MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

APPLICATION FOR INDUSTRIAL WASTEWATER AND STORMWATER SITE-SPECIFIC STATE OPERATING PERMIT UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED

Note ►	Please read the accompanying instructions before completing this form. This form must be completed in full in order for the department to accept the application; this includes completion of Table 1 and/or Table 2. **In accordance with 40 CFR 122.21(e), the department cannot issue a permit until the complete application has been received.**

PART A – BASIC APPLICATION INFORMATION

1. This application is for:

☐ A new site-specific operating permit, formerly general permit #MOG _____
☐ An operating permit renewal: Please indicate permit # MO- _____ Expiration Date _____
☐ An operating permit modification: Please indicate permit # MO-_____ Modification Reason: _____

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee) ☐ YES ☐ NO ☐ N/A
If no, explain why you are not submitting the appropriate fee with this application.

2. FACILITY

NAME	TELEPHONE NUMBER	FAX	
ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE

3. OWNER

NAME	EMAIL ADDRESS	TELEPHONE NUMBER	FAX
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

3.1 Request review of draft permit prior to public notice? ☐ YES ☐ NO

4. CONTINUING AUTHORITY

NAME	EMAIL ADDRESS	TELEPHONE NUMBER	FAX
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

5. OPERATOR

NAME	CERTIFICATE NUMBER	TELEPHONE NUMBER	FAX

6. FACILITY CONTACT

NAME	TITLE	EMAIL ADDRESS	TELEPHONE NUMBER	FAX

7. BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

8. ADDITIONAL FACILITY INFORMATION

8.1 Legal description of outfalls. (Attach additional sheets if necessary.)

_____ _____¼ _____¼ Sec _____T _____R _____ _____ County
UTM Coordinates Easting (X): _____ Northing (Y):
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

_____ _____¼ _____¼ Sec _____T _____R _____ _____ County
UTM Coordinates Easting (X): Northing (Y):

_____ _____¼ _____¼ Sec _____T _____R _____ _____ County
UTM Coordinates Easting (X): Northing (Y):

_____ _____¼ _____¼ Sec _____T _____R _____ _____ County
UTM Coordinates Easting (X): Northing (Y):

8.2 For each outfall, list the name of the receiving water. (Attach additional sheets if necessary.)

OUTFALL NUMBER	RECEIVING WATER
# _____	_____
# _____	_____
# _____	_____
# _____	_____

8.3 Primary Standard Industrial Classification (SIC). (Attach additional sheets if necessary.)

OUTFALL NUMBER	PRIMARY SIC:	OTHER SIC:		
#_____	PRIMARY SIC:_____	OTHER SIC: _____	_____	_____
#_____	PRIMARY SIC:_____	OTHER SIC: _____	_____	_____
#_____	PRIMARY SIC:_____	OTHER SIC: _____	_____	_____
#_____	PRIMARY SIC:_____	OTHER SIC: _____	_____	_____

9. MAPS NECESSARY TO COMPLETE THIS APPLICATION

Attach a map or aerial photograph showing all outfalls and the receiving stream. If this facility includes stormwater outfalls, please indicate direction of stormwater runoff, acreage of impervious surface and total acreage associated with each drainage area.

END OF PART A. PLEASE CONTINUE TO PART B.

PART B – INDUSTRIAL PROCESS WASTEWATER AND STORMWATER

Note ►	ALL APPLICANTS MUST COMPLETE PART B OF THE APPLICATION. THIS SECTION APPLIES TO ALL INDUSTRIAL WASTEWATER AND STORMWATER DISCHARGES. DO NOT ATTEMPT TO COMPLETE THIS SECTION BEFORE READING THE ACCOMPANYING INSTRUCTIONS.

1. NARRATIVE DESCRIPTION OF POLLUTANT SOURCES

A. **FACILITY DESCRIPTION** - 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, public sewers 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. **INTAKE DESCRIPTION** - If the facility uses sources of water other than potable water supplied by a municipal or private water treatment facility and distribution system, provide a description of 1) The number of intakes; 2) The source of the water; 3) The method of intake (i.e. wells or river intake structure); 4) The maximum volume of water intake in gallons per day; 5) The average volume of water intake in gallons per day.

1. INTAKE FEATURE	2. SOURCE WATER	3. METHOD OF INTAKE	4. DESIGN FLOW	5. ACTUAL FLOW

C. **OUTFALL DESCRIPTION** - For each outfall, provide a description of 1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water and stormwater runoff; 2) A. The operation contributing flow; B. The maximum flow associated with each operation in gallons per day; and C. The average flow contributed by each operation in gallons per day; 3) A. The treatment received by the wastewater; and B. If applicable, the design flow of that treatment process in gallons per day. Continue on additional sheets if necessary.

1. OUTFALL NUMBER	2. OPERATION(S) CONTRIBUTING FLOW			3. TREATMENT	
	A. OPERATION	B. MAXIMUM FLOW	C. AVERAGE FLOW	A. DESCRIPTION	B. DESIGN FLOW

D. Except for stormwater runoff, leak or spills, are any of the discharges described in items A or B intermittent or seasonal?

