## **ATTACHMENT 5**

## **Bulldog Discharge Permit Application**

The Discharge Application was submitted to the Colorado Department of Public Health and Environment – Water Quality Control Division on August 1, 2023.

ATTACHMENT 5 includes the Discharge Application only. ATTACHMENTS associated with the Discharge Application are available upon request.

There is a 180 day review period for the Discharge Application and Rio Grande Silver anticipates receiving the approved discharge permit in January or February 2024.



4300 Cherry Creek Drive S Denver, CO 80246-1530 P 303-692-2000

www.colorado.gov/cdphe/wqcd



For Agency Use Only Permit Number Assigned

Date Received

Dedicated to protecting and improving the health and environment of the people of Colorado

# APPLICATION FOR DISCHARGES ASSOCIATED WITH HARDROCK MINING/MILLING, AND COAL MINING/PREPARATION ACTIVITIES

**Please print or type. Original signatures are required.** This application must be considered complete by the Division before it will initiate permit processing. The Division will notify the applicant if additional information is needed to complete the application. If more space is required to answer any question, please attach additional sheets to the application form. Applications must be mailed or delivered to:

Colorado Department of Public Health and Environment
Water Quality Control Division
4300 Cherry Creek Drive South
WQCD-P-B2

Denver, Colorado 80246-1530 TEMPORARY COVID19 Submission - Digitally signed documents may be emailed to cdphe.wqrecordscenter@state.co.us. Do not follow up with a mailed-in hard copy. The directions for electronic signatures can be found at this FAQ at question 41. ☐ NEW CERT Reason for Application: ☐ RENEW CERT EXISTING PERMIT or CERT # PERMIT INFORMATION ☐ Property Owner ☐ Contractor/Operator Applicant is: IS THIS THE CORRECT APPLICATION FOR YOUR FACILITY? This application is for use by all hardrock mining and/or milling and coal mining and/or preparation facilities with process water, mine dewatering, and/or stormwater discharges.

CONTACT INFORMATION

1.

PERMITTEE (If more than one please add additional pages)

ORGANIZATION FORMAL NAME:

permit correspondences and is **legally responsible** for ensuring compliance with the permit.

This form must be signed by the Permittee to be considered complete.

Per Regulation 61 In all cases, it shall be signed as follows:

- a) In the case of corporations, by a responsible corporate officer. For the purposes of this section, the responsible corporate officer is responsible for the overall operation of the facility from which the discharge described in the application originates.
- b) In the case of a partnership, by a general partner.
- c) In the case of a sole proprietorship, by the proprietor.
- d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official

b.	rec	quired by permits includin	g Discharge Monitori	ng Reports [DMR's], A	authorized to sign and certify reports nnual Reports, Compliance Schedule sion will transmit pre-printed reports (ie.
	DM	R's) to this person. If mor	•		sion will transmit pre-printed reports (ie.
		Same As 1) Permittee	١.		
		Responsible Position (Title			
		Currently Held By (Person)	_		
		Telephone No:			
		email address			
		Organization:			
		Mailing Address:			
		City:	State:	Zip:	
		permittee or by a duly author (i) The authorization is mad (ii) The authorization specific regulated facility or activity sposition of equivalent response	rized representative of the in writing by the permites either an individual object as the position of posibility, or an individual zed representative may	hat person. A person is a nittee or a position having respor lant manager, operator of or position having overall	quested by the Division shall be signed by the duly authorized representative only if:  assibility for the overall operation of the fa well or a well field, superintendent, responsibility for environmental matters for andividual or any individual occupying a
c.		E CONTACT local contact fility.     Same As 1) Permittee	or questions relating	to the facility & disch	arge authorized by this permit for the
		Responsible Position (Title	):		
		Currently Held By (Person)	:		
		Telephone No:			
		email address			
		Organization:			
		Mailing Address:			
		City:	State:	Zip:	
d.	OP	ERATOR in Responsible Ch	arge Same As 1) P	ermittee	
•		Responsible Position (Title	,		
		Currently Held By (Person)			
		Telephone No:			
		email address			
		Organization:			
		Mailing Address:			
		City:			
		Certification Type		•	

