MPDES Application Form 2C – General Instructions

Who Must Complete Form 2C?

You must complete Form 2C if you answered "Yes" to Item 2.c on Form 1—that is, if you are an existing manufacturing, commercial, mining, or silvicultural facility that currently discharges process wastewater.

Where to File Your Completed Form

Submit your completed application package (Forms 1, 2C, supplemental information, and applicable fees) to:
 Montana Department of Environmental Quality
 Water Protection Bureau
 PO Box 200901
 Helena, MT 59620-0901

When to File Your Completed Form

Form 2C must be submitted at least 180 days before your present MPDES permit expires, 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 2C (or related attachments) as confidential.

You may make a claim of confidentiality for any information that that goes beyond the information required by Form 2C. 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 at the top of each page of Form 2C and any attachments. If you do not know your permit number, contact DEQ. Additionally, for Section 7 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 and fees are received and completed according to 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.

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 2C – Line-by-Line Instructions

Section 1. Outfall Location

Item 1.1. Identify each of the facility's outfall structures by number. If you have more than three outfalls you need to provide the required information on a separate page. For each outfall, specify:

- The initial and the first named receiving water (i.e. unnamed tributary to the Yellowstone River)
- The latitude and longitude to the nearest 15 seconds or 4 decimal places
- The location of each outfall (i.e., where the coordinates are collected) shall be the point where the discharge is released into a water of the state. 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/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., U.S. Geological Survey or USGS).

Section 2. Line Drawing

Item 2.1. Attach a line drawing showing water flow through your facility, from intake to discharge. Indicate the sources of intake water (e.g., city, well, stream, other); operations contributing wastewater to the effluent including process and production areas, sanitary flows, cooling water, and stormwater runoff; and treatment units labeled to correspond to the more detailed descriptions under Section 3. 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 actual measurements wherever available; otherwise 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 2C–1 at the end of these instructions.

Section 3. Average Flows and Treatment

Item 3.1. For each outfall identified under Item 1.1, provide the following information:

- 1. all processes, operations, or production areas that contribute wastewater to the effluent for the outfall, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff;
- 2. average flow of wastewater contributed by each operation in million gallons per day (mgd);

- 3. a description of the treatment unit (including size of each treatment unit, flow rate through each treatment unit, retention time, etc.);
- 4. the applicable treatment code(s) from Exhibit 2C–2 (see end of instructions); and
- 5. the ultimate disposal of any wastes that are not discharged to the receiving water.

You may describe processes, operations, or production areas in general terms (e.g., "dye-making reactor" or "distillation tower"). You may estimate the average flow of point sources composed of stormwater; however, you must indicate the basis of the rainfall event and the method of estimation. Add additional sheets as necessary.

Item 3.2. Answer whether you are applying for an MPDES permit to operate a privately owned treatment works. If yes, continue to Item 3.3. If no, skip to Section 4.

Item 3.3. Attach a list to your application that includes the identity of each user of the treatment works, then answer "Yes" to Item 3.3.

Section 4. Intermittent Flows

Item 4.1. Answer "Yes" or "No" to indicate whether any of the discharges you described in Sections 1 and 3 of Form 2C are intermittent or seasonal, except for stormwater runoff, spillage, or leaks. An intermittent discharge is one that is not continuous. A continuous discharge is one that occurs without interruption during the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. If yes, continue to Item 4.2. If no, skip to Section 5.

Item 4.2. By relevant outfall number, identify each operation that has intermittent or seasonal discharges. Indicate the average frequency (days per week and months per year), the long-term average and maximum daily flow rates in mgd, and the duration of the intermittent or seasonal discharges in days per year. Base your answers on actual data over the past three to 4.5 years if available. Otherwise, provide your best estimate. Report the average of all daily values measured during days when the discharge occurred for "Long-Term Average," and report the highest daily value for "Maximum Daily."

