UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
WATER AND
WATERSHEDS

March 11, 2016

Troy Smith, IPDES Rules and Guidance Coordinator
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706 *(sent to: Troy.Smith@deq.idaho.gov)*

Re: U.S Environmental Protection Agency Comments on Guidance Documents for the Idaho Pollutant Discharge Elimination System (IPDES) Program

Dear Mr. Smith:

The U.S Environmental Protection Agency, Region 10 (EPA) has reviewed the following IPDES document that the Idaho Department of Environmental Quality (DEQ) presented at the March 4, 2016 stakeholder meeting:

- Idaho Pollutant Discharge Elimination System: User's Guide to Permitting and Compliance Volume 1 — Section 5 Individual Permit Development Process

The EPA has the following comments and suggestions to improve the document.

General Comments

1. The EPA believes that Section 5 is very generic and suggests that the section include specific details about DEQ's anticipated permit development process for the IPDES program. However, it is unclear whether such details will be provided in the yet-to-be developed IPDES User's Guide to Permitting and Compliance Volume 2. Therefore, the EPA's comments on and suggestions for Section 5 may include details that IDEQ could incorporate into either Volume 1 or Volume 2, as appropriate.

2. The EPA recommends that this section be reorganized to better align with the typical permit writing process. For example, the EPA recommends the following headings be reorganized and information that is more detailed be provided. Under each heading, the EPA suggests DEQ provide sufficient detail to inform EPA and stakeholders of DEQ's intentions with regard to their IPDES permit writing process and permit content. We have included an outline of EPA Region 10's permit writing process, which in our experience, we have found to be typical of many state processes (see Attachment 1).

   The EPA further suggests that DEQ revisit this guidance once they develop permit writing templates and tools to ensure consistency between the guidance and practice.

Suggested organizational changes:

5.0 Individual Permit Development Process
The EPA suggests DEQ clarify the permit development process to include both the development of the permit and the fact sheet. The sections could be aligned to discuss permit and fact sheet development separately, delineating those elements DEQ views as required and optional.

5.1 Permit Development
The EPA suggests DEQ clarify the five required elements and provide details about the expectations for each element. DEQ should elaborate on implementation and additional guidance related to each of the permit components. (Source: EPA Permit Writers' Manual, Page 3-2)

5.1.1. *Cover Page: Contains the name and location of the permittee, a statement authorizing the discharge, and a listing of the specific locations for which a discharge is authorized.* Additionally, the EPA suggests DEQ include receiving water body, latitude/longitude of discharge(s), facility mailing and/or physical address, and other information deemed required or optional by DEQ.

5.1.2. *Effluent Limitations: The primary mechanism for controlling discharges of pollutants to receiving waters. A permit writer spends the majority of his or her time, when drafting a permit, deriving appropriate effluent limitations on the basis of applicable technology and water quality standards.* Additionally, the EPA suggests DEQ include required elements associated with effluent limitations such as identify the point of compliance, limited pollutants, and that limits can be expressed in a variety of units (mass, concentration) and averaging periods (seasonal, tiered and monthly, weekly average, daily maximum, etc.).

5.1.3. *Monitoring and Reporting Requirements: Used to characterize wastestreams and receiving waters, evaluate wastewater treatment efficiency, and determine compliance with permit conditions.* Additionally, the EPA suggests DEQ include other information including sample location (influent, effluent, receiving water, etc.), parameter, sample type, sample frequency, etc. and additional monitoring requirements such as Whole Effluent Toxicity testing, receiving water analysis, biosolids, expanded effluent (priority pollutant) testing, etc. In this subsection, the EPA suggests that DEQ elaborate on Discharge Monitoring Report (DMR) submittal requirements, records retention, and other upset and non-compliance reporting requirements.

5.1.4. Special Conditions: Conditions developed to supplement numeric effluent limitations. Examples include additional monitoring activities, special studies, best management practices (BMPs), and compliance schedules.

Additionally, the EPA suggests that DEQ consider and discuss other required or optional conditions that may be incorporated into permits including wasteload assessments (an evaluation of hydraulic and organic loading to determine if a facility is reach capacity to effectively treat), I/I studies, Operation and Maintenance requirements for facilities and collection systems, mixing zone studies, receiving water studies, etc.

5.1.5. Standard Conditions: Pre-established conditions that apply to all NPDES permits and delineate the legal, administrative, and procedural requirements of the NPDES permit.

Additional elements DEQ may deem as required or optional that should be discussed or mentioned may include:
Schedule of Submissions – optional
Mixing Zone Authorization – required if mixing zone is allowed.

