Form 2D – General Instructions

Who Must Complete Form 2D?
You must complete Form 2D if you answered "Yes" to Section A Item 2.d. on Form 1—that is, if you are a new manufacturing, commercial, mining, or silvicultural facility that has yet to commence discharge of process wastewater.

Where to File Your Completed Form
Submit your completed application package (Forms 1 and 2D) to:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901

When to File Your Completed Form
Form 2D must be submitted at least 180 days before the date on which the discharge is to commence, unless DEQ has granted permission for a later date.

Fees
The Montana Water Quality Act requires that DEQ collect fees sufficient to cover the cost of issuing permits as well as the administrative costs associated with these activities. DEQ collects both application and annual fees. Fees vary depending upon the complexity, type, and strength of wastewater and the number of discharge points, as set forth in ARM 17.30.201. *DEQ will not process this application until all of the requested information is supplied, the application is complete, and the appropriate fees are paid.* Fee information is available on DEQ's website: www.deq.mt.gov or by contacting the Water Protection Bureau at (406)444-5546.

Public Availability of Submitted Information
DEQ will make information from MPDES permit application forms available to the public for inspection and copying upon request. You may not claim any information on Form 2D (or related attachments) as confidential.
You may make a claim of confidentiality for any information that you submit that goes beyond the information required by Form 2D. Note that DEQ will deny claims for treating any effluent data (estimated or actual) as confidential. If you do not assert a claim of confidentiality at the time you submit your information, DEQ may make the information available to the public without further notice to you. DEQ will handle claims of confidentiality in accordance with the Agency's business confidentiality regulations at ARM 17.30.1321 and 75-5-105, MCA.

Completion of Forms
Print or type in the specified areas only. If you do not have enough space on the form to answer a question, you may continue on additional sheets, as necessary, using a format consistent with the form.

Provide your MPDES permit number and facility name at the top of each page of Form 2D and any attachments. If you do not know your MPDES permit number, contact DEQ. ***Additionally, for Tables A through E, provide the applicable outfall number at the top of each page.***

Do not leave any response areas blank unless the form directs you to skip them. If the form directs you to respond to an item that does not apply to your facility or activity, enter "NA" for "not applicable" to show that you considered the item and determined a response was not necessary for your facility.

DEQ will consider your application complete when it and any supplementary material are received and completed according to DEQ's satisfaction. DEQ will judge the completeness of any application independently of the status of any other permit application or permit for the same facility or activity.

Note for New Dischargers
Provide all information available to you at the time you complete Form 2D. If you do not have information to respond to an item because your facility has yet to discharge, write or type "data not available" next to the item on the form. ***You are required to submit actual data no later than 24 months after your facility commences to discharge.***

Definitions
Key terms used in the various MPDES application forms are included in the "Glossary" attachment. See ARM 17.30.1304 or 75-5-103, MCA.

Form 2D – Line-by-Line Instructions

Section 1. Expected Outfall Location

Item 1.1. Identify each of the facility's outfall structures by number. For each outfall, specify the latitude and longitude to the nearest 15 seconds and name of the receiving water. The application form provides reporting space for three outfalls. If your facility has more than this, attach additional sheets as necessary. The location of each outfall (i.e., where the coordinates are collected) shall be the point where the discharge is released into a state surface water. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://nris.msl.mt.gov/ or http://nationalmap.gov, geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., USGS).

Section 2. Expected Discharge Date

Item 2.1. Report the expected date the facility will commence discharging (month, day, and year).

Section 3. Average Flows and Treatment

Item 3.1. For each outfall, report the operations expected to contribute wastewater to the effluent and an estimated average flow from each. Briefly describe the planned wastewater treatment for each operation or list the applicable treatment code(s) from Exhibit 2D–1, located at the end of these instructions. Finally, for each operation, note the ultimate disposal of any solid or liquid wastes not expected to be discharged.

Section 4. Line Drawing

Item 4.1. Attach a line drawing showing the expected water flow through your facility, from intake to discharge. Indicate the sources of intake water (e.g., city, well, stream, other); all sources of wastewater contributing to the effluent, including process and production areas, sanitary flows, cooling water, and stormwater runoff; and labeled treatment units. You may group similar operations into a single unit. Construct a water balance on the line drawing by showing average flows (specify units) between intakes, operations, treatment units, and outfalls. Show all significant losses of water to products, the atmosphere, and discharge. You should use your best estimate. If you cannot determine a water balance for your activities (such as mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection and treatment measures. An example of an acceptable line drawing is provided in Exhibit 2D–2 at the end of these instructions.

