General Permit for Domestic Sewage Treatment Lagoons Continuous Dischargers – MTG581000 Response to Comments

The Department of Environmental Quality (DEQ) issued Public Notice MT-17-16 on July 31, 2017, stating DEQ's intent to renew the Montana Pollutant Discharge Elimination System (MPDES) wastewater discharge general permit for domestic sewage treatment lagoons. The public notice included a combined draft Environmental Assessment and specific draft Permits and Fact Sheets for MTG580000 for Batch Dischargers and MTG581000 for Continuous Dischargers.

The public notice required that all substantive comments must be received or postmarked by August 31, 2017. There were no comments received for MTG580000 for Batch Dischargers. DEQ received three sets of comments for MTG581000 for Continuous Dischargers, from: the US EPA Region 8; Anderson-Montgomery Consulting Engineers; and the Department of Public Health and Human Services (DPHHS) on behalf of Montana State Hospital. In addition, DEQ corrected minor typographical errors found as part of the issuance of this permit.

DEQ has considered the comments in preparation of the final permit MTG581000 for Continuous Dischargers. A synopsis of the submitted comments and DEQ's responses are included below. Copies of the original comment letters are available from DEQ upon request. This Response to Comments is an addendum to and supersedes the Fact Sheet to the extent specific changes or clarifications are discussed, below.

US EPA comments and DEQ's responses:

Comment #1:

40 (Code of Federal Regulations) C.F.R. §122.44(d)(1)(ii) requires permits for facilities having a discharge which causes, has the reasonable potential to cause, or contributes to an exceedence of a water quality standard to contain effluent limits for the pollutants causing the exceedence. The EPA suggests that MTDEQ provide additional detail as to how the provisions in [the Permit] Part III.A. meet these requirements.

RESPONSE #1:

Public notice #MT-17-16 contained the tentative determination for reissuance of the General Permit for domestic sewage treatment lagoons. The Fact Sheet and draft permit for continuous dischargers included universal conditions designed to ensure that any source applying for authorization can comply with effluent limits, water quality standards, and any specific prohibitions; and that the discharge will be similar in degree and nature to other facilities authorized under that general permit.

DEQ did not consider the evaluations conducted as part of this renewal to be Reasonable Potential (RP) analyses for purposes of facility-specific determinations or for developing facility-specific water quality-based effluent limits (WQBELs). It was designed to show how the renewed general permit could impact each facility given the very limited information available to DEQ about each facility. Better information will be provided by the facilities during renewal allowing DEQ to perform a better analysis of each facility. DEQ does not intend for facilities currently covered by the general permit to move away from lagoon technology.

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DEQ has rephrased the requirement under Part III.A to read as follows:

A. Requirement to Apply for an Individual Permit

When DEQ calculates a facility has RP to exceed a water quality standard (including Upon receipt of a complete Notice of Intent (NOI) renewal package, DEQ will conduct a Reasonable Potential (RP) Analysis for that facility (as discussed in Part V.E.2 of the Fact Sheet). Any facility with RP the facility will be required to apply for an individual permit as part of their authorization letter. These facilities will continue to be covered under the 2017-issued GP as long as they submit a complete application for an individual permit by no later than December 31, 2019. DEQ will terminate the facility's authorization under the 2017-issued GP upon issuance of an once the individual permit is effective.

In addition, DEQ removed Section J "Confirmation that an Individual Permit Application will be Submitted" from the Notice of Intent (NOI-581) because it is premature.

Comment #2:.

40 C.F.R. §124.8 requires the permitting authorities to make a reasonable finding, adequately supported by the administrative record and described by the fact sheet, that a compliance schedule is appropriate and that compliance with the final water quality based effluent limitation is required as soon as possible. The EPA suggests that MT DEQ provide additional detail as to how the provisions in [the Permit] Part III.F meet these requirements.

RESPONSE #2:

See Response #1.

