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JUL 31 2018

July 30, 2018

Ecology W2R-Ind

Mr. Greg Gould  
Washington Department of Ecology  
Industrial Section  
Waste 2 Resources Program  
PO Box 47600  
Olympia, WA 98504-7706

**RE: Request for Additional Information Regarding Emerald Kalama Chemical, LLC's  
Permit Renewal Application – NPDES Permit No. WA0000281**

Dear Mr. Gould:

This letter is in response to your request for additional information regarding our NPDES permit application you originally sent via e-mail on July 9, 2018.

Enclosed are the signed and corrected Form 2, Form 2C, and Form 2F for the NPDES application sent to you on June 30, 2018.

Additional information you requested was sent to you via e-mail on July 27, 2018.

If you have any questions or comments regarding this report or any other matters, please feel free to contact me at 360-673-0305.

Sincerely,

Phil Oyer  
Environmental Manager

cc: Records Library

Facility:	Year:	Left	Right
Air	Corr	Reports	Permit
Water	NPDES	WET-TOX	Enf
NPDES	DW/RCRA	Eng	Sub
WET-TOX	Cleanup	SW	HWP2
DW/RCRA			
Eng			
Sub			
SW			
HWP2			

## **Disclaimer**

This is an updated PDF document that allows you to type your information directly into the form, print it, and save the completed form.

Note: This form can be viewed and saved only using Adobe Acrobat Reader version 7.0 or higher, or if you have the full Adobe Professional version.

**Instructions:**

1. Type in your information
2. Save file (if desired)
3. Print the completed form
4. Sign and date the printed copy
5. Mail it to the directed contact.

United States  
Environmental Protection  
Agency

Office of  
Enforcement  
Washington, DC 20460

EPA Form 3510-2C  
Revised August 1990  
Previous editions  
are obsolete

Permits Division



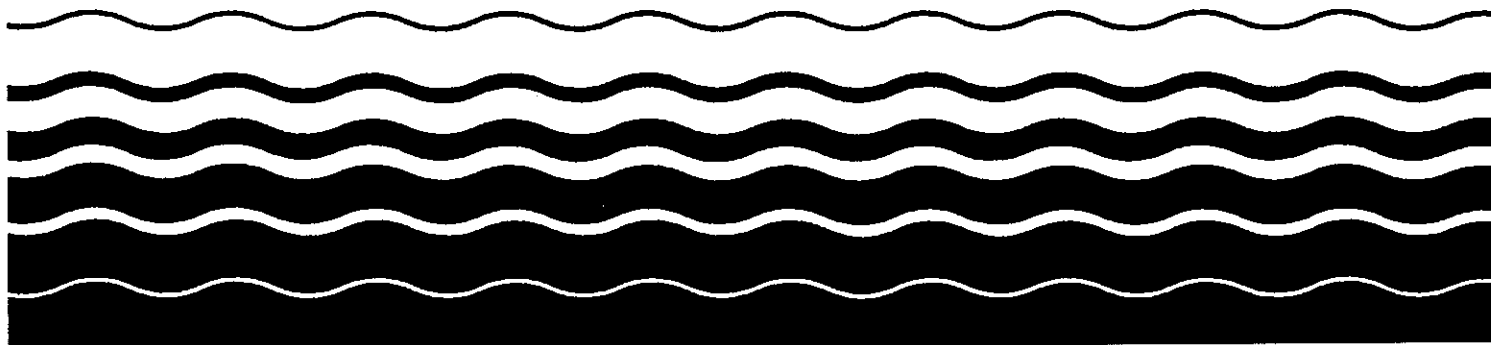
# Application Form 2C – Wastewater Discharge Information

## Consolidated Permits Program

This form must be completed by all persons applying for an EPA permit to discharge wastewater (*existing manufacturing, commercial, mining, and silvicultural operations*).



Printed on recycled paper



### **Paperwork Reduction Act Notice**

The public reporting burden for this collection of information is estimated to average 33 hours per response. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), US Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked **Attention: Desk Officer for EPA.**



**INSTRUCTIONS – FORM 2c**  
**Application for Permit to Discharge Wastewater**  
**EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL OPERATIONS**

This form must be completed by all applicants who check "yes" to item II-C in Form 1.

**Public Availability of Submitted Information.**

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (for not applicable) to show that you considered the question.

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form or Form 1 you may claim as confidential, but claims for information which is effluent data will be denied. If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

**Definitions**

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

**EPA ID Number**

Fill in your EPA Identification Number at the top of each page of Form 2c. You may copy this number directly from item I of Form 1.

**Item I**

You may use the map you provided for item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

**Item II-A**

The line drawing should show generally the route taken by water in your facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and stormwater runoff. You may group similar operations into a single unit, labeled to correspond to the more detailed listing in item II-B. The water balance should show average flows. Show all significant losses of water to products, atmosphere, and discharge. You should use actual measurements whenever available; otherwise use your best estimate. An example of an acceptable line drawing appears in Figure 2c-1 to these instructions.

**Item II-B**

List all sources of wastewater to each outfall. Operations may be described in general terms (for example, "dye-making reactor" or "distillation tower"). You may estimate the flow contributed by each source if no data are available. For stormwater discharges you may estimate the average flow, but you must indicate the rainfall event upon which the estimate is based and the method of estimation. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should select the proper code from Table 2c-1 to fill in column 3-b for each treatment unit. Insert "XX" into column 3-b if no code corresponds to a treatment unit you list. If you are applying for a permit for a privately owned treatment works, you must also identify all of your contributors in an attached listing.

**Item II-C**

A discharge is intermittent unless it 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. Fill in every applicable column in this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the

"Maximum Daily" columns (columns 4-a-2 and 4-b-2). Report the average of all daily values measured during days when discharge occurred within the last year in the "Long Term Average" columns (columns 4-a-1 and 4-b-1).

**Item III-A**

All effluent guidelines promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to you if you have any operations contributing process wastewater in any subcategory covered by a BPT, BCT, or BAT guideline. If you are unsure whether you are covered by a promulgated effluent guideline, check with your EPA Regional office (Table 1 in the Form 1 instructions). You must check "yes" if an applicable effluent guideline has been promulgated, even if the guideline limitations are being contested in court. If you believe that a promulgated effluent guideline has been remanded for reconsideration by a court and does not apply to your operations, you may check "no."

**Item III-B**

An effluent guideline is expressed in terms of production (or other measure of operation) if the limitation is expressed as mass of pollutant per operational parameter; for example, "pounds of BOD per cubic foot of logs from which bark is removed," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace." An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants.

**Item III-C**

This item must be completed only if you checked "yes" to item III-B. The production information requested here is necessary to apply effluent guidelines to your facility and you cannot claim it as confidential. However, you do not have to indicate how the reported information was calculated. Report quantities in the units of measurement used in the applicable effluent guideline. The production figures provided must be based on actual daily production and not on design capacity or on predictions of future operations. To obtain alternate limits under 40 CFR 122.45(b)(2)(ii), you must define your maximum production capability and demonstrate to the Director 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.

**Item IV-A**

If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing same information.

**Item IV-B**

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

**Item V-A, B, C, and D**

The items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

**General Instructions**

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants, you may be required to mark "X" in the "Testing Required" column (column 2-a, Part C), and test (sample and analyze) and report the levels of the pollutants in your discharge whether or not you expect them to be present in your discharge. For all others, you must mark "X" in either the "Believe Present" column or the "Believe Absent" column (columns 2-a or 2-b, Part B, and columns 2-b or 2-c, Part C) based on your best estimate, and test for those which you believe to be present. (See specific instructions on the form and below for Parts A through D.) Base your determination that a pollutant is present in or absent from your discharge on your

# FORM 2c - INSTRUCTIONS (continued)

## Item V-A, B, C, and D (continued)

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 as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant. Instead, mark an 'X' in the "Intake" column.

- A. **Reporting.** All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages V-1 to V-9 if the separate sheets contain all the required information in a format which is consistent with pages V-1 to V-9 in spacing and in identification of pollutants and columns. (For example, the data system used in your GC/MS analysis may be able to print data in the proper format.) Use the following abbreviations in the columns headed "Units" (column 3, Part A, and column 4, Parts B and C).

Concentration	Mass
ppm.....parts per million	lbs.....pounds
mg/l ...milligrams per liter	ton.....tons (English tons)
ppb.....parts per billion	mg.....milligrams
ug/l ...micrograms per liter	g.....grams
	kg.....kilograms
	T.....tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless:

- (1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or
- (2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- (3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA.

If you measure only one daily value, complete only the "Maximum Daily Values" columns and insert '1' into the "Number of Analyses" column (columns 2-a and 2-d, Part A, and column 3-a, 3-d, Parts B and C). The permitting authority may require you to conduct 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 found in a series of at least four grab samples 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 wastestream, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Long Term Average Values" columns (column 2-c, Part A, and column 3-c, Parts B and C), and the total number of daily values under the "Number of Analyses" columns (column 2-d, Part A, and columns 3-d, Parts B and C). Also, determine the average of all daily values taken during each calendar month, and report the highest average under the "Maximum 30-day Values" columns (column 2-c, Part A, and column 3-b, Parts B and C).