# APPLICATION for DISCHARGES ASSOCIATED WITH HARDROCK MINING/MILLING; COAL MINING/PREPARATION e. BILLING CONTACT Same As 1) Permittee Responsible Position (Title): Currently Held By (Person): \_\_\_\_\_ Telephone No:\_\_\_\_\_ email address\_\_\_\_\_ Organization: \_\_\_\_\_ Mailing Address: \_\_\_\_\_ City:\_\_\_\_\_ Zip: \_\_\_\_\_ f. OTHER CONTACT TYPES (check below) Add pages if necessary: Responsible Position (Title): Currently Held By (Person): \_\_\_\_\_ Telephone No:\_\_\_\_\_

	email address			
	Organization:			
	Mailing Address:			
	City:			
	Pretreatment Coordinator Environmental Contact Biosolids Responsible Party	<ul><li>Property Owner</li><li>Inspection Facil</li></ul>		Stormwater Authorized Representative
. PE	ERMITTED FACILITY INFORMATION	1		
Name	of Plan, Project or Development:			
Locati	on of construction site:			
	Street Address (or cross streets):			
	State and Zip Code:			
Latitud	de and Longitude (approximate cente	er of site to nearest 15 sec	conds using one of following	ng formats):
Latit	degrees (to 5 decimal places)	Longitude:degree:	s (to 5 decimal places)	(e.g., 39.70312°, 104.93334')
s. ST	ΓANDARD INDUSTRIAL CLASSIFICA	TION (SIC) CODE(S) FC	OR THIS FACILITY (Inclu	de up to 4 in order of importance.
			-	4

th	DESCRIBE THE INDUSTRIAL ACTIVITIES WHICH TAKE PLACE ON THIS SITE scribe the primary industrial activities which take place on site. Include the type of facility plus a brief description of the nature of e business and the industrial processes used. Include a description of the mining, milling, coal preparation, etc. processes where plicable. A process flow sheet would be acceptable.
5.	IS THIS FOR AN EXPLORATORY, ACTIVE MINING/MILLING, INACTIVE MINING, OR IS THE SITE IN TEMPORARY CESSATION?
	If Exploratory - please submit any known water quality/quantity data relative to the discharge and the receiving stream which reflects the conditions prior to the present activity, the length of time the activity is expected to be under exploration, and describe what activities will take place during exploration which could have an impact on the quality of the discharge.
6.	Production: List the principal product(s) produced and maximum production rate.
7.	Is this a seasonal operation? $\square$ No $\square$ Yes $\square$ If yes, please indicate the months of operation:
	☐ JAN ☐ FEB ☐ MAR ☐APR ☐MAY ☐JUNE ☐JULY ☐AUG ☐SEPT ☐OCT ☐IOV ☐EC
В.	Intermittent discharges: Except for storm runoff, are any of the discharges intermittent or seasonal? No Sescribe the frequency, duration and flow rate of each discharge occurrence.
	Activity duration: When did the mining/milling operation commence?  Rehabilitation and exploration is anticipated to begin in 2024
	What is the estimated life of the activity from which the discharge(s) identified in item 20 originate? years.
Э.	<b>Location map:</b> A location map designating the facility property, intake points, discharge points, each of its hazardous waste treatment storage or disposal facilities, each well where fluids from the facility are injected underground, those wells, springs, other surface water bodies and drinking water wells listed in public records or otherwise known to the applicant and the receiving waters shall be submitted. The map shall extend one mile beyond the property boundaries. The map shall be from a 7 or 15 minute USGS quad sheet, or a map of comparable scale. A north arrow shall be shown. See ATTACHMENT 5-Buildog Location Map
0.	<b>Site Map:</b> A map of the site shall be submitted, showing appurtenant facilities (buildings, ponds, diversion ditches, stockpiles, etc.), stream location, numbered discharge points, sampling and flow monitoring points, waste rock piles, spent ore piles, tailing dams/dikes, topsoil piles, location of french drains, mine drainage flow paths, domestic wastewater plants, power plants, truck washing areas, explosive storage areas, parking lots, vehicle maintenance areas, chemical storage areas, crusher areas and land application areas. The outfalls shall be labeled to correspond with the numbers listed in items 20 and 21. <b>See ATTACHMENT 6-Bulldog Site Map</b>

11. Water Balance: Attach a line drawing showing all water flow through and from the mine/mill site. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in item 21. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined, provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures. See ATTACHMENT 1a-Water Balance

## 12. OTHER ENVIRONMENTAL PERMITS

Does this facility currently have any environmental permits, or is it subject to regulation, under either of the following programs?

