

Permit No: SDL020000

# **SOUTH DAKOTA DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES**

## **Biosolids General Permit Authorizing Land Application, Composting, and Landfilling of Biosolids Under the South Dakota Biosolids System**

In compliance with the provisions of the South Dakota Water Pollution Control Act and the Administrative Rules of South Dakota, Article 74:52,

*the [PERMITEE]*

is authorized under this permit to land apply, compost, or landfill biosolids, from its wastewater treatment facility [Location] in accordance with application sites, specific limits, monitoring requirements, management practices, and other conditions set forth herein. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the South Dakota Water Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modifications; or for denial of a permit renewal application.

This permit shall become effective **September 1<sup>st</sup>, 2023**.

**General permit coverage for the [Permittee] shall become effective [COVERAGE DATE]**

This permit and the authorization to discharge shall expire at midnight, **August 31<sup>st</sup>, 2028**).

Signed this 1st day of September 2023



Authorizing Permitting Official

**Hunter Roberts**

Secretary

Department of Agriculture and Natural Resources

Modified: June 27, 2023  
Effective: September 1, 2023

## TABLE OF CONTENTS

### COVER SHEET – Issuance and Expiration Dates

|                                                                                   |           |
|-----------------------------------------------------------------------------------|-----------|
| <b>TABLE OF CONTENTS .....</b>                                                    | <b>2</b>  |
| <b>DEFINITIONS .....</b>                                                          | <b>4</b>  |
| <b>1.0 GENERAL PERMIT COVERAGE.....</b>                                           | <b>8</b>  |
| 1.1 REQUEST FOR COVERAGE UNDER THE GENERAL PERMIT .....                           | 8         |
| 1.2 GENERAL PERMIT TRANSFERS .....                                                | 8         |
| 1.3 LIMITATIONS ON COVERAGE.....                                                  | 8         |
| 1.4 REAFFIRM ELIGIBILITY .....                                                    | 9         |
| 1.5 REOPENER PROVISIONS.....                                                      | 9         |
| 1.6 DUTY TO REAPPLY .....                                                         | 9         |
| 1.7 CONTINUATION OF THE EXPIRED GENERAL PERMIT .....                              | 9         |
| 1.8 TERMINATING COVERAGE .....                                                    | 9         |
| 1.9 REQUIRING AN INDIVIDUAL BIOSOLIDS PERMIT .....                                | 9         |
| <b>2.0 BIOSOLIDS LIMITS AND MONITORING REQUIREMENTS.....</b>                      | <b>10</b> |
| 2.1 DESCRIPTION OF BIOSOLIDS GENERATING FACILITIES .....                          | 10        |
| 2.2 CHANGE IN TREATMENT SYSTEM OR USE/DISPOSAL PRACTICES .....                    | 10        |
| 2.3 SPECIAL CONDITIONS ON BIOSOLIDS STORAGE.....                                  | 11        |
| 2.4 PROPER OPERATION AND MAINTENANCE.....                                         | 11        |
| 2.5 PROPERTY RIGHTS.....                                                          | 11        |
| 2.6 SEVERABILITY .....                                                            | 11        |
| 2.7 GENERAL PERMIT ACTIONS .....                                                  | 12        |
| <b>3.0 BIOSOLIDS LIMITS – <i>OUTFALL 201 – CLASS B LAND APPLICATION</i> .....</b> | <b>13</b> |
| 3.1 CHEMICAL .....                                                                | 13        |
| 3.2 PATHOGENS.....                                                                | 14        |
| 3.3 VECTOR ATTRACTION REDUCTION .....                                             | 14        |
| 3.4 SITE RESTRICTIONS .....                                                       | 15        |
| 3.5 BIOSOLIDS SELF-MONITORING .....                                               | 15        |
| 3.6 BEST MANAGEMENT PRACTICES .....                                               | 18        |
| 3.7 LAND APPLICATION RECORDKEEPING REQUIREMENTS .....                             | 20        |
| 3.8 REPORTING REQUIREMENTS .....                                                  | 21        |
| <b>4.0 BIOSOLIDS LIMITS- – <i>OUTFALL 202 – CLASS A</i> .....</b>                 | <b>23</b> |
| 4.1 CHEMICAL .....                                                                | 23        |
| 4.2 PATHOGENS.....                                                                | 24        |
| 4.3 VECTOR ATTRACTION REDUCTION .....                                             | 24        |
| 4.4 BIOSOLIDS SELF-MONITORING REQUIREMENTS.....                                   | 24        |
| 4.5 BEST MANAGEMENT PRACTICES .....                                               | 26        |
| 4.6 RECORDKEEPING REQUIREMENTS.....                                               | 27        |
| 4.7 REPORTING REQUIREMENTS .....                                                  | 27        |
| <b>5.0 BIOSOLIDS LIMITS – <i>OUTFALL 203 – LANDFILL DISPOSAL</i> .....</b>        | <b>29</b> |
| 5.1 CHEMICAL .....                                                                | 29        |
| 5.2 PATHOGENS.....                                                                | 29        |
| 5.3 VECTOR ATTRACTION REDUCTION .....                                             | 29        |
| 5.4 BIOSOLIDS SELF-MONITORING .....                                               | 29        |
| 5.5 BEST MANAGEMENT PRACTICES .....                                               | 30        |
| 5.6 RECORDKEEPING REQUIREMENTS.....                                               | 30        |
| 5.7 REPORTING REQUIREMENTS .....                                                  | 31        |