☐ **YES** *(COMPLETE THE FOLLOWING TABLE)* ☐ **NO** *(GO TO SECTION 2.)*

1. OUTFALL NUMBER	2. OPERATION(S) CONTRIBUTING FLOW	3. FREQUENCY		4. FLOW				C. DURATION *(in days)*
				A. FLOW RATE *(in mgd)*		B. TOTAL VOLUME (specify with units)		
		A. DAYS PER WEEK *(specify average)*	B. MONTHS PER YEAR *(specify average)*	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

2. MAXIMUM PRODUCTION

A. Is your facility required to comply with effluent limitation guidelines promulgated by EPA under Section 304 of the Clean Water Act, which are expressed in terms of production (or other measures of operation)?

☐ **YES** *(COMPLETE B.)* ☐ **NO** *(GO TO SECTION 3.)*

B. If you answered "Yes" to item A. above, list the quantity that represents an actual measurement of the maximum level of production expressed in the terms and units used in the applicable effluent limitation guideline and indicate the affected outfall.

1. OUTFALL NUMBER	1. MAXIMUM QUANTITY		
	A. OPERATION, PRODUCT, MATERIAL, ETC.	B. QUANTITY PER DAY	C. UNITS OF MEASURE

3. IMPROVEMENTS

A. Are you currently required by any federal, state or local authority to meet any implementation schedule for constructing, upgrading or operating wastewater treatment equipment or practices or any other environmental programs that 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.

☐ **YES** *(COMPLETE THE FOLLOWING TABLE)* ☐ **NO** *(GO TO 4.)*

1. IDENTIFICATION OF CONDITION AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	Number	Source of discharge		A. REQUIRED	B. PROJECTED

B. Optional: You may attach information describing any additional water pollution control programs (or other environmental projects that may affect your discharge) currently underway or that you plan on completing within the next ten years. Provide the schedule for any additional improvements you include in this application.

☐ **MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.**

4. INTAKE AND EFFLUENT CHARACTERISTICS

Use the space below to list any of the pollutants you have reason to believe may be discharged from any outfall. Briefly describe the source of each pollutant and attach any analytical data you have for each pollutant (See Table A of Appendix A for a list of potential pollutants).

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

5. 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 waterbody in relation to your discharge within the last five years?

☐YES *(IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.)* ☐NO *(GO TO 6)*

6. CONTRACT ANALYSIS INFORMATION

If any of the analyses reported in this application or in Table 1 or Table 2 (see Part C below and the instructions for further information of Table 1 and Table 2) were performed by a contract laboratory or consulting firm, please provide the name, address and telephone number for that laboratory or consulting firm and indicate the pollutant analyzed by each entity.

A. NAME	B. ADDRESS	C. TELEPHONE	D. POLLUTANTS ANALYZED *(LIST)*

END OF PART B. PLEASE CONTINUE TO PART C.

PART C – EXPANDED EFFLUENT TESTING

1. TABLE 1 – PRIMARY INDUSTRY PROCESS WASTEWATER ONLY

If you are classified as a Primary Industry, you must complete Table 1 for each outfall discharging industrial process wastewater or industrial process wastewater mixed with stormwater.
Table 1 can be found in the instructions at the end of this document. Please see the instructions for details on completing the expanded effluent testing table.

2. TABLE 2 – NONPRIMARY INDUSTRY PROCESS WASTEWATER AND STORMWATER ASSOCIATED WITH EITHER PRIMARY OR NONPRIMARY INDUSTRY

If you are not classified as a Primary Industry, then you must complete Table 2 for each outfall discharging industrial process wastewater or industrial process wastewater mixed with stormwater.

OR

If you are classified as a Primary Industry, you must complete Table 2 for each outfall discharging only stormwater.
Table 2 can be found at the end of this document. Please see the instructions for details on completing the expanded effluent testing table.

PART D – CERTIFICATION OF APPLICATION INFORMATION

1. SIGNATURE OF CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information contained in the application and all attachments, and that to the best of my knowledge and based on my inquiry of those individuals immediately responsible for obtaining the information, believe the information to be true, accurate and complete. If granted the permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions. I understand my right to an appeal of a permit issuance or permit denial under the Missouri Clean Water Law to the Missouri Clean Water Commission. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE
SIGNATURE (SEE INSTRUCTIONS)	DATE SIGNED

END OF PART D. PLEASE CONTINUE TO PART E.

PART E – APPLICATION CONTENTS LIST		
Note ►	**PLEASE ENSURE THE PROPER APPLICATION INFORMATION LISTED BELOW IS INCLUDED IN THE SUBMITTAL.**	
A.	Have you included a map or aerial photograph required by Part A, item 9?	YES ☐ NO ☐
B.	Have you included a flow diagram of the facility required by Part B, item 1.A?	YES ☐ NO ☐
C.	Have you completed Table 1 required by Part C, item 1? All Primary Industry must complete Table 1 of this application. Table 1 can be found in the instructions at the end of this document. (See instructions before proceeding and for a list of Primary Industry).	YES ☐ NO ☐
D.	Have you completed Table 2 required by Part C, item 2? All applicants not considered Primary Industry or for any stormwater outfalls, whether you are or are not classified as a Primary Industry must complete Table 2 of this application. Table 2 can be found at the end of this document. (See instructions before proceeding).	YES ☐ NO ☐
E.	Did you sign the application in Part C, item 1?	YES ☐ NO ☐
F.	Did you include the appropriate permit application fee? (See instructions for fees information)	YES ☐ NO ☐
G.	Is wastewater land applied? If yes, complete Form I. Form I can be found on the department's website: dnr.mo.gov/forms/780-1686-f.pdf	YES ☐ NO ☐
H.	Is sludge, biosolids, ash or residuals land applied? If yes, complete Form R. Form R can be found on the department's website: dnr.mo.gov/forms/780-1684-f.pdf	YES ☐ NO ☐
I.	Will you be conducting underground injection of any substances at this facility? If yes, please contact the Water Protection Program at 573-751-1300.	YES ☐ NO ☐
J.	Are additional pages included to complete certain items listed in the application for which there was no space for in those sections of the application?	YES ☐ NO ☐
END OF PART E. END OF APPLICATION.		