	Permit Name	Yes	No	Applied For, Date	Permit No.
a.)	Colorado Division of Reclamation, Mining and Safety Permit Anniversary Date October 31, 2014			Homestake 9/15/1977 Transfered to Emerald Mining & Leasing 4/21/2008. Transfered to Rio Grande Silver 6/19/2012. Currently Active	
b.	) Underground Injection Control				
<b>c.</b> )	Dredge or fill permit under Section 404 of the Clean Water Act (CWA) (Army Corps of Engineers)				
d.	) Resource Conservation and Recovery Act (RCRA)				
e.	) CDPS Stormwater (If YES, please include copy of site's Stormwater Management Plan)				
f.)	Colorado State Air Pollution Emission				
,					
g.)	Other:				
g.)	Site-specific conditions:  a) Is this operation located within one mile of a landfil  b) Does the dewatering area have or possibly have grouplumes from leaking underground storage tanks, etc.  If YES for any of these, please show location of the lan item 9 or in the site map sketch in item 10. Please explains discharges from this facility.	undwater c.? dfill, tail	contam	ination, such as NO oossible groundwater conta	
g.	Site-specific conditions:  a) Is this operation located within one mile of a landfil  b) Does the dewatering area have or possibly have group lumes from leaking underground storage tanks, etc.  If YES for any of these, please show location of the lanitem 9 or in the site map sketch in item 10. Please exp	undwater c.? dfill, tail olain the	contamings or plocation	ination, such as  NO  nossible groundwater conta i, extent of contamination,  this facility?	ES mination on the location ma

15. Chemical addition/ treatment If chemical additives, settling agents, flocculants, or other materials are proposed for use in or to treat wastewater/stormwater prior to discharge, please submit a Chemical Evaluation Form with this application.
a. Is chemical addition/treatment proposed for this facility?  □ Yes □ No
b. Did applicant submit a Chemical Approval Form with this application? See ATTACHMENT 8-Request for Chemical Evaluation
□ Yes □ No - chemical addition/treatment not proposed
<b>16. Used or Manufactured Toxics:</b> The applicant must provide a list of any toxic products which the applicant currently uses or manufactures as an intermediate or final product or byproduct.
17. Flow Measurement: What method of flow measurement will be used for each discharge point (e.g., v notch weir, pump capacity, parshall flume, etc.)? Designate whether currently installed or proposed. Identify the minimum and maximum flow measurement capability. List the last date calibrated.
<b>18. Improvements:</b> Please provide a description of any abatement requirement, abatement project and projected final compliance dates if subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment. List any changes from previous permit.
19. Land Application: Is or will land application of any wastewater be practiced? NO YES  If Yes, please provide a copy of the material submitted to the Colorado DRMS on the discharge and include a copy of the CDRMS approval where applicable. Briefly describe the process

20. Flows, Treatment and Map: Please provide a detailed narrative description for each type of process, operation, storage or area which contributes wastewater to the effluent for each outfall, including all mine related wastewater, cooling waters, domestic wastewater and stormwater runoff; the average discharge flow for each outfall (including stormwater outfalls) and a description of the treatment the wastewater receives. The average flow of point sources composed of stormwater may be estimated.

