Idaho Pollutant Discharge Elimination System

Industrial (Non-POTW) Individual Permit Application Instructions

New or Existing Dischargers of Nonprocess Wastewater
(Adapted from EPA Form 2E)

State of Idaho
Department of Environmental Quality
Water Quality Division
1410 N. Hilton
Boise, ID 83706

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Table of Contents

List of Tables

Abbreviations and Acronyms

§	section (usually a section of federal or state rules or statutes)
BOD	biochemical oxygen demand
CFR	Code of Federal Regulations
COD	chemical oxygen demand
DEQ	Idaho Department of Environmental Quality
E. coli	*Escherichia coli*
EPA	United States Environmental Protection Agency
IDAPA	Idaho Administrative Procedures Act; refers to citations of Idaho administrative rules
IPDES	Idaho Pollutant Discharge Elimination System
NPDES	National Pollutant Discharge Elimination System
TOC	total organic carbon
TRC	total residual chlorine

General Information

Who Must Apply

Industrial (non-POTW) dischargers that are new or existing sources of nonprocess wastewater must complete this application for an Idaho Pollutant Discharge Elimination System (IPDES) individual permit. For the IPDES program and requirements of this application, the term industrial includes discharges from new or existing manufacturing, commercial, mining (not including small suction dredge), or silvicultural, or drinking water treatment operations (public and private) which are not regulated by effluent limit guidelines or new source performance standards.

Tribal Lands

The Idaho Department of Environmental Quality (DEQ) does not issue IPDES discharge permits for industrial facilities located in/within the limits of Indian Country, defined as:

> Indian Country (IDAPA 58.01.25.010.43).
>
> a. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
>
> b. All dependent Indian communities within the borders of the United States, whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of the state; and
>
> c. All Indian allotments, the Indian titles to which have not been extinguished including rights-of-way running through the same.

If the industrial facility is located in Indian Country, contact the United States Environmental Protection Agency (EPA) about submitting a National Pollutant Discharge Elimination System (NPDES) permit application.

When to Apply

For an existing industrial facility, submit a renewal application at least 240 days (180 days by rule + 60 days for DEQ review = 240 days) before the permit's expiration date to provide DEQ adequate time for completeness determination. Complete applications must be submitted at least 180 days before the present permit expires; however, DEQ is allowed 60 days to determine if the application is complete. Failure to submit an application within the time frame may result in an expired permit. Applications for complex permits with multiple discharge points may require even more time to ensure application completeness. IPDES permit conditions will identify the date by which permit applicants must submit a reapplication.

For a new industrial facility, submit an application at least 210 days (180 days by rule + 30 days for DEQ review = 210 days) before the anticipated discharge date to provide DEQ adequate time for completeness determination. Complete applications must be submitted at least 180 days

before the date on which the discharge is to commence; however, DEQ is allowed 30 days to determine if the application is complete. New dischargers must not discharge before receiving an issued permit.

DEQ will consider your application complete when the application and any supplementary material are received and completed according to DEQ's satisfaction.

Fees for Industrial Facilities

Industrial facilities are charged an annual fee based on their IPDES Permit Rating Worksheet score[1]:

- $4,000 for minor facilities (score less than 80)
- $13,000 for major facilities (score equal to or greater than 80)

DEQ assesses annual fees on or before July 1 of each year, and payments are due on or before October 1 of each year.

DEQ reviews and updates each industrial facility's permit rating status during the permit development process and defines an industrial major facility in IDAPA 58.01.25.010.51.b as:

> A non-municipal facility that equals or exceeds the eighty (80) point accumulation as described in the Score Summary of the NPDES Non-Municipal Permit Rating Work Sheet (June 27, 1990) or the Department equivalent guidance document.

Industrial permits are not subject to an application fee.

Submitted Information Available to Public

IPDES permit application information is available for public review, upon request. Information **required** by Idaho rules and supporting an individual permit application cannot be held confidential. If you believe some information is a trade secret or should be held confidential, DEQ requires that each page of a document or item describing the confidential information contain language such as *trade secret*, *proprietary*, or *confidential*.