5.2 Fact Sheet Development

The EPA notes that much of the information provided in Section 5.1.4 (Development of Effluent Limitations) are part of the fact sheet development process. The EPA suggests that elements of the fact sheet development be discussed separately from the permit development section. EPA's outline for permit development, Attachment 1, shows the typical steps for writing a permit. The EPA recommends the fact sheet development section be set out in the following format:

- information gathering (current permit, current fact sheet, application, supplemental information),
- data review (DMR data, effluent data, receiving water data, etc.),
- effluent and receiving water characterization,
- receiving water flows,
- applicable standards (designated/existing uses, numeric and narrative criteria, etc.),
- mixing zone (authorization, dilution),
- pollutants of concern,
- technology based effluent limits (TBELs) (applicability, effluent guidelines, derivation of limits)
- water quality based effluent limits (WQBELs) (refer to use of separate detailed guidance)
- Antidegradation/antibacksliding – comparison of current and proposed effluent limits is very helpful
- Discussion of special conditions included in the permit
- Appendices – summary of data, technical calculations, etc.

Again, the EPA recognizes that this level of detail may not be appropriate for Volume 1, but believes it important to discuss these details at some level in the guidance development process. In addition, EPA encourages DEQ to revisit this document later in their program development process to ensure overall consistency.

Specific Comments

1. Section 5.1 Development of Draft Permit and Fact Sheet
   The EPA suggests that DEQ separate the development of the permit and fact sheet into separate sections as described under the general comments.

2. Section 5.1.1 Cover Page
   The EPA suggests DEQ review the list of elements for completeness. Additionally, the EPA recommends including a list of all outfalls (including secondary and emergency outfalls, recycle water discharge if applicable) and the latitude/longitude of the outfalls as well as the facility mailing and/or physical address.

3. Section 5.1.2 Schedule of Submissions
   The EPA suggests that DEQ make this list as comprehensive as possible at this time to allow appropriate public discourse during the document development process. The breadth of "special conditions" DEQ may include to meet permit requirements or to fulfill data needs, could be covered in more detail under a section about special conditions as mentioned in comment above. As mentioned by EPA at the March 4th meeting, other special conditions requiring the submission of a report or study may include Inflow and Infiltration (I/I) report, Sanitary Sewer Overflow (SSO) report, outfall inspection, receiving water studies, facility planning, etc.

4. Section 5.1.3 Discharge Authorization
   This is primarily a permit element where the statutory/regulatory authority to authorize the discharge is provided on the cover page or at beginning of the permit (e.g. effluent limits section). The second paragraph under this subsection does not relate to the discharge authorization and should be moved to a general facility information section typically included in the fact sheet.

5. Section 5.1.4.1 Technology-based Effluent Limitations (TBELs) and Standards
   Correction to "TBELs are developed at a national level by determining how much of the pollutant(s) can be removed from the effluent using available technology...." Effluent limitation guidelines (ELGs) and standards are developed at a national level and are promulgated in the Code of Federal Regulations; however, permit writers must develop TBELs for permits based on these federally promulgated ELGs and standards. This guidance should clarify that the permit writer will identify all applicable technology-based standards for the discharge(s). Add an explanation that where EPA has not established federal standards, DEQ is required established TBELs based on best professional judgement (BPJ). The site-specific TBELs reflect the BPJ of the permit writer, taking into account the same statutory factors EPA would use in promulgating a national effluent guideline regulation, but they are applied to the circumstances relating to the applicant. (EPA's Permit Writers' Manual, Section 5.2.3)

6. Section 5.1.4.2 Determine Applicable Water Quality Standards
   This section should indicate that the applicable WQS for CWA purposes are those that are approved by EPA. The EPA recommends including additional information about how

Idaho's WQS are used in permitting including identification of the basin, subbasin and waterbody units to determine designated uses, identification of applicable criteria based on designated uses, provide a list of surface water quality criteria applicable to the discharge(s) in the fact sheet. The EPA recommends a list of typical water quality criteria (WQC) to be evaluated in permitting be provided for context (pH, DO, temperature, bacteria, toxics and narrative criteria). With regard to the antidegradation discussion, this document should reference DEQ's antidegradation implementation procedures. Listing the tiers in this document is not helpful, without any context to permitting.

7. Section 5.1.4.3 Effluent and Receiving Water Characterization
   The EPA recommends DEQ include information about typical sources DEQ will use to gather information for effluent and receiving water (e.g. state databases, USGS, DMR data, application, etc.). DEQ should explain that statistical bases are used for data evaluate and employed in permitting (e.g. upper and lower percentile values, means, geometric mean etc.), as appropriate.

8. 5.1.4.3.2 Critical Conditions of the Discharge and Receiving Water
   The EPA suggests changing "discharge" in subheading to "effluent" to be consistent with first sentence in the first paragraph. The EPA suggests listing likely data sources for this information and acknowledging statistical bases are used for data evaluate and employed in permitting (e.g. upper and lower percentile values, means, etc.), as appropriate.

