IOWA DEPARTMENT OF NATURAL RESOURCES - NPDES PERMIT APPLICATION
FORM 30, PART D - INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All Municipal Treatment Works Must Complete Part D.

Facility Name _____ Permit Number _____

1. Pretreatment Program

Does the facility have an approved pretreatment program (All facilities with a design ADW flow of greater than or equal to 5MGD are required to have a pretreatment program.) ☐ No ☐ Yes

If yes, provide the date the pretreatment program was approved: _____

2. Number of Industrial Users

Provide the number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs) that discharge to the facility.

a. Number of non-categorical SIUs _____
b. Number of CIUs _____
c. Total Number of SIUs (a plus b). _____

Supply the following information for each SIU. If more than one SIU discharges to the facility, copy questions 3 through 5 and provide the information for each SIU. Facilities that answered "Yes" to question 1 do not have to complete questions 3 through 5; proceed to questions 6 and 7. If there are no known SIUs, proceed to question 6. Note: all facilities with SIUs must complete question 7.

3. SIU Information

Name of SIU: _____

Provide a copy of the current Treatment Agreement for the Significant Industrial User.

4. Categorical Standards

Indicate whether the SIU is subject to the following:

a. Local Limits ☐ No ☐ Yes
b. Categorical pretreatment standards ☐ No ☐ Yes

If subject to categorical pretreatment standards, which category and subcategory?

Category: _____ Subcategory: _____

5. Problems at Facility Caused by SIU

Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the facility in the past three years?

☐ No ☐ Yes If yes, describe each episode:

6. RCRA/CERCLA Hazardous Waste/Wastewater

a. Does the facility receive, or has it in the past four years received, RCRA hazardous waste by truck, rail, or dedicated pipeline? ☐ No ☐ Yes

i. Method by which RCRA waste is received (check all that apply)

☐ Truck ☐ Rail ☐ Dedicated Pipe

ii. Give the EPA hazardous waste number and amount (volume or mass) and specify the units:

EPA Hazardous Waste Number	Amount	Units

b. Does the facility receive, or has it been notified that it will receive, CERCLA (Superfund) wastewater, RCRA remediation/corrective action wastewater, or other remedial activity wastewater? ☐ No ☐ Yes

i. Describe the site and type of facility at which the CERCLA/RCRA or other remedial waste originates (or is expected to originate in the next five years).

ii. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. Attach additional sheets as necessary.

iii. Is this waste treated (or will it be treated) prior to entering the facility? ☐ No ☐ Yes

If yes, describe the treatment, and provide information about the removal efficiency.

iv. Is the discharge to the facility (or will the discharge be) continuous or intermittent?

☐ Continuous ☐ Intermittent

If the discharge is intermittent, describe the discharge schedule:

7. Effluent Sampling for Facilities with SIUs.

Facility Name _____ Permit Number _____

Any facility with a design flow of <u>less than 1.0 MGD</u> that has one or more significant industrial users must provide effluent testing data for each of the following pollutants. Provide the indicated effluent testing information for each active outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods, and as specified in 567 IAC Chapter 63. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed. Effluent testing data must be no more than four years old. Please note, facilities with a design flow greater than 1.0 MGD do not have to complete question 7.

Outfall Number: _____

If more than one effluent sampling event is conducted, report averages and maximums. For a single sampling event, use the maximum columns.

Pollutant (Metals, Total Recoverable)	Maximum Daily Discharge				Average Daily Discharge				Number of Samples	Analytical Method	Reporting Level ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units			
Cadmium											
Chromium											
Copper											
Lead											
Nickel											
Silver											
Zinc											
Cyanide*											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

*Grab samples should be taken for these compounds only. Please refer to the instructions for further explanation.

FORM 30, PART D - INSTRUCTIONS

All municipal facilities must complete Part D. A "categorical industrial user" (CIU) is an industrial user subject to Categorical Pretreatment Standards in the Code of Federal Regulations (CFR) at 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N, which are technology-based standards that set industry-specific effluent limits. (Industrial Categories subject to Categorical Pretreatment Standards are listed in Appendix A).