Section 5. Production

Item 5.1. Indicate whether any effluent limitation guidelines (ELGs) promulgated under Section 304 of the Clean Water Act (CWA) apply to your facility. If yes, continue to Item 5.2. If no, skip to Section 6. All

Form 2C - Line-by-Line Instructions Continued

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 a Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT), or Best Available Technology Economically Achievable (BAT) guideline. If you are unsure whether you are covered by a promulgated ELG, consult DEO (see Exhibit 1–1 of the "General Instructions" of Form 1). 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 5.1 and skip to Section 6.

Item 5.2. Complete Item 5.2 by indicating the applicable ELG category, ELG subcategory, and corresponding regulatory citation for each outfall. See the example below.

5.2 Provide the following information on applicable ELGs

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

Item 5.3. Indicate if the limitations in the applicable ELGs are expressed in terms of production or other measure of operation. Operational parameters are expressed in terms of production (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 yes, continue to Item 5.4. If no, skip to Section 6.

Item 5.4. Indicate the operations, products, or materials produced at the facility, as regulated by the ELG, for each outfall. For each operation, product, or material produced, denote the maximum daily and highest annual monthly quantity produced per day over the past three to 4.5 years using the measurement units specified in the applicable ELG. DEQ will use the production information to apply ELGs to your facility. You may not claim that the production information you submit is confidential. You do not need to indicate how you calculated the

reported information. The production figures provided must be based on a reasonable measure of actual daily production, not on design capacity or on predictions of future operations. To obtain alternate limits under ARM 17.30.1345(3) through ARM 1730.1345(4)(b), you must define your maximum production capability and demonstrate to DEQ that your actual production is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

Section 6. Improvements

Item 6.1. Indicate if you are required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in your application. The requirements include, but are not limited to, permit conditions, administrative enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. If yes, continue to Item 6.2. If no, skip to Item 6.3.

Item 6.2. Briefly identify and describe each applicable project (e.g., consent decree, enforcement order, or permit condition). For each condition, specify the affected outfall number(s), the source(s) of the discharge, the required final compliance date, and the projected final compliance date.

Item 6.3. OPTIONAL ITEM. If desired, attach descriptions of any additional water pollution control programs (or other environmental projects that could affect your discharges) that are now underway or planned. Indicate in your attachments whether each program is actually underway or is planned and indicate your actual or planned schedule for construction.

Section 7. Effluent and Intake Characteristics Items 7.1 to 7.17. These items require you to collect and report data for the parameters and pollutants listed in Tables A through E, located at the end of Form 2C, by outfall. The instructions for completing the tables are table-specific in addition to the criteria for determining who should complete them. See the table on page 4 for conditions which apply.

Important note: Read the "General Instructions for Reporting, Sampling, and Analysis" before completing Section 7 and Tables A through E.

General Instructions for Reporting, Sampling, and Analysis

Important note: Read these instructions before completing Tables A through E and Section 7 of Form 2C

General Items

Complete the applicable tables for each outfall at your facility. *Be sure to note the MPDES permit number and applicable outfall number at the top of each page* of the tables and any associated attachments.

You may report some or all of the required data 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. For example, you may be able to print a report in a compatible format from the data system used in your GC/MS analysis completed under Table B.

Table A requires you to report at least one analysis for each pollutant listed. Tables B through D require you to report analytical data in two ways. For some pollutants, you may be required to check the box in the "Testing Required" column and test and report the levels of the pollutants in your discharge whether you expect them to be present in your discharge. For all other pollutants, you must check the box in either the "Believed Present" or "Believed Absent" columns based on your best estimate and test for those you believe to be present (with some exceptions). Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or similar effluent. For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated stormwater runoff.

If you would expect a pollutant to be present solely because of its presence in your intake water, you must mark "Believed Present" but you are not required to analyze for that pollutant. Instead, mark an "X" in the long-term average value of the "Intake" column; optionally, you may instead provide intake data.