**6.0 MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS .... 32**

|      |                                                          |    |
|------|----------------------------------------------------------|----|
| 6.1  | REPRESENTATIVE SAMPLING .....                            | 32 |
| 6.2  | MONITORING PROCEDURES .....                              | 32 |
| 6.3  | REPORTING OF MONITORING RESULTS .....                    | 32 |
| 6.4  | SIGNATORY REQUIREMENTS .....                             | 32 |
| 6.5  | ADDITIONAL MONITORING BY THE PERMITTEE.....              | 33 |
| 6.6  | RECORDS CONTENTS .....                                   | 33 |
| 6.7  | DUTY TO PROVIDE INFORMATION.....                         | 33 |
| 6.8  | OTHER INFORMATION .....                                  | 34 |
| 6.9  | PLANNED CHANGES.....                                     | 34 |
| 6.10 | RETENTION OF RECORDS .....                               | 34 |
| 6.11 | TWENTY-FOUR HOUR NOTICE OF NONCOMPLIANCE REPORTING ..... | 34 |
| 6.12 | OTHER NONCOMPLIANCE REPORTING.....                       | 35 |

**7.0 COMPLIANCE REQUIREMENTS..... 36**

|     |                                                    |    |
|-----|----------------------------------------------------|----|
| 7.1 | DUTY TO COMPLY .....                               | 36 |
| 7.2 | DUTY TO MITIGATE .....                             | 36 |
| 7.3 | NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE..... | 36 |
| 7.4 | INSPECTION AND ENTRY .....                         | 36 |
| 7.5 | REMOVED SUBSTANCES.....                            | 37 |
| 7.6 | AVAILABILITY OF REPORTS .....                      | 37 |

**8.0 PENALTIES FOR NONCOMPLIANCE..... 37**

|     |                                                    |    |
|-----|----------------------------------------------------|----|
| 8.1 | PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS..... | 37 |
| 8.2 | PENALTIES FOR TAMPERING .....                      | 37 |
| 8.3 | PENALTIES FOR FALSIFICATION OF REPORTS.....        | 37 |
| 8.4 | OIL AND HAZARDOUS SUBSTANCE LIABILITY.....         | 38 |

## DEFINITIONS

**30-day (and monthly) average** means the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. The calendar month shall be used for purposes of reporting.

**ARSD** means the Administrative Rules of South Dakota.

**Agronomic Rate** is the whole biosolids application rate (dry weight basis) designed to: (1) provide the amount of nitrogen needed by the crop or vegetation growth on the land; and (2) minimize the amount of nitrogen in the biosolids that passes below the root zone of the crop or vegetation grown on the land to the ground water.

The **Approval Authority** is the Secretary of the South Dakota Department of Agriculture and Natural Resources, or designated representative.

**Animals** for the purposes of this permit are domestic livestock.

**Annual Pollutant Loading Rate** is the maximum amount of a pollutant (dry-weight basis) that can be applied to a unit area of land during a 365-day period.

**Annual Whole Biosolids Application Rate** is the amount of biosolids (dry-weight basis) that can be applied to a unit area of land during a cropping cycle.

**Application Site or Land Application Site** means all contiguous areas of a users' property intended for biosolids application.

**Batch** is when a pile of biosolids is created, allowed to sit for a specific period of time and then removed from the site. A batch of biosolids could be a compost pile or long-term treatment piles.

**Biosolids** means any sludge or material derived from sludge that can be beneficially used. Beneficial use includes, but is not limited to, land application to agricultural land, forest land, a reclamation site or sale or give away to the public for home lawn and garden use.