Section 5. Intermittent or Seasonal Flows

Item 5.1. Specify whether any of the expected discharges described in Sections 1 and 3 will be intermittent or seasonal. If yes, continue to Item 5.2. If no, skip to Section 6.

Item 5.2. List applicable outfalls that will have intermittent or seasonal flows. For each, indicate the operations that will contribute to the flow. For each operation, indicate the average days per week and average months per year the discharge will occur, the maximum daily flow rate, the maximum total volume, and the duration of the discharge in days. The estimated flow rate and volume should not include stormwater runoff, spillage, or leaks. A discharge is intermittent if it occurs with interruptions during the operating hours of the facility. Discharges caused by routine maintenance shutdowns, process changes, or other similar activities are not considered to be intermittent. A discharge is seasonal if it occurs only during certain parts of the year. The frequency is the average recurrence rate of the discharge (in days per week and months per year). The duration is the average value of the time duration during which the discharge occurs (in days).

The maximum daily flow rate is the highest daily value and should be reported in million gallons per day (mgd). Maximum total volume means the total volume of any one discharge within 24 hours and is measured in units such as gallons.

Section 6. Production

Item 6.1. Indicate whether any effluent limitation guidelines (ELGs) promulgated under Section 304 of the Clean Water Act (CWA) apply to your facility. All ELGs promulgated by EPA appear in the *Federal Register* and are published annually in 40 CFR Subchapter N. An ELG applies if you have any operations contributing process wastewater in any subcategory covered by New Source Performance Standards (NSPS). If you are unsure whether you are covered by a promulgated ELG, consult DEQ. You must check "Yes" if an applicable ELG has been promulgated, even if the ELG is being contested in court. If you believe that a promulgated ELG has been remanded for reconsideration by a court and does not apply to your operations, you may answer "No" to item 6.1 and skip to Section 7

Item 6.2. Complete Item 6.2 by indicating the applicable ELG category, ELG subcategory, and corresponding regulatory citation. See the example below.

ELG Category	ELG Subcategory	Regulatory Citation
Pulp, Paper, and Paperboard Point Source Category	Secondary Fiber Non-Deink Subcategory	40 CFR 430, Subpart J

Item 6.3. Indicate whether the limitations in the applicable ELGs are expressed in terms of production (or other measure of operation). An ELG is expressed in terms of production (or another measure of operation) if the limitation is expressed as mass of pollutant per operational parameter (e.g., "pounds of biological oxygen demand per cubic foot of logs from which bark is removed," or "pounds of total suspended solids per megawatt hour of electrical energy consumed by smelting furnace."). An example of an ELG not expressed in terms of a measure of operation is one that limits the concentration of pollutants. If you answer "No" to this item, skip to Section 7.

Item 6.4. For each outfall to which an applicable production-based ELG applies, list the estimated level of production (projection of actual production level, not design), for each of the first three years of operation. The estimated production level must be a long-term average estimate (e.g., average production on an annual basis). If production will vary depending on long-term shifts in operating schedule or capacity, you may report alternative production estimates, but you must provide the basis for such alternatives. If known, report quantities in units of measurements used in the applicable ELG. If an ELG specifies a method for estimating production, you must follow that method.

Section 7. Effluent Characteristics and Tables A through E

General Information. Section 7 requires you to report *estimated* flow data for the parameters and pollutants listed in Tables A through E, located at the end of Form 2D. You are *not* required to conduct actual sampling and analysis at this time. If, however, data from such analyses are available, you must report those data. Note that no later than 24 months after you begin discharging from the proposed facility, you must complete and submit quantitative data for the pollutants and parameters in Tables A through E. However, you need not report results for tests you have already performed and reported under the discharge monitoring requirements of your MPDES permit.

Complete a set of tables (Tables A through E) for each outfall at your facility. Be sure to note the MPDES Permit Number, facility name, and outfall number at the top of each table page and any associated attachments.