Reporting of Effluent Data

Provide data for each outfall through which effluent is discharged to state waters. When an applicant has two or more outfalls with substantially identical effluents, DEQ may allow the applicant to test only one outfall and report those quantitative data as applying to the substantially identical outfall. If DEQ

grants your request, attach a separate sheet to the application form identifying the outfall tested and describing why the other outfall(s) are substantially identical.

Use of Existing Data

Existing data may be used, if available, in lieu of sampling conducted solely for the purposes of this application, provided that: all data requirements are met; sampling was performed, collected, and analyzed no more than 4.5 years prior to submission; all data are representative of the discharge; and all available representative data are considered in the values reported.

Analysis

Except as specified in 40 CFR 122.21(e)(3)(ii), all samples must be collected, preserved, and analyzed in accordance with approved analytical methods listed in 40 CFR Part 136, unless use of another method is required for the pollutant under 40 CFR chapter I, subchapter N. All methods must be sufficiently sensitive. A method is "sufficiently sensitive" when one of the following is met:

- The method minimum level of quantitation (ML) is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter.
- The method ML is above the water quality criterion, but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge.
- The method has the lowest ML of the analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N for the measured pollutant or pollutant parameter.

The minimum level of quantitation means the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration point for the analyte, as determined by the procedure set forth at 40 CFR 136. In most cases the ML is equivalent to the Required Reporting Value (RRV) identified in Department Circular DEQ-7 unless otherwise specified in the permit (ARM 17.30.702). Laboratory analytical results reported as less than detection must achieve these RRVs or permitspecified MLs.

Consistent with 40 CFR 136, you may provide matrix- or sample-specific MLs rather than the

General Instructions for Reporting, Sampling, and Analysis Continued

published levels. Further, where you can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive," the analytical results are not consistent with the quality assurance (QA)/quality control (QC) specifications for that method, then DEQ may determine that the method is not performing adequately and the applicant should select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.21(e)(3)(i).

When there is no analytical method that has been approved under 40 CFR 136; required under 40 CFR chapter I, subchapter N, and is not otherwise required by the DEQ, you may use a suitable method but shall provide a description of the method [40 CFR 122.21(e)(3)(ii)]. When selecting a suitable method, other factors such as a method's precision, accuracy, or resolution, may be considered when assessing the performance of the method.

Effluent monitoring data must comply with the QA/QC requirements of 40 CFR 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR 136.

A **grab sample** is an individual sample of at least 100 milliliters collected at a randomly chosen time over a period not exceeding 15 minutes.

A **composite sample** is a combination of at least four sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

Aliquots may be collected manually or automatically. For "GC/MS Fraction—Volatile Compounds" in Table B, aliquots must be combined in the laboratory immediately before analysis. Four aliquots or grab samples should be collected for this fraction. These four samples should be collected during actual hours of discharge over a 24-hour period and need not be flow proportioned. Only one analysis is required.

Clearly specify the units of measure for all pollutants in Tables A through C as concentration (mg/L or µg/L) and total mass (lb/day), except for flow, temperature, pH, color, and fecal coliform, including Escherichia coli (e. coli). If you are reporting quantitative data under Table D, report

concentration only. Flow, temperature, pH, color, and fecal coliform organisms must be reported as million gallons per day (mgd), degrees Celsius (°C), standard units, color units, and most probable number per 100 milliliters (MPN/100 mL), respectively.

Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and enterococci (previously known as fecal streptococcus at 40 CFR 122.21(g)(7), and volatile organic compounds. For all other pollutants, a 24-hour composite sample, using a minimum of four grab samples, must be used unless specified otherwise at 40 CFR 136. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours.

All reporting of values for metals must be in terms of "total recoverable metal," unless all approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium), or it is necessary to express the limitations for the metal in dissolved, valent, or total form as promulgated by an ELG or required by DEQ on a case-by-case basis.

Note that you are *not* required to complete the "Maximum Monthly Discharge" and the "Long-Term Average Daily Discharge" columns of Tables A through C; however, these fields should be completed if data are available.