Completing Required Application Information

This IPDES application for industrial facilities that are new or existing sources of nonprocess wastewater is divided into sections I–VII, including effluent monitoring tables.

If you do not enter information in a required field, an error is highlighted on the application screen. If you do not have the information, enter ***9999*** into the required field or select ***Not Available/Applicable*** from the dropdown option, which continues the application process and indicates to permitting staff that you do not have the required information. If this option is not available, contact the IPDES program for assistance.

[1] Idaho Department of Environmental Quality. 2017. *User's Guide to Permitting and Compliance Volume 1– General Information, Appendix B*. Boise, ID: DEQ. *www.deq.idaho.gov/media/60178999/ipdes-user-guide-ipdes-permitting-compliance-0816.pdf*

New ~~and~~ or Existing ~~Sources and~~ Dischargers of Nonprocess Wastewater

Are you a new ~~source or~~ discharger (e.g., you are not currently covered under an existing NPDES/IPDES permit? If *Yes*, you will be automatically directed to complete the application for new dischargers. If *No*, you will be automatically directed to complete the application for existing dischargers. Required field.

Industrial Facility Permit

Select the type of industrial ~~facility~~operation: Select the type of operation to be permitted from the list provided. If the operation type is not on the list, select *Other* and describe the operation type in the box. Required field.

I. Outfall Locations

Identify the outfall number, latitude, longitude, and the receiving water in the table below. Click the location link to identify the outfall location on the map, which will auto-populate the latitude and longitude in decimal degrees. Follow this link to DEQ's Interactive Map for help identifying the receiving water: https://mapcase.deq.idaho.gov/wq2012/. Applicants identify the outfall number and specific location using the interactive map or by entering the known coordinates in decimal degrees to four or more decimal places. If the facility discharges through more than one outfall, use the *Add Additional Outfall* link to provide this information for each outfall. You must also identify the name of the receiving water to which the activity discharges. For example, if the discharge is into a canal that flows into an unnamed tributary, which in turn flows into a named river, provide the name or description (if no name is available) of the canal, tributary, and the river. For assistance identifying the receiving waters, use DEQ's online interactive map or contact IPDES staff. Required field.

II. Discharge Date (New Dischargers Only)

The date you expect to begin discharging: For new discharges, provide your best estimate of the date on which the facility or outfall will begin to discharge. For existing discharges, the date discharge originally commenced. Required field.

III. Type of Waste

A. Check the boxes indicating the general types of wastes discharged. Indicate the general types of wastes to be discharged by selecting the appropriate boxes. If *Other Nonprocess Wastewater* is marked, describe the type of waste. Required field.

B. Are cooling water additives used? If *Yes*, list the cooling additives below and describe their composition if that information is available. The composition of cooling water additives may be found on product labels or from manufacturer's safety data sheets. Required field.

IV. Effluent Characteristics

General Instructions

The items in Part IV require you to collect and report data on the pollutants discharged from each outfall. The following general instructions on reporting, sampling, analysis, and reporting of intake data apply to the entire Part IV.

Reporting—All levels must be reported as concentration and total mass (except for discharge flow, pH, and temperature). Total mass is the total weight of pollutants discharged over a day.

If you measure only one daily value, complete only the *Maximum Daily Value* columns and insert one (1) into the *Number of Analyses* columns. DEQ may require you to conduct additional analyses to further characterize the 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 represent the waste stream, report them. Describe the method of testing and data analysis. Determine the average of all values within the last year and report the concentration and mass under the *Long-Term Average Value* columns and the total number of daily values under the *Number of Analyses*. Determine the average of all daily values taken during each calendar month, and report the highest average under the *Maximum 30-Day Value* columns.

Sampling—Sample collection for the reported analyses should be supervised by a person experienced in performing industrial wastewater sampling. Contact DEQ for detailed guidance on sampling techniques or specific requirements. Follow the specific requirements contained in the applicable analytical methods for sample containers, sample preservation, holding times, and duplicate sample collection. The sample time should represent the facility's normal operation, to the extent feasible, with all processes that contribute wastewater in normal operation and with the treatment system operating properly with no system upsets. Collect samples from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for collecting a representative sample.