Tables A through D require you to report estimated effluent data, with some exceptions, as discussed further below. Base your estimates on available in-house or contractors' engineering reports or any other studies performed on the proposed facility. Table E requires you to report quantitative data for the pollutants listed, but only if it is already available.

Several tables require you to provide estimates for pollutants you believe will be present in your discharge or will be limited directly by an ELG or indirectly through promulgated limitations on an indicator pollutant. Base your determination of whether a pollutant will be present in your discharge on your knowledge of the proposed facility's raw materials, maintenance chemicals, intermediate and final products, byproducts, and any analyses of any pollutant (you are required to report it).

For pollutants you believe will be present in the discharge, you are to provide the maximum daily and average daily concentration *and* total mass and the source of the information. Use the following codes to report your source information:

Data Source	Code
Engineering report	1
Actual data from pilot plants	1
Estimates from other engineering reports	2
Data from other similar plants	3
Best professional estimates	4
Others	5 and specify on the table

You may report some or all of your estimates (or actual data when available) by attaching separate sheets of paper instead of completing Tables A through E for each of your outfalls, so long as the sheets contain all of the required information and are similar in format to Tables A through E.

Reporting of Intake Data

If you expect a pollutant to be present solely because of its presence in your intake water, you must mark "Yes" under the "Intake Water" column of Tables A through D. If you wish to obtain credits for pollutants or parameters present in your intake water, insert a separate sheet with a short statement of why you believe you are eligible (see 40 CFR 122.45(g)).

Reporting of Effluent Data

Report all estimated pollutant or parameter levels as concentration (mg/L) or (µg/L) *and* as total mass (lb/day), with the exception of discharge flow, temperature, and pH.

Use the following abbreviations in the columns requiring "units" in Tables A through E.

Conventional and Non-Conventional Parameters

Item 7.1 and Table A. All applicants are required to complete Table A for each outfall, including outfalls discharging only noncontact cooling water or nonprocess water *unless* a waiver has been received or requested from DEQ. For each parameter listed on Table A, indicate whether a waiver has been requested. If you have requested a waiver for *all* pollutants for a given outfall, check the box indicating this at the top of Table A.

To request a waiver, submit a written request to DEQ in advance or with the permit application. The written request should specify the parameters that should be waived and for what outfall(s) and why. DEQ may waive Table A requirements upon a determination that less stringent reporting requirements are adequate to support issuance of an MPDES permit. Attach a copy of any waiver approval notice(s) received, if applicable, to this application.

Answer Item 7.1 by indicating if you are requesting a waiver for any of your outfalls. If yes, continue to Item 7.2. Otherwise, complete Table A by estimating your maximum daily and average daily discharge. Provide the source(s) of your information. Also on Table A, indicate whether you believe each of the parameters will be present in the facility's intake water. See "Reporting of Intake Data" above for further information. Skip to Item 7.3.

Item 7.2. Indicate the outfalls for which you have requested a waiver.

Item 7.3. Indicate if you have provided estimates or actual data for all Table A parameters for each of your outfalls for which a waiver has not been requested and attach the results to your application package.

Certain Conventional and Non-Conventional Pollutants

Items 7.4 through 7.6 and Table B. Complete one table for each outfall, including outfalls discharging only noncontact cooling water or nonprocess wastewater. Check the box at the top of Table B if you believe *all* pollutants listed will be absent in the discharge. If so, you do not need to complete Table B for the noted outfall. (You still need to complete Items 7.4 through 7.6.) Otherwise, for *each* pollutant listed in Table B, indicate whether you expect it will be present or absent in the discharge or whether the pollutant is limited directly by an ELG or indirectly through promulgated limitations or an indicator pollutant. (For example, total suspended solids is used as an indicator to control the discharge of iron and aluminum.) Next, provide an estimated maximum daily and average daily value, including the source of the information. If you have quantitative data available, report it. Also on Table B, indicate whether you believe the listed pollutants will be present in the facility's intake water. See "Reporting of Intake Data" above for further information. Answer "Yes" to Items 7.4 through 7.6 once you have completed the above tasks.