780-2583 (03-16)

BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.

Submittal of an incomplete application may result in the application being returned.

INSTRUCTIONS FOR COMPLETING THE APPLICATION FOR INDUSTRIAL WASTEWATER AND STORMWATER SITE-SPECIFIC OPERATING PERMIT

IMPORTANT: All blanks must be filled in when the application is submitted to the Missouri Department of Natural Resources' Water Protection Program. The form must be signed as indicated. This application is to be completed by industrial facilities planning to discharge or land-apply industrial process wastewater or industrial stormwater. Industries required to obtain permits for industrial stormwater are listed by Standard Industrial Classification (SIC) code in the regulations [10 CSR 20-6.200].
Include any facility with possibility of discharge, even if normally there is no discharge. If this form is not adequate to describe the existing operation, then sufficient information should be attached so that an evaluation of the discharge can be made. **IN ACCORDANCE WITH 40 CFR 122.21(e), THE DEPARTMENT CANNOT ISSUE A PERMIT UNTIL THE COMPLETE APPLICATION HAS BEEN RECEIVED.**

Part 402(k) of the federal Clean Water Act requires the permittee submit site-specific information regarding the facility in the application in order to be protected by the permit shield. The permit shield ensures the permittee that compliance with the NPDES permit, known as a Missouri State Operating Permit, is in compliance with the Clean Water Act. Every field in a NPDES permit application must be completed in order for the facility to be protected under the permit shield. Full disclosure of the presence or absence of specific pollutants is necessary to draft an appropriate site-specific permit. You can read more about the permit shield at www.epa.gov/npdes/pubs/owm0131.pdf.

Only pollutants documented in the application for this permit, or pollutants considered by the department to be common constituents of the wastewater from this type of facility can be authorized for discharge. The department also requires the applicant to collect a representative sample and submit the results when applying for issuance or renewal of an NPDES permit.

This completed form, along with the applicable permit fees, should be submitted to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176. Submittal of an incomplete application may result in the application being returned. If there are any questions concerning this form, contact the appropriate Department of Natural Resources' regional office or Water Protection Program at 573-751-1300. A map of the department's regional offices with addresses and phone numbers can be viewed online at dnr.mo.gov/regions.

Incomplete permit applications or related engineering documents will be returned by the department if they are not completed in the timeframe established in a comment letter from the department to the owner. Permit fees for returned applications shall be forfeited. Permit fees for applications being processed by the department that are withdrawn by the applicant shall be forfeited.

PART A – BASIC APPLICATION INFORMATION

1. Check the option that is applicable. **Do not check more than one item.** Industrial and stormwater site-specific operating permits refer to permits issued by the department for all nondomestic wastewater treatment facilities, including all industry and stormwater that do not qualify for a general discharge permit (MO-G) or general stormwater permit (MO-R) and that do not require a construction permit. **This includes all nondomestic wastewater treatment facilities that incorporate domestic wastewater into the operating permit.**

1.1 OPERATING PERMIT FEES - **If the application is for a site-specific permit renewal, send no fees.** You will be invoiced separately by the department. Applications for new permits or modifications must be accompanied by the fee specified below.

- A. Industrial Process Flows
  - i. Categorical Facilities. (Discharges covered by section 644.052.4 RSMo) (Please see the U.S. Environmental Protection Agency's Effluent Limitations Guidelines for a listing of categorical industry: water.epa.gov/scitech/wastetech/guide/industry.cfm).
    - a. $4,200 for a design flow under 1 million gallons per day (MGD)
    - b. $5,000 for a design flow of 1 MGD or more
  - ii. Noncategorical Facilities. (Discharges covered by section 644.052.5 RSMo).
    - a. $1,800 for a design flow under 1 MGD
    - b. $3,000 for a design flow of 1 MGD or more
- B. Industrial Stormwater Flows
  - i. Categorical Facilities. (Discharges covered by section 644.052.4 RSMo) (Please see the U.S. Environmental Protection Agency's Effluent Limitations Guidelines for a listing of categorical industry: water.epa.gov/scitech/wastetech/guide/industry.cfm).
    - a. $1,800 for a design flow under 1 million gallons per day (MGD)
    - b. $2,800 for a design flow of 1 MGD or more
  - ii. Non-Categorical Facilities. (Discharges covered by section 644.052.5 RSMo).
    - a. $1,800 for a design flow under 1 MGD
    - b. $3,000 for a design flow of 1 MGD or more

OPERATING PERMIT MODIFICATIONS are subject to the following fees:

- A. Major Modifications - 25 percent of annual fee.
- B. Minor Modifications (in accordance with 40 CFR 122.63, including transfers) - $100

2. Facility - Provide the name and the physical address of this facility. Example: Southwest Sewage Treatment Plant, Country Club Mobile Home Park, etc. Also include the street address or location of the facility. If the facility lacks a street name or route number, give the names of the closest intersection, highway, county road, etc.