**B. Sampling:** The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. You may contact your EPA or State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding

times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples must be used. For all other pollutants 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours. For stormwater discharges a minimum of one to four grab samples may be taken, depending on the duration of the discharge. One grab must be taken in the first hour (or less) of discharge, with one additional grab (up to a minimum of four) taken in each succeeding hour of discharge for discharges lasting four or more hours. The Director may waive composite sampling for any outfall for which you demonstrate that use of an automatic sampler is infeasible and that a minimum of four grab samples will be representative of your discharge.

Grab and composite samples are defined as follows:

**Grab sample:** An individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

**Composite sample:** A combination of at least 8 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 Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. Four (4) (rather than eight) aliquots or grab samples should be collected for VOA. 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.

The Agency is currently reviewing sampling requirements in light of recent research on testing methods. Upon completion of its review, the Agency plans to propose changes to the sampling requirements.

Data from samples taken in the past may be used, provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in wastewater treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if she or he determines it to be necessary to assess your discharges.

**C. Analysis:** You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission from your permitting authority to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the

**Item V-A, B, C, and D (continued)**

permitting authority, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

**D. Reporting of Intake Data:** You are not required to report data under the "Intake" columns unless you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water. NPDES regulations allow net limitations only in certain circumstances. To demonstrate your eligibility, under the "Intake" columns report the average of the results of analyses on your intake water (*if your water is treated before use, test the water after it is treated*), and discuss the requirements for a net limitation with your permitting authority.

**Part V-A**

Part V-A must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water or storm runoff. However, at your request, the Director may waive the requirement to test for one or more of these pollutants, upon a determination that available information is adequate to support issuance of the permit with less stringent reporting requirements for these pollutants. You also may request a waiver for one or more of these pollutants for your category or subcategory from the Director, Office of Water Enforcement and Permits. See discussion in General Instructions to item V for definitions of the columns in Part A. The "Long Term Average Values" column (column 2-c) and "Maximum 30-day Values" column (column 2-b) are not compulsory but should be filled out if data are available.

Use composite samples for all pollutants in this Part, except use grab samples for pH and temperature. See discussion in General Instructions to Item V for definitions of the columns in Part A. The "Long Term Average Values" column (column 2-c) and "Maximum 30-Day Values" column (column 2-b) are not compulsory but should be filled out if data are available.

**Part V-B**

Part V-B must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water or storm runoff. You must report quantitative data if the pollutant(s) in question is limited in an effluent limitations guideline either directly, or indirectly but expressly through limitation on an indicator (*e.g., use of TSS as an indicator to control the discharge of iron and aluminum*). For other discharged pollutants you must provide quantitative data or explain their presence in your discharge. EPA will consider requests to the Director of the Office of Water Enforcement and Permits to eliminate the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representative of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in the category or subcategory discharge substantially identical levels of the pollutant or discharge the pollutant uniformly at sufficiently low levels. Use composite samples for all pollutants you analyze for in this part, except use grab samples for residual chlorine, oil and grease, and fecal coliform. The "Long Term Average Values" column (column 3-c) and "Maximum 30-day Values" column (column 3-b) are not compulsory but should be filled out if data are available.

**Part V-C**

Table 2c-2 lists the 34 "primary" industry categories in the lefthand column. For each outfall, if any of your processes which contribute wastewater falls into one of those categories, you must mark "X" in "Testing Required" column (column 2-a) and test for (1) all of the toxic metals, cyanide, and total phenols, and (2) the organic toxic pollutants contained in Table 2c-2 as applicable to your category, unless you qualify as a small business (*see below*). The organic toxic pollutants are listed by GC/MS fractions on pages V-4 to V-9 in Part V-C. For example, the Organic Chemicals Industry has an asterisk in all four fractions; therefore, applicants in this category must test for all organic toxic pollutants in Part V-C. The inclusion of total phenols in Part V-C is not intended to classify total phenols as a toxic pollutant. If you are applying for a permit for a privately owned

treatment works, determine your testing requirements on the basis of the industry categories of your contributors. When you determine which industry category you are in to find your testing requirements, you are not determining your category for any other purpose and you are not giving up your right to challenge your inclusion in that category (*for example, for deciding whether an effluent guideline is applicable*) before your permit is issued. For all other cases (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), you must mark "X" in either the "Believed Present" column (column 2-b) or the "Believed Absent" column (column 2-c) for each pollutant. For every pollutant you know or have reason to believe is present in your discharge in concentrations of 10 ppb or greater, you must report quantitative data. For acrolein, acrylonitrile, 2, 4 dinitrophenol, and 2-methyl-4, 6 dinitrophenol, where you expect these four pollutants to be discharged in concentrations of 100 ppb or greater, you must report quantitative data. For every pollutant expected to be discharged in concentrations less than the thresholds specified above, you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. At your request the Director, Office of Water Enforcement and Permits, may waive the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representatives of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in question discharge substantially identical levels of the pollutant, or discharge the pollutant uniformly at sufficiently low levels. If you qualify as a small business (*see below*) you are exempt from testing for the organic toxic pollutants, listed on pages V-4 to V-9 in Part C. For pollutants in intake water, see discussion in General Instructions to this item. The "Long Term Average Values" column (column 3-c) and "Maximum 30-day Values" column (column 3-b) are not compulsory but should be filled out if data are available. You are required to mark "Testing Required" for dioxin if you use or manufacture one of the following compounds:

- (a) 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T);
- (b) 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP)
- (c) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate, (Erbon);
- (d) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate, (Ronnel);
- (e) 2,4,5-trichlorophenol, (TCP); or
- (f) hexachlorophene, (HCP).

If you mark "Testing Required" or "Believed Present," you must perform a screening analysis for dioxins, using gas chromatography with an electron capture detector. A TCDD standard for quantitation is not required. Describe the results of this analysis in the space provided; for example, "no measurable baseline deflection at the retention time of TCDD" or "a measurable peak within the tolerances of the retention time of TCDD." The permitting authority may require you to perform a quantitative analysis if you report a positive result. The Effluent Guidelines Division of EPA has collected and analyzed samples from some plants for the pollutants listed in Part C in the course of its BAT guidelines development program. If your effluents are sampled and analyzed as part of this program in the last three years, you may use these data to answer Part C provided that the permitting authority approves, and provided that no process change or change in raw materials or operating practices has occurred since the samples were taken that would make the analyses unrepresentative of your current discharge.

**Small Business Exemption:** If you qualify as a "small business," you are exempt from the reporting requirements for the organic toxic pollutants, listed on pages V-4 to V-9 in Part C. There are two ways in which you can qualify as a "small business." 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. 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*

## FORM 2c - INSTRUCTIONS (continued)

### Item V-A, B, C, and D (continued)

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 which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intracorporate 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 in *National Income and Product Accounts of the United States* (Department of Commerce, Bureau of Economic Analysis).

### Part V-D

List any pollutants in Table 2c-3 that you believe to be present and explain why you believe them to be present. No analysis is required, but if you have analytical data, you must report it.

**Note:** Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed in Table 2c-4 of these instructions) may be exempted from the requirements of section 311 of 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 may be exempted if the origin, source, and amount of the discharged substances are identified in the NDPEs permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. To apply for an exclusion of the discharge of any hazardous substance from the requirements of section 311, attach additional sheets of paper to your form, setting forth the following information:

1. The substance and the amount of each substance which may be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment which is to be provided for the discharge by:
  - a. An onsite treatment system separate from any treatment system treating your normal discharge;
  - b. A treatment system designed to treat your normal discharge and which is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
  - c. Any combination of the above.

See 40 CFR §117.12(a)(2) and (c) published on August 29, 1979, in 44 FR 50766, or contact your Regional Office (Table 1 on Form 1, Instructions), for further information on exclusions from section 311.

### Item VI

This requirement applies to current use or manufacture of a toxic pollutant as an intermediate or final product or byproduct. The Director may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

### Item VII

Self explanatory. The permitting authority may ask you to provide additional details after your application is received.

### Item IX

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(2) of the Clean Water Act provides that "Any person who knowingly makes any false statement, representation, or certification in any application,... shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than six months, or by both."

40 CFR Part 122.22 requires the certification to be signed as follows:

(A) *For a corporation:* by a responsible corporate official. For purposes of this section, a responsible corporate official means (i) 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 (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

**Note:** EPA does not require specific assignments or delegation of authority to responsible corporate officers identified in §122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate position under §122.22(a)(1)(ii) rather than to specific individuals.

(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. For purposes of this section, a principal executive officer of a Federal Agency includes (i) the chief executive officer of the Agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the Agency (e.g., Regional Administrators of EPA). Applications for Group II stormwater dischargers may be signed by a duly authorized representative (as defined in 40 CFR 122.22(b)) of the individuals identified above.