Use grab samples for pH, temperature, total residual chlorine, oil and grease, and *Escherichia coli* (*E. coli)* or fecal coliform. For all other pollutants, follow the composite sample definitions below. However, take a minimum of one grab sample for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours. DEQ may waive composite sampling for any outfall for which you demonstrate that using an automatic sampler is infeasible and a minimum of four grab samples represents the discharge.

Grab and composite samples are defined as:

- 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. 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 previous aliquot was collected. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis, combine aliquots in the laboratory immediately before analysis. Collect four (rather than eight) aliquots or grab samples during actual hours of discharge over a 24-hour period. The samples do not need to be flow proportioned. Only one volatile organic analysis is required.

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

- All data requirements are met
- Sampling was done no more than three years before submission
- All data represent the present discharge

Factors that would cause the data to be unrepresentative include:

- Significant changes in production level
- Changes in raw materials, processes, or final products
- Changes in wastewater treatment

For two or more substantially identical outfalls, request permission from DEQ to sample, analyze, and submit the results for only one outfall to represent the substantially identical outfalls. If DEQ grants your request, identify which outfall was tested, and describe why the outfall not tested is substantially identical to the outfall that was tested. Include this information in Part VII.

Analysis—Use test methods promulgated in 40 CFR 136; however, if none have been promulgated for a particular pollutant, use any suitable method for measuring the level of the pollutant in the discharge provided that you submit a description of the method or a reference to a published method. In the description, include the sample holding time, preservation techniques, and the quality control measures used.

When EPA promulgates new analytical methods in 40 CFR 136, EPA will provide information describing when to use the new methods to generate data on your discharges. DEQ may request additional information, including current quantitative data, if necessary, to assess the discharges.

Reporting Intake Data—Reporting data under the *Intake* columns is not required unless demonstrating eligibility for a net effluent limit for one or more pollutants (i.e., an effluent limit adjusted by subtracting the average level of the pollutants present in the intake water). To demonstrate eligibility, under the *Intake* columns, report the average of the results of analyses on the intake water (if the water is treated before use, test the water after it is treated), and discuss the requirements for a net limit with DEQ. For additional information, see IDAPA 58.01.25.303.07. **If requesting an intake credit, include the request and any relevant data, document, or report, in Part VII.**

A. Existing Sources: Provide measurements for the parameters and pollutants listed in the following tables, unless waived by DEQ (see instructions). Provide at least one analysis for each pollutant or parameter listed by filling in the information for each column in the following tables. Report data that represent the facility's current operation (average daily

value over the previous 365 days should be reported). Most facilities routinely monitor these pollutants or parameters as part of existing permit requirements. If you expect a pollutant or parameter to be present solely as a result of its presence in the intake water, state this information in section VII. Required fields.

B. New Dischargers: Provide estimates for the parameters and pollutants listed in the following tables unless previously waived by DEQ. Provide the source of estimated values (see instructions). Provide an estimated maximum daily and average daily value for each pollutant or parameter. Report the sources of estimates and determine whether a pollutant will be present in the discharge based on your knowledge of the proposed facility's use of maintenance chemicals and any analyses of the effluent or of any similar effluent. Provide estimates based on available in-house or contractor's engineering reports or any other studies performed on the proposed facility. If you expect a pollutant or parameter to be present solely as a result of its presence in your intake water, state this information in section VII.

Note: For new sources and dischargers, sampling and analyses are not required at this time, but follow-up testing and reporting are required no later than 2 years after the facility starts to discharge. If available, report data from these analyses. Required fields.

