



**WATER
PROTECTION
BUREAU**

Agency Use

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FORM
NOI-581
2017

**Notice of Intent (NOI)
Domestic Sewage Treatment Lagoons – Continuous Dischargers
MTG581000**

The NOI form is to be completed by the owner or operator of a domestic sewage treatment lagoon that is eligible for coverage under the Montana Department of Environmental Quality's *General Permit for Domestic Sewage Treatment Lagoons – Continuous Dischargers*. **Please read the attached instructions before completing this form.** You must print or type legibly; forms that are not legible, not complete, or unsigned will be returned. You must maintain a copy of the completed NOI form for your records.

Section A - NOI Status (check one)

- New No prior NOI submitted.
- Request termination of Individual Permit. Permit Number: M T 0 0 _ _ _ _
- Renewal Permit Number: M T G 5 8 _ _ _ _
- Modification Permit Number: M T G 5 8 _ _ _ _
- Resubmitted Permit Number M T G 5 8 _ _ _ _

Section B - Facility Information (See instruction sheet):

Facility Name _____
 Facility Location _____
 City, State, Zip _____
 County _____
 Facility: Latitude _____ Longitude _____ OR
 Township _____ Range _____ Section _____ ; _____ 1/4 _____ 1/4 _____ 1/4
 Facility contact person (name, title) _____
 Phone Number () _____ E-mail (optional) _____

- Is the facility located on Indian Lands? Yes No
- Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country? Yes No

Section C - Applicant (Owner/Operator) Information *(see instructions)*

Applicant (Owner/Operator) Name *(see instructions)* _____

Mailing Address _____

City, State, and Zip Code _____

Applicant contact person *(name, title)* _____ Employer: _____

Phone Number (_____) _____ E-mail *(optional)* _____

Applicant is: *(Check all that apply - see definitions)* Owner Operator

Status of Applicant *(Check one)* Federal State Public Private Other *(specify)* _____

1. Existing or Pending Permits, Certifications, or Approvals None

MPDES _____ RCRA _____

Clean Air Act _____ Other *(specify)* _____

404 Permit (dredge & fill) _____ Other *(specify)* _____

2. Standard Industrial Classification (SIC) Codes

SIC Code	Description	SIC Code	Description
1		2	

(Provide the four-digit SIC code(s) and description(s) which best reflects the industry activity for the owner/operator).

3. Map

Attach a **topographic or aerial map** of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility and the location of each of its existing and proposed intake and discharge structures and monitoring locations (outfalls). Include all springs, rivers, and other surface water bodies within the one mile zone on the map, or provide an additional map. Indicate type(s) of maps supplied:

Topographic map Aerial map Other map: _____

Section D – Outfall Location(s) and Receiving Water

Outfall No.	Latitude	Longitude	Receiving Water ⁽¹⁾ <i>(Initial and First Named)</i>

Footnote:

(1) Identify the initial state surface water that your facility discharges to as well as the first named state surface water, if different (i.e., “unnamed ditch to Full Creek”).

1. Effluent monitoring location:

i. describe monitoring location *(note if none)* (e.g.. effluent control device, outfall): _____

ii. latitude/longitude *(or note same as above)*: _____ / _____

iii. indicate if above location for: effluent flow monitoring, effluent sampling, both

iv. if there is a second effluent monitoring location, provide the above information for it, below:

Section E - Domestic Sewage Treatment Lagoon Collection System & Influent Information

1. Collection System Information. Provide information on municipalities and areas served by the facility.

a. Type of collection system (Separate vs. Combined Sanitary Sewer) and percent contribution (by miles) of each:

- Separate sanitary sewer _____% of total contribution
 Combined storm and sanitary sewer _____% of total contribution

Collection System Name	Population Served	Type of Collection System	Ownership

Total population served by facility: _____ Year of data: _____

2. Non-Domestic (Industrial) Users:

a. Provide information on any non-domestic user (i.e. indirect discharger) to the facility:

Name	Industry Type	Estimated Process Flow (non-domestic) (gpd)

3. Infiltration/Inflow (I/I) Status Update (for facilities with an average daily design flow > 0.1 mgd):

a. Estimate the average number of gallons per day (gpd) that flow into the treatment works from inflow and/or infiltration

Annually: _____ gpd I/I estimate

b. Date of most recent I/I evaluation: _____ Date I/I summary report submitted to DEQ: _____

Comments:

4. Influent Monitoring:

Describe influent sampling location (e.g. manhole, lift station, etc.): _____

Indicate whether location is for: influent flow monitoring influent sampling both

5. Lagoon Design and Actual Flow Data

a. Design Flow (Influent flow rate facility was designed to handle)

Current Average Daily Design Flow _____ million gallons per day (mgd)

Historic Average Daily Design Flow (c. 1993): _____ mgd. Specify year of data: _____

b. Actual Flow (Recent discharge flow rates):

Annual Flow Monitoring Data Last three rolling years (specify Mo/Yr)	Two years ago _____ to _____	One year ago _____ to _____	This year _____ to _____
1. Annual average daily flow rate (mgd)			
2. Maximum daily flow rate (mgd)			
3. Total number of months with discharge			

Section F – Treatment and Discharge Methods

1. Description of Treatment

a. Facultative vs. Aerated Lagoons (*check the one that applies and complete relevant information*)

Facultative system: Number of facultative cells _____
 Designed retention time for system: _____ days
 Actual retention time for system: _____ days

Aerated or partially mixed system: Number of aerated cells _____
 Number of partially mixed cells _____
 Number of facultative or acquiescent cells _____

Year Installed: _____ If applicable, date plan & specification approved: _____

Year Last Modified: _____ If applicable, date plan & specification approved: _____

b. Disinfection (*check the one that applies*)

- None
- Ultraviolet (UV) disinfection
- Chlorination. If chlorination, is dechlorination employed prior to discharge? _____
- Other: _____

2. Discharge Method

a. Method of lagoon discharge to surface waters (*check the one that applies*):

- Continuous discharge**
- Periodic discharge** (includes controlled and intermittent). Provide the following information:

1. Number of discrete discharges per year: _____
2. Average duration of each discharge (days): _____
3. Average flow rate for each discharge (mgd) _____

b. Additional wastewater disposal methods (*check each that apply*):

- Surface impoundment. If applicable, date plan & specification approved: _____
 Location: _____ Annual ave. daily volume (mgd) _____ Estim days/year: _____
- Land application. If applicable, date plan & specification approved: _____
 Location: _____ Annual ave. daily volume (mgd) _____ Estim days/year: _____
- Transport to another treatment works
 Transporter: _____ Annual ave. daily volume (mgd) _____ Estim days/year: _____
- Underground percolation/well injection. If applicable, date plan & specification approved: _____
 Location: _____ Annual ave. daily volume (mgd) _____ Estim days/year: _____

Section G - Effluent Monitoring Information:

All data must be based on 40 CFR 136 methods and be no more than 4.5 years old.

Pollutant ⁽¹⁾	Maximum	Long Term Average	Units	No. of Analyses
1. Total Suspended Solids (TSS)				
2. Biochemical Oxygen Demand (BOD ₅)				
Carbonaceous BOD ₅ (CBOD ₅)* <i>*optional – only if permittee requests ⁽²⁾</i>				
3. pH	<u>Max:</u>	<u>Min:</u>	s.u.	
4. Temperature (winter)				
5. Temperature (summer)				
6. <i>E. Coli</i> bacteria ⁽³⁾			#/100 mL	
7. Dissolved Oxygen ⁽⁴⁾	<u>Min:</u>			
8. Oil and Grease				
9. Total Residual Chlorine (TRC) ⁽⁴⁾				
10. Ammonia				
11. Total Kjeldahl Nitrogen (TKN) ^(4,5)				
12. Nitrate+ Nitrite (NO ₃ +NO ₂)				
13. Total Nitrogen (TN) ^(4,5)				
14. Total Phosphorus (TP) ^(4,5)				
15. Total Dissolved Solids (TDS) ⁽⁴⁾				
16. Other:				