## CODES FOR TREATMENT UNITS

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### PHYSICAL TREATMENT PROCESSES

1-A . . . . .	Ammonia Stripping	1-M . . . . .	Grit Removal
1-B . . . . .	Dialysis	1-N . . . . .	Microstraining
1-C . . . . .	Diatomaceous Earth Filtration	1-O . . . . .	Mixing
1-D . . . . .	Distillation	1-P . . . . .	Moving Bed Filters
1-E . . . . .	Electrodialysis	1-Q . . . . .	Multimedia Filtration
1-F . . . . .	Evaporation	1-R . . . . .	Rapid Sand Filtration
1-G . . . . .	Flocculation	1-S . . . . .	Reverse Osmosis ( <i>Hyperfiltration</i> )
1-H . . . . .	Flotation	1-T . . . . .	Screening
1-I . . . . .	Foam Fractionation	1-U . . . . .	Sedimentation ( <i>Settling</i> )
1-J . . . . .	Freezing	1-V . . . . .	Slow Sand Filtration
1-K . . . . .	Gas-Phase Separation	1-W . . . . .	Solvent Extraction
1-L . . . . .	Grinding ( <i>Comminutors</i> )	1-X . . . . .	Sorption

### CHEMICAL TREATMENT PROCESSES

2-A . . . . .	Carbon Adsorption	2-G . . . . .	Disinfection ( <i>Ozone</i> )
2-B . . . . .	Chemical Oxidation	2-H . . . . .	Disinfection ( <i>Other</i> )
2-C . . . . .	Chemical Precipitation	2-I . . . . .	Electrochemical Treatment
2-D . . . . .	Coagulation	2-J . . . . .	Ion Exchange
2-E . . . . .	Dechlorination	2-K . . . . .	Neutralization
2-F . . . . .	Disinfection ( <i>Chlorine</i> )	2-L . . . . .	Reduction

### BIOLOGICAL TREATMENT PROCESSES

3-A . . . . .	Activated Sludge	3-E . . . . .	Pre-Aeration
3-B . . . . .	Aerated Lagoons	3-F . . . . .	Spray Irrigation/Land Application
3-C . . . . .	Anaerobic Treatment	3-G . . . . .	Stabilization Ponds
3-D . . . . .	Nitrification-Denitrification	3-H . . . . .	Trickling Filtration

### OTHER PROCESSES

4-A . . . . .	Discharge to Surface Water	4-C . . . . .	Reuse/Recycle of Treated Effluent
4-B . . . . .	Ocean Discharge Through Outfall	4-D . . . . .	Underground Injection

### SLUDGE TREATMENT AND DISPOSAL PROCESSES

5-A . . . . .	Aerobic Digestion	5-M . . . . .	Heat Drying
5-B . . . . .	Anaerobic Digestion	5-N . . . . .	Heat Treatment
5-C . . . . .	Belt Filtration	5-O . . . . .	Incineration
5-D . . . . .	Centrifugation	5-P . . . . .	Land Application
5-E . . . . .	Chemical Conditioning	5-Q . . . . .	Landfill
5-F . . . . .	Chlorine Treatment	5-R . . . . .	Pressure Filtration
5-G . . . . .	Composting	5-S . . . . .	Pyrolysis
5-H . . . . .	Drying Beds	5-T . . . . .	Sludge Lagoons
5-I . . . . .	Elutriation	5-U . . . . .	Vacuum Filtration
5-J . . . . .	Flotation Thickening	5-V . . . . .	Vibration
5-K . . . . .	Freezing	5-W . . . . .	Wet Oxidation
5-L . . . . .	Gravity Thickening		

# TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY\*

INDUSTRY CATEGORY	GC/MS FRACTION <sup>1</sup>			
	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 .....	X	X	X	X
Coil coating .....	X	X	X	—
Copper forming .....	X	X	X	—
Electric and electronic compounds .....	X	X	X	X
Electroplating .....	X	X	X	—
Explosives manufacturing .....	—	X	X	—
Foundries .....	X	X	X	—
Gum and wood chemicals .....	X	X	X	X
Inorganic chemicals manufacturing .....	X	X	X	—
Iron and steel manufacturing .....	X	X	X	—
Leather tanning and finishing .....	X	X	X	X
Mechanical products manufacturing .....	X	X	X	—
Nonferrous metals manufacturing .....	X	X	X	X
Ore mining .....	X	X	X	X
Organic chemicals manufacturing .....	X	X	X	X
Paint and ink formulation .....	X	X	X	X
Pesticides .....	X	X	X	X
Petroleum refining .....	X	X	X	X
Pharmaceutical preparations .....	X	X	X	—
Photographic equipment and supplies .....	X	X	X	X
Plastic and synthetic materials manufacturing .....	X	X	X	X
Plastic processing .....	X	—	—	—
Porcelain enameling .....	X	—	X	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	X	—
Textile mills .....	X	X	X	X
Timber products processing .....	X	X	X	X

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

<sup>1</sup>The pollutants in each fraction are listed in Item V-C.

X = Testing required.

— = Testing not required.

**TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES  
REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT**

---

TOXIC POLLUTANT	HAZARDOUS SUBSTANCES	HAZARDOUS SUBSTANCES
Asbestos	Dichlorvos	Naled
	Diethyl amine	Napthenic acid
HAZARDOUS SUBSTANCES	Dimethyl amine	Nitrotoluene
	Dinitrobenzene	Parathion
Acetaldehyde	Diquat	Phenolsulfonate
Allyl alcohol	Disulfoton	Phosgene
Allyl chloride	Diuron	Propargite
Amyl acetate	Epichlorohydrin	Propylene oxide
Aniline	Ethion	Pyrethrins
Benzonitrile	Ethylene diamine	Quinoline
Benzyl chloride	Ethylene dibromide	Resorcinol
Butyl acetate	Formaldehyde	Strontium
Butylamine	Furfural	Strychnine
Captan	Guthion	Styrene
Carbaryl	Isoprene	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
Carbofuran	Isopropanolamine	TDE (Tetrachlorodiphenyl ethane)
Carbon disulfide	Kelthane	2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
Chlorpyrifos	Kepone	Trichlorofon
Coumaphos	Malathion	Triethanolamine
Cresol	Mercaptodimethur	Triethylamine
Crotonaldehyde	Methoxychlor	Trimethylamine
Cyclohexane	Methyl mercaptan	Uranium
2,4-D (2,4-Dichlorophenoxyacetic acid)	Methyl methacrylate	Vanadium
Diazinon	Methyl parathion	Vinyl acetate
Dicamba	Mevinphos	Xylene
Dichlobenil	Mexacarbate	Xylenol
Dichlone	Monoethyl amine	Zirconium
2,2-Dichloropropionic acid	Monomethyl amine	

## HAZARDOUS SUBSTANCES

1. Acetaldehyde	74. Carbaryl	145. Formaldehyde
2. Acetic acid	75. Carbofuran	146. Formic acid
3. Acetic anhydride	76. Carbon disulfide	147. Fumaric acid
4. Acetone cyanohydrin	77. Carbon tetrachloride	148. Furfural
5. Acetyl bromide	78. Chlordane	149. Guthion
6. Acetyl chloride	79. Chlorine	150. Heptachlor
7. Acrolein	80. Chlorobenzene	151. Hexachlorocyclopentadiene
8. Acrylonitrile	81. Chloroform	152. Hydrochloric acid
9. Adipic acid	82. Chloropyrifos	153. Hydrofluoric acid
10. Aldrin	83. Chlorosulfonic acid	154. Hydrogen cyanide
11. Allyl alcohol	84. Chromic acetate	155. Hydrogen sulfide
12. Allyl chloride	85. Chromic acid	156. Isoprene
13. Aluminum sulfate	86. Chromic sulfate	157. Isopropanolamine
14. Ammonia	87. Chromous chloride	dodecylbenzenesulfonate
15. Ammonium acetate	88. Cobaltous bromide	158. Kelthane
16. Ammonium benzoate	89. Cobaltous formate	159. Kepone
17. Ammonium bicarbonate	90. Cobaltous sulfamate	160. Lead acetate
18. Ammonium bichromate	91. Coumaphos	161. Lead arsenate
19. Ammonium bifluoride	92. Cresol	162. Lead chloride
20. Ammonium bisulfite	93. Crotonaldehyde	163. Lead fluoborate
21. Ammonium carbamate	94. Cupric acetate	164. Lead flourite
22. Ammonium carbonate	95. Cupric acetoarsenite	165. Lead iodide
23. Ammonium chloride	96. Cupric chloride	166. Lead nitrate
24. Ammonium chromate	97. Cupric nitrate	167. Lead stearate
25. Ammonium citrate	98. Cupric oxalate	168. Lead sulfate
26. Ammonium fluoroborate	99. Cupric sulfate	169. Lead sulfide
27. Ammonium fluoride	100. Cupric sulfate ammoniated	170. Lead thiocyanate
28. Ammonium hydroxide	101. Cupric tartrate	171. Lindane
29. Ammonium oxalate	102. Cyanogen chloride	172. Lithium chromate
30. Ammonium silicofluoride	103. Cyclohexane	173. Malathion
31. Ammonium sulfamate	104. 2,4-D acid (2,4- Dichlorophenoxyacetic acid)	174. Maleic acid
32. Ammonium sulfide	105. 2,4-D esters (2,4- Dichlorophenoxyacetic acid esters)	175. Maleic anhydride
33. Ammonium sulfite	106. DDT	176. Mercaptodimethur
34. Ammonium tartrate	107. Diazinon	177. Mercuric cyanide
35. Ammonium thiocyanate	108. Dicamba	178. Mercuric nitrate
36. Ammonium thiosulfate	109. Dichlobenil	179. Mercuric sulfate
37. Amyl acetate	110. Dichlone	180. Mercuric thiocyanate
38. Aniline	111. Dichlorobenzene	181. Mercurous nitrate
39. Antimony pentachloride	112. Dichloropropane	182. Methoxychlor
40. Antimony potassium tartrate	113. Dichloropropene	183. Methyl mercaptan
41. Antimony tribromide	114. Dichloropropene-dichloropropane mix	184. Methyl methacrylate
42. Antimony trichloride	115. 2,2-Dichloropropionic acid	185. Methyl parathion
43. Antimony trifluoride	116. Dichlorvos	186. Mevinphos
44. Antimony trioxide	117. Dieldrin	187. Mexacarbate
45. Arsenic disulfide	118. Diethylamine	188. Monoethylamine
46. Arsenic pentoxide	119. Dimethylamine	189. Monomethylamine
47. Arsenic trichloride	120. Dinitrobenzene	190. Naled
48. Arsenic trioxide	121. Dinitrophenol	191. Naphthalene
49. Arsenic trisulfide	122. Dinitrotoluene	192. Naphthenic acid
50. Barium cyanide	123. Diquat	193. Nickel ammonium sulfate
51. Benzene	124. Disulfoton	194. Nickel chloride
52. Benzoic acid	125. Diuron	195. Nickel hydroxide
53. Benzonitrile	126. Dodecylbenzenesulfonic acid	196. Nickel nitrate
54. Benzoyl chloride	127. Endosulfan	197. Nickel sulfate
55. Benzyl chloride	128. Endrin	198. Nitric acid
56. Beryllium chloride	129. Epichlorohydrin	199. Nitrobenzene
57. Beryllium fluoride	130. Ethion	200. Nitrogen dioxide
58. Beryllium nitrate	131. Ethylbenzene	201. Nitrophenol
59. Butylacetate	132. Ethylenediamine	202. Nitrotoluene
60. n-Butylphthalate	133. Ethylene dibromide	203. Paraformaldehyde
61. Butylamine	134. Ethylene dichloride	204. Parathion
62. Butyric acid	135. Ethylene diaminetetracetic acid (EDTA)	205. Pentachlorophenol
63. Cadmium acetate	136. Ferric ammonium citrate	206. Phenol
64. Cadmium bromide	137. Ferric ammonium oxalate	207. Phosgene
65. Cadmium chloride	138. Ferric chloride	208. Phosphoric acid
66. Calcium arsenate	139. Ferric fluoride	209. Phosphorus
67. Calcium arsenite	140. Ferric nitrate	210. Phosphorus oxychloride
69. Calcium carbide	141. Ferric sulfate	211. Phosphorus pentasulfide
69. Calcium chromate	142. Ferrous ammonium sulfate	212. Phosphorus trichloride
70. Calcium cyanide	143. Ferrous chloride	213. Polychlorinated biphenyls (PCB)
71. Calcium dodecylbenzenesulfonate	144. Ferrous sulfate	214. Potassium arsenate
72. Calcium hypochlorite		215. Potassium arsenite
73. Captan		216. Potassium bichromate