3. Owner - Provide the legal name and address of owner.

3.1 Prior to submitting a permit to public notice, the department shall provide the permit applicant 15 days to review the draft permit. In the interest of expediting permit issuance, permit applicants may waive the opportunity to review draft permits prior to public notice. Check YES to review the draft permit prior to public notice. Please include the name and email address of the individual

that should receive the draft permit under 6. Facility Contact. Check NO to waive the process and expedite the permit. You will still have the opportunity to comment during the 30-day public notice period prior to issuance.

4. Continuing Authority - Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the facility. The regulatory requirement regarding continuing authority is available at www.sos.mo.gov/adrules/csr/current/10csr/10c20-6.pdf or contact the appropriate department regional office for more information.

5. Operator – If facility is operated by a certified operator, provide the name, certificate number and telephone number of the person operating the facility. If facility is not operated by a certified operator, you may include the individual responsible for ensuring compliance with Missouri Clean Water Law or you may leave this space blank.

6. Facility Contact - Provide the name, title and work telephone number of a person who is thoroughly familiar with the operation of the facility and the facts reported in this application and who can be contacted by the department.

7. Facility Description - Provide a narrative description of the nature of your business. Attach additional sheets if necessary.

8. Additional facility information.

8.1 An outfall is the point at which wastewater or stormwater is discharged. Outfalls should be identified in terms of the legal description of the facility. Global Positioning System (GPS) is a satellite-based navigation system. Submit coordinates obtained by GPS at the outfall pipe discharge point. If access to a GPS receiver is not available, please use a mapping system to approximate the coordinates; the department's mapping system is available at www.dnr.mo.gov/internetmapviewer/.

8.2 Receiving Water – the name of the stream to which the discharge is directed and any subsequent tributary until a continuous flowing stream is reached.

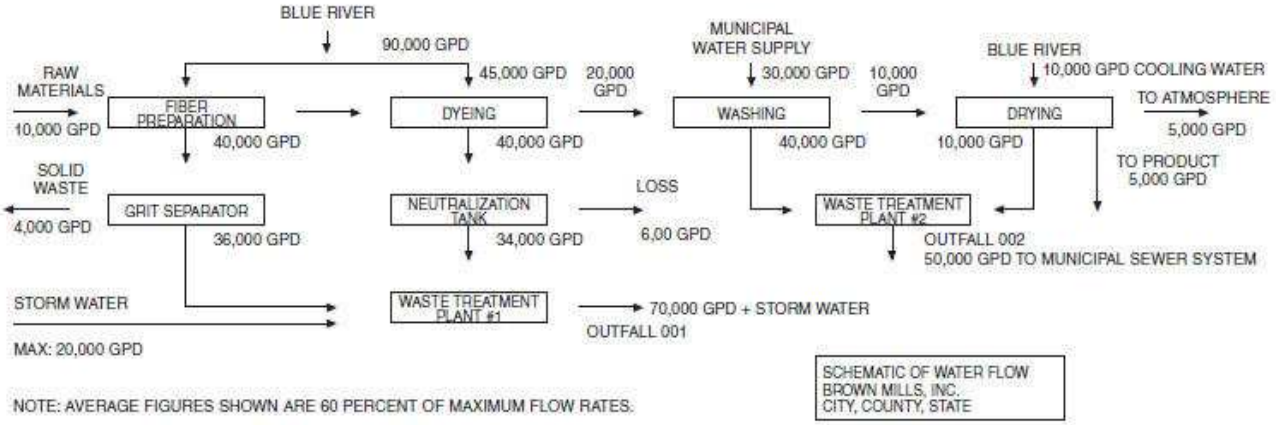
8.3 List your primary Standard Industrial Classification (SIC) code for each outfall. If multiple SIC codes apply, please include the next three most applicable codes. The SIC system was devised by the U.S. Office of Management and Budget to cover all economic activities (www.whitehouse.gov/omb/fedreg_naicsfr1/). The primary SIC code should be based on the operation that generates the most revenue. Please visit the following website to search for the correct SIC code associated with the industrial activity: www.osha.gov/pls/imis/sicsearch.html or contact the appropriate department regional office.

9. A map or aerial photograph must be submitted with the permit application showing all outfalls and the receiving stream. This can be a map or aerial photograph found on an internet browser, the department's map viewer at www.dnr.mo.gov/internetmapviewer/. If this facility contains stormwater outfalls, please indicate the direction of the stormwater runoff, which outfall that runoff flows to, area of impervious surface in acres that drain to each outfall, and the total acreage associated with each drainage area or outfall.

PART B – INDUSTRIAL PROCESS WASTEWATER AND STORMWATER

1. Narrative Description of Pollutant Sources

A. FACILITY DESCRIPTION - The line drawing should show the route taken by water in your facility from intake to discharge. Show all operations contributing to 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. The water balance should show design, average and maximum flows. Show all significant losses of water to products, to the atmosphere, discharge and public sewer systems. You should use actual measurements whenever available; otherwise, use your best estimate. An example of an acceptable line drawing appears below.



B. INTAKE DESCRIPTION - All facilities using source water other than potable water supplied by a municipal or private water treatment facility and distribution system, must provide a description of 1. The number of intakes; 2. The source of the water; 3. The method of intake (i.e. wells or river intake structure); 4. The design flow of water intake in gallons per day in accordance with 40 CFR 125.92(g); and 5. The actual flow of water intake in gallons per day in accordance with 40 CFR 125.92(a).