A "significant industrial user" (SIU), which includes both categorical (CIU) and non-categorical industrial users, is defined in the Iowa Administrative Rules (IAC) at 567 IAC Chapter 60 as an industrial user of a Publicly-Owned Treatment Works (POTW) that meets any one of the following conditions:

a. Discharges an average of 25,000 gallons per day or more of process wastewater excluding sanitary, noncontact cooling and boiler blowdown wastewater;
b. Contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW;
c. Is subject to Categorical Pretreatment Standards under the Code of Federal Regulations; or
d. Is designated by the department as a significant industrial user on the basis that the contributing industry, either singly or in combination with other contributing industries, has a reasonable potential for adversely affecting the operation of or effluent quality from the POTW or for violating any pretreatment standards or requirements.

An "industrial user" means any industrial or commercial entity that discharges wastewater that is not domestic wastewater, and it includes both CIUs and non-categorical SIUs. Domestic wastewater includes wastewater from connections to houses, hotels, non-industrial office buildings, institutions, or sanitary waste from industrial facilities. The number of industrial users is the total number of industrial and commercial users that discharge to the facility. For this application, provide information on non-categorical SIUs and categorical industrial users separately.

1. **Pretreatment Program -** Indicate whether the facility has an approved pretreatment program, which is a program administered by a POTW that meets the criteria established in 40 CFR 403.8 and 403.9 and that has been approved by the Iowa DNR. Note: if the facility has a pretreatment program, also complete Parts B and C of the permit application.

2. **Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs) -** Provide the number of non-categorical SIUs, the number of CIUs, and the total number of SIUs (non-categorical SIUs plus CIUs) that discharge to the facility. <u>All facilities that receive discharges from SIUs and do not have an approved pretreatment program must complete questions 3 through 5. If your facility receives wastewater from more than one SIU, complete questions 3 through 5 once for each SIU (make additional copies of page 1 as needed).</u>

3. **Significant Industrial User Information -** Provide the name of each SIU and attach a current Treatment Agreement for each SIU. Treatment Agreements must be on DNR Form 542-3221, available at http://www.iowadnr.gov.

4. **Categorical Standards -** Indicate whether the SIU is subject to local limits and/or categorical standards. "Local limits" are enforceable local requirements developed by a municipality to address Federal, state, and local regulations. "Categorical standards" are technology-based standards developed by EPA that set industry-specific effluent limits, located at 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N. If the SIU is subject to categorical standards, indicate the category and subcategory.

5. **Problems at the Facility Attributed to Waste Discharged by the SIU -** Provide information concerning any problems at your facility that are attributable to discharges from SIUs. Problems may include upsets or interference at the plant, corrosion in the collection system, or other similar events in the past three years.

6. **RCRA/CERCLA Hazardous Waste/Wastewater -** Indicate whether your facility receives hazardous waste under the Resource Conservation and Recovery Act (RCRA) program, wastewater covered under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), RCRA remediation/corrective action

wastewater, or other remedial activity wastewater. If the answer to either a or b is yes, complete the appropriate section. EPA Region VII manages the RCRA/CERCLA program in Iowa. Contact EPA Region VII at the Air, RCRA and Toxics Division (ARTD), RCRA Enforcement State Programs Branch (RESP), 11201 Renner Blvd., Lenexa, KS 66219, phone 913-551-7673, for further information.

7. **Effluent Sampling for Facilities with SIUs -** All municipal facility that have one or more SIUs and have a design average wet weather (AWW) flow of less than 1 MGD must provide data for each of the pollutants in Section 7. All samples analyzed must be representative of the discharge from the sampled outfall.

Complete question 7 once for each active outfall through which effluent is discharged to surface waters. Active outfalls include discharges for controlled discharge lagoons, but do not include discharges that occur less than once every five years**.** If the facility has more than one active outfall, make additional copies of page 3 and indicate on each page the outfall number for which the data are provided. Using the blank rows provided, submit any data the facility may have for pollutants not specifically listed in question 7. Note that additional testing may be required on a case-by-case basis.

Sampling data must be representative of the facilities' discharge. All data provided in the application must be based on samples taken within four years prior to the date of submittal of this application. If you have existing data that is less than four years old, you may use that data in lieu of conducting additional sampling. If you measure more than the required number of daily values for a pollutant, include them in the data you report.