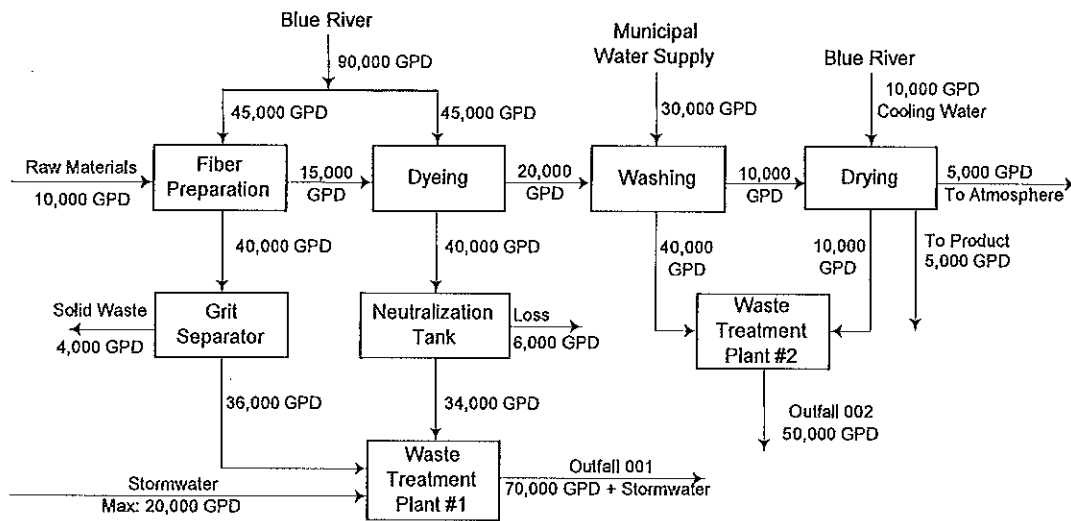
Table 2C-4

## HAZARDOUS SUBSTANCES

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217. Potassium chromate	247. Sodium selenite	270. Trimethylamine
218. Potassium cyanide	248. Strontium chromate	271. Uranyl acetate
219. Potassium hydroxide	249. Strychnine	272. Uranyl nitrate
220. Potassium permanganate	250. Styrene	273. Vanadium pentoxide
221. Propargite	251. Sulfuric acid	274. Vanadyl sulfate
222. Propionic acid	252. Sulfur monochloride	275. Vinyl acetate
223. Propionic anhydride	253. 2,4,5-T acid (2,4,5-Trichlorophenoxyacetic acid)	276. Vinylidene chloride
224. Propylene oxide	254. 2,4,5-T amines (2,4,5-Trichlorophenoxyacetic acid amines)	277. Xylene
225. Pyrethrins	255. 2,4,5-T esters (2,4,5-Trichlorophenoxyacetic acid esters)	278. Xylenol
226. Quinoline	256. 2,4,5-T salts (2,4,5-Trichlorophenoxyacetic acid salts)	279. Zinc acetate
227. Resorcinol	257. 2,4,5-TP acid (2,4,5-Trichlorophenoxypropanoic acid)	280. Zinc ammonium chloride
228. Selenium oxide	258. 2,4,5-TP acid esters (2,4,5-Trichlorophenoxypropanoic acid esters)	281. Zinc borate
229. Silver nitrate	259. TDE (Tetrachlorodiphenyl ethane)	282. Zinc bromide
230. Sodium	260. Tetraethyl lead	283. Zinc carbonate
231. Sodium arsenate	261. Tetraethyl pyrophosphate	284. Zinc chloride
232. Sodium arsenite	262. Thallium sulfate	285. Zinc cyanide
233. Sodium bichromate	263. Toluene	286. Zinc fluoride
234. Sodium biftuoride	264. Toxaphene	287. Zinc formate
235. Sodium bisulfite	265. Trichlorofon	288. Zinc hydrosulfite
236. Sodium chromate	266. Trichloroethylene	289. Zinc nitrate
237. Sodium cyanide	267. Trichlorophenol	290. Zinc phenolsulfonate
238. Sodium dodecylbenzenesulfonate	268. Triethanolamine	291. Zinc phosphide
239. Sodium fluoride	269. Triethylamine	292. Zinc silicofluoride
240. Sodium hydrosulfide		293. Zinc sulfate
241. Sodium hydroxide		294. Zirconium nitrate
242. Sodium hypochlorite		295. Zirconium potassium fluoride
243. Sodium methylate		296. Zirconium sulfate
244. Sodium nitrite		297. Zirconium tetrachloride
245. Sodium phosphate (dibasic)		
246. Sodium phosphate (tribasic)		

# LINE DRAWING



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

Figure 2C-1

EPA I.D. NUMBER (copy from Item 1 of Form 1)

WA0000281

Form Approved.  
OMB No. 2040-0086.  
Approval expires 3-31-98.

Please print or type in the unshaded areas only.

FORM  
2C  
NPDESU.S. ENVIRONMENTAL PROTECTION AGENCY  
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER  
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS  
Consolidated Permits Program

## I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
001	46.00	1.00	18.00	122.00	51.00	41.00	To Columbia River
002	46.00	1.00	18.00	122.00	51.00	38.00	To Outfall 001
003	46.00	1.00	24.00	122.00	51.00	17.00	To Wetlands

## II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. 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 (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
	See Site Map (3-002-000)				
	See BIOX Plant flow schematic				
	(0-017-050)				
001 & 002	COOLING WATER & PROCESS WASTEWATER				
	Cooling Water		From Cooling Towers		
	Treated Process Wastewater		Activated Sludge, Anaerobic Treatment, Preaeration, Discharge to Surface Water	3-A	3-C
				3-E	4-A
	Contaminated Stormwater from Process		Activated Sludge, Anaerobic Treatment, Preaeration, Discharge to Surface Water	3-A	3-C
				3-E	4-A
003	Uncontaminated Stormwater	Variable			
	Hazardous/Dangerous Waste Streams:				
	- Process Wastewater	Benzene (D018);	Continuous flow, approx. 33,694 gpd		
	- Groundwater	Product Toluene (U220)	Continuous flow, approx. 0.083 MGD		
	- Laboratory	Acetone & Methanol (F003)	Intermittent flow, approx. 1,500 gpd		
	- Spills	Variable constituents	Variable amount		
			*All streams are collected and treated along with the treated Process Wastewater.		