C. OUTFALL DESCRIPTION - List all sources of wastewater to each outfall. Operations may be described in general terms (for example, "dye-making reactor" or "distillation tower.") Please include the maximum flow in gallons per day (GPD) or million gallons per day (MGD) that can be contributed from each source, as well as the average flow in GPD or MGD. The technology used to treat the wastewater should be listed along with the design flow for each treatment unit in GPD or MGD. For stormwater, you must use the 10 year, 24-hour storm event to calculate the design flow. The department will accept any reasonable method used to derive the stormwater design flow of a facility or outfall. For an example of an

applicable method, please review the Rational Method Equation: www.lmnoeng.com/Hydrology/rational.php. The Rational Method Equation is the simplest method to determine peak discharge from drainage areas; however, other methods can be used. Submit the method information and calculation used to derive the stormwater design flows. The department utilizes the 10 year, 24-hour storm event for developing permit conditions. This information can be found at the following website: www.nws.noaa.gov/oh/hdsc/PF_documents/TechnicalPaper_No40.pdf. Provide the design flow of each treatment unit. Treatment units should be listed in order of wastewater or stormwater flow from intake to discharge.

D. Indicate whether any discharges are seasonal or intermittent. A discharge is intermittent if it does not flow continuously during the operating hours of the facility. This does not include temporary shutdowns for maintenance, process changes or other similar activities that cause flow to stop during that period. 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. Report the average of all daily values for flow rate and total volume measured during days when discharge occurred within the last year in the "Long Term Average" columns.

2. Maximum Production

A. All effluent limitation 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 operation contributing process wastewater in any subcategory covered by Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT), or Best Available Technology Economically Achievable (BAT) guidelines. If you are unsure whether you are covered by a promulgated effluent limitation guideline, check with your department's regional office or search the following EPA website for your industrial activity: water.epa.gov/scitech/wastetech/guide/industry.cfm. You must check yes if an applicable effluent limitation guideline has been promulgated, even if the guideline limitations are being contested in court. If you believe that a promulgated effluent limitation guideline has been remanded for reconsideration by a court and does not apply to your operations, you may check no.

B. An effluent limitation guideline is expressed in terms of production (or other measure of operation) if the limitations are 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.

If you checked "Yes" to item A, then you must fill out the table. The production information requested here is necessary to apply effluent limitation guidelines to your facility and you may not 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 limitation guideline. The figures provided must be a measure of actual operation over a one month period, such as the production for the highest month during the last 12 months, or the monthly average production for the highest year of the last five years, or other reasonable measure of actual operation, but may not be based on design capacity or on predictions of future increases in operation.

3. Improvements

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

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

4. Intake and Effluent Characteristics

List any pollutants in Table A of Appendix A or any other pollutant not listed in the application or instructions that you believe to be present and explain why you believe them to be present in the space provided. No analysis is required, but if you have the analytical data, you must submit it with the application.

5. Biological Toxicity Testing Data

If you have conducted any biological testing of the discharge, such as Whole Effluent Toxicity (WET) Tests, please provide information and results of that test. Additional information may be requested by the department.

6. Please provide the information on the laboratory used to conduct analyses on the parameters listed in the application and Table 1 or Table 2.

PART C – EXPANDED EFFLUENT TESTING

1. Table 1

If you are a Primary Industry, complete Table 1 for each outfall discharging process wastewater or process wastewater combined with stormwater.

You are considered a Primary Industry if are classified as one of the following:

Adhesives and sealants	Inorganic chemicals manufacturing	Photographic equipment and supplies
Aluminum forming	Iron and steel manufacturing	Plastic and synthetic materials mfg.
Auto and other laundries	Leather tanning and finishing	Plastic processing
Battery manufacturing	Mechanical products manufacturing	Porcelain enameling
Coal mining	Nonferrous metals manufacturing	Printing and publishing
Coil coating	Ore mining	Pulp and paperboard mills
Copper forming	Organic chemicals manufacturing	Rubber processing
Electric and electronic compounds	Paint and ink formulation	Soap and detergent manufacturing
Electroplating	Pesticides	Steam electric power plants
Explosives manufacturing	Petroleum refining	Textile mills
Foundries	Pharmaceutical preparations	Timber products
Gum and wood chemicals		

These tables require you to collect and report data on the pollutants discharged from each of your outfalls. Each section of the tables addresses a different set of pollutants and must be completed in accordance with the specific instructions for that section.

For Publically Owned Treatment Works (POTWs) only - In accordance with 40 CFR 122.21(j)(4)(vi), all POTWs must provide data from a minimum of three samples taken within 4 ½ years prior to the date of the permit application. This means that every parameter listed by the applicant in Part B item 4, and all parameters required to be sampled in Table 1, must contain the analytical test results from three separate effluent samples.

In accordance with 40 CFR 403.3(q), POTWs are treatment works, as defined by section 212 of the Clean Water Act, owned by a state or municipality. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant. The term also means the municipality as defined in section 502(4) of the act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

DETAILED INSTRUCTIONS FOR COMPLETING TABLE 1

GENERAL INSTRUCTIONS - Part A requires you to report at least one analysis for each pollutant. Part B requires you to mark “X” in either the “Testing Required” column, “Believe Present” column or the “Believe Absent” column (column 2A, 2B or 2C in Part B) based on your best estimate, and test for those which you believe to be present. For some pollutants, you may be required to mark “X” in the “Testing Required” column (column 2-A) 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. Please see Table B of Appendix A for a list of required pollutants based on your industrial activity. For all others, you must mark “X” in either the “Believe Present” column or the “Believe Absent” column (column 2-B or 2-C) based on your best estimate, and test for those you believe to be present.