See ATTACHMENT 10-Flows, Treatment and Map and ATTACHMENT 1-Bulldog Mine Treatment Summary

Examples of the process, operation, storage or production areas to document in this section include, but are not limited to:

- all small area exemptions (SAEs) and associated pollutant sources;
- mine vent bore hole pads and associated roads;
- facilities that support the mining operation, such as ventilation facilities; dewatering facilities, laydown areas, material storage areas, subsoil storage; material handling areas;
- coal preparation plant and coal preparation plant associated areas, including train load out areas and associated access roads;
- coal refuse areas and associated roads;
- brushing/grubbing areas; topsoil stockpiles; regrading areas; reclamation areas;
- ore and ore conveyances; mine waste, waste rock; tailings, overburden, topsoil, and roads constructed of these materials;
- all milling/processing areas;
- mine adits or mining areas that currently do, or potentially could, discharge mine water;

- excavations/pits/ponds that may discharge mine water;
- all spoil piles and spoil springs; seeps and springs (mine influenced and other);
- non-stormwater discharges (e.g., domestic or wash water; well dewatering, etc.);
- all roads, and all road construction (haul roads/access roads etc) with associated total disturbed area, as applicable;
- all under-drains;
- all ponds.

For all wastewater ultimately discharged from the facility, **provide a map with date prepared**, that shows the permit or property boundary, and contributing sources, associated flow paths, and discharge locations (outfalls and receiving water such as streams, wetlands and other surface waters within or outside the facility,); for stormwater, the direction of stormwater flow to show whether stormwater from multiple pollutant sources commingle; and outfall locations (including outfalls for **sheet flow** as applicable to the facility). See also items 10 and 11, above.

List the outfall number for each discharge point. List all sources of wastewater for each outfall and give the 30 day average flow and daily maximum flow. Estimate the flow contributed by each source if no data is available, and for stormwater, you may use any reasonable measure of duration, volume or frequency. Describe each treatment unit. Indicate the 10-year, 24-hour equivalent volume used in designing the treatment system and the system's actual volume, excluding solids retention and any "permanent pool" that may be provided. Indicate if extra capacity is provided for mine water and/or other non-storm related flows and how this volume was determined. Indicate what type(s) of discharge structure each outfall has and how flow is discharged - whether it discharges automatically or manually. If your flows vary significantly or if you anticipate significant changes in flows during the next 5 years, specify which flows will change and explain why they will change. Describe the ultimate disposal of any solid or liquid waste not discharged. (Specify receiving waters(s) in table for item 21.)

Use additional sheets if necessary. Additional information on the treatment facilities may be requested during application review.

OUTFALL NUMBER	WASTEWATER SOURCE	TREATMENT USED	AVG FLOW, MGD*	DESIGN FLOW, MGD*	DAILY MAX FLOW, MGD*
001					

<sup>\*</sup>MGD - Million gallons/day

21. For each outfall provide the latitude, longitude and receiving water and indicate the method used to derive this information. Use additional sheets if necessary. Please refer to instructions.

For each outfall to surface water or discharge to ground water, provide latitude/longitude and receiving water

reactifulction to surface water of discharge to ground water, provide latitude/longitude and receiving water					
OUTFALL	LATITUDE	LONGITUDE	RECEIVING WATERS*  * Give formation name and distance to surface water for discharges to ground water		
001					
FACILITY FRONT DOOR					

The following choices for the data acquisition are listed in order of preference. Please check the box that applies to the method used for collection of the locational data of your **Facility and Discharge points**.

Global Positioning System (GPS) unit accurate to within 30 yards.

Global Positioning System (GPS) unit accurate to greater than 30 yards.

# Global Positioning System (GPS) unit accuracy unknown. Point on original USGS topographic map. Engineering drawing/plan with latitude and longitude reference. Other. Explain 22. Are the receiving waters, indicated in item 21, a ditch or storm sewer? NO YES If YES, submit documentation that the owner of the ditch or storm sewer allows this discharge. No permit will be processed unless documentation of approval is received. 23. Do you have a certified operator? NO YES If yes, please list name(s), certification number(s) and certification level(s).