Toxic Metals, Total Cyanide, and Total Phenols

Items 7.7 and 7.8 and Table C. Complete one table for each outfall, including outfalls discharging only noncontact cooling water or nonprocess wastewater. Check the box at the top of Table C if you believe *all* pollutants listed will be absent in the discharge. If so, you do not need to complete Table C for the noted outfall (unless you have quantitative data available). You still need to respond to Items 7.7 and 7.8, however. Otherwise, indicate whether you believe each pollutant on Table C will be present or absent in your discharge for each applicable outfall. For those pollutants you believe will be present, provide an estimated maximum daily and average daily value and source of the information. (Provide quantitative data if you have them available.) Also, on Table C, indicate whether you believe the pollutant is or will be present in your facility's intake water. See "Reporting of Intake Data" above for more information. Answer "Yes" to Items 7.7 and 7.8 when you have completed the above tasks.

Organic Toxic Pollutants
(Gas Chromatography/Mass Spectrometry or GC/MS Fractions)

Item 7.9. Applicants are exempt from the reporting requirements associated with Table D if they expect to have gross sales of less than $100,000 per year for the next three years; also exempt are coal mines with expected average production of less than 100,000 tons of coal per year. If you believe you meet one of these criteria, answer "Yes" to Item 7.9, check the small business box at the top of Table D, and attach projected sales or production figures. Skip to Item 7.12.

The sales or production figures must be for the facility that will be the source of the discharge. The data should not be limited only to production or sales for the process or processes that will contribute to the discharge, unless those are the only processes at the facility.

For sales data, where intra-corporate transfers of goods and services will be involved, the transfer price per unit should approximate market process for those goods and services as closely as possible. If necessary, you may index your sales figures to the second quarter of 1980 to demonstrate your eligibility for a small business exemption. You may accomplish this by using the gross national product price deflator (second quarter of 1980 = 100). This index is available online from the U.S. Department of Commerce, Bureau of Economic Analysis at https://www.bea.gov/data/prices-inflation/gdp-price-deflator.

Item 7.10 and 7.11 and Table D. Complete one table for each outfall, including outfalls discharging only noncontact cooling water or nonprocess wastewater. Check the box at the top of Table D if you believe *all* pollutants listed will be absent in the discharge from the outfall. If so, you do not need to complete Table D for the noted outfall (unless you have quantitative data available). Otherwise, for *each* pollutant listed, indicate whether you believe it will be present or absent in the discharge. For those you believe will be present, provide an estimated maximum daily and average daily value and the source of the information. Also, on Table D, indicate whether you believe the pollutant is or will be present in your facility's intake water. See "Reporting of Intake Data" above for further information. Finally, answer "Yes" to Items 7.10 and 7.11 when you have completed the above tasks.

2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD)

Item 7.12. Answer whether the facility uses or manufactures one or more of the 2,3,7,8-TCDD congeners listed below or if you know or have reason to believe that TCDD is or may be present in effluent from any of your outfalls:

- 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS # 93-765).
- 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS # 93-72-1).
- 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS # 136-25-4).
- 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS # 299-84-3).
- 2,4,5-trichlorophenol (TCP) (CAS # 95-95-4).
- Hexachlorophene (HCP) (CAS # 70-30-4).

Certain Hazardous Substances and Asbestos

Table E. Complete Table E for each outfall. Check the box at the top of Table E if you believe *all* pollutants listed will be absent in the discharge. Otherwise, for *each* pollutant listed in Table E, indicate whether you believe it will be present or absent in the discharge. If you have quantitative estimates available for any of the pollutants listed, provide the maximum daily and average daily average value and the source of the information. Also, on Table E, if you believe the pollutant is or will be present in your facility's intake water, state so in the "Reason Pollutant Believed Present in Discharge" column.

Item 7.13. Indicate whether, for each of your outfalls, you have indicated whether you know or have reason to believe that any pollutants listed in Table E are discharged.

Item 7.14. Indicate whether, for each of your outfalls, you have completed and attached Table E to the application describing the reasons the applicable pollutants are expected to be discharged and providing quantitative data if available.

Intake Credits

Item 7.15. Answer whether you are seeking to obtain credits for any of the pollutants or parameters listed in Section 7 (Tables A through E) in your intake water for any of the facility's outfalls.

Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed in Exhibit 2D-3 at the end of these instructions) may be exempted from the requirements of Section 311 of the CWA, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance can be exempted if the origin, source, and amount of the discharged substances are identified in the MPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. See 40 CFR 117.12(a)(2) and (c) or contact DEQ for further information on exclusions from CWA Section 311.