If you measure only one daily value, complete the "Maximum Daily Discharge" columns of the tables and enter "1" in the "Number of Analyses" columns. DEQ may require additional analyses to further characterize your discharges.

For **composite samples**, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24-hour period. For **grab samples**, the daily value is the arithmetic or flow-weighted total mass or average concentration taken over the operating hours of the facility during a 24-hour period.

If you measure more than one daily value for a pollutant and those values are representative of your waste stream, you must report them.

General Instructions for Reporting, Sampling, and Analysis Continued

Stormwater

For stormwater discharges, a minimum of one to four grab samples must be taken, depending on the duration of the discharge. One grab sample must be taken in the first hour (or less) of discharge, with one more grab sample (up to a minimum of four) taken in each succeeding hour of discharge for discharges lasting four hours or more.

Except for stormwater discharges, DEQ may waive composite sampling requirements for any outfall for which you demonstrate that use of an automatic sampler is infeasible and that the minimum of four grab samples will be representative of your discharge. Results of analyses of individual grab samples for any parameter may be averaged to obtain the daily average. Grab samples that are not required to be analyzed immediately may be composited in the laboratory, if the container, preservation, and holding time requirements are met and if sample integrity is not compromised during compositing. See Table II at 40 CFR 136.3 for further information.

Reporting of Intake Data

You are not required to report data under the "Intake" columns of Tables A through C unless you wish to demonstrate your eligibility for a "net" effluent

limitation. MPDES regulations allow net limitations only in certain circumstances outlined in ARM 17.30.1345(9). To demonstrate your eligibility, under the "Intake" columns, report the average of the results of analyses of your intake water and discuss the requirements for a net limitation with DEQ. If your water is treated before use, test the water after it has been treated.

The collection of samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. You may contact DEQ for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements in the applicable analytical methods—for example, sample containers, sample preservation, holding times, and the collection of duplicate samples—must be followed. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes that contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Collect samples from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present MPDES permit, or at any site adequate for the collection of a representative sample

Form 2C – Line-by-Line Instructions Continued

In general, the following conditions apply when applicants are determining which tables they need to complete:

- Table A. Conventional and non-conventional Pollutants: All pollutants from all outfalls unless a waiver is obtained from DEO
- Table B. Toxic metals, cyanide, total phenols, and organic toxic pollutants: Applicants in primary industry categories listed in Exhibit 2C-3 at the end of these instructions or pollutants believed present
- Table C. Certain conventional and non-conventional pollutants: Applicants subject to ELGs that limit pollutants directly or indirectly and applicants who believe pollutants may be present in their facility's discharge.
- Table D. Certain hazardous substances and asbestos: Applicants who believe pollutants may be present in their facility's discharge
- Table E. 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD): Applicants that use or manufacture the pollutant or believe the pollutant may be present in the facility's discharge.

Item 7.1 and Table A. All applicants must report at least one analysis for each conventional and non-conventional pollutant listed in Table A for each outfall (one table per outfall). This includes outfalls discharging only noncontact cooling water or stormwater runoff. However, DEQ may waive the reporting requirements for individual point sources or for a particular industry category for one or more of the pollutants listed in Table A if the applicant has demonstrated that such a waiver is appropriate because information adequate to support issuance of a permit can be obtained with less stringent requirements. Indicate whether you are requesting a waiver in response to Item 7.1. If yes, continue to Item 7.2. If no, skip to Item 7.3.

Item 7.2. Specify the outfalls for which you are requesting a waiver. Next, indicate on Table A for the applicable outfalls the pollutants for which the waiver is being requested. Attach your waiver request and supporting information to your completed Form 2C.

Form 2C - Line-by-Line Instructions Continued

Item 7.3. Test your effluent from each outfall for each pollutant listed in Table A for which you have not requested a waiver. You may also conduct optional tests of your intake water for the Table A pollutants. See the "General Instructions for Reporting, Sampling, and Analysis" on pages 4-7 for further information.

