

Response to Comments
Concentrated Aquatic Animal Production General Permit
MPDES Permit # MTG130000

On December 18, 2015, the Montana Department of Environmental Quality (DEQ) issued Public Notice MT-15-59, stating the DEQ's intent to reissue a Montana Pollutant Discharge Elimination System (MPDES) wastewater discharge general permit for Concentrated Aquatic Animal Production Facilities in Montana. The notice stated that DEQ had prepared a draft permit, fact sheet, and environmental assessment.

The public notice required that all substantive comments must be received or postmarked by January 27, 2016, in order to be considered in formulation of the final determination and issuance of the permit. The public notice also announced that a public hearing would be held on January 27, 2016, at the DEQ Metcalf building in Helena and that comments would be taken at that time as well. DEQ held the public hearing as scheduled. No comments were received at the public hearing.

DEQ received written comments from the following:

- A. Eileen Ryce, Hatchery Bureau Chief, Montana Department of Fish Wildlife and Parks
- B. Mark Maskill, Hatchery Manager, Creston National Fish Hatchery

DEQ has considered these comments in preparation of the final permit. This Response to Comments supersedes the Fact Sheet and supplements the administrative record to the extent it provides further explanation or supports changes to the draft permit.

A. Eileen Ryce, Hatchery Bureau Chief, Montana Department of Fish Wildlife and Parks

Comment A-1: The monitoring and Reporting Requirements as outlined in the table on page 15 of the Fact Sheet do not match what is on Table 1 of the Draft General Permit (page 7). The table in the Fact Sheet most closely represents the discussions that we have had, especially in relation the use of composite samples. We are unclear as to what table we should be commenting on, although our preference is for the table within the Fact Sheet

Response A-1: Table 2, the Monitoring and Reporting Requirements table presented in the Fact Sheet is the correct table as indicated by the discussion of composite sampling on Fact Sheet page 9. Table 1 in the final permit is corrected to be identical to Fact Sheet Table 2.

Comment A-2: FWP would like to see clearer instruction on sampling methods. For Total Suspended Solids we would like language added that states the composite is representative of a 24 hour discharge period and that it include multiple discharge points where necessary. As you are aware Total Suspended Solids are primarily discharged during cleaning, if samples are only collected during cleaning activities the results will be misrepresentative of our overall operations.

Our preference would be to have Total Suspended Solids reported in a way that the results are representative of activities, for instance composite samples collected over a 24-hour period.

Response A-2: To provide additional clarification on sampling methods, the following language from page 9 of the fact sheet is inserted into Part II.B, Monitoring Requirements, in the final permit. The underlined sentence is added to provide additional clarification regarding collecting composite samples for parameters other than TSS.

TSS monitoring shall be conducted semi-annually during the month of maximum feeding in each monitoring period. Monitoring for other parameters requiring collection of composite samples shall be at the frequency and times shown in Table 1. Samples shall be composite samples composed of aliquots collected from each discharge point. All samples must be collected on a day that cleaning occurs. Composite samples may be collected using automated sampling devices or may be collected as a collection of grab samples from each discharge location at the hatchery and should be collected using the following definition:

“Composite Samples” shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

- a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;*
- b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;*
- c. Constant sample volume, time interval between samples proportional to flow (i.e. sample taken every “X” gallons of flow); and,*
- d. Continuous collection of sample, with sample collection rate proportional to flow rate.*

At least one set of sample aliquots must be collected during cleaning operations and shall include samples collected from the overflow of any settling basin or other treatment unit that discharges to state waters. The overflow samples must be collected while cleaning wastes are being discharged to the settling basin or treatment unit. If all discharges from raceways or other rearing units are directed to a settling basin or treatment unit during cleaning operations, the only cleaning sample shall be collected from the treatment unit overflow. All sample aliquots shall be combined into one common sample for analysis.

Because discharge configurations are unique at each facility, the sampling procedure used to address the requirements above must be described in the BMP plan for the facility.

Comment A-3: As we have discussed, the hatcheries will have the ability to detail sampling protocols within their BMP document. FWP would like to see language added to the permit that clearly states sampling protocols will be outlined in the BMPs and that these will be reviewed and approved by DEQ. Our intention behind this is to make everything clearer for when we have compliance inspections.

Response A-3: The language added to the final permit in response A-2 includes a requirement to include a description of the sampling procedure in the BMP plan. The following language is also added to the Best Management Practices Plan requirements in Part II.C of the permit. This language is taken from Part VI.B.1.e on page 8 of the fact sheet.

A description of the sample collection methods used for DMR reporting. This description should include sampling location(s), method for determining proper flow-weighted proportions of sample aliquots, and methods for preserving and shipping analytical samples to an off-site laboratory when an off-site laboratory is used.

Part II.A.1 of the permit already requires permittees to submit their BMP plan to DEQ. If the sampling procedure described in the plan is insufficient, DEQ will provide additional guidance and request clarification.

Comment A-4: On page 15 of the Fact Sheet the Required Reporting Value for Total Kjeldahl Nitrogen (TKN) is listed as 0.1 mg/L. On consultation with Energy Labs throughout the state, the minimum that they can report is 0.3 mg/L. FWP suggests that the required Reporting Values be representative of what is possible from labs within the State. Alternatively, please let us know if there is an alternate lab within the State where we can get samples processed.

Response A-4: The required reporting value listed in the fact sheet is an error. The required reporting value in Department Circular DEQ-12A is 0.225 mg/L. The final permit is corrected to include this detection limit.

During the nutrient standards development process, DEQ informed laboratories in the state that achieving lower detection limits would be necessary. If the contract laboratory FWP utilizes is unable to achieve 0.225 mg/L for TKN, DEQ recommends FWP contact the state environmental laboratory.

B. Mark Maskill, Hatchery Manager, Creston National Fish Hatchery

Comment B-1: Draft Permit Comment: Regarding; Page 19, Definitions. #2 “Composite Samples”. Creston has one discharge location when cleaning and treating rearing water, it is at the end of our

effluent treatment discharge pipe. When done cleaning, no further water flows from the effluent discharge pipe until we clean again. During the remainder of the day ambient rearing water flows through each rearing unit, over the dam boards and out various discharge pipes. When cleaning, all effluent water is collected and passed through the water treatment building, but when finished it stays dry throughout the day. Thus, we would not be able to take “composite samples” from the treatment building discharge point per instructions; “4 samples ...not less than six hours nor more than 24 hours.” We could collect a flow proportioned sample at cleaning from our effluent discharge pipe as we have in the past and then three additional samples from Mill Creek downstream of our last outflow pipe during constant time intervals. Would this scenario work for your sampling procedures?

Response B-1: Please see Response A-2 for clarifications added to the final permit regarding the collection of composite samples. Composite samples must be representative of the facility discharge over the course of an entire day that cleaning occurs. The samples collected from the Creston Fish Hatchery’s treatment system represent the discharge from the facility while cleaning is occurring. Additional flow proportioned samples should be collected during regular (non-cleaning) operation from each discharge location. These additional samples must be collected prior to the effluent mixing with the receiving water. Collecting samples directly from Mill Creek downstream of the last outflow pipe is not acceptable because the effluent is diluted at that point. Sampling could take place at the dam boards, or some other location just prior to effluent entering the discharge pipes if the discharge pipes are submerged in the receiving water and samples cannot be collected directly at the end of pipe. Creston National Fish Hatchery staff should coordinate with DEQ in developing an acceptable sampling protocol and include it in the BMP plan for DEQ approval.