



Application for Coverage

Under the South Dakota Surface Water Discharge System Individual Permit for Biosolids Management

This form is provided by the Secretary of the South Dakota Department of Environment and Natural Resources in accordance with §74:03:18:09 of the Administrative Rules of South Dakota. Facilities must obtain a permit to manage biosolids (treated municipal sludge) or septage. Completion and submittal of this form is required to obtain coverage under a Biosolids Management permit.

Section A: Facility Information

The facility described below is involved in biosolids treatment/management activities and is applying for coverage under the South Dakota Surface Water Discharge System Individual Permit for Biosolids Management.

1. Facility name: _____
2. Facility Address: _____
3. Facility Location: Section _____ Township _____ Range _____
Latitude _____ Longitude _____
4. Facility Operator: _____
5. Operator Address: _____
Street _____ State _____ Zip Code _____
6. Operator Telephone: (_____) _____ Fax (_____) _____
7. Operator e-mail (if available) _____
8. Billing Address: _____
Street or P.O. Box _____ State _____ Zip Code _____

Check all boxes that apply in each of the following sections.

9. Ownership Status: Name of Owner: _____
 Federal Special District
 State Public
 Local (County or city) Private
 Other: _____

10. Is the facility or any associated management or application site(s) on:

Federal Land

Indian Land

if yes, explain:

11. Facility Type:

Sewage Treatment Plant

Class I (facilities with industrial pretreatment programs or designated as Class I)

Wet-weather design flow equal to or greater than 1 million gallons per day

Serves 10,000 people or more

Design flow less than 1 million gallons per day and serves less than 10,000 people

Compost Facility

Septage Management Facility

Beneficial Use Facility

12. What is the capacity of your facility?

Sewage treatment plants specify wet-weather design flow in million gallons per day _____

Other facilities specify or estimate capacity (explain if necessary) _____

Section B: Facility Operations

1. Sewage Treatment Facility:

a. Pre-treatment

Settling basins

Screening

Grinding

Other: _____

b. Activated Sludge

Normal activated

Fine bubble

Pure oxygen activated

Sequential batch reactors

Oxidation ditch

Carrousel

Other: _____

c. Fixed Film

- K.S. loaded trickling filters
- Block media high air
- Rotating biological contactors
- Plastic media
- Ordinary stones
- Recirculating gravel filters
- Other: _____

e. Digestion

- Aerobic
- Mixed aerobic/anaerobic
- Anaerobic
- Thermophilic
- Other: _____

d. Lagoons

- Without aeration or recirculation
- Aerated without recirculation
- Aerated with recirculation
- Aerated settled
- Biolac system
- Other: _____

f. Biosolids Treatment/Management

- Drying beds
- Belt-filter presses
- Centrifuge
- Composting
- Bagging
- Alkaline stabilization
- Polymer
- Heat Drying
- Heat Treatment
- Irradiation
- Pasteurization
- Other: _____

2. Septage Management Facilities

- Composting
- Aeration
- Screening
- Grinding
- pH adjustment
- Other: _____
- None

3. Discuss any seasonal or operational variations that affect either the quality or quantity of biosolids/septage that is generated or managed:

4. **Topographic Map.** Provide a topographic map or maps (or other appropriate map(s) if a topographic map is unavailable) that shows the following items of information. Map(s) should include the area one mile beyond all property boundaries of the facility:

- a. Location of all biosolids management facilities, including locations where biosolids is stored, treated, or disposed.
- b. Location of all wells, springs, and other surface water bodies, listed in public records or otherwise known to the applicant within ¼ mile of the facility property boundaries.

Line Drawing. Provide a line drawing and/or a narrative description that identifies all biosolids processes that will be employed during the term of the permit, including all processes used for collecting, dewatering, storing, or treating biosolids, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.