A person experienced in performing wastewater sampling should supervise the collection of samples for the reported analyses. Specific requirements contained in the applicable analytical methods, including Chapter 63 of the Iowa Administrative Code, should be followed for sample containers, sample preservation, holding times, and collection of duplicate samples. Samples should be taken at a time representative of normal operation. To the extent feasible, all processes that contribute to wastewater should be in operation and the treatment system should be 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 location specified in the current NPDES permit, or at any location adequate for the collection of a representative sample.

Total Recoverable Metals. Total recoverable metals are measured from unfiltered samples using EPA methods specified in 40 CFR Part 136.3. A digestion procedure is used to solubilize suspended materials and destroy possible organic metal complexes. The method measures dissolved metals plus those metals recovered from suspended particles by the method digestion.

One grab sample must be collected for each scan for cyanide. For all other pollutants, one 24-hour composite sample must be collected for each scan. A minimum of one grab sample, instead of a 24-hour composite, may be taken for effluent from waste stabilization (controlled discharge) lagoons. Grab and composite samples are defined as follows:

Grab sample: a representative, discrete portion of the sewage, industrial waste, other waste, surface water, or groundwater taken without regard to flow rate.

24-Hour Composite sample:

i. For facilities where no significant industrial waste is present, a sample made by collecting a minimum of 6 grab samples taken 4 hours apart and combined in proportion to the flow rate at the time each grab sample was collected. (Generally, grab samples should be collected at 8 am, 12 pm (noon), 4 pm, 8 pm, 12 am (midnight), and 4 am on weekdays (Monday - Friday) unless local conditions indicate another more appropriate time for sample collection).
ii. For facilities where significant industrial waste is present, a sample made by collecting a minimum of 12 grab samples taken 2 hours apart and combined in proportion to flow rate at the time each grab sample was collected. (Generally, grab samples should be collected at 8 am, 10 am, 12 pm (noon), 2 pm, 4 pm, 6 pm, 8 pm, 10 pm, 12 am (midnight), 2 am, 4 am, and 6 am on weekdays (Monday - Friday) unless local conditions indicate a more appropriate time for sample collection).

iii. An automatic composite sampling device may also be used for collection of flow proportioned or time proportioned composite samples.

The Iowa DNR or EPA may allow or establish site-specific sampling procedures or requirements, including sampling locations, sampling seasons, the duration between sampling events, and sample collection protocols under 40 CFR Part 136. Contact the permit writer for guidance on sampling techniques and for answers to specific questions. The following instructions explain how to complete each of the columns in the pollutant tables in Section 7.

Maximum Daily Discharge. For composite samples taken with a composite sampling device, the daily discharge is the average pollutant concentration and total mass found in a composite sample taken over a 24-hour period. For a series of grab samples, the daily discharge is the arithmetic or flow-weighted total mass or average pollutant concentration found in a series of six grab samples (or four grab samples for VOCs) taken during the operating hours of the facility during a 24-hour period. Treat non-detect values as zero (0) when calculating an arithmetic mean. For a single grab sample, the daily discharge is the total mass or pollutant concentration found in the sample analysis.

To determine the maximum daily discharge values, compare the daily discharge values from each of the sample events. Report the highest total mass and highest concentration level from these samples.

i. "Concentration" is the amount of pollutant that is present in a sample with respect to the size of the sample. The daily discharge concentration is the average concentration of the pollutant throughout the 24-hour period.
ii. "Mass" is calculated as the total mass of the pollutant discharged over the 24-hour period.
iii. All data must be reported as both concentration and mass (where appropriate). Use the following abbreviations in the columns headed "Units".

mg - milligrams	mg/l - milligrams per liter	µg/l - micrograms per liter	g - grams
ppm - parts per million	ppb - parts per billion	su - standard units	kg - kilograms
gpd - gallons per day	MGD - million gallons per day	lbs - pounds ton (English ton)	T - tons (metric tons)

Average Daily Discharge. The average daily discharge is determined by calculating the arithmetic mean of the daily pollutant concentration and the arithmetic mean of the daily total mass of the pollutant from each of the sample events within the four years prior to this permit application. Treat non-detect values as zero (0) when calculating an arithmetic mean. Report the concentration, mass, and units used under the "Average Daily Discharge" column, along with the number of samples on which the average is based. Use the unit abbreviations shown above in "Maximum Daily Discharge". If data requested in Part B have been reported on the facilities' Discharge Monitoring Reports (DMRs), you may compile such data and report it under the average and maximum daily discharge columns.