Parts III.A. and III.F of the Permit require submission of individual permit application within two years for those continuous dischargers with RP to exceed a standard as they currently operate. The Fact Sheet Part V.E. presents the criteria that will be used in this evaluation during the NOI review process.

The Fact Sheet outlined the steps and criteria to evaluate discharges from a facility. If a facility wants to explore or avoid an individual permit, it will need time to assess a source-specific mixing zone, evaluate alternative operation strategies (such as batch hold and release or land application during the summer months), or consider any individual circumstances. By allowing two years, DEQ provides time to assemble information, complete paperwork, and conduct any mixing zone study or analyze operations, if applicable. For these reasons, DEQ concludes that a two-year compliance schedule is appropriate.

In reviewing Part III of the Permit as part of this response to comments, DEQ determined that the section erroneously included mention of Compliance Schedules; however, the conditions in Part III.A. are Special Conditions. Any mention of Compliance Schedule in this section will be removed.

Comment #3.a.:

Section III.C. of the permit contains a special condition that requires permittees which discharge to an impaired water body to conduct a nutrient optimization study within four years "unless the

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facility coverage is after January 1, 2018." It is unclear why this distinction is being made and if the optimization study is required of facilities that receive coverage under the permit after January 1, 2018.

RESPONSE #3a:

The intention of the distinction was to allow existing facilities covered under individual permits to request coverage under permit MTG581000 at a later date; in that case the nutrient optimization study would be required four years from the authorization date, not four years from the General Permit effective date of January 1, 2018. Any facility covered under MTG581000 that has RP to exceed nutrient criteria or discharges to an impaired waterbody will be required to conduct the nutrient optimization study. For clarification, DEQ will change the first sentence in the Permit Part III.C. to read as follows:

Facilities that discharge to waterbodies listed as impaired for nutrients (TN, TP, or other eutrophication indicators) and facilities that have RP to exceed TN and/or TP criteria must complete a nutrient optimization study within four years of coverage under this renewed General Permit or prior to expiration of this permit, whichever is soonest (January 1, 2022, unless the facility coverage is after January 1, 2018).

Comment #3.b.:

In Section III.F, Table 7 lists a requirement for a "Nutrient Optimization Plan," which is not mentioned elsewhere in the special conditions of the permit, and may be referring to the nutrient optimization study.

RESPONSE #3b:

DEQ agrees with this comment, and will change Table 7 to read "Nutrient Optimization Study."

<u>Anderson-Montgomery Consultants and Montana State Hospital Comments, and DEQ's Responses:</u>

Comment #4:

Application of the proposed General Permit to [Montana State Hospital and Park City] is confusing ... if General Permitting information does not apply to these permittees, why is it sent out with the suggestion that they are applicable and that they need to fill out the Notice of Intent Form to apply for a general permit? If the Department is mandating that [Montana State Hospital and Park City] pursue an Individual Permit, why force them to go through the exercise and expense of completing the NOI...? Perhaps the Department could simply administratively extend the General Permit until the process of obtaining a new Individual Discharge permit is complete.

RESPONSE #4:

See Responses #1 and #2. The Fact Sheet included an evaluation of possible permit outcomes based on very limited information. DEQ has not made facility-specific determinations at this time. Based on better site-specific information from the facilities during renewal, DEQ will be able to perform a better analysis of each facility. DEQ does not intend for facilities currently covered by the general permit to move away from lagoon technology, but the facilities do need

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to submit a NOI to maintain permit coverage for any discharge. No changes will be made in response to this comment.

Comment #5:

Significant changes regarding effluent limits for Park City and the Montana State Hospital are described in Attachments B and C and mixing zones for both systems have been reduced to zero. The Fact Sheet in the proposed permit rules does not provide documentation as to how these changes were determined. We request that we be provided the technical information that supports how these standards were established. It was our understanding that wastewater conveyance ditches were not necessarily going to be classified as "state waters" subject to water quality standards.