5. **Contractor Information.** Are any operational or maintenance aspects of this facility related to biosolids generation, treatment, use or disposal the responsibility of a contractor? Yes No

If yes, provide the following for each contractor (attach additional pages if necessary):

- a. Name: _____
- b. Mailing Address: _____
- c. Telephone Number: _____
- d. Responsibilities of contractor: _____

Section C: Biosolids Quantity & Quality

- 1. Annual production of biosolids (based on a five-year average in dry tons): _____
- 2. Amount of biosolids used during last calendar year (dry ton): _____
 Actual Estimated
- 3. Amount of biosolids maintained in storage (dry tons): _____
 Actual Estimated

4. Do you expect major changes in product quantities generated, used, or stored during the next five years?

Yes No

If yes, explain:

5. If a septage management facility, what types of septage will you handle?

Class I

Class II

Class III

6. Typical Biosolids constituent concentrations (not applicable to septage):

Average calculated from previous year's data.

Concentrations based on most recent data.

Other: _____

Constituent level in ppm (dry weight basis):

Arsenic _____

Nitrate Nitrogen _____

Cadmium _____

Ammonia Nitrogen _____

Copper _____

Total Kjeldahl Nitrogen _____

Lead _____

Phosphate _____

Mercury _____

% Total solids _____

Molybdenum _____

% Volatile solids (% of total) _____

Nickel _____

pH _____

Selenium _____

Zinc _____

7. Indicate pathogen reduction class and alternative employed. Note: All Class A alternatives require sampling and analysis.

Class A – Alternative 1 *Time and Temperature*

Class A – Alternative 2 *Alkaline stabilization*

Class A – Alternative 3 *Process verification*

Class A – Alternative 4 *Batch verification*

- Class A – Alternative 5 *Process to Further Reduce Pathogens (PFRP)*
 - Class A – Alternative 6 *Equivalency determination*

 - Class B – Alternative 1 *Seven samples analyzed for fecal coliform*
 - Class B – Alternative 2 *Process to Significantly Reduce Pathogens (PSRP)*
 - Class B – Alternative 3 *Equivalency determination*

 - Does not meet pathogen reduction requirements. If not, explain:
-
-
-

8. Indicate vector attraction reduction alternative employed.

- 38% volatile solids reduction, or
 - Bench sheet
- Aerobic process with SOUR test
- Aerobic treatment meeting time/temperature
- pH adjustment
- 75% or greater solids content for biosolids containing only stabilized solids
- 90% or greater solids content for biosolids containing any unstabilized solids
- Injection below the surface of the ground
- Incorporation after application

9. You must submit the following data with your permit application:

- Biosolids monitoring data (submit all available data for last two years)
- Soils at application site (submit only if biosolids are not exceptional quality and the site is to be used again.)
- Surface and groundwater monitoring data (submit only if biosolids are not exceptional quality)

You may provide your data in the following forms:

- As an attachment to this application
- Compiled in annual reports completed and submitted with this application
- Include any site specific data with a related Site Specific Land Application Plan

2. If you depend on another party to apply your biosolids, provide the name of the operator/contractor and the location of the facilities managed (attach additional sheets if necessary):

Operator/contractor name _____

Address _____
 Street City State Zip Code

Operator/Contractor phone: (_____) _____

Name of the facility/site: _____

 Street City State Zip Code

Name of the facility/site: _____

 Street City State Zip Code

Name of the facility/site: _____

 Street City State Zip Code

3. Indicate land types or management scenarios you use, and the amount of biosolids (dry tons) in each category during the last calendar year:

Bulk to agricultural land _____ (total dry tons for all agricultural land types)

Food crop _____ (subtotal)

Feed crop _____ (subtotal of agricultural land; total for feed crops)

Range land _____ (subtotal for feed crops)

Pasture _____ (subtotal for feed crops)

Fiber crop _____ (subtotal)

Bulk to forest land _____ (total to forest land)

Bulk to public contact site _____ (total to public contact site)

Bulk to land reclamation site _____ (total to land reclamation sites)

Bulk to lawn or home garden _____ (total to lawns or home gardens)

Sold or given away in a bag or other container _____ (total in bags or other containers)

Bulk sold or given away to another person who prepares for application to the land _____ (total)

Bulk sold or given away to another party for application to the land _____ (total)

4. Total sold, given away, or applied to the land during the previous calendar year (dry tons)_____

Section E: Land Application Plans (not required for EQ biosolids unless otherwise specified)

You must attach a site specific land application plan for each site where you are presently applying or are proposing to apply biosolids to the land.

