

# **General Permit for Domestic Sewage Treatment Lagoons Batch/Non-Discharging Facilities – MTG580000 Response to Comments**

The Department of Environmental Quality (DEQ) issued Public Notice MT-22-08 on May 2, 2022, stating DEQ's intent to renew the Montana Pollutant Discharge Elimination System (MPDES) wastewater discharge general permit for domestic sewage treatment lagoons – batch and non-discharging facilities. The public notice included a draft Environmental Assessment, the draft Lagoon General Permit (LGP), and the Fact Sheet for MTG580000.

The public notice required that all substantive comments must be received or postmarked by June 2, 2022. The U.S. Environmental Protection Agency (EPA) Region 8 requested an additional 15 days.

DEQ received two sets of comments, from: EPA Region 8 on June 16, 2022; and Clinton and Judith Cain, 2551 Magenta Rd, Bozeman, MT 59718 on May 5, 2022. DEQ considered the comments in preparation of the final permit MTG580000. The 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:**

*Ammonia and Nitrate/Nitrite Reasonable Potential Analysis: The Fact Sheet (page 22) states that the 2018 Lagoon General Permit (LGP) did not include ammonia effluent limits or monitoring based on a narrative reasonable potential analysis, the 2018 LGP did not require nitrate/nitrite limits or monitoring, and that both of these decisions are being carried over into the renewal. There is no further discussion of reasonable potential for either of these parameters. Both ammonia and nitrate are identified as "known present" pollutants of concern on page 19 of the Fact Sheet.*

*MDEQ's Fact Sheet needs to adequately document the details of the reasonable potential analysis for both ammonia and nitrate/nitrite (narrative or otherwise), and explain the factors that led MDEQ to a 'no reasonable potential' decision per 40 CFR § 124.8. If MDEQ needs more data to make this decision, EPA recommends that monitoring for these parameters be included in the LGP.*

### **Response #1:**

For facilities with an average daily design flow of less than 0.1 million gallons per day (mgd), DEQ finds that monitoring for ammonia and nitrate + nitrite is not necessary. These facilities discharge minimal amounts of effluent at a low frequency. EPA application Form 2A (both 1999 and 2019 versions) specifically separates these small volume dischargers (less than 0.1 mgd) and assigns minimal monitoring requirements and omits monitoring for these two parameters. See Table A on the 2019 Form 2A.

DEQ reconsidered ammonia and N+N requirements for those facilities with an average daily design flow greater than or equal to 0.1 mgd. There are currently seven batch facilities ranging from 0.1 to 0.35 mgd that are authorized under the LGP. DEQ will require these facilities to conduct weekly effluent monitoring for N+N and ammonia (during periods with discharge). See Table 7 of the final permit. In addition, DEQ will require quarterly upstream flow, N+N,

ammonia, pH, and temperature for the three quarters the facilities are allowed to discharge [Jan-Mar, Apr-June, and Oct- Dec] as part of the LGP Special Conditions. See Table 9 of the final permit.

In reviewing the comment and preparing the response, DEQ found an inconsistency with how the size threshold was set. As a result, DEQ also corrected the LGP and NOI-580 to reflect the average daily design flow threshold consistent with EPA's Form 2A:

- Very small batch facilities: less than ( $<$ ) 0.1 mgd, rather than  $\leq$  0.1 mgd.
- Small batch facilities: greater than or equal to ( $\geq$ ) 0.1 mgd, rather than  $>$  0.1 mgd.

**Comment #2:**

***Total Suspended Solids (TSS) Mass Limits:** The Fact Sheet (pages 10 to 15) states multiple times that mass-based limits are a substitute for TSS percent removal. EPA is unclear how a mass limit - based on design flow - would be equivalent to the concept of percent removal (i.e., removal efficiency of the treatment facility).*

*EPA is aware that it can be difficult to make a meaningful comparison of influent TSS and effluent TSS in facilities that discharge intermittently. In the recent reissuance of EPA Region 8's LGP, Region 8 incorporated TSS percent removal requirements for these types of facilities based on longer averaging periods of influent and effluent TSS – see pages 15 and 16 of the Region 8 LGP for more information on this concept. EPA recommends that MDEQ review this document and evaluate whether taking a similar approach in Montana's LGP makes sense. If MDEQ does not incorporate a TSS percent removal into their LGP, it must provide additional justification for why a mass-based limit is a reasonable substitute for percent removal per 40 CFR § 124.56 and 40 CFR § 124.8. If there is ultimately no correlation between mass-based limits and percent removal for TSS, MDEQ should justify the lack of TSS percent removal requirements independent of the mass-based effluent limitations.*

**Response #2:**

As EPA recognizes, the comparison between influent and effluent TSS concentrations is meaningless when the holding time ranges from months to years. The 21 facilities currently authorized under the LGP discharge an average of two months annually; DEQ does not recognize any value added by requiring a TSS percent removal requirement that cannot compare influent and effluent in any 'real-time.' Increases in TSS from these events will be sufficiently regulated through the TSS concentration and load limits.