OFFICIAL USE ONLY (effluent guidelines sub-categories)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal? <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Section III)								
1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				C. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

<b>III. PRODUCTION</b>			
A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility? <input checked="" type="checkbox"/> YES (complete Item III-B) <input type="checkbox"/> NO (go to Section IV)			
B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)? <input checked="" type="checkbox"/> YES (complete Item III-C) <input type="checkbox"/> NO (go to Section IV)			
C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.			
1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	
See Attachment 1 for Production Rates			

<b>IV. IMPROVEMENTS</b>					
A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Item IV-B)					
1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. <input type="checkbox"/> MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED
---



EPA I.D. NUMBER (copy from Item 1 of Form 1)

WA0000281

CONTINUED FROM PAGE 2

**V. INTAKE AND EFFLUENT CHARACTERISTICS**

A, B, &amp; C: See instructions before proceeding -- Complete one set of tables for each outfall -- Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

**VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS**

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (list all such pollutants below )☒ NO (go to Item VI-B)

CONTINUED FROM THE FRONT

**VII. BIOLOGICAL TOXICITY TESTING DATA**

Do 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 3 years?

☒ YES (Identify the test(s) and describe their purposes below)

☐ NO (go to Section VIII)

Biological toxicity testing was performed in July 2012 and February 2013. Testing consisted of acute and chronic bioassays using *Ceriodaphnia dubia* and *Pimephales promelas* as the test species for both test dates. See Attachment 2 for a summary of the results.

**VIII. CONTRACT ANALYSIS INFORMATION**

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

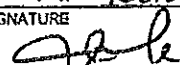
☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
ALS Environmental Services	1317 South 13th Avenue Kelso, WA 98626	360-577-7222	Table V Pollutants, Dioxin
Northwestern Aquatic Sciences	3814 Yaquina Bay Road P.O. Box 1437 Newport, OR 97365	541-265-7225	Acute and Chronic Toxicity Testing
Specialty Analytical	9011 SE Jannsen Road Clackamas, OR 97015	503-607-1331	Table V Pollutants, Pesticides

**IX. CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print)	B. PHONE NO. (area code & no.)
Jarrod Kauri GSC Director	(360) 673-2550
C. SIGNATURE	D. DATE SIGNED
	7/30/13

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.  
SEE INSTRUCTIONS.

EPA ID. NUMBER (copy from Item 1 of Form 1)  
WA0000281

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)										OUTFALL NO. 901	
PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.											
1. POLLUTANT		2. EFFLUENT				3. UNITS (specify if blank)		4. INTAKE (optional)		b. NO. OF ANALYSES	
		a. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS		b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION (2) MASS				c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION (2) MASS			
a. Biochemical Oxygen Demand (BOD)		See 002									
b. Chemical Oxygen Demand (COD)		See 002									
c. Total Organic Carbon (TOC)		See 002									
d. Total Suspended Solids (TSS)		See 002									
e. Ammonia (as N)		See 002									
f. Flow		VALUE 14.5	VALUE 14.3	VALUE	13.2		MGD		VALUE		
g. Temperature (winter)		VALUE 20.4	VALUE 16.4	VALUE	14.6		°C		VALUE		
h. Temperature (summer)		VALUE 34.6	VALUE 32.5	VALUE	30.2		°C		VALUE		
i. pH		MINIMUM See 002	MAXIMUM	MAXIMUM			STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.											
1. POLLUTANT AND CAS NO. (if available)		2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
		a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION (2) MASS	d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)				See 002							
b. Chlorine, Total Residual				See 002							
c. Color				See 002							
d. Fecal Coliform				See 002							
e. Fluoride (16984-48-8)				See 002							
f. Nitrate-Nitrite (as N)				See 002							

## ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)				
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)			See 002										
h. Oil and Grease			See 002										
i. Phosphorus (as P), Total (7723-14-0)			See 002										
j. Radioactivity													
(1) Alpha, Total			See 002										
(2) Beta, Total			See 002										
(3) Radium, Total			See 002										
(4) Radium 226, Total			See 002										
k. Sulfate (as SO <sub>4</sub> ) (14808-79-8)			See 002										
l. Sulfide (as S)			See 002										
m. Sulfite (as SO <sub>3</sub> ) (14265-45-3)			See 002										
n. Surfactants			See 002										
o. Aluminum, Total (7429-90-5)			See 002										
p. Barium, Total (7440-39-3)			See 002										
q. Boron, Total (7440-42-8)			See 002										
r. Cobalt, Total (7440-48-4)			See 002										
s. Iron, Total (7439-89-6)			See 002										
t. Magnesium, Total (7439-95-4)			See 002										
u. Molybdenum, Total (7439-98-7)			See 002										
v. Manganese, Total (7439-96-5)			See 002										
w. Tin, Total (7440-31-5)			See 002										
x. Titanium, Total (7440-32-6)			See 002										

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
WA0000281	001

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for each of these pollutants in concentrations of 10 ppb or greater. If you mark column 2c for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must either submit at least one analysis or pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT			4. UNITS		5. INTAKE (optional)	
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1)	b. MAXIMUM 30 DAY VALUE (if available) (1)	c. LONG TERM AVG. VALUE (if available) (1)	d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	b. NO. OF ANALYSES
METALS, CYANIDE, AND TOTAL PHENOLS									
1M. Antimony, Total (7440-36-0)				See 002					
2M. Arsenic, Total (7440-38-2)				See 002					
3M. Beryllium, Total (7440-41-7)				See 002					
4M. Cadmium, Total (7440-43-9)				See 002					
5M. Chromium, Total (7440-47-3)				See 002					
6M. Copper, Total (7440-50-8)				See 002					
7M. Lead, Total (7439-92-1)				See 002					
8M. Mercury, Total (7439-97-6)				See 002					
9M. Nickel, Total (7440-02-0)				See 002					
10M. Selenium, Total (7782-49-2)				See 002					
11M. Silver, Total (7440-22-4)				See 002					
12M. Thallium, Total (7440-28-0)				See 002					
13M. Zinc, Total (7440-66-6)				See 002					
14M. Cyanide, Total (57-12-5)				See 002					
15M. Phenols, Total				See 002					
DIOXIN									
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)				See 002					
DESCRIBE RESULTS									

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		b. NO. OF ANALYSES
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
GC/MS FRACTION – VOLATILE COMPOUNDS												
1V. Acrolein (107-02-8)				See 002								
2V. Acrylonitrile (107-13-1)				See 002								
3V. Benzene (71-43-2)				See 002								
4V. Bis (Chloromethyl) Ether (542-88-1)				See 002								
5V. Bromoform (75-25-2)				See 002								
6V. Carbon Tetrachloride (56-23-5)				See 002								
7V. Chlorobenzene (108-90-7)				See 002								
8V. Chlorodibromomethane (124-48-1)				See 002								
9V. Chloroethane (75-00-3)				See 002								
10V. 2-Chloroethylvinyl Ether (110-75-8)				See 002								
11V. Chloroform (67-66-3)				See 002								
12V. Dichlorobromomethane (75-27-4)				See 002								
13V. Dichlorodifluoromethane (75-71-8)				See 002								
14V. 1,1-Dichloroethane (75-34-3)				See 002								
15V. 1,2-Dichloroethane (107-06-2)				See 002								
16V. 1,1-Dichloroethylene (75-35-4)				See 002								
17V. 1,2-Dichloropropane (78-87-5)				See 002								
18V. 1,3-Dichloropropylene (542-75-6)				See 002								
19V. Ethylbenzene (100-41-4)				See 002								
20V. Methyl Bromide (74-83-9)				See 002								
21V. Methyl Chloride (74-87-3)				See 002								

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	b. NO. OF ANALYSES
					(1) CONCENTRATION	(2) MASS						
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)												
22V. Methylene Chloride (75-09-2)				See 0.02								
23V. 1,1,2,2-Tetrachloroethane (79-34-5)				See 0.02								
24V. Tetrachloroethylene (127-18-4)				See 0.02								
25V. Toluene (108-88-3)				See 0.02								
26V. 1,2-Trans-Dichloroethylene (156-60-5)				See 0.02								
27V. 1,1,1-Trichloroethane (71-55-6)				See 0.02								
28V. 1,1,2-Trichloroethane (79-00-5)				See 0.02								
29V. Trichloroethylene (79-01-6)				See 0.02								
30V. Trichlorofluoromethane (75-69-4)				See 0.02								
31V. Vinyl Chloride (75-01-4)				See 0.02								
GC/MS FRACTION - ACID COMPOUNDS												
1A. 2-Chlorophenol (95-57-8)				See 0.02								
2A. 2,4-Dichlorophenol (120-83-2)				See 0.02								
3A. 2,4-Dimethylphenol (105-67-9)				See 0.02								
4A. 4,6-Dinitro-O-Cresol (534-52-1)				See 0.02								
5A. 2,4-Dinitrophenol (51-28-5)				See 0.02								
6A. 2-Nitrophenol (88-75-5)				See 0.02								
7A. 4-Nitrophenol (100-02-7)				See 0.02								
8A. P-Chloro-M-Cresol (59-50-7)				See 0.02								
9A. Pentachlorophenol (87-86-5)				See 0.02								
10A. Phenol (108-95-2)				See 0.02								
11A. 2,4,6-Trichlorophenol (88-05-2)				See 0.02								