**Bulk Biosolids** is biosolids that is not sold or given away in a bag or other container for application to the land.

**Ceiling Concentration** is the maximum concentration limits for 9 heavy metal pollutants in biosolids; specifically arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc. If a limit for any one of the pollutants is exceeded, the biosolids cannot be applied to the land.

**CFU/gram** is the number of colony forming fecal coliform units per gram of biosolids on a dry weight basis.

**Composite Biosolids Sample** is a sample taken either in a wastewater treatment process, dewatering facility, or application device consisting of a series of individual grab samples. For liquid biosolids, a minimum of three grab samples of 500 milliliters taken during the first one-third, second one-third and final one-third of a pumping cycle and combined in equal volumetric amounts. For semi-dewatered, dewatered or dried biosolids, a composite sample consisting of a minimum of three grab samples of 0.5 pounds taken over a period of 24 hours not less than two hours apart or another representative sample as defined or approved by the permitting authority.

**Cumulative Pollutant Loading Rate** is the maximum amount of an inorganic pollutant (dry-weight basis) that can be applied to a unit area of land.

**CWA** means the Clean Water Act (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, Pub. L. 97-117, and Pub. L. 100-4.

**Daily Maximum (Daily Max.)** is the maximum value allowable in any single sample or instantaneous measurement.

**Dry Weight Basis** means 100 percent solids (i.e. zero percent moisture).

A **geometric mean**, unlike an arithmetic mean, tends to dampen the effect of very high or low values, which might bias the mean if a straight average (arithmetic mean) were calculated. This is helpful when analyzing bacteria concentrations, because levels may vary anywhere from 10 to 10,000 fold over a given period.

A **Grab Sample**, for monitoring requirements, is a single “dip and take” sample collected at a representative point in wastewater treatment or biosolids land application processes.

**Grit and Screenings** are sand, gravel, cinders, or other materials with a high specific gravity and relatively large materials such as rags generated during preliminary treatment of domestic sewage at a treatment works and shall be disposed of according to 40 CFR 258.

**Ha** means hectare. One hectare equals 2.47 acres.

**High Potential for Public Contact Site** includes but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

**IU** means industrial user.

An **Instantaneous Measurement**, for monitoring requirements, is a single reading, observation, or measurement either taken instantaneously at the facility or within 15 minutes of the sample.

**Kg/Ha** is kilogram of pollutants per hectare of land.

**Kg/Ha/Yr** is the kilograms of pollutants applied to a hectare of land in a single calendar year.

**Land Application** is the spraying or spreading of biosolids onto the land surface; the injection of biosolids below the land surface; or the incorporation of biosolids into the land so the biosolids can either condition the soil or fertilize crops or vegetation grown in the soil. Land application includes distribution and marketing (i.e. the selling or giving away of biosolids).

**Low Potential for Public Contact Site** includes, but is not limited to, farms, ranches, reclamation areas, and other lands which are private lands, restricted public lands, or lands which are generally not accessible to or used by the public.

**MPN/gram** is the most probable number of fecal coliform bacteria per gram of biosolids on a dry weight basis.

**Monthly Average** is the arithmetic mean of all measurements taken during the month.

**pH** is the measure of the hydrogen ion concentration of water or wastewater; expressed as the negative log of the hydrogen ion concentration. A pH of 7 is neutral. A pH less than 7 is acidic, and a pH greater than 7 is basic.

**Pathogen** means an organism that is capable of producing an infection or disease in a susceptible host.

**PFRP** means Processes to Further Reduce Pathogens, as described in detail in 40 CFR Part 503, Appendix B and consists of composting, heat drying, heat treatment, thermophilic aerobic digestion, irradiation or pasteurization.

**Pollutant** for the purposes of this permit is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly through the food-chain, could, on the basis of information available, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organism or offspring of the organisms.

**Pollutant Limit** is a numerical value that describes the maximum amount of a pollutant allowed per unit amount of biosolids (e.g., milligrams per kilogram of total solids); the maximum amount of a pollutant that can be applied to a unit area of land (e.g., pounds per acre); the maximum density of microorganisms per unit amount of biosolids (e.g., Most Probable Number per gram of total solids); the maximum volume of a material that can be applied to a unit area of land (e.g., gallons per acre); or the maximum amount of a pollutant allowed in plant tissue (e.g., parts per million).

**PSRP** means Processes to Significantly Reduce Pathogens, as described in detail in 40 CFR Part 503, Appendix B and consists of aerobic digestion, air drying, anaerobic digestion, composting, or lime stabilization.