Footnote:

- (1) Data for each parameter required unless otherwise noted.
- (2) As allowed under 40 CFR 133.102(a)(4), DEQ may substitute CBOD₅ for BOD₅ upon request of applicant.
- (3) Reporting *Escherichia coli* (*E. coli*) bacteria as #/100 milliliters (mL) includes either most probable number (mpn) per 100 mL or colony-forming units (cfu) per 100 mL. Report the geometric mean rather than the long-term average.
- (4) Provide requested data only if available.
- (5) Provide nutrient data taken in the applicable summer period (typically July 1 – September 30th) if discharge has occurred in that timeframe.

CBOD₅ - Are you requesting to substitute CBOD₅ in lieu of BOD₅?

- No, please maintain BOD₅ as the appropriate parameter for limits and compliance monitoring
- Yes, please replace BOD₅ with CBOD₅ as the appropriate parameter for limits and compliance monitoring

Section H - Demonstration of Eligibility for Less Stringent Technology-based Effluent Limits

A facility is required to demonstrate eligibility for treatment equivalent to secondary (TES) or alternate state requirements (ASR), or they will be subject to the default - National Secondary Standards (NSS). Provide information to support your request for less stringent limits and select the appropriate Total Suspended Solids (TSS) standard and 5-day Biochemical Oxygen Demand (BOD₅) standard that applies to your facility.

Step One: Provide information to support eligibility for less stringent TBELs:

Indicate whether you are requesting ‘treatment equivalent to secondary’ for one or both parameters. If so, provide the 95th percentile of the monthly and weekly average concentrations for the applicable parameter (TSS and/or BOD₅) for the past 2 to 4.5 years.

Parameter	Units	Requesting Less Stringent TBELs?	95 th Percentile Monthly Average	95 th Percentile Weekly Average	Date Range (Mo/Yr to Mo/Yr)
TSS	mg/L	Y N			
BOD ₅	mg/L	Y N			
	% removal	--		5 th percentile:	

Certification that proper operation and maintenance was conducted – provide narrative overview below.

Proper Operation & Maintenance: Provide justification (attach sheet(s) as necessary) for meeting TES or ASR, above. Examples include following O&M Manuals, active involvement in managing lagoon, and conducting optimization or other assessment.

Step Two: Select the appropriate TSS Category (Check one):

- (A) TSS - National Secondary Standards (NSS)**
Limits = 30 mg/L monthly average and 45 mg/L weekly average – default, no demonstration needed (i.e. NSS is required unless all of the applicable conditions are met for TES or ASR).
- (B) TSS - Treatment Equivalent to Secondary (TES)**
Limits = 45 mg/L monthly average and 65 mg/L weekly average – applies if the 95th percentile TSS effluent quality for the previous 2 to 4.5 years’ is 30 - 45 mg/L monthly average and/or 45 - 65 mg/L weekly average; the facility has demonstrated proper operation & maintenance; and has ≥ 65% BOD₅ removal.
- (C) TSS - Alternate State Requirements (ASR)**
Limits = 100 mg/L monthly average and 135 mg/L weekly average – applies if the 95th percentile TSS effluent quality for the previous 2 to 4.5 years’ is > 45 mg/L monthly average and/or > 65 mg/L weekly average; the facility has demonstrated having proper operation & maintenance; and treats to or better than 45 mg/L BOD₅.