Base your determination that a pollutant is present in or absent from the discharge on your knowledge of the raw materials, maintenance chemicals, intermediate products, final products, byproducts and any previous analyses known to you of the effluent or of any 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.

REPORTING - All levels must be reported as concentration or as total mass. You may report required data by attaching separate sheets of paper instead of filling out Table 2 if the separate sheets contain all the required information listed in Table 2. (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 4).

CONCENTRATION

ppm……..parts per million
mg/L……..milligrams per liter
ppb……...parts per billion
µg/L……..micrograms per liter

MASS

lbs……pounds
ton……..tons (English tons)
mg……....milligrams
g……grams
kg……....kilograms
T…….tonnes (metric tons)

If you measure only one daily value, complete only the “Maximum Daily Values” columns and insert “1” into the “Number of Analyses” columns (columns 3-A and 3-D). The department may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one daily value for a pollutant, determine the average of all values within the last year and report the concentration and mass under the “Long Term Average Values” column (column 3-B), and the total number of daily values under the “Number of Analyses” columns (column 3-C).

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 the appropriate department regional office 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 that 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 industrial wastewater discharges, composite samples must be collected for all parameters except those requiring grab samples in accordance with the applicable test method. For stormwater discharges, grab samples must be collected for all parameters.

Grab and composite samples are defined as follows:

> GRAB SAMPLES - An individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
>
> COMPOSITE SAMPLE - For the purposes of this application, a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. 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.

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 times, preservation techniques and the quality control measures which you used.

In accordance with 40 CFR 122.21(e)(3), the test method chosen for each pollutant must be sufficiently sensitive. In order for the method to be considered sufficiently sensitive, one of the following three criteria must be met by that method: 1) the method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured pollutant. These water quality criteria can be found in 10 CSR 20-7 (s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf); 2) the method ML is above the applicable water quality criterion, but the amount of the pollutant in the discharge sample is high enough that the method detects and quantifies the level of that pollutant; 3) the method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapter N or O for the measured pollutant. If you have question regarding sufficiently sensitive or whether your method qualifies as sufficiently sensitive, please contact the appropriate regional office.

If you have two or more substantially identical outfalls, you may request permission from the department 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 department, on a separate sheet attached to the application form, identify which outfall you did test and describe why the outfalls you did not test are substantially identical to the outfall you did test.

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. National Pollutant Discharge Elimination System (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 attach a separate sheet containing the following for each pollutant:

1. A statement that the intake water is drawn from the body of water into which the discharge is made. (Otherwise, you are not eligible for net limitations.)

2. A statement of the extent to which the level of the pollutant is reduced by treatment of your wastewater. (Your limitations will be adjusted only to the extent that the pollutant is not removed.)

3. When applicable, a demonstration of the extent to which the pollutant in the intake vary physically, chemically or biologically from the pollutants contained in your discharge. For example, when the pollutant represents a class of compounds. Your limitations will be adjusted only to the extent that the intake pollutants do not vary from the discharged pollutants.

SPECIFIC INSTRUCTIONS - Table B of Appendix A lists the 34 “primary” industry categories in the left-hand column. For each outfall, if any of your processes that contribute wastewater falls into one of those categories, you must mark “X” in “Testing Required” column (column 2-A) of Part B and test for: 1) All of the toxic metals, cyanide and total phenols; and 2) The organic toxic pollutants contained in the gas chromotography/mass spectrometry (GS/MS) fractions indicated in Table B as applicable to your category, unless you qualify as a small business (see below). For example, the Organic Chemicals

Industry has an “X” in all four fractions; therefore, applicants in this category must test for all organic toxic pollutants listed in Table 1.

For all other cases (nonprocess wastewater outfalls and nonrequired GC/MS fractions), you must mark “X” in either the “Believe Present” column (column 2-B) or the “Believe Absent” column (column 2-C) for each pollutant, and test for those you believe present. If you qualify as a small business (see below) you are exempt from testing for the organic toxic pollutants, listed in Table B. For pollutants in intake water, see discussion above. The “Long Term Average Values” column (column 5-A) are not compulsory but should be filled out if data is available.

You are required to mark “Testing Required” for dioxin if you use or manufacture one of the following compounds:

1. 2,4,5-trichlorophenocy acetic acid (2,4,5-T);
2. 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP);
3. 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon;
4. O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel);
5. Hexachlorophene (HCP).

If you mark “Testing Required” or “Believe Present,” you must perform a screening analysis for dioxins, using gas chromatography with an electron capture detector. A dioxin standard for quantification is not required. Describe the results of this analysis in the space provided; for example, “no measurable baseline deflection at the retention time of dioxin” or “a measurable peak within the tolerances of the retention time of dioxin.” 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 facilities for the pollutants listed in Table B of Appendix A in the course of its BAT guidelines development program. If your effluents were sampled and analyzed as part of this program in the last three years, you may use this data to complete the table upon department approval, 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 in Table 2. In accordance with 40 CFR 122.21(g)(8), to be considered a small business you must meet one of the two following criteria: 1. For coal mines, a probable total annual production of less than 100,000 tons per year; 2. For all other applicants, gross total annual sales averaging less than $100,000 per year (in second quarter 1980 dollars).