**A Publicly-owned Treatment Works or POTW** is any device or system used in the treatment, including recycling and reclamation of municipal sewage or industrial waste of a liquid nature,

which is owned by the state or a municipality. This term includes sewers, pipes, or other conveyances only if they convey wastewater to a publicly owned treatment works providing treatment.

**Runoff** is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off over the land surface.

**SDDANR** means the South Dakota Department of Agriculture and Natural Resources.

**Secretary** means the Secretary of the South Dakota Department of Agriculture and Natural Resources, or other authorized representative.

**Severe Property Damage** is substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources, which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

**Sludge** is any solid, semi-solid, or liquid residue generated during the treatment of municipal wastewater or domestic sewage and/or a combination of domestic sewage and industrial waste of a liquid nature in the Treatment Works. Sludge includes but is not limited to domestic septage, scum or solids removed during primary, secondary, or advanced wastewater treatment, portable toilet pumpings, and sludge products. Sludge does not include grit, screenings, or ash generated during the incineration of biosolids.

**Similar Container** is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

**Specific Oxygen Uptake Rate (SOUR)** is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the biosolids.

**Total Solids** are the materials in the biosolids that remain as residue if the biosolids is dried at 103 to 105 degrees Celsius.

**TSS** means Total Suspended Solids. TSS is a measure of the filterable solids present in a sample.

**Unstabilized Solids** are organic materials in biosolids that have not been treated in either an aerobic or anaerobic treatment process.

**Vector Attraction** is the characteristic of biosolids that attracts rodents, flies, mosquitoes or other organism capable of transporting infectious agents.

**Volatile Solids** is the amount of the total solids in biosolids lost when the biosolids is combusted at 550 degrees Celsius for 15-20 minutes in the presence of excess air.

## **1.0 GENERAL PERMIT COVERAGE**

### **1.1 Request for Coverage under the General Permit**

1. This general permit is potentially applicable to any wastewater treatment facility within South Dakota that treats and disposes of sewage sludge also known as biosolids. A Notice of Intent (NOI) can be found in Appendix A at the end of this general permit. Applications for individual Biosolids Permits may also serve as an application form for this general permit and can be accepted by the Secretary, provided they contain the information and signatures required to properly grant or deny general permit coverage. The original form must be sent to the following address:

South Dakota Department of Agriculture and Natural Resources  
Water Quality Program  
Joe Foss Building  
523 East Capitol Avenue  
Pierre, South Dakota 57501-3182  
Telephone: (605) 773-3351

2. Coverage under this general permit is limited to those activities specifically designated in the permittee's NOI or application form. Failure to adhere to the requirements in this general permit could subject the permittee to penalties as provided under the South Dakota Water Pollution Control Act.

### **1.2 General Permit Transfers**

1. Coverage under this general permit may be transferred to a new permittee if:
  - a. The signatory authority notifies the secretary at least 30 days in advance of the proposed transfer date;
  - b. The notice includes a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
  - c. The new permittee submits a Certification of Applicant form certifying the new permittee is qualified to perform the obligations of a general permit holder in accordance with South Dakota Codified Law 1-41-20.
2. The Secretary will notify the existing and new permittee of his or her intent to transfer, modify, or revoke and reissue the general permit based on the information received and other permit information.

### **1.3 Limitations on Coverage**

Facilities will not be eligible for coverage under this general permit if:

1. The facility disposes of biosolids in a method not listed in this general permit; or
2. The facility is required to comply with a compliance schedule to attain compliance.

#### **1.4 Reaffirm Eligibility**

Periodically during the term of this general permit and at the time of reissuance, the permittee may be requested to reaffirm its eligibility for coverage under this general permit.

#### **1.5 Reopener Provisions**

This general permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limits (and compliance schedules, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Update to 40 CFR 503: The federal guidelines are promulgated or revised for activities covered by this general permit;
2. Noncompliance: The permittee is a significant contributor of pollution, presents a health hazard, or is in noncompliance with the conditions of the general permit; or
3. Other Changes: Other conditions or standards change so that the permittee no longer qualifies for this general permit such as the permittee changes in biosolids monitoring, substantial changes in use or disposal, a compliance schedule is necessary, or other items.