9. 5.1.4.3.3 Mixing Zone Applicability
   The EPA suggests including a definition, description and/or diagram to explain what a mixing zones is and how mixing zones are used in permitting. The EPA suggests clarification on whether mixing zone requests are required with each permit application, for both new and re-issued permits.

10. 5.1.4.4 Determine Need for WQBELs
    First paragraph, first sentence, the EPA suggests changing the word "likely" to "potential" for consistency with reasonable potential analysis (RPA) terminology.
    Second paragraph, last sentence, the EPA suggests changing for clarification the following: "*DEQ will determine the amount of the dilution allowance or the size of the mixing zone that is available under these critical conditions*" to "DEQ will authorize the mixing zone (e.g. percent of river flow) and determine the amount of dilution (dilution factor) available under these critical conditions."
    Third paragraph, the EPA suggests clarification, that dynamic modeling is not typically used to develop seasonal or tier limits. Tiered and seasonal limits may be developed by applying steady state modeling on a seasonal basis. A reference to EPA's Technical Support Document (TSD) may be appropriate for a detail explanation about dynamic modeling for limit development.

11. 5.1.4.5 Calculating WQBELs
    The EPA suggest at least basic information be provided about the methodology used for deriving WQBELs and the application of antibacksliding provisions. The document should

generally describe the statistically based limit development process prescribed by EPA's TSD.

12. Section 5.1.4.5.1 Intake Credits
    This section is disproportionate in terms of length and level of detail as compared to any other section of the document. For example, the preceding section about calculating WQBELs is only half as long and lacking in necessary detail. In EPA's experience, intake credits are not applicable in most NPDES permit situations due to regulatory restrictions under 40 CFR § 122.45(g).

13. Section 5.1.5 Monitoring and Reporting
    The EPA recommends DEQ develop a monitoring matrix to establish consistent monitoring requirements based on the type and design capacity of a facility and other factors, as appropriate. Under the reporting section, DEQ should explain that most records will be reported electronically to DEQ and uploaded to EPA's national database as required.

14. Sections 5.6.1.3 Special Conditions
    The use of the term "alternative" compliance schedule in this section is confusing. The document states, "alternative compliance schedule must be within the term of the permit…" and the document does not indicate allowances for long-term compliance schedules. EPA request clarification on what constitutes an "alternative" compliance schedule.

15. Section 5.4 Respond to Comment and Generate Proposed Permit and EPA Reviews Proposed Permit.
    The EPA requests that DEQ review this section after finalizing the MOA to ensure consistency. In particular, this section should incorporate and/or summarize the final agreed upon procedure for EPA review of individual permits.

Please contact me at (206) 553-1755 or by email at lidgard.michael@epa.gov if you have any questions about this letter or related matters, or you may contact Karen Burgess, of my staff, at (206) 553-1644 or burgess.karen@epa.gov.

Sincerely,

Michael J. Lidgard, Manager
NPDES Permits Unit

cc: Mary Anne Nelson, IPDES Program Manager *(sent to: mary.anne.nelson@deq.idaho.gov)*

Attachment 1: Outline of NDPES Permit-Issuance Process

EPA Region 10 DRAFT. Last updated 1/26/16

Permitting Process

1) Data Collection
   - **a)** Review existing permit and fact sheet
     - **i)** Did the permit have technology-based effluent limits?
     - **ii)** Did the permit have water quality-based effluent limits?
     - **iii)** Flow and Dilution assumptions
       - **(1)** Dilution modeling or percentage of the river?
       - **(2)** River gauge to calculate 1Q, 7Q10, etc.
     - **iv)** Ambient monitoring conducted? Which parameters, frequency?
     - **v)** Any effluent monitoring-only parameters?
     - **vi)** Compliance schedule for anything?
     - **vii)** Special studies?
   - **b)** Review Files
     - **i)** Permit file
     - **ii)** Deliverables
       - **(1)** Ambient water data
       - **(2)** mixing zone study
     - **iii)** Compliance files
   - **c)** Application
     - **i)** Design flow
     - **ii)** New construction or treatment capabilities
   - **d)** DMR Data
     - **i)** Generally look at the last 5 years of DMR data.
     - **ii)** Gather DMR data
     - **iii)** Summarize DMR data.
   - **e)** Receiving Water
     - **i)** Flow Data
     - **ii)** Water Quality

For ID: Go to

- **(1)** Beneficial Uses
- **(2)** Water Quality Standards (Tribal, State)
- **(3)** Water Quality Limited
  - **(a)** Status of TMDL
  - **(b)** Waste Load Allocation

- **iii)** TMDL review

- **f)** Type of Facility
  - **i)** Industrial

(1) Review Industry, Treatment Process
(a) Development Document
(b) Similar Permits
(c) Industry Information
ii) POTW
(1) Major, Minor
(2) Review Treatment Process
(3) I/I, SSOs
g) Outfall Information
i) Characteristics
ii) Latitude, Longitude
h) Site visit
i) Endangered Species – for EPA-issued permits
i) Listed Species
ii) FWS, NOAA (NMFs)