Item 7.4 and Table B. This item asks whether any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3. If you are applying for a permit for a privately owned treatment works, determine your testing requirements based on the industrial categories of your contributors. This exercise is simply to determine your testing requirements only. You are not giving up your right to challenge your inclusion in the category determined for testing (e.g., for deciding whether an ELG is applicable) before your permit is issued. If yes, continue to Item 7.5. If no, skip to Item 7.8.

Complete a separate Table B for each outfall. Table B is split into five sections. Section 1 of Table B lists toxic metals, cyanide, and total phenols. Sections 2 through 5 of Table B list the pollutants in each of the gas chromatography/mass spectrometry (GC/MS) fractions. Note that inclusion of total phenols in Section 1 of Table B does not mean that the group is classified as toxic pollutants.

Item 7.5. Because you indicated in Item 7.4 that the facility's processes contribute wastewater that falls into one or more of the primary industry categories, check "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B. Answer "Yes" to Item 7.5 once you have completed this task.

Item 7.6. Because you indicated in Item 7.4 that the facility's processes contribute wastewater that falls into one or more of the primary industry categories, list the primary industry categories applicable to your facility. Next, review Exhibit 2C-3 to determine whether testing is required and for which GC/MS fraction(s): volatile compounds, acid compounds, base/neutral compounds, and pesticides. Check the applicable boxes for each GC/MS fraction requiring testing.

Item 7.7. For each of the required GC/MS fractions, check "Testing Required" for each of the pollutants in the required fraction in Sections 2 through 5 of Table B. Answer "Yes" to Item 7.7 once you have completed this task for each outfall.

Item 7.8 and Sections 1 through 5 of Table B. For all other cases (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions) and remaining pollutants, check "Believed Present" or "Believed Absent" in Sections 1 through 5 of Table B to indicate whether you have reason to believe that any of the pollutants listed are discharged from your outfalls. Answer "Yes" to Item 7.8 after you have completed this step.

Item 7.9 and Section 1 of Table B. For each pollutant you know or have reason to believe is present in your discharge from each applicable outfall in concentrations of 10 parts per billion (ppb) or greater, you must report quantitative data. If the result was nondetect, but the detection level met the RRV, indicate "< ML". For every pollutant expected to be discharged but in concentrations less than 10 ppb, you must submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

For pollutants in intake water, see the discussion under "General Instructions for Reporting, Sampling, and Analysis." Answer "Yes" to Item 7.9 once you have completed Section 1 of Table B for each outfall.

Item 7.10. This item asks if you qualify as a "small business." If so, you are exempt from submitting quantitative data for the organic toxic pollutants on Table B (Sections 2 through 5). You still must indicate, though, whether you believe any of the pollutants listed in Sections 1 through 5 are present in your discharge per the Instructions at Item 7.8 above.

You can qualify as a small business in two ways: 1. If your facility is a coal mine and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR 795.14(c)) instead of conducting analyses for the organic toxic pollutants.

2. If your facility is not a coal mine and if your gross total annual sales for the most recent three years average less than \$100,000 per year (in second quarter 1980 dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants.

The production or sales data must be for the facility that is the source of the discharge. The data should not be limited to production or sales for the process or processes that contribute to the discharge, unless

Form 2C – Line-by-Line Instructions Continued

those are the only processes at your facility. For sales data, in situations involving intra-corporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 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.

If you qualify as a small business according to the criteria above, answer "Yes" to Item 7.10. Check the box at the top of Table B to show that you are not required to submit quantitative data for the organic toxic pollutants (Sections 2 through 5 of Table B), then skip to Item 7.12. Otherwise, answer "No" and continue to Item 7.11.

Item 7.11 and Sections 2 through 5 of Table B.