Section 8. Engineering Report

Item 8.1. Indicate if any technical evaluations have been conducted of your wastewater treatment, including engineering reports or pilot plant studies. If yes, continue to Item 8.2. If no, skip to Item 8.3.

Item 8.2. Attach the technical evaluation(s) you considered when responding to Item 8.1 and any related documentation, then answer "Yes" to Item 8.2. The MPDES permit writer will use this information to determine appropriate treatment methods and associated permit conditions and limits.

Item 8.3. Answer "Yes" if you are aware of any existing plant(s) that resemble your production processes, wastewater constituents, or wastewater treatment. If you are unaware of such plants, answer "No" and skip to Section 9.

Item 8.4. Provide the name and location of any existing plant(s) that resemble(s) your production facility. You do not need to conduct any studies to respond to this item.

Section 9. Other Information

Item 9.1. Indicate whether you have attached to the application any optional information that you would like considered as part of the application review process. These should be items beyond those you have already noted as being included in the package. Skip to Section 10 if you do not have further information to provide.

Item 9.2. List the additional materials attached and note why you think DEQ should consider them when reviewing your application and developing your permit.

Form 2D – Section 10, Certification Statement

Item 10.1. This form must be signed and certified by the appropriate official as given in Section 6 and ARM 17.30.1323. The Montana Water Quality Act provides for penalties of not more than $25,000 or imprisonment for not more than 6 months, or both, for any person that knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the ACT, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under the Act. 75-5-633, MCA.

This application must be signed as follows:

A. For a corporation, by a responsible corporate officer. A responsible corporate officer means:
   1. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
   2. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures

B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

C. For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes:
   1. The chief executive officer of the agency, or
   2. a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Exhibit 2D–1. Codes for Treatment Units and Disposal of Wastes Not Discharged

1. PHYSICAL TREATMENT PROCESSES

1–A..... Ammonia stripping
1–B..... Dialysis
1–C..... Diatomaceous earth filtration
1–D..... Distillation
1–E..... Electrodialysis
1–F ..... Evaporation
1–G..... Flocculation
1–H..... Flotation
1–I ..... Foam fractionation
1–J..... Freezing
1–K..... Gas-phase separation
1–L ..... Grinding (*comminutors*)
1–M..... Grit removal
1–N ..... Microstraining
1–O ..... Mixing
1–P ..... Moving bed filters
1–Q ..... Multimedia filtration
1–R..... Rapid sand filtration
1–S ..... Reverse osmosis (*hyperfiltration*)
1–T..... Screening
1–U ..... Sedimentation (*settling*)
1–V ..... Slow sand filtration
1–W ..... Solvent extraction
1–X ..... Sorption

2. CHEMICAL TREATMENT PROCESSES

2–A..... Carbon adsorption
2–B..... Chemical oxidation
2–C..... Chemical precipitation
2–D..... Coagulation
2–E..... Dechlorination
2–F ..... Disinfection (*chlorine*)
2–G ..... Disinfection (*ozone*)
2–H ..... Disinfection (*other*)
2–I ..... Electrochemical treatment
2–J..... Ion exchange
2–K ..... Neutralization
2–L..... Reduction

3. BIOLOGICAL TREATMENT PROCESSES

3–A..... Activated sludge
3–B..... Aerated lagoons
3–C..... Anaerobic treatment
3–D..... Nitrification–denitrification
3–E..... Pre-aeration
3–F ..... Spray irrigation/land application
3–G ..... Stabilization ponds
3–H ..... Trickling filtration

4. OTHER PROCESSES

4–A..... Discharge to surface water
4–B..... Ocean discharge through outfall
4–C ..... Reuse/recycle of treated effluent
4–D ..... Underground injection

5. SLUDGE TREATMENT AND DISPOSAL PROCESSES

5–A..... Aerobic digestion
5–B..... Anaerobic digestion
5–C..... Belt filtration
5–D..... Centrifugation
5–E..... Chemical conditioning
5–F ..... Chlorine treatment
5–G..... Composting
5–H..... Drying beds
5–I ..... Elutriation
5–J..... Flotation thickening
5–K..... Freezing
5–L ..... Gravity thickening
5–M..... Heat drying
5–N ..... Heat treatment
5–O ..... Incineration
5–P ..... Land application
5–Q ..... Landfill
5–R..... Pressure filtration
5–S ..... Pyrolysis
5–T..... Sludge lagoons
5–U ..... Vacuum filtration
5–V ..... Vibration
5–W ..... Wet oxidation