Step Three: Select the appropriate BOD₅ Category (Check one):

- (1) BOD₅ National Secondary Standards (NSS)**
Limits = 30 mg/L monthly average, 45 mg/L weekly average, and 85% removal – default, no demonstration needed (i.e. NSS is required unless all of the applicable conditions are met for TES).
- (2) BOD₅ - Treatment Equivalent to Secondary (TES)**
Limits = 45 mg/L monthly average, 65 mg/L weekly average, and ≥ 65% removal – applies if the 95th percentile BOD₅ effluent quality for the previous 2 to 4.5 years’ is > 30 mg/L monthly average and/or > 45 mg/L weekly average and facility has demonstrated proper operation & maintenance.

Section I - Standard Mixing Zone Request

1. Indicate whether the facility needs a Standard Mixing Zone (See General Permit Fact Sheet Attachment C).

- No. This facility does not need a standard mixing zone.
 - We agree with the Attachment C conclusions that a standard mixing zone is not required (STOP)
 - Other: _____(STOP)
- Yes. This facility needs a standard mixing zone. Indicate pollutants and go to #2:
 - Nitrate + nitrite.
 - Ammonia.

2. In order to comply with the standard mixing zone requirements, a Water Quality Assessment (ARM 17.30.506) must be submitted in conjunction with this NOI. Check how you have completed the assessment:

- I have attached a separate assessment conducted in conformance with ARM 17.30.506.
- I have completed the checklist, below, which conforms with the assessment requirements.

(a) Identify whether any of the following biologically important areas exist within the proposed mixing zone or within a shore-hugging plume in an aquatic life segment, and identify the source of this information:

- Yes No fish spawning area. Information source: _____
- Yes No fish nursery area. Information source: _____

(b) Identify whether any of the following areas are located within or adjacent to the proposed mixing zone, and identify the source of this information:

- Yes No drinking water intake. Information source: _____
- Yes No zone of influence for a drinking water well or a well which is used for recreational purposes. Information source: _____
- Yes No recreational area. Information source: _____

(c) Identify whether data supports the conclusion that fish or other aquatic life would be attracted to the effluent plume:

- Yes No Information source: _____

(d) Identify whether the you are requesting a standard mixing zone for parameter(s) that are are toxic and persistent:

- Yes No Parameter: _____ Information source: _____
- Yes No Parameter: _____ Information source: _____

(e) Will the parameter(s) that you are requesting a standard mixing zone for inhibit migration of fish or other aquatic species, or will it block migration into tributary segments?

- Yes No Parameter: _____ Information source: _____
- Yes No Parameter: _____ Information source: _____

(f) Is there another mixing zone that could cause cumulative effects and therefore threaten or impair existing uses?

- Yes No Information source: _____

Section J – Sage Grouse Habitat

Visit the Montana Sage Grouse Habitat Conservation Program (Program) website (see instructions for link) and determine if the domestic lagoon is located in designated sage grouse habitat (core, general, and/or connectivity).

- Yes: Submit application to the Program and attach a copy of the application and resulting consulting letter.
- No: Project is not located in a designated habitat. No further effort is needed.

Section K - CERTIFICATION FOR ALL OWNER/OPERATORS

Applicant Information: This form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Applicants Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)

B. Title (Type or Print)

C. Phone No.

D. Signature

E. Date Signed

Section L – Authorized Representative:

In order for future reports, including Discharge Monitoring Reports (DMRs), to be signed by anyone other than the signatory for this NOI, a duly authorized individual(s) or position(s) must be identified. If one is not designated then all reports must be signed by the signatory until such designation is made in writing [ARM 17.30.1323(2)].
(Check the appropriate box(es)):

- I designate the Facility Contact listed in Section B as a duly authorized individual
- I designate the Applicant Contact listed in Section C as a duly authorized individual
- I designate the following other duly authorized representative for this permit (*complete information below*):

Name and Title, or Position Title: _____

Company Name (if different than the applicant): _____

Mailing Address: _____

City, State, and Zip Code: _____

Phone Number: () _____ Email Address: _____

***** Or *****

- No duly authorized representative for this permit is designated at this time.