Unless you qualify as a small business (see Item 7.10), you must provide quantitative data for all pollutants for which you marked "Testing Required" in Sections 2 through 5 of Table B. You must also provide quantitative data for all pollutants you marked as "Believed Present" in Sections 2 through 5 of Table B if you discharge those pollutants in concentrations of 10 ppb or greater, except for acrolein, acrylonitrile, 2,4-dinitrophenol, and 2methyl-4,6-dinitrophenol. If you discharge any of the four latter pollutants in concentrations of 100 ppb or greater, you must report quantitative data. If you discharge the pollutants in Sections 2 through 5 of Table B less than these thresholds (i.e., <100 ppb for acrolein, acrylonitrile, 2,4-dinitrophenol, and 2methyl-4,6-dinitrophenol and <10 ppb for all others), you must submit quantitative data or briefly describe the reasons the pollutant is in your discharge.

For pollutants in intake water, see the discussion under "General Instructions for Reporting, Sampling, and Analysis" on pages 2C-5 and 2C-6 for further information. Once you have completed these tasks for each outfall, answer "Yes" to Item 7.11.

Item 7.12 and Table C. For each outfall (including outfalls containing only noncontact cooling water or stormwater runoff), indicate whether you know or have reason to believe that any of the pollutants listed on Table C are present in your discharge. If so, mark the box in the "Believed Present" column for each applicable pollutant. If not, mark the box in the MPDES Application Form 2C Instructions

"Believed Absent" column for each applicable pollutant. Answer "Yes" to Item 7.12 once you have completed the required task for each outfall.

Item 7.13 and Table C. You are required to report quantitative data for any Table C pollutants that are directly limited in an applicable ELG or are indirectly limited in an applicable ELG through an expressed limitation on an indicator (e.g., use of total suspended solids (TSS) as an indicator to control the discharge of iron and aluminum). For all other pollutants that you marked as "Believed Present," you must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

For pollutants in intake water, see the discussion under "General Instructions for Reporting, Sampling, and Analysis" on pages 2C-5 and 2C-6 for further information. Answer "Yes" to Item 7.13 when you have fully completed the tasks associated with Table C and Items 7.12 and 7.13 above, for all outfalls.

Item 7.14 and Table D. For each outfall, indicate if you believe that any pollutant listed in Table D is "Believed Present" or "Believed Absent" in your facility's effluent. Check the boxes in the applicable columns on Table D next to each pollutant. For every pollutant believed present, you must briefly describe the reasons the pollutant is expected to be discharged and report any quantitative data you have for that pollutant. Note that you are not required to perform analytical tests for any of the Table D pollutants at this time. However, if you have prior test results, you must report them.

Item 7.15. Answer "Yes" to this Item when you have completed Table D for all outfalls.

Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed in Exhibit 2C-4 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.

Form 2C - Line-by-Line Instructions Continued

Item 7.16. Indicate whether:

- Your facility 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-dichloro-propionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5,-trichlorophenol (TCP); or hexachlorophene (HCP).
- You know or have reason to believe that 2.3.7,8-tetrachlorodibenzo-p-dioxin (TCDD) may be present in the effluent.

If yes for any outfall, continue to Item 7.17. If no, skip to Section 8.

Item 7.17 and Table E. If you answered "Yes" to Item 7.16, you must report *qualitative* data generated using a screening procedure not calibrated with analytical standards, for TCDD. Your screening analyses must be performed using gas chromatography with an electron capture detector. A TCDD standard for quantitation is not required. Describe the results of your screening analysis (e.g., "no measurable baseline deflection at the retention time of TCDD" or "a measurable peak within the tolerances of the retention time of TCDD.") on Table E. DEQ may require you to perform a quantitative analysis if you report a positive result. Answer "Yes" to Item 7.17 when you have completed Table E.

Section 8. Used or Manufactured Toxics

Item 8.1. Indicate if any pollutant listed in Table B is used or manufactured in your facility as an intermediate or final product or byproduct. If yes, continue to Item 8.2. If no, skip to Section 9.