DEQ believes that replacing TSS percent removal with a mass loading limit, in the same manner as 40 CFR 133.103(d) *Less concentrated influent wastewater for separate sewers*, which begins "... is authorized to substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements..." is sufficiently stringent. Furthermore, DEQ maintained the 5-day biochemical oxygen demand (BOD<sub>5</sub>) percent removal due to the regulatory requirements for facilities to meet significant biological treatment under 40 CFR 133.101(k). This will prevent inflow & infiltration (I&I) and other potential causes of less concentrated influent.

There will be no change made to the final permit in response to this comment.

**Comment #3:**

***Electronic Reporting of Monitoring Results:*** *As of December 21, 2016 all reports and form submitted in compliance with permit monitoring requirements must be submitted electronically by the permittee, per 40 CFR § 122.41(l)(4)(i). Although the draft LGP mentions NetDMR twice, it never clearly states DMR data must be submitted electronically, nor is NetDMR or electronic reporting mentioned in the “Reporting Requirements” section.*

*To better align with the regulatory requirements, add the following language (or equivalent) to the “Reporting Requirements” section (Section V-S on page 23) of the LGP: “The facility must electronically submit their discharge monitoring data via NetDMR unless a waiver is granted in compliance with 40 CFR § 127.24.” MDEQ may or may not allow waivers; the language may need to be adjusted accordingly.*

**Response #3:**

DEQ changed the LGP to clarify the requirement to submit *electronically* on NetDMRs (underline is added text, strike-out is removed):

LGP Part III.A. now reads:

Reporting frequency for each facility under the discharging facility subgroup shall be monthly, and each facility must submit the results electronically on their NetDMR for each month by the 28<sup>th</sup> of the following month. If no discharge occurs during the reporting period, “no discharge” shall be reported on the NetDMR.

LGP Part V.S. now reads in part:

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

- Monitoring results must be ~~reported on a Discharge Monitoring Report (DMR) form-~~ submitted electronically (NetDMR web-based application) no later than the 28<sup>th</sup> day of the month following the end of the monitoring period. If no discharge occurs during the entire reporting period, “No Discharge” must be reported within the respective NetDMR. Facilities that are unable to report electronically may submit a request for an Electronic Reporting Temporary Waiver and DEQ will make a case-by-case decision.

**Comment #4:**

***Alternative State Requirements (ASR) Eligibility:*** *Alternative State Requirements (ASR) are a sub-category of Treatment Equivalent to Secondary treatment (TES) found in 40 CFR §133.105(d). To be eligible for ASR, a facility therefore needs to be eligible for TES. Per 40 CFR § 133.101(g)(3), to be eligible for TES, the treatment works must provide significant biological treatment of municipal wastewater. This is defined in 40 CFR § 133.101(k) in part as a 30-day average of at least 65 percent removal of BOD<sub>5</sub>. While the draft LGP does not contain eligibility requirements for TES or ASR, the Fact Sheet (Section IV-A-2-c) (page 11) contains a list of MDEQ’s eligibility criteria for ASR without mentioning the 65 percent removal of BOD<sub>5</sub>.*

*Add the following statement (or equivalent) to the determination as a 4th criteria to align with the regulatory requirements: “The treatment works must provide significant biological treatment of municipal wastewater, defined as an aerobic or anaerobic biological treatment process that consistently achieves a 30-day average of at least 65% removal of BOD<sub>5</sub>.”*

*Additionally, the Notice of Intent (page 6 of 8) contains an eligibility list under Step Two (C). Add a similar statement here.*

**Response #4:**

DEQ allows TSS Alternative State Requirements (ASR), for waste stabilization ponds that meet 40 CFR 133.103(c), Special Considerations – Waste stabilization ponds. Upon review, DEQ agrees to add to the eligibility criteria for a facility to be granted ASR that were specified on page 11 of the Fact Sheet, the facility needs also to provide significant biological treatment that achieves at least 65% removal of BOD<sub>5</sub>. Through this RTC, the Fact Sheet page 11 is amended to read (underline is addition):

DEQ has determined that to qualify for ASR, a facility must meet all of the following:

1. the principal process is a waste stabilization pond,
2. the facility has applied good operation & maintenance (O&M), ~~and~~
3. the monthly average 95<sup>th</sup> percentile for the last two to five years is greater than 45 mg/L TSS (except for values attributable to upsets, bypasses, and operational errors or other unusual conditions) and/or the weekly average for the same period is greater than 65 mg/L, and
4. the facility provides significant biological treatment that achieves a 30-day average of at least 65% removal of BOD<sub>5</sub>.