#### **1.6 Duty to Reapply**

If the permittee wishes to continue an activity regulated by this general permit after its expiration date, the permittee must apply for and obtain coverage under a new general permit. The general permit application must be submitted at least 45 days before the expiration date of this general permit. Periodically during the term of this general permit and at the time of reissuance, the permittee may be requested to reaffirm its eligibility to dispose of biosolids under this general permit

#### **1.7 Continuation of the Expired General Permit**

An expired general permit continues in full force and effect until a new general permit is issued. If the permittee wishes to continue an activity regulated by this general permit after its expiration date, the permittee must submit an application at least 45 days before the expiration date of the general permit.

#### **1.8 Terminating Coverage**

Permittees wishing to terminate coverage under this general permit must submit a Notice of Termination (NOT) form that is signed in accordance with **6.4 - Signatory Requirements**. Compliance with this general permit is required until a NOT, found in Appendix C, is submitted.

#### **1.9 Requiring an Individual Biosolids Permit**

1. The Secretary may require any permittee covered under this general permit to apply for and obtain an individual permit if any of the following occur:

- a. The disposal method or runoff is a significant contributor of pollution to waters of the state or it presents a health hazard;
  - b. The discharger or treatment works treating domestic sewage is not in compliance with the conditions of the SWD permit;
  - c. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
  - d. Federal guidelines are promulgated for sources covered by the biosolids general permit;
  - e. Conditions or standards have changed so the disposal no longer qualifies for the general permit; or
  - f. A water quality management plan containing requirements applicable to such point sources is approved.
2. The Secretary will notify the permittee in writing that an application for an individual permit is required. When an individual permit is issued to a permittee otherwise covered under this general permit, the permittee's general permit coverage shall be automatically terminated upon the effective date of the individual permit.

## **2.0 BIOSOLIDS LIMITS AND MONITORING REQUIREMENTS**

### **2.1 Description of Biosolids Generating Facilities**

The authorization to dispose of treated biosolids provided under this permit is limited to those biosolids produced from the permittee specifically designated below.

| <b>Outfall Number</b> | <b>Description of Biosolids Source(s)</b>                                                  |
|-----------------------|--------------------------------------------------------------------------------------------|
| 201                   | Biosolids produced at the POTW and bulk applied to the land.                               |
| 202                   | Class A biosolids produced at the POTW and distributed to the public.                      |
| 203                   | Biosolids produced at the POTW and sent to an appropriate permitted landfill for disposal. |

### **2.2 Change in Treatment System or Use/Disposal Practices**

The permittee must inform the SDDANR in writing at least 45 days prior of any significant change in the biosolids generation and handling processes at the plant and any major change in use/disposal practices. This includes, but is not limited to, the addition or removal of biosolids treatment units (e.g., digesters, drying beds, etc.) and/or any other change which would require a major modification of the permit (e.g., changing from land application to surface disposal).

### **2.3 Special Conditions on Biosolids Storage**

Permanent storage of biosolids is prohibited. Biosolids shall not be temporarily stored for more than two years. Written permission to store biosolids for more than two years must be obtained from SDDANR. Storage of biosolids for more than two years will only be allowed if it is determined that significant treatment is occurring. During the storage of biosolids, controls shall be put into place to prevent runoff of the biosolids from the storage site.

### **2.4 Proper Operation and Maintenance**

The permittee shall at all times properly operate and maintain all facilities and treatment and control systems (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit or other conditions required by the Secretary upon issuance. This may include but is not limited to, all treatment, transportation, and application equipment which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance may also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

### **2.5 Property Rights**

1. The Secretary's issuance of this general permit, adoption of design criteria, and approval of plans and specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state, or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties.
2. The State does not warrant that the permittee's compliance with this general permit, design criteria, approved plans and specifications, and operation under this general permit, will not cause damage, injury or use of private property, an invasion of personal rights, or violation of federal, state or local laws or regulations. The permittee is solely and severally liable for all damage, injury or use of private property, invasion of personal rights, infringement of federal, state or local laws and regulations, or taking or condemnation of property owned by third parties, that may result from actions taken under the permit.

### **2.6 Severability**

The provisions of this general permit are severable, and if any provision of this general permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this general permit, shall not be affected thereby.

## **2.7 General Permit Actions**

The Secretary may modify, revoke and reissue, or terminate coverage under this general permit for cause, including failure to comply with any provision of this permit or any condition imposed by the Secretary upon granting coverage under this general permit. The filing of a request by the permittee for a general permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any general permit condition.