If you qualify for the first criteria listed above, you must submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR Section 795.14(c)) instead of conducting analysis for the organic toxic pollutants. If you qualify for the second criteria listed above, you must submit sales data for those years instead of conducting analyses for the organic toxic pollutants.

The production or sales data must be for the facility that is the source of the discharge. The data should include all production or sales for the process or processes at your facility, not just for the process or processes which contribute to the discharge. For sales data, in situations involving intra-corporate transfers 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: www.bea.gov/national/).

IMPORTANT NOTICE: If Table 1 is not completed in full, meaning if the sections for Conventional and Nonconventional Pollutants, Metals and Total Phenols, Dioxin, Radioactivity and all applicable parameters from the GC/MS sections do not contain sample results for each parameter listed in those sections and if the other sections of the GC/MS sections that are not application do not contain an “X” in the “Believe Absent” column, **THIS APPLICATION WILL BE CONSIDERED INCOMPLETE**. The department will **NOT PROCESS** the application **UNTIL THE COMPLETE APPLICATION** has been submitted.

2. Table 2

If you are not a Primary Industry, complete Table 2 for each outfall discharging process wastewater or process wastewater combined with stormwater. If you are classified as a Primary Industry, you must complete Table 2 for each outfall discharging only stormwater. For any stormwater outfalls, you must also submit EPA Form 2F.

DETAILED INSTRUCTIONS FOR COMPLETING TABLE 2

GENERAL INSTRUCTIONS - Part A requires you to report at least one analysis for each pollutant. Part B requires you to mark “X” in either the “Believe Present” column or the “Believe Absent” column (column 2A or 2B in Part B) based on your best estimate, and test for those which you believe to be present.

Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or of any similar effluent. (For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated storm water 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.

REPORTING - All levels must be reported as a concentration or as total mass. You may report some or all of the required data by attaching separate sheets of paper. Use the following abbreviations in the columns headed “Units” (column 3 in Part A, or column 4 in Part B).

CONCENTRATION
ppm……..parts per million
mg/L……..milligrams per liter
ppb……....parts per billion
µg/L……..micrograms per liter

MASS
lbs……..……pounds
ton……..tons (English tons)
mg……....milligrams
g……grams
kg……....kilograms
T……..…...tonnes (metric tons)

If you measure only one daily value, complete only the “Maximum Daily Values” columns and insert “1” into the “Number of Analyses” columns (columns 2C and 4B, Part A, and columns 3C and 5B, Part B). The Missouri Department of Natural Resources may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one daily value for a pollutant, determine the average of all values within the last year and report the concentration and mass under the “Long Term Average Values” columns (column 2B and 4A in Part A, or column 3B and 5A in Part B), and the total number of daily values under the “Number of Analyses” columns (columns 2C and 4B, Part A, and columns 3C and 5B, Part 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 the appropriate department regional office 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 industrial wastewater discharges, composite samples must be collected for all parameters except those requiring grab samples in accordance with the applicable test method. For stormwater discharges, grab samples must be collected for all parameters.

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 eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. 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.

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 times, preservation techniques and the quality control measures which you used.

In accordance with 40 CFR 122.21(e)(3), the test method chosen for each pollutant must be sufficiently sensitive. In order for the method to be considered sufficiently sensitive, one of the following three criteria must be met by that method: 1) the method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured pollutant. These water quality criteria can be found in 10 CSR 20-7 (s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf); 2) the method ML is above the applicable water quality criterion, but the amount of the pollutant in the discharge sample is high enough that the method detects and quantifies the level of that pollutant; 3) the method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapter N or O for the measured pollutant. If you have question regarding sufficiently sensitive or whether your method qualifies as sufficiently sensitive, please contact the appropriate regional office.

If you have two or more substantially identical outfalls, you may request permission from the Missouri Department of Natural Resources 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 Missouri Department of Natural Resources, 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.

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. National Pollutant Discharge Elimination System (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 attach a separate sheet containing the following for each pollutant:

> A. A statement that the intake water is drawn from the body of water into which the discharge is made. (Otherwise, you are not eligible for net limitations.)

B. A statement of the extent to which the level of the pollutant is reduced by treatment of your wastewater. (Your limitations will be adjusted only to the extent that the pollutant is not removed.)

C. When applicable, a demonstration of the extent to which the pollutants in the intake vary physically, chemically, or biologically from the pollutants contained in your discharge: For example, when the pollutant represents a class of compounds. Your limitations will be adjusted only to the extent that the intake pollutants do not vary from the discharged pollutants.

IMPORTANT NOTICE: If Part A and Part B of Table 2 are not completed in full, meaning if Part A does not contain sample results for each parameter listed and if Part B does not contain an "X" in either column indicating "Believe Present" or "Believe Absent", with sample results for each parameter believed present, **THIS APPLICATION WILL BE CONSIDERED INCOMPLETE**. The department will **NOT PROCESS** the application **UNTIL THE COMPLETE APPLICATION** has been submitted.

PART D – CERTIFICATION OF APPLICATION INFORMATION

1. Signature of Certification
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 no more $10,000 or by imprisonment for not more than six months, or both."

All applications must be signed as follows and the signature must be original.

A. For a corporation, by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters.
B. For a partnership or sole proprietorship, by a general partner or the proprietor.
C. For a municipal, state, federal or other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.