Exhibit 2D–2. Example Line Drawing

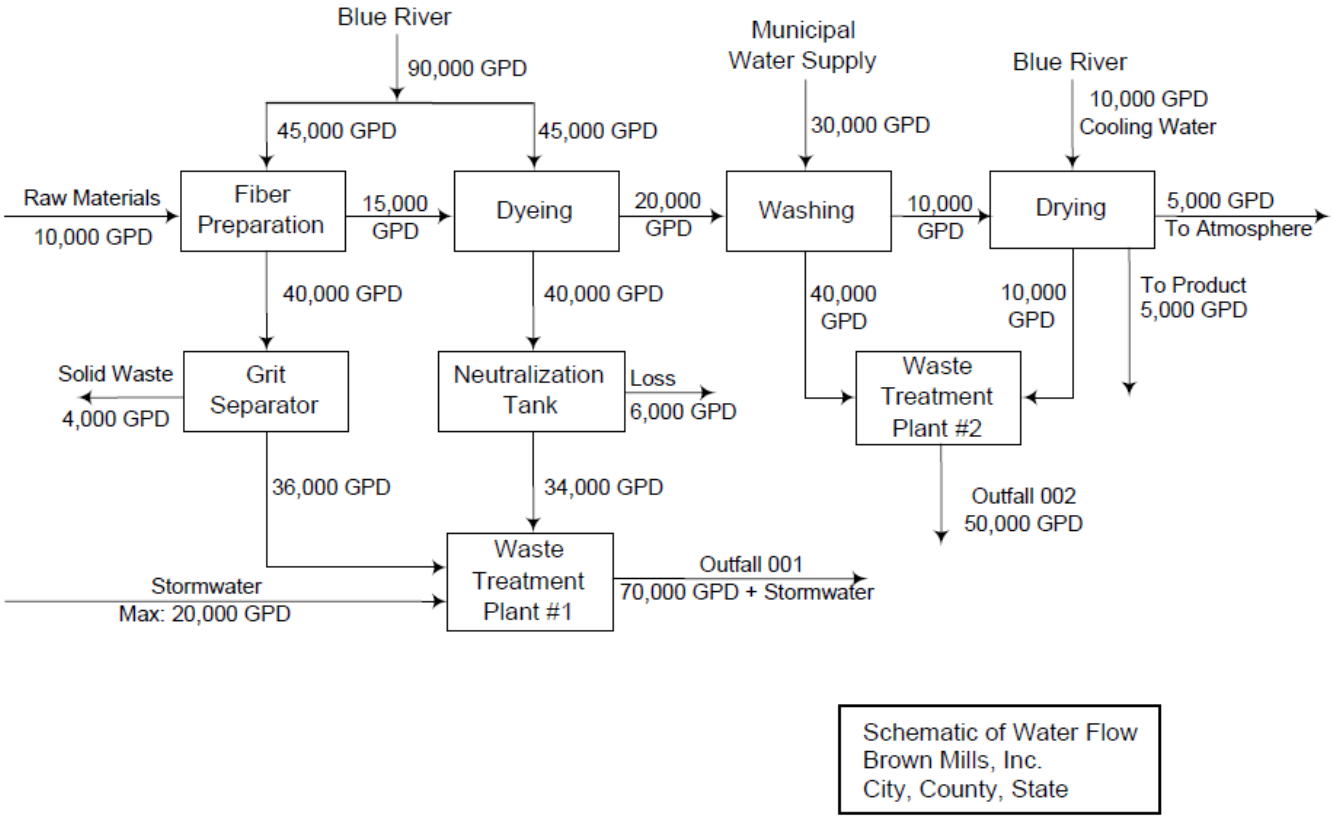

Exhibit 2D–3. Hazardous Substances

1. Acetaldehyde
2. Acetic acid
3. Acetic anhydride
4. Acetone cyanohydrin
5. Acetyl bromide
6. Acetyl chloride
7. Acrolein
8. Acrylonitrile
9. Adipic acid
10. Aldrin
11. Allyl alcohol
12. Allyl chloride
13. Aluminum sulfate
14. Ammonia
15. Ammonium acetate
16. Ammonium benzoate
17. Ammonium bicarbonate
18. Ammonium bichromate
19. Ammonium bifluoride
20. Ammonium bisulfite
21. Ammonium carbamate
22. Ammonium carbonate
23. Ammonium chloride
24. Ammonium chromate
25. Ammonium citrate
26. Ammonium fluoroborate
27. Ammonium fluoride
28. Ammonium hydroxide
29. Ammonium oxalate
30. Ammonium silicofluoride
31. Ammonium sulfamate
32. Ammonium sulfide
33. Ammonium sulfite
34. Ammonium tartrate
35. Ammonium thiocyanate
36. Ammonium thiosulfate
37. Amyl acetate
38. Aniline
39. Antimony pentachloricle
40. Antimony potassium tartrate
41. Antimony tribromide
42. Antimony trichloride
43. Antimony trifluoride
44. Antimony trioxide
45. Arsenic disulfide
46. Arsenic pentoxide
47. Arsenic trichloride
48. Arsenic trioxide
49. Arsenic trisulfide
50. Barium cyanide
51. Benzene
52. Benzoic acid
53. Benzonitrile
54. Benzoyl chloride
55. Benzyl chloride
56. Beryllium chloride
57. Beryllium fluoride
58. Beryllium nitrate
59. Butylacetate
60. n-butylphthalate
61. Butylamine
62. Butyric acid
63. Cadmium acetate
64. Cadmium bromide
65. Cadmium chloride
66. Calcium arsenate
67. Calcium arsenite
68. Calcium carbide
69. Calcium chromate
70. Calcium cyanide
71. Calcium dodecylbenzenesulfonate