The parameters include the following:

- Discharge flow
- pH (give range)
- Temperature~~,~~ (summer)
- Temperature~~,~~ (winter)

1. Is *E.coli* believed present or is sanitary waste discharged? The *Yes/No* response will determine if *E. coli* must be reported in the following table. Required field.
2. Is total residual chlorine present in wastewater (e.g., is chlorine used)? The *Yes/No* response will determine if total residual chlorine (TRC) must be reported in the following table. Required field.
3. Is noncontact cooling water discharged? The *Yes/No* response will determine if chemical oxygen demand (COD) and total organic carbon (TOC) must be reported in the following table. Required field.

The pollutants include the following:

- Ammonia (as N)
- Fecal ~~C~~coliform
- *E. coli*
- Oil and ~~G~~grease
- Total ~~S~~suspended ~~S~~solids ~~(TSS)~~
- ~~**Chlorine,~~ Total ~~R~~residual chlorine (TRC)
- Biochemical ~~O~~oxygen ~~D~~demand (BOD)
- ~~***~~Chemical ~~O~~oxygen ~~D~~demand (COD)
- ~~***~~Total ~~O~~organic carbon (TOC)

Complete analyses of these pollutants or parameters according to 40 CFR 136. Use grab samples for pH, temperature, TRC, oil and grease, and fecal coliform. For all other pollutants, use 24-hour composite samples. Contact DEQ for assistance with sampling or analysis questions. DEQ may request that you complete additional testing, if appropriate, on a case-by-case basis under the Clean Water Act§308.

To request a waiver from reporting any of these pollutants or parameters (whether a new or existing discharger), submit a written request to DEQ specifying which pollutants or parameters should be waived and the reasons for requesting a waiver. Submit this request to DEQ before or with the permit application. DEQ may waive the requirements for information about any pollutant or parameter if they determine that less stringent reporting requirements are adequate to support issuing the permit. Contact DEQ to receive instructions on what the particular request should contain. Include any waiver request information in section VII.

V. Intermittent or Seasonal Discharge

Except for storm runoff, leaks or spills, ~~will the~~are any of the discharges described in this application ~~be~~ intermittent or seasonal? If *Yes*, briefly describe the frequency of flow and duration. 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. Describe the average frequency of flow and duration of any intermittent or seasonal discharge (except for storm water runoff, leaks, or spills). The frequency of flow means the number of days or months per year there is intermittent discharge. Duration means the number of days or hours per discharge. For existing dischargers, base the answers on actual data whenever available. For new dischargers, base the answers on your best estimate. Required field.

VI. Treatment System

Briefly describe any treatment systems used (or to be used for new dischargers) and indicate the specific treatment types and processes involved. Indicate whether the treatment system is physical, chemical, biological, sludge and disposal, or other. Use the treatment process and code shown in Table 1. Identify the particular types of processes used or to be used. For example, if a physical treatment system is or will be used, specify the processes applied, such as grit removal, ammonia stripping, and dialysis. Required field.

Table 1. Treatment process codes.

Physical Treatment Processes			
1–A	Ammonia Stripping	1-M	Grit Removal
1-B	Dialysis	1-N	Microstaining
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 (*Settling*)
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		

VII. Requests and Other Information ~~(Optional)~~

A. Do you intend to request or renew one or more of the variances authorized under IDAPA or the Code of Federal Regulations? Identify if you intend to request a variance, waiver, or intake credit and which you intend to request. DEQ will discuss the information and timeline requirements with you. Required field.

   Provide any variance, waiver, or intake credit request materials with section VII.

B. Do you intend to request a mixing zone? Answer *Yes*, if you want DEQ to consider a mixing zone in the reasonable potential analysis and effluent determination. The application is defaulted to *Yes*. Select *No*, if you do not intend to request a mixing zone; however, this may impact permit development and effluent limits. Required field.

C. Use the space below to expand upon any of the previous questions or to alert the ~~DEQ~~ reviewer of any other additional information that should considered in establishing permit limits for the ~~facility~~ operation~~(e.g., intake credits, mixing zone requests, and waivers)~~.

D. Upload Additional Information Upload any data, documents, or reports that were not included elsewhere in the application that would support development of permit limits or conditions. Files may be any file type.