RESPONSE #5:

See Responses #1 & #4. This is the first renewal of the General Permit for Domestic Sewage Treatment Lagoons to consider whether dilution is available for any facilities to meet water quality standards. There has been no "reduction" of mixing zones for either Park City or Montana State Hospital because no dilution was evaluated in previous permits.

As discussed in the Fact Sheet Parts V.A and C., no facility can discharge pollutants in concentrations that can cause or contribute to an exceedence of a water quality standard in state waters. The current water quality standards are found in Department Circular DEQ-7 (May 2017) and Circular DEQ-12A (July 2014), which can be found on DEQ's website.

The Fact Sheet Part V.B provides the definition for "state water," which includes any body of water, irrigation system, or drainage system. There are exemptions: a ditch dedicated to wastewater conveyance or an irrigation ditch where the water is used up and not returned to state water are not considered state water.

No changes will be made in response to this comment.

Comment #6:

Is the conclusion that there is no RP for the Montana State Hospital to violate Nitrate-Nitrite Standards correct?

RESPONSE #6:

See Response #1. The RP analysis will be conducted once the NOI requesting coverage under the renewed General Permit is received.

No changes will be made in response to this comment.

Comment #7:

The department is proposing to eliminate the variance that allows excursions from the pH limit of 6.0 to 9.0 which are as a result of natural biological processes. It should be noted that 40 CFR 133.103(c) allows the variance outside of this range if the POTW can demonstrate that 1). Inorganic chemicals are not added to the treatment process and 2). Contributions from industrial sources do not cause the pH to change outside of the range of 6.0 to 9.0. Presumably, this variance was conceived of by EPA to allow for natural processes which might cause pH to be outside of this range. We believe that eliminating this exception in the general permit is unwarranted, will cause

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hardship on small communities utilizing lagoon systems and ignores the biological processes in lagoons that might cause pH to significantly fluctuate. We believe that a permittee can readily address the two criteria listed in 40 CFR 133.103 (c) to determine applicability and compliance.

[Montana State Hospital] would note that we have already received letters of non-compliance from the DEQ for high pH values in our effluent discharge. We do not believe that a lagoon system should be penalized for the natural biological activities that occur in a lagoon. We ask that the Department retain the exclusion for pH within the constraints of the Federal rule and continue to recognize the fact that the desired biological processes in a lagoon system will cause significant variations in pH.

RESPONSE #7:

A general permit has significant constraints on flexibility for developing effluent limits, monitoring regimes, and other special conditions. Any facility that cannot comply with the "general" requirements in a General Permit can apply for coverage under an individual permit, which is designed to allow greater flexibility. DEQ has found that evaluating the cause of a facility's pH excursions and adjusting operations is often a viable solution to abnormal pH values. Please work with DEQ before pursuing any individual permit based on pH. No changes will be made in response to this comment.

Comment #8:

It would appear by the discussion in Table B and C that Townsend is getting special treatment regarding mixing zones and applicability of ammonia and nutrient criteria. With the nutrient issues in Canyon Ferry Reservoir, should not a more definitive plan for nutrient reduction be imposed? Why is Townsend not required to obtain an Individual Permit?

RESPONSE #8:

See Response #1. Upon receipt of a complete NOI package for coverage under the General Permit, DEQ will conduct a RP analysis and determine whether Townsend is eligible for coverage under the General Permit. Their permit requirements will be as outlined using the methods outlined in the General Permit.

No changes will be made in response to this comment.

Minor administrative corrections:

DEQ made the following administrative corrections:

- Permit Part I.D and I.E corrected the date of January 1, 2017 to January 1, 2018.
- NOI form:
 - Clarified the discharge method is either continuous or periodic, controlled, or intermittent;
 - o Removed the reference to "batch" dischargers in Section H.
 - o Removed Section J and renumbered the remaining sections.