1. Are all land application sites currently planned for use identified in an attached site specific land application plan?

Yes No If no, a site specific land application plan must be submitted before biosolids can be applied

2. If no to 1 above, a General Land Application Plan is required with this application to secure the right to propose new sites at a later date. *See Appendices 1 & 2 for contents of site specific and general land application plans.*

4. Facilities not providing a land application plan for their exceptional quality biosolids must provide a management contingency plan with this application addressing how they will manage their biosolids in the event they fail exceptional quality standards.

5. Are any local permits required for your facility or for the biosolids application sites?

Yes No

If yes, list here or describe in attached Site Specific Land Application Plan(s):

Section F: Surface Disposal of Biosolids

1. Do you own or operate a surface disposal site?

Yes No

a. Unit name or number: _____

b. Unit location: _____

Street or Route # City State Zip Code

County Section Township Range

Latitude _____ Longitude _____

Method of latitude/longitude determination

_____ USGS _____ Field Survey _____ GPS _____ Other

c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

d. Amount of biosolids placed on the active biosolids unit per 365-day period (total dry tons):_____

e. Amount of biosolids placed on the active biosolids unit over the life of the unit (total dry tons): _____

f. Does the biosolids unit have a liner with a maximum hydraulic conductivity of $1E-7$ cm/sec?

Yes No

If yes, describe the liner (or attach a description):

g. Does the active biosolids unit have a leachate collection system?

Yes No

If yes, describe the leachate collection system (or attach a description). Also, describe the method used for leachate disposal and provide the numbers of any Federal, State, or local permit(s) for leachate disposal:

h. Is the boundary of the active biosolids unit less than 150 meters from the property line of the surface disposal site?

Yes No

If yes, provide the actual distance in meters: _____

Provide the following information:

Remaining capacity of active biosolids unit (dry tons): _____

Anticipated closure date for active biosolids unit, if known: _____

Provide, with this application, a copy of any closure plan that has been developed for this active biosolids unit.

Section G: Facility Sampling Plan

1. Does your facility have a Biosolids Sampling Plan?

Yes No

a. If yes, submit a copy with this application.

b. If no, explain how your sampling is done:

c. No sampling is done.

Section H: Landfill Disposal of Biosolids

1. Do you currently dispose or do you plan to dispose of any biosolids on other than an emergency basis?

- Yes No

If yes,

- Disposal is a temporary management option which will not exceed five years in length
 Disposal is planned as a long-term management option

2. Approximate quantities to be disposed (in dry tons) _____

Section I: Attachment Checklist

Please check boxes to indicate any attachments you are including with your permit application.

- Land Application Plan(s):
- Site Specific
 - General
- Contingency Plan for EQ Biosolids
- Facility Biosolids Sampling Plan
- Data
- Maps
- Treatment Plant Schematic
- Temporary disposal plan
- Other (list all): _____

Section J: Appendices

1. Contents of Site Specific Land Application Plans
 2. Contents of General Land Application Plans
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Certification Statement

“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 person or 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. In addition, I certify that I am aware of the terms and conditions of the Individual Permit for Biosolids Management and I agree to comply with those requirements.”

Signature _____ **Date** _____

Title _____ **Telephone number** _____

Upon request of the permitting authority, you must submit any other information necessary to assess biosolids/septage use or disposal practices at your facility or identify appropriate permitting requirements.

Submitting Your Permit Application

You must submit your permit application to the following:

**South Dakota Department of Environment and Natural Resources
Surface Water Quality Program
Joe Foss Building
523 East Capitol Avenue
Pierre, South Dakota 57501-3182**

Attention: State Biosolids Coordinator

Appendix 1

Contents of Site Specific Land Application Plans

A site specific land application plan is required for every site where non-exceptional quality biosolids are applied to the land.