PART E - APPLICATION CONTENTS LIST

A. Self explanatory. See Part A, item 9 instructions for more information.

B. Self explanatory. See Part B, item 1.A instructions for more information.

C. If your facility is classified as a Primary Industry, you must complete Table 1. Please see the Expanded Effluent Testing section below for further details. Table 1 can be found online at www.dnr.mo.gov/forms/780-2581-f.pdf.

D. If your discharge is process wastewater not classified as a Primary Industry, you must complete Table 2. Table 2 must also be completed for all stormwater discharges whether you are or are not a Primary Industry. Please see the Expanded Effluent Testing section below for further details. Table 2 can be found online at www.dnr.mo.gov/forms/780-2582-f.pdf.

E. Self explanatory. See Part C, item 1 instructions for more information.

F. Self explanatory. See Part A, item 1.1 instructions for more information.

G. If you answer yes, you must complete and include Form I with this application. The Form I can be found at the department's website: dnr.mo.gov/forms/index.html#WaterPollution.

H. If you answer yes, you must complete and include Form R with this application. The Form R can be found at the department's website: dnr.mo.gov/forms/index.html#WaterPollution.

I. If you answer yes, you must complete and include Form R with this application. The Form R can be found at the department's website: dnr.mo.gov/forms/index.html#WaterPollution.

J. If you are planning to conduct underground injection activities, please contact the Water Protection Program at (573) 751-1300 prior to commencing any activity. Additional information regarding this proposed activity must be submitted to the Water Protection Program and the Missouri Geological Survey. For further information regarding underground injection control (UIC) requirements, please review EPA's website: http://water.epa.gov/type/groundwater/uic/index.cfm.

K. Self explanatory. Attach additional sheets as needed.

APPENDICES

Appendix A

TABLE A – TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT

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-ethylyhexyl)phthalate
4-Bromophenyl Phenyl Ether

Base/Neutral (continued)

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-Octyphthalate
1,2-Diphenylhydrazine (as Azobenzene)
Fluroranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Napthalene
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

Toxic Pollutant

Asbestos

Hazardous Substances

Acetaldehyde
Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumaphos
Cresol
Crotonaldehyde
2,4-D (2,4-Dichloro-Phenoxyacetic acid)
Diazinon
Dicamba
Dichlobenil
2,2-Dichloropropionic acid
Dichlorvos
Diethylamine
Dimethylamine
Dintrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine
Kelthane
Kepone
Malathion
Mercaptodimethur
Methoxychlor
Methyl mercaptan
Methyl parathion
Mevinphos
Mexacarbate
Monethyl amine
Monomethyl amine
Nalad
Napthenic acid
Nitrotoluene
Parathion
Phenolsulfonate
Phosgene

TABLE A – TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT (continued)

Hazardous Substances (continued)	**Other Pollutants Found in 10 CSR 20-7.031 Table A That Are Not Listed Above (continued)**	**Other Pollutants Found in 10 CSR 20-7.031 Table A That Are Not Listed Above (continued)**
Propargite	Butylate	Mirex
Propylene oxide	Carboxin	Nitroguanidine
Pyrethrins	1,2-cis-dichloroethylene	n-nitrosopyrrolidene
Quinoline	Chloramben	o-chlorotoluene
Resorcinol	Dalapon	Other Dichlorobenzenes
Strontium	DCPA (dacthal)	Oxamyl (vydate)
Strychnine	Demeton	Paraquat
Styrene	di (2-ethylhexyl) adipate	p-chlorotoluene
2, 4, 5-T (2,4,5-Trichloro-phenoxyacetic acid)	Dibromochloropropane	pentachlorobenzene
TDE (Tetrachlorodiphenyl ethane)	Dichlorodifluoromethane	Picloram
2, 4, 5-TP [2-(2,4,5-Trichloro-phenoxy) propanoic acid]	Dichloropropene	p-nitrophenol
Trichlorofon	Diisopropyl methylphosphonate	Pronamide
Triethanolamine	Dimethyl methylphosphonate	Propachlor
Triethaylamine	Dinoseb	Propazine
Uranium	Diphenamid	Propham
Vanadium	Diphenylamine	Simazine
Vinyl acetate		Tebuthiuron
Xylene	1,3-dinitrobenzene	Terbacil
Xylenol	1,4-dithiane	Terbufos
Zirconium	Endothall	Trichlorofluoromethane
	Fenamiphos	Trifluralin
Other Pollutants Found in 10 CSR 20-7.031 Table A That Are Not Listed Above	Fluometron	Trihalomethanes
Alachlor	Fluorotrichloromethane	Trinitroglycerol
Ametryn	Fonofos	Trinitrotoluene
Atrazine	Glyphosate	1,1,1,2-Tetrachloroethane
Baygon	Hexachlorocyclopentadiene	1,2,3-trichloropropane
Bentazon	Hexazinone	1,2,4,5-tetrachlorobenzene
Bis (chloromethyl) ether	Maleic hydrazide	2,3,7,8-tetrachlorodibenzo-p-dioxin (ng/L)* (TCDD or dioxin)
Bromacil	MCPA	1,2,4-trichlorobenzene
Bromochloromethane	Metolachlor	2,4,5-trichlorophenol
Bromomethane	Metribuzin	

Appendix A (continued)

TABLE B – TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY				
INDUSTRIAL CATEGORY	**GC/MS FRACTION**			
	VOLATILE	**ACID**	**BASE/NEUTRAL**	**PESTICIDES**
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	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 mfg.	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	X	X	X	X

1 The pollutants in each fraction are listed in Item 1.30

X = Testing required
- = Testing not required