72. Calcium hypochlorite
73. Captan
74. Carbaryl
75. Carbofuran
76. Carbon disulfide
77. Carbon tetrachloride
78. Chlordane
79. Chlorine
80. Chlorobenzene
81. Chloroform
82. Chloropyrifos
83. Chlorosulfonic acid
84. Chromic acetate
85. Chromic acid
86. Chromic sulfate
87. Chromous chloride
88. Cobaltous bromide
89. Cobaltous formate
90. Cobaltous sulfamate
91. Coumaphos
92. Cresol
93. Crotonaldehyde
94. Cupric acetate
95. Cupric acetoarsenite
96. Cupric chloride
97. Cupric nitrate
98. Cupric oxalate
99. Cupric sulfate
100. Cupric sulfate ammoniated
101. Cupric tartrate
102. Cyanogen chloride
103. Cyclohexane
104. 2,4-D acid (2,4-dichlorophenoxyacetic acid)
105. 2,4-D esters (2,4-dichlorophenoxyacetic acid esters)
106. DDT
107. Diazinon
108. Dicamba
109. Dichlobenil
110. Dichlone
111. Dichlorobenzene
112. Dichloropropane
113. Dichloropropene
114. Dichloropropene-dichloproropane mix
115. 2,2-dichloropropionic acid
116. Dichlorvos
117. Dieldrin
118. Diethylamine
119. Dimethylamine
120. Dinitrobenzene
121. Dinitrophenol
122. Dinitrotoluene
123. Diquat
124. Disulfoton
125. Diuron
126. Dodecylbenzesulfonic acid
127. Endosulfan
128. Endrin
129. Epichlorohydrin
130. Ethion
131. Ethylbenzene
132. Ethylenediamine
133. Ethylene dibromide
134. Ethylene dichloride
135. Ethylene diaminetetracetic acid (EDTA)
136. Ferric ammonium citrate
137. Ferric ammonium oxalate
138. Ferric chloride
139. Ferric fluoride
140. Ferric nitrate
141. Ferric sulfate
142. Ferrous ammonium sulfate
143. Ferrous chloride
144. Ferrous sulfate
145. Formaldehyde
146. Formic acid
147. Fumaric acid