Item 8.2. List the applicable toxic pollutants. Note that DEQ may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and DEQ has adequate information to issue you a permit. You may *not* claim this information as confidential. Note that

you do *not* need to distinguish between use or production of the pollutants or list amounts.

Section 9. Biological Toxicity Tests

Item 9.1. Indicate if you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last three years. If yes, continue to Item 9.2. If no, skip to Section 10.

Item 9.2. Identify the tests known to have been performed for each outfall and the purposes of each. For each test, check "Yes" or "No" to indicate if you have submitted the test results to DEQ and the date the results were submitted. DEQ may ask you to provide additional details after reviewing your application.

Section 10. Contract Analyses

Item 10.1. Indicate if any of the analyses reported in Section 7 were performed by a contract laboratory or consulting firm. If yes, continue to Item 10.2. If no, skip to Section 11.

Item 10.2. Identify each laboratory or firm used in the table provided. For each, provide the name, address, and phone number of the laboratory or firm and the pollutants analyzed.

Section 11. Additional Information

Item 11.1. In addition to the information reported on the application form, DEQ may request additional information reasonably required to assess the discharges of the facility and to determine whether to issue an MPDES permit. The additional information may include additional quantitative data and bioassays to assess the relative toxicity of discharges to aquatic life and requirements to determine the cause of the toxicity. Indicate under Item 11.1 whether DEQ has requested additional information from you. If yes, continue to Item 11.2. If no, skip to Section 12.

Item 11.2. List the items requested and attach the required information to the application.

Form 2C – Section 12, Certification Statement

Item 12.1. This form must be signed and certified by the appropriate official as given in ARM 17.30.1323(1). 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.

Blue River Municipal Water Supply Blue River 90.000 GPD 10,000 GPD 30,000 GPD Cooling Water 45,000 GPD 45,000 GPD Raw Materials Fiber 20.000 5.000 GPD 15,000 10,000 Dyeing Drying Washing To Atmosphere Preparation GPD GPD 10,000 GPD To Product 10,000 40,000 GPD 40,000 GPD 40,000 5,000 GPD GPD **GPD** Waste Solid Waste Neutralization Grit Loss Treatment Separator Tank 6,000 GPD 4.000 GPD Plant #2 36.000 GPD 34.000 GPD Outfall 002 50,000 GPD Waste Outfall 001 Treatment Stormwater 70.000 GPD + Stormwater Plant #1 Max: 20,000 GPD

Schematic of Water Flow Brown Mills, Inc. City, County, State

Exhibit 2C-1. Example Line Drawing

Exhibit 2C-2. Codes for Treatment Units and Disposal of Wastes Not Discharged

1. PHYSICAL TREATMENT PROCESSES					
1–AAmmonia stripping	1-MGrit removal				
1–BDialysis	1-NMicrostraining				
1-CDiatomaceous earth filtration	1–OMixing				
1–DDistillation	1–PMoving bed filters				
1–EElectrodialysis	1–QMultimedia filtration				
1–FEvaporation	1-RRapid sand filtration				
1–GFlocculation	1–SReverse osmosis (hyperfiltration)				
1–HFlotation	1–TScreening				
1–IFoam fractionation	1–USedimentation (settling)				
1–JFreezing	1–VSlow sand filtration				
1–KGas–phase separation	1-WSolvent extraction				
1–LGrinding (comminutors)	1–XSorption				
2. CHEMICAL TREATM	ENT DDOCESSES				
2–ACarbon adsorption 2–BChemical oxidation	2–GDisinfection (ozone)				
	2–HDisinfection (<i>other</i>) 2–IElectrochemical treatment				
2–CChemical precipitation					
2–DCoagulation 2–EDechlorination	2–JIon exchange 2–KNeutralization				
2–FDisinfection (chlorine)	2–LReduction				
3. BIOLOGICAL TREATM	MENT PROCESSES				
3–AActivated sludge	3–EPre-aeration				
3–BAerated lagoons	3–FSpray irrigation/land application				
3–CAnaerobic treatment	3–GStabilization ponds				
3–DNitrification–denitrification	3–HTrickling filtration				
4. WASTEWATER DISPOSAL PROCESSES					
4–ADischarge to surface water	4–CReuse/recycle of treated effluent				
4–BOcean discharge to outfall	4–DUnderground injection				
. 2 mmm count discussing to current	. 2 charigional injection				
5. SLUDGE TREATMENT AND					
5–AAerobic digestion	5–M Heat drying				
5–BAnaerobic digestion	5–NHeat treatment				
5–CBelt filtration	5–OIncineration				
5–DCentrifugation	5–PLand application				
5–EChemical conditioning	5–QLandfill				
5–FChlorine treatment	5–RPressure filtration				
5–GComposting	5–SPyrolysis				
5–HDrying beds	5–TSludge lagoons				
5–IElutriation	5–UVacuum filtration				
5–JFlotation thickening	5–VVibration				
5–KFreezing	5–W Wet oxidation				
5–LGravity thickening					