APPLICATION for DISCHARGES ASSOCIATED WITH HARDROCK MINING/MILLING; COAL MINING/PREPARATION

24. Discharge Quality: Analytical data for the following parameters, unless waived by the Division, shall be submitted from at least one sampling of each discharge point as well as state waters upstream of each discharge. Upstream data should be from non-runoff periods, to the extent possible. If more than one outfall is to a common body of water, only one analysis of the receiving water upstream of the upper-most outfall will be required. If the receiving stream is dry during portions of the year, so indicate. In the case of sedimentation ponds for stormwater runoff, one outfall can be sampled if it can reasonably be assumed to be representative of all sedimentation pond outfalls. For new mines, please submit a minimum of one years data for those parameters listed below. Such data must have been obtained on at least a quarterly basis and must be reflective of the water quality prior to any mining activity. See ATTACHMENT 11

PARAMETER	DETECTION LEVEL	PARAMETER	DETECTION LEVEL
Total Dissolved Solids, mg/R	10	Total Recoverable Manganese, mg/R	0.05
Flow, MGD	NA	Dissolved Manganese, mg/R	0.05
pH, s.u.	NA	Total Mercury, mg/R	0.00025
Oil and Grease, mg/R	5	Total Recoverable Nickel, mg/R	0.05
Dissolved Oxygen, mg/R	NA	Potentially Dissolved Nickel, mg/R	0.05
Alkalinity, mg/R	10	Total Recoverable Silver, mg/R	0.0002
Total Suspended Solids,mg/R	10	Potentially Dissolved Silver, mg/R	0.0002
Hardness, mg/R as CaCO <sub>3</sub>	10	Total Recoverable Uranium, mg/R	0.03
Total Ammonia, mg/R	0.05	Total Recoverable Zinc, mg/R	0.05
Temperature, <sup>B</sup> C Winter	NA	Potentially Dissolved Zinc, mg/R	0.05
Temperature, <sup>B</sup> C Summer	NA	Total Residual Chlorine, mg/R	0.05
Biochemical Oxygen Demand, mg/R	1	Fecal Coliform, #/100 ml	NA
Chemical Oxygen Demand, mg/R	30	Nitrate, mg/R as N	0.1
Dissolved Aluminum, mg/R	0.1	Nitrite, mg/R as N	0.002
Total Arsenic, mg/R	0.05	Sulfide mg/R as H₂S	0.1
Total Recoverable Cadmium, mg/R	0.0004	Boron, mg/R	0.05
Hexavalent Chromium, mg/R	0.025	Chloride, mg/R	5
Trivalent Chromium, mg/R	0.05	Sulfate, mg/R	5
Total Chromium, mg/R	0.005	Total Cyanide, mg/R	0.01
Total Recoverable Copper, mg/R	0.005	Total Recoverable Selenium, mg/R	0.002
Potentially Dissolved Copper, mg/R	0.005	Total Cobalt, mg/R	0.006
Total Recoverable Iron, mg/R	0.3	Gross Alpha, piC/R	0.3
Dissolved Iron, mg/R	0.3	Total Radium 226 + 228, pCi/R	8
Total Recoverable Lead, mg/R	0.005	Total Fluoride, mg/R	0.1
Potentially Dissolved Lead, mg/R	0.005	Weak Acid Dissociable Cyanide, mg/R	0.01
Total Phenols, mg/R	0.100	Total Phosphorus, mg/R as P	0.05
Total Organic Nitrogen, mg/R as N	0.05		

- **25. Dioxin Testing:** Each applicant must report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it:
  - (a) Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5- trichlorophenol (TCP); or hexachlorophene (HCP); or
  - (b) Knows or has reason to believe that TCDD is or may be present in an effluent. See ATTACHMENT 12
- 26. Whole Effluent Toxicity Testing: WET testing shall be conducted for each outfall which is not solely made up of stormwater or domestic wastewater, unless waived by the Division, on 100% effluent using both Ceriodaphnia dubia and fathead minnows. This requirement is waived where routine testing is currently required under an existing CDPS permit. The test shall be an acute test unless the ratio of stream low flow to effluent design flow is less than 10:1, respectively, and the receiving stream has a Class 1 Aquatic Life Use or Class 2 Aquatic Life Use with all the appropriate aquatic life numeric standards. In the latter case, a chronic test is required. The Division reserves the right to request additional testing as part of the application review process. If so required, the permit application will not be considered complete until the additional testing is submitted. In addition, all applicants must identify any biological toxicity tests which have been performed within the last 3 years on any of the discharges