Analytical Method. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods and 567 IAC Chapter 63. Applicants should use methods that enable pollutant detection at levels adequate to meet water quality-based standards. Where no approved method can detect a pollutant at the water quality-based standards level, use the most sensitive approved method. If you believe that an alternative method should be used (e.g., due to matrix interference), obtain prior approval from the permit writer. If an alternative method is specified in the existing permit, use that method unless otherwise directed by the permit writer. Where no approved analytical method exists, you may use a suitable method but you must provide a description of the method. For the purposes of the application, "suitable method" means a method that is sufficiently sensitive to measure as close to the water quality-based standard as possible.

Indicate the method used for each pollutant in the "Analytical Method" column. If a method has not been approved for a pollutant for which you are providing data, you may use a suitable method to measure the concentration of the pollutant in the discharge and provide a detailed description of the method used or a reference to the published method. In such cases, indicate the method used and attach a narrative description of the method that includes the sample holding time, preservation techniques, and the quality control measures used.

Reporting Levels. Provide the method detection limit (MDL), minimum level (ML), or other designated method endpoint reflecting the precision of the analytical method used. Report all analytical results using the actual numeric values

determined by the analysis. In other words, even where analytical results are below the detection or quantitation level of the method used, the actual data should be reported, rather than reporting “non-detect” (“ND”) or “zero” (“0”). Because the endpoint of the method has also been reported along with the test results, the permit writer will be able to determine if the data are in the “non-detect” or “below quantitation” range.

For any dilutions made and any problems encountered in the analysis, attach an explanation and any supporting documentation. For GC/MS, report all results found to be present by spectral confirmation (i.e., quantitation limits or detection limits should not be used as a reporting threshold for GC/MS).

Appendix A - Industrial Categories Subject to National Categorical Pretreatment Standards

Industrial Categories with Pretreatment Standards in Effect
(Reference 567 IAC Chapter 62 and the Code of Federal Regulations, Chapter 40)

Adhesives and Sealants Industry
Airport De-icing
Aluminum Forming
Asbestos Manufacturing
Battery Manufacturing
Builder's Paper and Board Mills
Canned and preserved fruits and vegetables processing
Canned and preserved seafood processing
Carbon Black Manufacturing
Cement Manufacturing
Centralized Waste Treatment
Coal Mining
Coil Coating
Concentrated Animal Feeding Operations (CAFO)
Construction and Development
Concentrated Aquatic Animal Production
Concrete Products
Copper Forming
Dairy Products Processing
Electrical and Electronic Components
Electroplating
Explosives Manufacturing
Ferroalloy Manufacturing
Fertilizer Manufacturing
Glass Manufacturing
Grain Mills Manufacturing
Gum and Wood Chemicals
Hospital
Industrial Laundries
Ink Formulating
Inorganic Chemicals Manufacturing
Iron and Steel Manufacturing
Landfills
Leather Tanning and Finishing
Meat and Poultry Products
Metal Finishing
Metal Molding and Castings
Metal Products and Machinery
Mineral Mining and Processing
Nonferrous Metals Forming and Metal Powders
Nonferrous Metals Manufacturing
Oil and Gas Extraction
Ore Mining and Dressing
Organic Chemicals, Plastics, and Synthetic Fibers
Paint Formulating
Paving and Roofing Materials (Tars and Asphalt)
Pesticide Chemicals
Petroleum Refining
Pharmaceutical Manufacturing
Phosphate Manufacturing
Photographic
Plastic Molding and Forming
Porcelain Enameling
Printing and Publishing
Pulp, Paper and Paperboard
Rubber Manufacturing
Shore Receptor and Bulk Terminals
Soap and Detergent Manufacturing
Steam Electric Power Generating
Sugar Processing
Textile Mills
Timber Products Processing
Transportation Equipment Cleaning
Waste Combustors