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CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
						(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS													
1B. Acenaphthene (83-32-8)				See 002									
2B. Acenaphthylene (208-96-8)				See 002									
3B. Anthracene (120-12-7)				See 002									
4B. Benzidine (92-87-5)				See 002									
5B. Benzo (a) Anthracene (56-55-3)				See 002									
6B. Benzo (a) Pyrene (50-32-8)				See 002									
7B. 3,4-Benzo-fluoranthene (205-99-2)				See 002									
8B. Benzo (ghi) Perylene (191-24-2)				See 002									
9B. Benzo (k) Fluoranthene (207-08-9)				See 002									
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)				See 002									
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)				See 002									
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)				See 002									
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)				See 002									
14B. 4-Bromophenyl Phenyl Ether (101-55-3)				See 002									
15B. Butyl Benzyl Phthalate (85-68-7)				See 002									
16B. 2-Chloronaphthalene (91-58-7)				See 002									
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)				See 002									
18B. Chrysene (218-01-9)				See 002									
19B. Dibenzo (a,h) Anthracene (53-70-3)				See 002									
20B. 1,2-Dichlorobenzene (95-50-1)				See 002									
21B. 1,3-Di-chlorobenzene (541-73-1)				See 002									

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1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE <i>(optional)</i>			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1)	b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
					CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS <i>(continued)</i>													
22B. 1,4-Dichlorobenzene (106-46-7)				See 002									
23B. 3,3-Dichlorobenzidine (91-84-1)				See 002									
24B. Diethyl Phthalate (84-66-2)				See 002									
25B. Dimethyl Phthalate (131-11-3)				See 002									
26B. Di-N-Butyl Phthalate (84-74-2)				See 002									
27B. 2,4-Dinitrotoluene (121-14-2)				See 002									
28B. 2,6-Dinitrotoluene (606-20-2)				See 002									
29B. Di-N-Octyl Phthalate (117-84-0)				See 002									
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)				See 002									
31B. Fluoranthene (206-44-0)				See 002									
32B. Fluorene (86-73-7)				See 002									
33B. Hexachlorobenzene (118-74-1)				See 002									
34B. Hexachlorobutadiene (87-68-3)				See 002									
35B. Hexachlorocyclopentadiene (77-47-4)				See 002									
36B. Hexachloroethane (67-72-1)				See 002									
37B. Indeno (1,2,3- <i>cd</i> ) Pyrene (193-39-5)				See 002									
38B. Isophorone (78-59-1)				See 002									
39B. Naphthalene (91-20-3)				See 002									
40B. Nitrobenzene (98-95-3)				See 002									
41B. N-Nitrosodimethylamine (62-75-9)				See 002									
42B. N-Nitrosodi-N-Propylamine (621-64-7)				See 002									

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CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)													
43B. N-Nitro-sodiphenylamine (86-30-6)				See 002									
44B. Phenanthrene (85-01-9)				See 002									
45B. Pyrene (129-00-0)				See 002									
46B. 1,2,4-Trichlorobenzene (120-82-1)				See 002									
GC/MS FRACTION – PESTICIDES													
1P. Aldrin (309-00-2)				See 002									
2P. α-BHC (319-84-6)				See 002									
3P. β-BHC (319-85-7)				See 002									
4P. γ-BHC (58-89-9)				See 002									
5P. δ-BHC (319-86-8)				See 002									
6P. Chlordane (57-74-9)				See 002									
7P. 4,4'-DDT (50-29-3)				See 002									
8P. 4,4'-DDE (72-55-9)				See 002									
9P. 4,4'-DDD (72-54-9)				See 002									
10P. Dieldrin (60-57-1)				See 002									
11P. α-Endosulfan (115-29-7)				See 002									
12P. β-Endosulfan (115-29-7)				See 002									
13P. Endosulfan Sulfate (1031-07-8)				See 002									
14P. Endrin (72-20-8)				See 002									
15P. Endrin Aldehyde (7421-93-4)				See 002									
16P. Heptachlor (76-44-8)				See 002									

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EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
WA0000281	001

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE	b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
GC/MS FRACTION - PESTICIDES (continued)														
17P. Heptachlor Epoxide (1024-57-3)				See 002										
18P. PCB-1242 (53469-21-9)				See 002										
19P. PCB-1254 (11097-69-1)				See 002										
20P. PCB-1221 (11104-28-2)				See 002										
21P. PCB-1232 (11141-16-5)				See 002										
22P. PCB-1248 (12672-29-6)				See 002										
23P. PCB-1260 (11096-82-5)				See 002										
24P. PCB-1016 (12674-11-2)				See 002										
25P. Toxaphene (8001-35-2)				See 002										



# EPA Form 2-C Supplemental Cooling Water Intake Structures

CWA §316(b) requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. EPA has promulgated rules for new facilities at 40 CFR 125 Subpart I and for existing facilities at 40 CFR 125 Subpart J. This form requests information from applicants using EPA Form 2-C to determine applicability of CWA 316(b) requirements and inform applicants of additional application requirements that may apply to the facility.

Facility Name: Emerald Kalama Chemical, LLC

NPDES Permit Number: WA0000281

## SECTION A. APPLICABILITY

☒ Yes ☐ No

Is there a cooling water intake associated with this facility? Cooling water intake means a structure withdrawing cooling water, for contact or noncontact cooling, from a surface water source. Withdrawal from groundwater or a public water system is not applicable. If No, STOP.

1. What is the design intake flow (in gallons per day)? 21,974,000 gpd
2. What percentage of the flow is used exclusively for cooling? 100%
3. What is the maximum intake velocity? 0.38 ft/sec at low river level
4. Describe the cooling water system (e.g., once-through, closed-cycle). Once-through non-contact system
5. Name the surface water body from which cooling water is withdrawn. Columbia River
6. Provide latitude/longitude of the cooling water intake(s) (NAD83/WGS84). 46.02139, -122.86111  
To ensure accurate locations provide at least 5 significant digits.
7. Describe the configuration of the intake(s) (e.g., dimensions, screen type). See JARPA – Water Intake and Outfall Line Maintenance  
If as-built plans and specifications are available, please provide.
8. When was the intake(s) installed, including any major modifications? Installed 1962; Modified January, 24, 2017
9. When was the intake(s) last inspected? If regular inspections are scheduled, provide frequency. Screens are inspected daily
10. Have there been any studies to determine the impact of the intake(s) on aquatic organisms (e.g., impingement/entrainment studies). ☒ Yes ☐ No  
If yes, please provide

See JARPA – Water Intake and Outfall Line Maintenance

\* Add new fence numbers, as needed for the following questions.

## SECTION B. APPLICATION REQUIREMENTS

CWA §316(b) requirements apply to all industrial NPDES permitted facilities with cooling water intake structures. EPA has promulgated best technology available (BTA) effluent guidelines for facilities meeting certain thresholds:

- Design intake flow greater than two million gallons per day.
- Greater than 25 percent of the water withdrawn is used for cooling purposes.

Submittal requirements for facilities subject to BTA effluent guidelines:

- New facilities must submit information specified in 40 CFR 122.21(r) and 40 CFR 125.86.
- Existing facilities must submit information specified in 40 CFR 122.21(r) and 40 CFR 125.95.

Facilities subject to BTA guidelines are encouraged to contact Ecology early in the application process. Ecology may consider this application administratively incomplete until the required information is received.

Submittal requirements for existing facilities and new facilities below BTA thresholds:

- Ecology will evaluate the information submitted with this form and may request additional information to assess the need for requirements under 40 CFR 125.90(b) or 40 CFR 125.80(c).


## **Disclaimer**

This is an updated PDF document that allows you to type your information directly into the form, print it, and save the completed form.

**Note:** This form can be viewed and saved only using Adobe Acrobat Reader version 7.0 or higher, or if you have the full Adobe Professional version.

**Instructions:**

1. Type in your information
2. Save file (if desired)
3. Print the completed form
4. Sign and date the printed copy
5. Mail it to the directed contact.

FORM <b>2F</b> NPDES		U.S. Environmental Protection Agency
		Washington, DC 20460
<b>Application for Permit to Discharge Storm Water          Discharges Associated with Industrial Activity</b>		

**Paperwork Reduction Act Notice**

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

### 1. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

For each Outfall, list the latitude and longitude of its location to the nearest 10 seconds and the name of the receiving water.							
A. Outfall Number (ifsf)	B. Latitude			C. Longitude			D. Receiving Water (name)
001	46.00	1.00	18.00	122.00	51.00	41.00	Columbia River
002	46.00	1.00	18.00	122.00	51.00	38.00	Outfall 001
003	46.00	1.00	24.00	122.00	51.00	17.00	Wetlands

## II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

[illegible]

B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

### III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.

Continued from the Front

#### IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
002	Approximately 500,000 square feet	Approximately 500,000 square feet	003	Approximately 105,600 square feet	Approximately 105,600 square feet

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

Contaminated or potentially contaminated stormwater that falls within the process areas is treated as process wastewater in the on-site wastewater treatment plant (NPDES Permit No. WA0000281) and is discharged through Outfall 002.

Uncontaminated stormwater from the containment basin for tanks T-70 and T-71 typically is pumped to the on-site wastewater treatment plant, treated along with process wastewater, and is discharged through Outfall 002. Uncontaminated stormwater can be discharged through Outfall 003 into an adjacent wetland area. The last discharge through Outfall 003 occurred in January 2002.

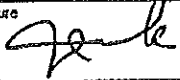
Stormwater discharged through Outfall 003 is required to be tested prior to discharge according to section S2 of the current NPDES permit.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
003	Structural and non-structural control measures for stormwater are outlined in the facility's existing Stormwater Pollution Prevention Plan (SWPPP).	3-E, 3-A, 3-C, 4-A

#### V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title (type or print) James Kern Director of GSC	Signature 	Date Signed 7/30/12
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B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

No discharge through Outfall 003 has occurred since January 2002. No recent testing data is available.

#### VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

There is no history of significant leaks or spills within the T-70 and T-71 containment basins.

Continued from Page 2

EPA ID Number (copy from Item 1 of Form 1)  
WA0000261**VII. Discharge Information**

A, B, C, & D See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.  
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis - Is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (list all such pollutants below)☒ No (go to Section IX)**VIII. Biological Toxicity Testing Data**

Do 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 3 years?

☐ Yes (list all such pollutants below)☒ No (go to Section IX)**IX. Contract Analysis Information**

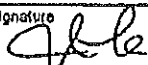
Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)☒ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

**X. Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (Type Or Print) Jarrod Kevin Director of GSC	B. Area Code and Phone No. 360-954-7032
C. Signature 	D. Date Signed 7/31/19



Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

EPA Form 3510-2F (1-92) Page VII-1 Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)
12/1/07	Approximately 4,320 minutes	5.01 inches	24 hours	Approx. 100 gpm	284,000 gallons

7. Provide a description of the method of flow measurement or estimate.

The volume of the containment basin for T-70 and T-71 has been calibrated. The measurement on the staff gauge can be converted into gallons using the calibration table for the containment basin.

## **Instructions – Form 2F Application for Permit to Discharge Storm Water Associated with Industrial Activity**

### **Who Must File Form 2F**

Form 2F must be completed by operators of facilities which discharge storm water associated with industrial activity or by operators of storm water discharges that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard.

Operators of discharges which are composed entirely of storm water must complete Form 2F (EPA Form 3510-2F) in conjunction with Form 1 (EPA Form 3510-1).

Operators of discharges of storm water which are combined with process wastewater (process wastewater is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater) must complete and submit Form 2F, Form 1, and Form 2C (EPA Form 3510-2C).

Operators of discharges of storm water which are combined with nonprocess wastewater (nonprocess wastewater includes noncontact cooling water and sanitary wastes which are not regulated by effluent guidelines or a new source performance standard, except discharges by educational, medical, or commercial chemical laboratories) must complete Form 1, Form 2F, and Form 2E (EPA Form 3510-2E).

Operators of new sources or new discharges of storm water associated with industrial activity which will be combined with other nonstormwater new sources or new discharges must submit Form 1, Form 2F, and Form 2D (EPA Form 3510-2D).

### **Where to File Applications**

The application forms should be sent to the EPA Regional Office which covers the State in which the facility is located. Form 2F must be used only when applying for permits in States where the NPDES permits program is administered by EPA. For facilities located in States which are approved to administer the NPDES permits program, the State environmental agency should be contacted for proper permit application forms and instructions.

Information on whether a particular program is administered by EPA or by a State agency can be obtained from your EPA Regional Office. Form 1, Table 1 of the "General Instructions" lists the addresses of EPA Regional Offices and the States within the jurisdiction of each Office.

### **Completeness**

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (for not applicable) to show that you considered the question.

### **Public Availability of Submitted Information**

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. Section 402(j) of the Clean Water Act requires that all permit applications will be available to the public. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form, Form 1, or Form 2C you may claim as confidential, but claims for information which are effluent data will be denied.

If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

### **Definitions**

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

### **EPA ID Number**

Fill in your EPA Identification Number at the top of each odd numbered page of Form 2F. You may copy this number directly from item I of Form 1.

**Item I**

You may use the map you provided for item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

**Item 11-A**

If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing the same information.

**Item 11-B**

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

**Item III**

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including:

each of its drainage and discharge structures;

the drainage area of each storm water outfall;

paved areas and building within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied;

each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste for less than 90 days under 40 CFR 262.34);

each well where fluids from the facility are injected underground; and

springs, and other surface water bodies which receive storm water discharges from the facility;

**Item IV-A**

For each outfall, provide an estimate of the area drained by the outfall which is covered by impervious surfaces. For the purpose of this application, impervious surfaces are surfaces where storm water runs off at rates that are significantly higher than background rates (e.g., predevelopment levels) and include paved areas, building roofs, parking lots, and roadways. Include an estimate of the total area (including all impervious and pervious areas) drained by each outfall. The site map required under item III can be used to estimate the total area drained by each outfall.

**Item IV-B**

Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored, or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of these materials; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. Significant materials should be identified by chemical name, form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101 (14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

**Item IV-C**

For each outfall, structural controls include structures which enclose material handling or storage areas, covering materials, berms, dikes, or diversion ditches around manufacturing, production, storage or treatment units, retention ponds, etc. Nonstructural controls include practices such as spill prevention plans, employee training, visual inspections, preventive maintenance, and housekeeping measures that are used to prevent or minimize the potential for releases of pollutants.

**Item V**

Provide a certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges which are not covered by an NPDES permit. Tests for such non-storm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. Part B must include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test. All non-storm water discharges must be identified in a Form 2C or Form 2E which must accompany this application (see beginning of instructions under section titled "Who Must File Form 2F" for a description of when Form 2C and Form 2E must be submitted).

**Item VI**

Provide a description of existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years.

**Item VII-A, B, and C**

These items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

**General Instructions**

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants addressed in Parts B and C, if you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge. For all other pollutants addressed in Parts B and C, you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. (See specific instructions on the form and below for Parts A through C.) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, material management practices, maintenance chemicals, history of spills and releases, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or similar effluent.

- A. Sampling:** The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or storm water discharges. You may contact EPA or your State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative, to the extent feasible, of your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge must be used (you are not required to analyze a flow-weighted composite for these parameters). For all other pollutants both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

A grab sample shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable), and a flow-weighted composite shall be taken for the entire event or for the first three hours of the event.

Grab and composite samples are defined as follows:

**Grab sample:** An individual sample of at least 100 milliliters collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge. This sample is to be analyzed separately from the composite sample.

**Flow-weighted Composite sample:** A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of fifteen minutes between aliquot collections. 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. Where GC/MS Volatile Organic Analysis (VOA) is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Data from samples taken in the past may be used, provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in storm water treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rainfall), protocols for collecting samples under 40 CFR Part 136, and additional time for submitting data on a case-by-case basis.

- B. Reporting:** All levels must be reported as concentration and mass (note: grab samples are reported in terms of concentration). You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages VII-1 and VII-2 if the separate sheets contain all the required information in a format which is constant with pages VII-1 and VII-2 in spacing and identification of pollutants and columns. Use the following abbreviations in the columns headed "Units."

Concentration		Mass	
ppm	parts per million	lbs	pounds
mg/l	milligrams per liter	ton	tons (English tons)
ppb	parts per billion	mg	milligrams
ug/l	micrograms per liter	g	grams
kg	kilograms	T	tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless:

- (1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or
- (2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- (3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA. If you measure only one grab sample and one flow-weighted composite

sample for a given outfall, complete only the "Maximum Values" columns and insert "1" into the "Number of Storm Events Sampled" column. The permitting authority may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outfall and those values are representative of your discharge, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Average Values" columns, and the total number of storm events sampled under the "Number of Storm Events Sampled" columns.

- C. Analysis:** You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission from your permitting authority to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the permitting authority, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

#### **Part VII-A**

Part VII-A must be completed by all applicants for all outfalls who must complete Form 2F.

Analyze a grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results except use only grab samples for pH and oil and grease. See discussion in General Instructions to Item VII for definitions of grab sample collected during the first thirty minutes of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

#### **Part VII B**

List all pollutants that are limited in an effluent guideline which the facility is subject to (see 40 CFR Subchapter N to determine which pollutants are limited in effluent guidelines) or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See discussion in General instructions to item VII for definitions of grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Analyze a grab sample collected during the first thirty minutes of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results, except as provided in the General Instructions.

#### **Part VII-C**

Part VII-C must be completed by all applicants for all outfalls which discharge storm water associated with industrial activity, or that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard. Use both a grab sample and a composite sample for all pollutants you analyze for in this part except use grab samples for residual chlorine and fecal coliform. The "Average Values" column is not compulsory but should be filled out if data are available. Part C requires you to address the pollutants in Table 2F-2, 2F-3, and 2F-4 for each outfall. Pollutants in each of these Tables are addressed differently.

**Table 2F-2:** For each outfall, list all pollutants in Table 2F-2 that you know or have reason to believe are discharged (except pollutants previously listed in Part VII-B). If a pollutant is limited in an effluent guideline limitation which the facility is subject to, the pollutant must be analyzed and reported in Part VII-B. If a pollutant in Table 2F-2 is indirectly limited by an effluent guideline limitation through an indicator (e.g., use of TSS as an indicator to control the discharge of iron and aluminum), you must analyze for it and report the data in Part VII-B. For other pollutants listed in Table 2F-2 (those not limited directly or indirectly by an effluent limitation guideline), that you know or have reason to believe are discharged, you must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

**Table 2F-3:** For each outfall, list all pollutants in Table 2F-3 that you know or have reason to believe are discharged. For every pollutant in Table 2F-3 expected to be discharged in concentrations of 10 ppb or greater, you must submit quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, you must submit quantitative data if any of these four pollutants is expected to be discharged in concentrations of 100 ppb or greater. For every pollutant expected to be discharged in concentrations less than 10 ppb (or 100 ppb for the four pollutants listed above), then you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

**Small Business Exemption** - If you are a "small business," you are exempt from the reporting requirements for the organic toxic pollutants listed in Table 2F-3. There are two ways in which you can qualify as a small business". 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. 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 which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intracorporate 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 in National Income and Product Accounts of the United States (Department of Commerce, Bureau of Economic Analysis).