## APPLICATION for DISCHARGES ASSOCIATED WITH HARDROCK MINING/MILLING; COAL MINING/PREPARATION or the receiving water in relation to a discharge from this facility. Attach WET test results to this application. If so required, the permit will not be processed until the additional information is submitted. WET testing procedures are described in the "Guidelines for Conducting Whole Effluent Toxicity Tests" which can be obtained from the Division. 27. Priority Pollutant Scan: The results of a priority pollutant scan, unless waived by the Division, for the volatile and acid fractions as shown in Appendix A must be submitted of each discharge. See ATTACHMENT 14-Priority Pollutant Scan 28. Additional Monitoring: All applicants must review the parameters listed in Appendix A and Appendix B to this application, and indicate whether it knows or has reason to believe that these pollutants are present. For every pollutant expected to be discharged, the applicant must briefly describe the reasons the pollutant is expected to be discharged, and report any quantitative data for the pollutant. 29. Please submit a copy all water quality monitoring data of outfalls or receiving streams for which data has been gathered over the last five years for the mining/milling site and which is required by the Division of Minerals and Geology. If not already submitted to the Division, the plan which details the monitoring frequency, type, locations and method of analysis must also be submitted. See ATTACHMENT 15-Water Quality Monitoring Data. See ATACHMENT 5-Location Map for Windy Gulch sample site locations. 30. Pollution Prevention Plans: Please describe any pollution prevention or best management plans currently in place which could result in the improvement of water quality. These could include solvent recycling programs, material containment procedures, education, etc.

31. Historic Drainages: Does historic drainage exist at the site, which is not covered under a CDPS permit? Yes? No? If so, please provide a map showing the location of the discharges and copies of all analytical information on the discharges. Please sample the discharges for the parameters listed in item 26 and submit those results. This requirement may be waived by the Division if

suitable data on the discharges historic quality and quantity exists.

## **REQUIRED SIGNATURES**

**Signature of Applicant:** The applicant must be either the owner and/or operator of the site. The application <u>must be signed</u> by the applicant to be considered complete. <u>In all cases</u>, it shall be signed as follows: (Regulation 61.4 (1ei)

- a) In the case of corporations, by the responsible corporate officer is responsible for the overall operation of the facility from which the discharge described in the form originates
- b) In the case of a partnership, by a general partner.
- c) In the case of a sole proprietorship, by the proprietor.
- d) In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, (a principal executive officer has responsibility for the overall operation of the facility from which the discharge originates).

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information,

## Signature of Permit Legal Contact

Name (printed

including the possibility of fine or imprisonme	ent.	
Signature of Legally Responsible Person (subn	nission must include original signature)	Date Signed
Name (printed	Title	
Signature of Operator (submission must includ	de original signature)	Date Signed

DO NOT INCLUDE PAYMENT - AN INVOICE WILL BE SENT AFTER THE PERMIT IS ISSUED.

Title

## Appendix A - Priority Pollutants

Organic Toxic Pollutants in Each of Three Fractions in Analysis by Gas Chromatography/Mass Spectroscopy(GC/MS).