2) Contacts (NCU, State, Tribe, Permittee)
a) NCU. Identify from Compliance Office List. Email/meet to determine any major issues.
b) TMDL contact. Identify. Email and meet to determine and issues.
c) State
d) Tribe – for EPA-issued permit
i) Tribal consultation
e) Permittee
i) Call up and introduce yourself. Let them know that you are starting to work on permit. See if they have any questions or outstanding issues to discuss.
ii) Ask if they have effluent data available on a spreadsheet. It is better to have all individual samples. The DMR may only have averages for some parameters.

3) Draft Permit and Fact Sheet Development
a) Receiving Water
i) Critical Flows
ii) Mixing Zone
b) Develop Permit Conditions
i) Limits
(1) Technology-based permitting (TBELs)
(a) ELGs
(b) BPJs
(2) Water Quality-based effluent limits (WQBELs)
ii) Other Conditions
(1) Compliance Schedules
(2) Internal Review – See Review Procedures

4) State/Tribal Precertification of Preliminary Draft – for EPA-issued permits

a) Once the preliminary draft permit is prepared, the permit writer sends the permit to State or Tribe (if Tribe has TAS) for tribal certification.
b) Concurrence. Concurrence on the draft package from NCU, ORC and team lead.
c) Send preliminary draft permit package to state/tribe. Package includes:
    i) Letter to agency (see boilerplate letters)
    ii) Preliminary Draft Permit
    iii) Fact Sheet

5) Public Notice of Draft Permit
    a) Once the permit writer receives the draft certification, prepare the permit for public notice.
    b) Letters and public notice templates.
    c) Route documents for concurrence. The draft permit package includes:
        i) Draft Permit w/attachments
        ii) Fact Sheet
        iii) Public Notice
        iv) Cover Letter to Facility
        v) Letter to State (or Tribe with TAS)
        vi) Letter to Tribe (if involved)
    d) Notify file clerk of impending public notice. Coordinate the public notice date with the file clerk. The file clerk will contact the local newspaper to arrange the exact date of the public notice.
    e) Posting on the Web
        i) Notify the web coordinator of impending public notice 48 hours (2 business days) before the document needs posting.
        ii) Send it to the web coordinator as either a Word document or a pdf created within Word. Do not scan the permit or fact sheet in order to create the pdf. If you have materials that need to be scanned (for example, a 401 certification), create an appendix for that document, scan the document and email as a separate attachment.
    f) Contact file clerk to review mailing list. Review mailing list, add names as necessary
    g) Call permittee to notify of public notice.
    h) Schedule Public hearing if appropriate.
    i) Default public notice period is 30 days.
    j) Email documents to File clerk, who will insert the public notice dates in the fact sheet and public notice announcement.
    k) Email documents to web coordinator for posting.
    l) Mailing

6) Prepare Proposed Final Permit
    a) Once the public notice period is closed.
    b) Revise permit in response to comments received.
    c) Prepare Response to Comments Document

7) Request for Final Certification on Proposed Final Permit
   a) Proposed Final Permit Package includes:
      i) Letter to State (or Tribe with TAS).
      ii) Proposed Final Permit
      iii) The package does not generally include the Response to Comments document.
   b) Route documents for concurrence. (Limited routing)
8) Prepare Final Permit Package
   a) Prepare administrative index.
   b) Finalize Permit. Fill in effective date, expiration date.
   c) Finalize the Response to Comments document
   d) Review mailing list from file clerk, provide file clerk with names/addresses of commenters on draft permits.
   e) Prepare issuance letter to permittee.
   f) Final Package Includes:
      i) Final Permit w/attachments
      ii) Response to Comments
      iii) Administrative Record Index
      iv) Issue Letter to Facility
      v) Letter to State (optional)
      vi) Industrial Rating Sheet (non-POTW)
      vii) Final Certification
      viii) Letter to Commentors.
   g) Give final package to file clerk for mailing.
   h) Post document on the web.
      i) Notify the web coordinator 48 hours (2 business days) before the document needs posting.
      ii) Email the electronic version of the final package to the web coordinator for posting.
      iii) Send it to the web coordinator as either a Word document or a pdf created within Word.
      iv) Notify the web coordinator and team lead who signed it and when.
   i) See Posting
9) Code permit
   a) The permit should be coded within 2 weeks
   b) The NPU Coder will produce a draft coding sheet and send it to the permit writer for review.
   c) The permit writer has the responsibility to check the coding sheet, resolve any questions with the NPU Coder, and send a final version to NCU.
   d) NCU will provide DMR sheets to the permit writer for their review.