This requirement has also been added to the NOI-580 form. In addition, DEQ noted that the draft NOI-580 form required that, to be eligible for ASR, a facility must treat to or better than 45 mg/L BOD<sub>5</sub>, which was inadvertently omitted from the Fact Sheet. This requirement is maintained on the form and added to the Fact Sheet through this RTC.

**Comment #5:**

***Ineligibility Criteria – Downstream Waters:*** 40 CFR 122.44(d)(1)(i) requires that “Limitations must control all pollutants or pollutant parameters ... which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.” The reference to “any State water quality standard” extends to any state WQS that may be impacted by pollutants in a permitted discharge. Since MDEQ’s LGP only considers Montana’s WQS, it is necessary to push facilities out of LGP coverage if the discharge impacts other EPA-approved state or tribal standards downstream of the discharge. To accomplish this, MDEQ could add the following statement to the ineligibility criteria in Section I-C-1 (page 3): “If DEQ determines that the facility discharges may affect downstream waters subject to other states’ or tribal WQS.”

**Response #5:**

DEQ added the following to Part I.C.1:

“f. If DEQ determines that the facility discharges may affect downstream waters subject to other states or tribal Water Quality Standards.”

**Comment #6:**

***Ineligibility Criteria – Requiring Facility to Apply for Individual Permit Coverage:*** MDEQ should consider requiring a facility to apply for individual coverage if denied coverage under the LGP. This would strengthen MDEQ’s authority to implement their permitting program. EPA recommends that Section I-C (Sources Ineligible for Coverage Under this General Permit ) (page 3) of the LGP be modified with an additional numbered bullet such as the following: “If coverage under the LGP is denied by MDEQ for any reason, MDEQ may require the facility to immediately apply for coverage under an individual permit.”

**Response #6:**

DEQ added the following to Part I.C.1:

“g. If coverage under the LGP is denied by DEQ for any reason, DEQ may require the facility to immediately apply for coverage under an individual permit by submitting the required forms and fees.”

**Comment #7:**

***Due Date for No-Discharge Facility Monitoring Results:*** To avoid confusion about when to report a release from a non-discharging facility, MDEQ should consider clarifying that monitoring results are due by the 28th of the month as related to a specific point of time in the discharge (e.g., following the start of the discharge) in Section III-B-3 (page 14) of the LGP.

**Response #7:**

DEQ clarified the monitoring submittal requirement in the LGP Part III.B.3. as suggested. This section now reads (underline is addition):

“3. Provide the monitoring results on the Non-Discharging Facilities – Required Monitoring Form no later than the 28<sup>th</sup> of the month following the start of the discharge (see Fact Sheet Attachment B).”

**Comment #8:**

***Clarification of Terms:*** The LGP (page 8) uses the term ‘Alternate State Requirements’ in two places when referring to the concept of ‘Alternative State Requirements’ used in 40 CFR Part 133. The Fact Sheet uses both terms several times. MDEQ should consider clarifying that the two terms are used interchangeably, or else modify the language in the LGP and Fact Sheet to consistently use the more common language of ‘Alternative State Requirements.’

**Response #8:**

DEQ corrected page 8 of the LGP and the NOI-580 Section H, by changing the Group C limits to “Alternative State Requirements.” In addition, the Fact Sheet is corrected through this addendum.

**Clinton and Judith Cain and DEQ’s responses:**

**Comment #9:** The following is a synopsis of the letter received May 12, 2022

As landowners next to the 4 Corners Sewer Plant in Bozeman, the Cains have concerns with this lagoon system:

- *Ground and surface water quality*
- *Air quality, specifically hydrogen sulfide*
- *Unsuitable location and over-committed lagoon (taken on additional subdivisions even though they were at capacity when built)*

**Response #9:**

DEQ appreciates your safety concerns with the 4 Corners Water and Sewer District Plant. However, the 4 Corners Water and Sewer District Plant is regulated under a Montana Ground Water Pollution Control System permit, MTX000110. The LGP available for public comment is an MPDES permit that regulates point source discharge of pollutants to state surface waters. A copy of your letter was sent to Darryl Barton, Section Supervisor for the Water Protection Bureau Compliance and Technical Services Section. No changes to the final permit will be made in response to this comment.

**DEQ's Corrections:**

**Form NOI-580.**

Section B: Based on EPA comments for another General Permit, DEQ corrected the question to reflect "Indian country" rather than "Indian Lands."

Section E. #3: Corrected size cutoff to  $\geq 0.1$  mgd, rather than  $> 0.1$  mgd.

Section H. Expanded all references to BOD<sub>5</sub> to include either BOD<sub>5</sub> or CBOD<sub>5</sub>.