106-49-0	2.6E+00	c	9.1E+01	c					3.5E-01	c
Toxaphene	8001-35-2	4.4E-01	c	1.6E+01	c	7.6E-03	c	3.8E-01	c	6.1E-02	c
Tralomethrin	66841-25-6	4.6E+02	n	4.6E+03	n					2.7E+02	n
Triallate	2303-17-5	7.9E+02	n	8.0E+03	n					4.7E+02	n
Triasulfuron	82097-50-5	6.1E+02	n	6.2E+03	n					3.7E+02	n
Tribromobenzene, 1,2,4-	615-54-3	3.1E+02	n	3.1E+03	n					1.8E+02	n
Tributyl Phosphate	126-73-8	5.3E+01	c	1.9E+03	c					7.3E+00	c
Tributyltin Compounds	NA	1.8E+01	n	1.8E+02	n					1.1E+01	n
Tributyltin Oxide	56-35-9	1.8E+01	n	1.8E+02	n					1.1E+01	n
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	4.3E+04	ns	1.8E+05	nms	3.1E+04	n	1.3E+05	n	5.9E+04	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Trichloroaniline HCl, 2,4,6-	33663-50-2	1.7E+01	c	5.9E+02	c					2.3E+00	c
Trichloroaniline, 2,4,6-	634-93-5	1.4E+01	c	5.1E+02	c					2.0E+00	c
Trichlorobenzene, 1,2,4-	120-82-1	8.7E+01	n	4.0E+02	ns	4.2E+00	n	1.8E+01	n	8.2E+00	n
Trichloroethane, 1,1,1-	71-55-6	9.0E+03	ns	3.9E+04	ns	5.2E+03	n	2.2E+04	n	9.1E+03	n
Trichloroethane, 1,1,2-	79-00-5	1.1E+00	c	5.5E+01	c	1.5E-01	c	7.7E+00	c	2.4E-01	c
Trichloroethylene	79-01-6	2.8E+00	c	1.4E+02	c	1.2E+00	c	6.1E+01	c	1.7E+00	c
Trichlorofluoromethane	75-69-4	8.0E+02	n	3.4E+03	ns	7.3E+02	n	3.1E+03	n	1.3E+03	n
Trichlorophenol, 2,4,5-	95-95-4	6.1E+03	n	6.2E+04	n					3.7E+03	n
Trichlorophenol, 2,4,6-	88-06-2	4.4E+01	c**	1.6E+03	c**	7.8E-01	c	4.0E+01	c	6.1E+00	c**
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	93-72-1	4.9E+02	n	4.9E+03	n					2.9E+02	n
Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	6.1E+02	n	6.2E+03	n					3.7E+02	n
Trichloropropane, 1,1,2-	598-77-6	3.9E+02	n	5.1E+03	ns					1.8E+02	n
Trichloropropane, 1,2,3-	96-18-4	9.1E-02	c	4.1E+00	c					9.6E-03	c
Trichloropropene, 1,2,3-	96-19-5	2.7E+00	n	1.2E+01	n	1.0E+00	n	4.4E+00	n	2.1E+00	n
Tridiphane	58138-08-2	1.8E+02	n	1.8E+03	n					1.1E+02	n
Triethylamine	121-44-8	1.7E+02	n	7.1E+02	n	7.3E+00	n	3.1E+01	n	1.5E+01	n
Trifluralin	1582-09-8	6.3E+01	c**	2.2E+03	c*					8.7E+00	c*
Trimethyl Phosphate	512-56-1	1.3E+01	c	4.7E+02	c					1.8E+00	c
Trimethylbenzene, 1,2,4-	95-63-6	6.7E+01	n	2.8E+02	ns	7.3E+00	n	3.1E+01	n	1.5E+01	n
Trimethylbenzene, 1,3,5-	108-67-8	4.7E+01	n	2.0E+02	n	6.3E+00	n	2.6E+01	n	1.2E+01	n
Trinitrobenzene, 1,3,5-	99-35-4	2.2E+03	n	2.7E+04	n					1.1E+03	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Trinitrotoluene, 2,4,6-	118-96-7	1.9E+01	c**	7.9E+02	c**					2.2E+00	c**
Triphenylphosphine Oxide	791-28-6	1.2E+03	n	1.2E+04	n					7.3E+02	n
Tris(2-chloroethyl)phosphate	115-96-8	3.5E+01	c	1.2E+03	c					4.8E+00	c
Tris(2-ethylhexyl)phosphate	78-42-2	1.5E+02	c*	5.4E+03	c					2.1E+01	c
Tetrabromodiphenyl ether, 2,2',4,4'-(BDE-47)	5436-43-1	7.8E+00	n	1.0E+02	n					3.7E+00	n
Tri-n-butyltin	688-73-3	1.8E+01	n	1.8E+02	n					1.1E+01	n
Uranium (Soluble Salts)	NA	2.3E+02	n	3.1E+03	n					1.1E+02	n
Vanadium Pentoxide	1314-62-1	4.0E+02	c**	2.0E+04	c**	2.9E-04	c*	1.5E-02	c*	3.3E+02	n
Vanadium Sulfate	36907-42-3	1.6E+03	n	2.0E+04	n					7.3E+02	n
Vanadium and Compounds	NA	3.9E+02	n	5.2E+03	n					1.8E+02	n
Vanadium, Metallic	7440-62-2	5.5E+02	n	7.2E+03	n					2.6E+02	n
Vernolate	1929-77-7	6.1E+01	n	6.2E+02	n					3.7E+01	n
Vinclozolin	50471-44-8	1.5E+03	n	1.5E+04	n					9.1E+02	n
Vinyl Acetate	108-05-4	9.9E+02	n	4.2E+03	ns	2.1E+02	n	8.8E+02	n	4.1E+02	n
Vinyl Bromide	593-60-2	1.1E-01	c*	5.8E+00	c*	7.6E-02	c*	3.8E+00	c*	1.5E-01	c*
Vinyl Chloride	75-01-4	6.0E-02	c	1.7E+01	c	1.6E-01	c	2.8E+01	c	1.6E-02	c
Warfarin	81-81-2	1.8E+01	n	1.8E+02	n					1.1E+01	n
Xylene, Mixture	1330-20-7	6.0E+02	ns	2.6E+03	ns	1.0E+02	n	4.4E+02	n	2.0E+02	n
Xylene, P-	106-42-3	4.7E+03	ns	2.0E+04	ns	7.3E+02	n	3.1E+03	n	1.5E+03	n
Xylene, m-	108-38-3	4.5E+03	ns	1.9E+04	ns	7.3E+02	n	3.1E+03	n	1.4E+03	n