Exhibit 2D–3. Hazardous Substances

148. Furfural
149. Guthion
150. Heptachlor
151. Hexachlorocyclopentadiene
152. Hydrochloric acid
153. Hydrofluoric acid
154. Hydrogen cyanide
155. Hydrogen sulfide
156. Isoprene
157. Isopropanolamine dodecylbenzenesulfonate
158. Kelthane
159. Kepone
160. Lead acetate
161. Lead arsenate
162. Lead chloride
163. Lead fluoborate
164. Lead fluorite
165. Lead iodide
166. Lead nitrate
167. Lead stearate
168. Lead sulfate
169. Lead sulfide
170. Lead thiocyanate
171. Lindane
172. Lithium chromate
173. Malathion
174. Maleic acid
175. Maleic anhydride
176. Mercaptodimethur
177. Mercuric cyanide
178. Mercuric nitrate
179. Mercuric sulfate
180. Mercuric thiocyanate
181. Mercurous nitrate
182. Methoxychlor
183. Methyl mercaptan
184. Methyl methacrylate
185. Methyl parathion
186. Mevinphos
187. Mexacarbate
188. Monoethylamine
189. Monomethylamine
190. Naled
191. Naphthalene
192. Naphthenic acid
193. Nickel ammonium sulfate
194. Nickel chloride
195. Nickel hydroxide
196. Nickel nitrate
197. Nickel sulfate
198. Nitric acid
199. Nitrobenzene
200. Nitrogen dioxide
201. Nitrophenol
202. Nitrotoluene
203. Paraformaldehyde
204. Parathion
205. Pentachlorophenol
206. Phenol
207. Phosgene
208. Phosphoric acid
209. Phosphorus
210. Phosphorus oxychloride
211. Phosphorus pentasulfide
212. Phosphorus trichloride
213. Polychlorinated biphenyls (PCB)
214. Potassium arsenate
215. Potassium arsenite
216. Potassium bichromate
217. Potassium chromate
218. Potassium cyanide
219. Potassium hydroxide
220. Potassium permanganate
221. Propargite
222. Propionic acid
223. Propionic anhydride
224. Propylene oxide
225. Pyrethrins
226. Quinoline
227. Resorcinol
228. Selenium oxide
229. Silver nitrate
230. Sodium
231. Sodium arsenate
232. Sodium arsenite
233. Sodium bichromate
234. Sodium bifluoride
235. Sodium bisulfite
236. Sodium chromate
237. Sodium cyanide
238. Sodium dodecylbenzenesulfonate
239. Sodium fluoride
240. Sodium hydrosulfide
241. Sodium hydroxide
242. Sodium hypochlorite
243. Sodium methylate
244. Sodium nitrite
245. Sodium phosphate (dibasic)
246. Sodium phosphate (tribasic)
247. Sodium selenite
248. Strontium chromate
249. Strychnine
250. Styrene
251. Sulfuric acid
252. Sulfur monochloride
253. 2,4,5-T acid (2,4,5-trichlorophenoxyacetic acid)
254. 2,4,5-T amines (2,4,5-trichlorophenoxy acetic acid amines)
255. 2,4,5-T esters (2,4,5-trichlorophenoxy acetic acid esters)
256. 2,4,5-T salts (2,4,5-trichlorophenoxy acetic acid salts)
257. 2,4,5-TP acid (2,4,5-trichlorophenoxy propanoic acid)
258. 2,4,5-TP acid esters (2,4,5-trichlorophenoxy propanoic acid esters)
259. TDE (tetrachlorodiphenyl ethane)
260. Tetraethyl lead
261. Tetraethyl pyrophosphate
262. Thallium sulfate
263. Toluene
264. Toxaphene
265. Trichlorofon
266. Trichloroethylene
267. Trichlorophenol
268. Triethanolamine dodecylbenzenesulfonate
269. Triethylamine
270. Trimethylamine
271. Uranyl acetate
272. Uranyl nitrate
273. Vanadium penoxide
274. Vanadyl sulfate
275. Vinyl acetate
276. Vinylidene chloride
277. Xylene
278. Xylenol
279. Zinc acetate
280. Zinc ammonium chloride
281. Zinc borate
282. Zinc bromide
283. Zinc carbonate
284. Zinc chloride
285. Zinc cyanide
286. Zinc fluoride
287. Zinc formate
288. Zinc hydrosulfite
289. Zinc nitrate
290. Zinc phenolsulfonate
291. Zinc phosphide
292. Zinc silicofluoride
293. Zinc sulfate
294. Zirconium nitrate
295. Zirconium potassium fluoride
296. Zirconium sulfate
297. Zirconium tetrachloride