Volatiles	Base/Neutral	Acid
Acrolein	Acenaphthene	2-Chlorophenol
Acrylonitrile	Acenaphthylene	2,4-Dichlorophenol
Benzene	Anthracene	2,4-Dimethylphenol
Bromoform	Benzidine	4,6-Dinitro-o-cresol
Carbon Tetrachloride	Benzo(a)anthracene	2,4-Dinitrophenol
Chlorobenzene	Benzo(a)pyrene	2-Nitrophenol
Chlorodibromomethane	3,4-Benzofluoranthene	4-Nitrophenol
Chloroethane	Benzo(ghi)perylene	P-chloro-m-cresol
2-Chloroethylvinyl Ether	Benzo(k)fluoranthene	Pentachlorophenol
Chloroform	Bis(2-chloroethoxy)methane	Phenol
Dichlorobromomethane	Bis(2-chloroethyl) ether	2,4,6-Trichlorophenol
1,1-Dichloroethane	Bis(2-chloroisopropyl) ether	
1,2-Dichloroethane	Bis(2-ethylhexyl)phthalate	
1,1-Dichloroethylene	4-Bromophenyl phenyl ether	
1,2-Dichloropropane	Butylbenzyl phthalate	
1,3-Dichloropropylene	2-Chloronaphthalene	
Ethylbenzene	4-Chlorophenyl phenyl ether	
Methyl Bromide	Chrysene	
Methyl Chloride	Dibenzo (a,h) anthracene	
Methylene Chloride	1,2-Dichlorobenzene	
1,1,2,2-Tetrachloroethane	1,3-Dichlorobenzene	
Tetrachloroethylene	1,4-Dichlorobenzene	
Toluene	3,3-Dichlorobenzidine	
1,2-Trans-dichloroethylene	Diethyl phthalate	
1,1,1-Trichloroethane	Dimethyl phthalate	
1,1,2-Trichloroethane	Di-n-butyl phthalate	
Trichloroethylene	2,4-Dinitrotoluene	
Vinyl Chloride	2,6-Dinitrotoluene	
	Di-n-octyl phthalate	
	1,2-Diphenylhydrazine (as azobenzene)	)
	Fluorene	
	Fluoranthene	
	Hexachlorobenzene	
	Hexachlorobutadiene	
	Hexachlorcyclopentadiene	
	Hexachloroethane	
	Indeno(1,2,3-cd) pyrene	
	Isophorone	
	Naphthalene	
	Nitrobenzene	
	N-Nitrosodimethylamine	
	N-Nitrosodi-n-propylamine	
	N-Nitrosodiphenylamine	
	Phenanthrene	

Pesticides			Metals, Cyanide, and Total Phenols
Aldrin	Endosulfan Sulfate	Alpha-Endosulfan	Total Recoverable Antimony, mg/P
Alpha-BHC	Endrin	Beta-Endosulfan	Total Recoverable Beryllium, mg/P
Beta-BHC	Endrin Aldehyde	Toxaphene	Total Recoverable Thallium, mg/P
Gamma-BHC	Heptachlor		Bromide, mg/P
Delta-BHC	Heptachlor Epoxide		Color
Chlordane	PCB-1242		Sulfite, mg/P
4,4'-DDT	PCB-1254		Surfactants,
4,4'-DDE	PCB-1221		Total Magnesium, mg/P
4,4'-DDD	PCB-1232		Total Molybdenum, mg/P
Dieldrin	PCB-1248		Total Tin, mg/P
PCB-1260	PCB-1016		Total Titanium, mg/P

1,2,4-Trichlorobenzene)

Pyrene

## Appendix B - Toxic Pollutants and Hazardous Substances

Propargite

## **Toxic Pollutants**

## Asbestos

## **Hazardous Substances**

2,4-D (2,4-Dichlorophenoxy

Acetaldehyde Kelthane Allyl alcohol Kepone Allyl chloride Malathion Amyl acetate Mercaptodimethur Aniline Methoxychlor Methyl mercaptan Benzonitrile Benzyl chloride Methyl methacrylate Butyl acetate Methyl parathion Mevinphos Butylamine Captan Mexacarbate Carbaryl Monoethyl amine

Carbaryl Monoethyl amine
Carbofuran Monomethyl amine
Carbon disulfide Naled
Chlorphyrifos Naphthenic acid

CoumaphosNitrotolueneCresolParathionCrotonaldehydePhenolsulfanateCyclohexanePhosgene

acetic acid)
Propylene oxide
Diazinon
Pyrethrins
Dicamba
Quinoline
Dichlobenil
Resorcinol
Dichlone
Strontium

2,2-Dichloropropionic acid Strychnine
Dichlorvos Styrene

Diethyl amine2,4,5-T (2,4,5-TrichlorophenoxyDimethly amineacetic acid)DinitrobenzeneTDE (Tetrachlorodiphenyl ethane)Diquat2,4,5-TP [2-(2,4,5-Trichlorophenoxy)

Disulfoton propanoic acid]

Diuron Trichlorofan

Epichlorohydrin Triethanolamine dodecylbenzenesulfonate Ethion Triethylamine

Ethylene diamine Trimethylamine
Ethylene dibromide Uranium
Formaldehyde Vanadium
Furfural Vinyl acetate
Guthion Xylene
Isoprene Xylenol
Isopropanolamine Zirconium

dodecylbenzenesulfonate