Contaminant		Screening Levels									
Analyte	CAS No.	Residential Soil	key	Industrial Soil	key	Residential Air	key	Industrial Air	key	Tapwater	key
		mg/kg		mg/kg		ug/m <sup>3</sup>		ug/m <sup>3</sup>		ug/L	
Xylene, o-	95-47-6	5.3E+03	ns	2.3E+04	ns	7.3E+02	n	3.1E+03	n	1.4E+03	n
Zinc (Metallic)	7440-66-6	2.3E+04	n	3.1E+05	nm					1.1E+04	n
Zinc Phosphide	1314-84-7	2.3E+01	n	3.1E+02	n					1.1E+01	n
Zineb	12122-67-7	3.1E+03	n	3.1E+04	n					1.8E+03	n



## Appendix D

### TYPICAL RANGE OF NATURAL OCCURRING METALS CONCENTRATIONS

Heavy metal	Groundwater			Soil		
	Overall			Overall		
	Max	Min	Arithmetic Mean	Max	Min	Arithmetic Mean
	(mg/l)			(mg/kg)		
Argentum, Ag	NA	NA	NA	<0.5	<0.5	NA
Aluminum, Al	22.0	0.1	1.7	53900	33500	42567
Arsenic, As	2.220	0.004	0.120	43.0	1.1	15.6
Boron, B	<0.02	<0.02	NA	0.19	0.11	0.15
Barium, Ba	4.10	0.10	0.29	21.0	5.0	11.5
Calcium, Ca	293.0	0.5	45.3	NA	NA	NA
Cadmium, Cd	0.011	0.005	0.203	0.09	11.90	14.40
Cobalt, Co	0.30	ND	0.05	11.90	3.90	7.90
Chromium, Cr	0.100	0.002	0.034	14.40	0.02	6.00
Copper, Cu	0.39	0.05	0.05	19.8	4.0	13.8
Iron, Fe	72.00	0.01	4.26	44500	301	12140
Mercury, Hg	0.017	0.002	0.007	0.42	0.02	0.12
Potassium, K	11.10	0.002	0.007	4.100	0.218	1.485
Magnesium, Mg	675.0	0.2	41.2	507.2	0.9	141.4
Manganese, Mn	5.00	0.01	0.45	3.99	3.95	3.97
Nickel, Ni	0.40	0.01	0.07	28.90	0.70	5.77
Lead, Pb	1.00	0.01	0.06	36.00	0.18	10.37
Selenium, Se	0.010	0.001	0.002	ND	ND	NA
Stannum, Sn	0.25	0.10	0.16	8.5	3.5	6.0
Strontium, Sr	6.10	0.01	0.27	7020	4940	5850
Vanadium, V	0.00	0.00	NA	105.0	2.0	31.6
Zinc, Zn	52.00	0.01	2.40	54.3	6.9	21.9

Notes:

1) NA - Not applicable      2) ND - Below Detection Limits

Values presented are intended for reference only. Background naturally occurring heavy metals shall be assessed separately during the detailed assessment. These values should not supersede or over-rule field findings on naturally occurring heavy metals.



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