Exhibit 2C-3. Testing Requirements for Organic Toxic Pollutants Industry Categories*

INDUSTRY CATEGORY	GC/MS FRACTION [†]			
	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and sealants	X	X	X	
Aluminum forming	X	X	X	
Auto and other laundries	X	X	X	X
Battery manufacturing	X		X	
Coal mining				
Coil coating	X	X	X	
Copper forming	X	X	X	
Electric and electronic compounds	X	X	X	$\overline{\mathbf{X}}$
Electroplating	X	X	X	П
Explosives manufacturing	П	X	X	
Foundries	$\ddot{ extbf{X}}$	X	X	
Gum and wood chemicals (all subparts except				
D and F)	X	X		
Gum and wood chemicals, Subpart D (tall oil				
rosin)	X	X	X	
Gum and wood chemicals, Subpart F (rosin-				
based derivatives)	X	X	X	
Inorganic chemicals manufacturing	X	X	X	
Iron and steel manufacturing	X	X	X	
Leather tanning and finishing	X	X	X	
Mechanical products manufacturing	X	X	X	
	X	X	X	$\overset{\sqcup}{\mathrm{X}}$
Nonferrous metals manufacturing	Λ	Λ	Λ	Λ
Ore mining, Subpart B (base and precious		X		
metals)	v	V	v	v
Organic chemicals manufacturing	X	X	X	X
Paint and ink formulation	X	X	X	
Pesticides	X	X	X	X
Petroleum refining	X			
Pharmaceutical preparations	X	X	X	
Photographic equipment and supplies	X	X	X	
Plastic and synthetic materials manufacturing.	X	X	X	X
Plastic processing	X			
Printing and publishing	X	X	X	X
Pulp and paperboard mills	X	X	X	X
Rubber processing	X	X	X	
Soap and detergent manufacturing	X	X	X	
Steam electric power plants	X	X		
Textile mills (except Subpart C, Greige Mills)	X	X	X	
Timber products processing	X	X	X	X

^{*} See note at conclusion of 40 CFR 122, Appendix D (1983) for explanation of effect of suspensions on testing requirements for primary industry categories.

[†] The pollutants in each fraction are listed in Table B.

X = Testing is required.

 $[\]square$ = Testing is not required.

Exhibit 2C-4. 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
- 24. Ammonium chromat
- 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
- 142. Fellous allillolli
- 143. Ferrous chloride,
- 144. Ferrous sulfate
- 145. Formaldehyde
- 146. Formic acid
- 147. 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 chloride163. Lead fluoborate
- 164. Lead fluorite 165. Lead iodide

Exhibit 2C-4. Hazardous Substances

- 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 (2,4,5trichlorophenoxyacetic acid)
- 254. 2,4,5-T amines (2,4,5-trichlorophenoxy acetic
 - 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 cvanide
- 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