Site specific land application plan(s) must provide information necessary to determine if a site is appropriate for land application of biosolids. Your site specific land application plan(s) must provide a description of how the site(s) will be managed and, at a minimum, the following information:

- 1) Whether or not it is known or can be determined that biosolids containing pollutants in excess of the values in Table 3 of Appendix 1 of this permit have ever been applied to the site, and if so:
 - The date(s) when the biosolids were applied (if known);
 - The amount of biosolids applied (if known);
 - The concentration of pollutants in the biosolids (if known);
 - The area(s) of the site to which biosolids were applied (if known);
- 2) A discussion of the types of crops grown or expected to be grown, their intended end use (e.g. pasture grass for a feed crop, corn as a food crop), and the current distribution of crops on the site;
- 3) An explanation of how agronomic rates will be determined during the life of the site along with any currently available calculations. Whenever agronomic rates are determined or conditions change (i.e. a change in crops or agronomic rates) an update of the agronomic rate calculations must be filed with the department;
- 4) Method(s) of application;
- 5) Seasonal and daily timing of biosolids applications;
- 6) Any available data from soils, surface water, or groundwater monitoring collected from the site within the last two years, and any proposed new monitoring or continuation of existing monitoring programs;
- 7) The name of the county where biosolids will be applied;
- 8) A description of how biosolids will be stored at the site and also addressing related off-site storage;
- 9) Site map(s) showing:
 - The means of access to the facility and location by street address if applicable; a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site (with section, township, and range), and other means of identifying the location as appropriate and available;
 - The number of acres in the site;

- Location and extent of any wetlands on the site;
 - A topographic relief of the application site and surrounding areas;
 - Adjacent properties and uses and their zoning classification;
 - Any seasonal surface water bodies located on the site or perennial surface water bodies within ¼ mile of the city;
 - The location of any wells within ¼ mile of the site that are listed in public records or otherwise known to you, whether for domestic, irrigation, or other purposes;
 - The width of buffer zones to surface waters, property boundaries, and other features requiring buffers;
 - The presence and extent of any threatened or endangered species or related critical habitat;
 - Any portion of the site that falls within a wellhead protection area;
 - The location and size of any areas which will be used to store biosolids.
- 10) If the seasonal groundwater is three feet or less below the surface, a management plan describing how you will protect groundwater. For example, your plan may limit applications to the time of year when groundwater is receding to less than three feet and growing vegetation will use the nitrogen in the biosolids.
- 11) A description of how access to the site will be restricted (i.e. signs posted around the site or other approved method of access restriction).
- 12) Written approval of the landowner when bulk biosolids which do not meet standards for exceptional quality biosolids will be applied to the land.

Appendix 2

Contents of General Land Application Plans

A general land application plan is required when all biosolids sites are not identified in the permit application submitted for coverage under the South Dakota Surface Water Discharge Program Individual Permit for Biosolids Management.

- 1) Describe the geographical area covered by the plan, including the names of all counties where biosolids will be applied;
- 2) Identify site selection criteria;
- 3) Describe how sites will be managed;
- 4) Provide for advance notice to the department new or expanded land application sites. The advance notice must be at least 30 days, to allow time for the department to object prior to the biosolids applications.

application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.

All applications filed pursuant to Titles 34A and 45 shall include a certification, sworn to under oath and signed by the applicant, that he is not disqualified by reason of this section from obtaining a permit. In the absence of evidence to the contrary, that certification shall constitute a prima facie showing of the suitability and qualification of the applicant. If at any point in the application review, recommendation or hearing process, the secretary finds the applicant has intentionally made any material misrepresentation of fact in regard to this certification, consideration of the application may be suspended and the application may be rejected as provided for under this section.

Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26."

Pursuant to SDCL 1-40-27, I certify that I have read the forgoing provision of state law, and that I am not disqualified by reason of that provision from obtaining the permit for which application has been made.

By signing this form, I certify that the information included on this form is, to the best of my knowledge and belief, true, accurate, and complete. I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.

Dated at _____, South Dakota this ____ day of _____, 20____.

Applicant Name (Please Print)

Applicant Signature

Subscribed and sworn before me this ____ day of _____, 20____.

Notary Public

My commission expires: _____

(SEAL)

**PLEASE ATTACH SHEET DISCLOSING ALL FACTS PERTAINING TO
SDCL 1-40-27 (1) (a) THROUGH (e).
ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT
AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION.**