**Table 2F-4:** For each outfall, list any pollutant in Table 2F-4 that you know or believe to be present in the discharge and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report them. Note: Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed at 40 CFR 177.21 or 40 CFR 302.4) may be exempted from the requirements of section 311 of 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 may be exempted if the origin, source, and amount of the discharged substances are identified in the NPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. To apply for an exclusion of the discharge of any hazardous substance from the requirements of section 311, attach additional sheets of paper to your form, setting forth the following information:

1. The substance and the amount of each substance which may be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment which is to be provided for the discharge by;
  - a. An onsite treatment system separate from any treatment system treating your normal discharge;
  - b. A treatment system designed to treat your normal discharge and which is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
  - c. Any combination of the above.

See 40 CFR 117.12(a)(2) and (c), published on August 29, 1979, in 44 FR 50766, or contact your Regional Office (Table I on Form 1, Instructions), for further information on exclusions from section 311.

#### **Part VII-D**

If sampling is conducted during more than one storm event, you only need to report the information requested in Part VII-D for the storm event(s) which resulted in any maximum pollutant concentration reported in Part VII-A, VII-B, or VII-C.

Provide flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, the method of flow measurement, or estimation. Provide the data and duration of the storm event(s) sampled, rainfall measurements, or estimates of the storm event which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.



#### **Part VII-E**

List any toxic pollutant listed in Tables 2F-2, 2F-3, or 2F-4 which you currently use or manufacture as an intermediate or final product or byproduct. In addition, if you know or have reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is discharged or if you use or manufacture 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 (Ronnell); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); then list TCDD. The Director may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

#### **Item VIII**

Self explanatory. The permitting authority may ask you to provide additional details after your application is received.

#### **Item X**

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(4) of the Clean Water Act provides that "Any person who knowingly makes any false material statement, representation, or certification in any application, . . . shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction of such person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both." 40 CFR Part 122.22 requires the certification to be signed as follows:

**(A) For a corporation:** by a responsible corporate official. For purposes of this section, a responsible corporate official means (i) 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 (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

**Note:** EPA does not require specific assignments or delegation of authority to responsible corporate officers identified in 122.22(a)(1)(i) The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate position under 122.22(a)(1)(ii) rather than to specific individuals.

**(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. For purposes of this section, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

**Table 2F-1  
Codes for Treatment Units**

**Physical Treatment Processes**

1-A	Ammonia Stripping	1-M	Grit Removal
1-B	Dialysis	1-N	Microstraining
1-C	Diatomaceous Earth Filtration	1-O	Mixing
1-D	Distillation	1-P	Moving Bed Filters
1-E	Electrodialysis	1-Q	Multimedia Filtration
1-F	Evaporation	1-R	Rapid Sand Filtration
1-G	Flocculation	1-S	Reverse Osmosis (Hyperfiltration)
1-H	Flotation	1-T	Screening
1-I	Foam Fractionation	1-U	Sedimentation (Setting)
1-J	Freezing	1-V	Slow Sand Filtration
1-K	Gas-Phase Separation	1-W	Solvent Extraction
1-L	Grinding (Comminutors)	1-X	Sorption

**Chemical Treatment Processes**

2-A	Carbon Adsorption	2-G	Disinfection (Ozone)
2-B	Chemical Oxidation	2-H	Disinfection (Other)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (Chlorine)	2-L	Reduction

**Biological Treatment Processes**

3-A	Activated Sludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application
3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filtration

**Other Processes**

4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection

**Sludge Treatment and Disposal Processes**

5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

**Table 2F-3**

**Toxic Pollutants**

**Toxic Pollutants and Total Phenol**

Antimony, Total  
Arsenic, Total  
Beryllium, Total  
Cadmium, Total  
Chromium, Total

Copper, Total  
Lead, Total  
Mercury, Total  
Nickel, Total  
Selenium, Total

Silver, Total  
Thallium, Total  
Zinc, Total  
Cyanide, Total  
Phenols, Total

**GC/MS Fraction Volatiles Compounds**

Acrolein  
Acrylonitrile  
Benzene  
Bromoform  
Carbon Tetrachloride  
Chlorobenzene  
Chlorodibromomethane  
Chloroethane  
2-Chloroethylvinyl Ether  
Chloroform

Dichlorobromomethane  
1,1-Dichloroethane  
1,2-Dichloroethane  
1,1-Dichloroethylene  
1,2-Dichloropropane  
1,3-Dichloropropylene  
Ethylbenzene  
Methyl Bromide  
Methyl Chloride  
Methylene Chloride

1,1,2,2-Tetrachloroethane  
Tetrachloroethylene  
Toluene  
1,2-Trans-Dichloroethylene  
1,1,1-Trichloroethane  
1,1,2-Trichloroethane  
Trichloroethylene  
Vinyl Chloride

**Acid Compounds**

2-Chlorophenol  
2,4-Dichlorophenol  
2,4-Dimethylphenol  
4,6-Dinitro-O-Cresol

2,4-Dinitrophenol  
2-Nitrophenol  
4-Nitrophenol  
p-Chloro-M-Cresol

Pentachlorophenol  
Phenol  
2,4,6-Trichlorophenol  
2-methyl-4,6 dinitrophenol

**Base/Neutral**

Acenaphthene  
Acenaphthylene  
Anthracene  
Benzidine  
Benzo(a)anthracene  
Benzo(a)pyrene  
3,4-Benzofluoranthene  
Benzo(ghi)perylene  
Benzo(k)fluoranthene  
Bis(2-chloroethoxy)methane  
Bis(2-chloroethyl)ether  
Bis(2-chloroisopropyl)ether  
Bis(2-ethylhexyl)phthalate  
4-Bromophenyl Phenyl Ether  
Butylbenzyl Phthalate

2-Chloronaphthalene  
4-Chlorophenyl Phenyl Ether  
Chrysene  
Dibenzo(a,h)anthracene  
1,2-Dichlorobenzene  
1,3-Dichlorobenzene  
1,4-Dichlorobenzene  
3,3'-Dichlorobenzidine  
Diethyl Phthalate  
Dimethyl Phthalate  
Di-N-Butyl Phthalate  
2,4-Dinitrotoluene  
2,6-Dinitrotoluene  
Di-N-Octylphthalate  
1,2-Diphenylhydrazine (as Azobenzene)

Fluoranthene  
Fluorene  
Hexachlorobenzene  
Hexachlorobutadiene  
Hexachloroethane  
Indeno(1,2,3-cd)pyrene  
Isophorone  
Naphthalene  
Nitrobenzene  
N-Nitrosodimethylamine  
N-Nitrosodi-N-Propylamine  
N-Nitrosodiphenylamine  
Phenanthrene  
Pyrene  
1,2,4-Trichlorobenzene

**Pesticides**

Aldrin  
Alpha-BHC  
Beta-BHC  
Gamma-BHC  
Delta-BHC  
Chlordane  
4,4'-DDT  
4,4'-DDE  
4,4'-DDD

Dieldrin  
Alpha-Endosulfan  
Beta-Endosulfan  
Endosulfan Sulfate  
Endrin  
Endrin Aldehyde  
Heptachlor  
Heptachlor Epoxide  
PCB-1242

PCB-1254  
PCB-1221  
PCB-1232  
PCB-1248  
PGB-1260  
PCB-1016  
Toxaphene

**Table 2F-4**

**Hazardous Substances**

**Toxic Pollutant**

Asbestos

**Hazardous Substances**

Acetaldehyde  
 Allyl alcohol  
 Allyl chloride  
 Amyl acetate  
 Aniline  
 Benzonitrile  
 Benzyl chloride  
 Butyl acetate  
 Butylamine  
 Carbaryl  
 Carbofuran  
 Carbon disulfide  
 Chlorpyrifos  
 Coumaphos  
  
 Cresol  
 Crotonaldehyde  
  
 Cyclohexane  
 2,4-D (2,4-Dichlorophenoxyacetic acid)  
 Diazinon  
 Dicamba  
 Dichlobenil  
 Dichlorone  
 2,2-Dichloropropionic acid  
 Dichlorvos  
 Diethyl amine  
 Dimethyl amine

Dinitrobenzene  
 Diquat  
 Disulfoton  
 Diuron  
 Epichlorohydrin  
 Ethion  
 Ethylene diamine  
 Ethylene dibromide  
 Formaldehyde  
 Furfural  
 Guthion  
 Isoprene  
 Isopropanolamine  
 Kelthane

Kepone  
 Malathion

Mercaptodimethur  
 Methoxychlor

Methyl mercaptan  
 Methyl methacrylate  
 Methyl parathion  
 Mevinphos  
 Mexacarbate  
 Monoethyl amine  
 Monomethyl amine  
 Naled

Napthenic acid  
 Nitrotoluene  
 Parathion  
 Phenolsulfonate  
 Phosgene  
 Propargite  
 Propylene oxide  
 Pyrethrins  
 Quinoline  
 Resorcinol  
 Stronthium  
 Strychnine  
 Styrene  
 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)  
 TDE (Tetrachlorodiphenyl ethane)  
 2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]  
 Trichlorofan  
 Triethylamine  
  
 Trimethylamine  
 Uranium  
 Vanadium  
 Vinyl acetate  
 Xylene  
 Xylenol  
 Zirconium