### 3.0 Biosolids Limits – *Outfall 201 – Class B Land Application*

Effective immediately and lasting through the life of this permit, all biosolids generated by the permittee to be used for bulk land application shall meet the Class B requirements listed. The permittee shall comply with the limits in Table 1, 2, and 3 in the chart below. **Class B biosolids cannot be sold or given away in bags or other containers or applied on lawns or home gardens.**

### 3.1 Chemical

If the biosolids are to be land applied to agricultural land, forest land, a public contact site, or a reclamation area it shall meet at all times either:

1. The ceiling pollutant concentrations listed in Table 1 and the cumulative pollutant loadings in Table 2; or
2. The ceiling pollutant concentrations listed in Table 1 and the monthly average pollutant concentrations in Table 3.

**Note:** If biosolids that exceed Table 3 values, for any parameter, are land applied to a site, that site thereafter is subject to the cumulative pollutant loading rates in Table 2. **Records for those sites are required to be retained indefinitely.**

| <i>Pollutant</i>        | <i>Table 1</i>                                     | <i>Table 2</i>                                        | <i>Table 3</i>                                         |
|-------------------------|----------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------|
|                         | <b>Daily<br/>Maximum<br/>mg/Kg<sup>1,2,3</sup></b> | <b>Cumulative<br/>Loading<br/>Kg/Ha<sup>1,4</sup></b> | <b>Monthly<br/>Average<br/>mg/Kg<sup>1,2,4,5</sup></b> |
| <b>Total Arsenic</b>    | 75                                                 | 41                                                    | 41                                                     |
| <b>Total Cadmium</b>    | 85                                                 | 39                                                    | 39                                                     |
| <b>Total Copper</b>     | 4300                                               | 1500                                                  | 1500                                                   |
| <b>Total Lead</b>       | 840                                                | 300                                                   | 300                                                    |
| <b>Total Mercury</b>    | 57                                                 | 17                                                    | 17                                                     |
| <b>Total Molybdenum</b> | 75                                                 | N/A                                                   | N/A                                                    |
| <b>Total Nickel</b>     | 420                                                | 420                                                   | 420                                                    |
| <b>Total Selenium</b>   | 100                                                | 100                                                   | 100                                                    |
| <b>Total Zinc</b>       | 7500                                               | 2800                                                  | 2800                                                   |

<sup>1</sup> See definitions in draft general permit.

<sup>2</sup> All limits are on a dry weight basis and are based on 40 CFR 503.13 (a.b.r. in ARSD Chapter 74:52:09).

<sup>3</sup> All biosolids used for land application must meet the ceiling concentrations for pollutants listed in this table.

<sup>4</sup> If biosolids that exceed Table 3 values are land applied to a site, that site thereafter is subject to the cumulative pollutant loading rates in Table 2.

- <sup>5</sup> These limits represent the maximum allowable levels of pollutants for land application of any biosolids generated by the facility based on an average of all samples taken during a 30-day period.

**If the biosolids do not meet the requirements above, the biosolids shall not be land applied. Class B biosolids cannot be sold or given away in bags or other containers or applied on lawns or home gardens.**

### 3.2 Pathogens

If the biosolids are to be land applied to agricultural land, forest land, a public contact site, or a reclamation site, the biosolids shall be Class B (including the site restrictions) as described below. If the biosolids does not meet Class B requirements, the biosolids cannot be land applied.

To continue generating a Class B biosolids with respect to pathogens, the permittee has a choice of meeting either a process requirement **or** a numerical microbiological limit:

| <i>Microbiological Limit</i> <sup>1</sup>                           |           | <i>Process Requirement</i> <sup>2</sup>                   |
|---------------------------------------------------------------------|-----------|-----------------------------------------------------------|
| Fecal Coliforms shall be <2,000,000 MPN or CFU/gram of total solids | <b>OR</b> | Processes to Significantly Reduce Pathogens or equivalent |

<sup>1</sup> Based on a geometric mean of a minimum of seven (7) samples of biosolids collected over a two-week period.

<sup>2</sup> The Processes to Significantly Reduce Pathogens can be found in Appendix B of 40 CFR 503.

**If the biosolids do not meet the requirements above, the biosolids shall not be land applied.**

There are additional approved pathogen reduction alternatives available in 40 CFR 503.32 (a.b.r. in ARSD Chapter 74:52:09) for Class B. The permittee shall inform the department of which alternative the permittee plans on using to fulfill these requirements. SDDANR must be informed in writing at least 30 days prior to its use. *This change may be made without additional public notice.*

### 3.3 Vector Attraction Reduction

For land application to agricultural land, forest land, a public contact site or a reclamation area the biosolids must meet one of the vector attraction reduction alternatives found in 40 CFR 503.33 (b)(1-10).

**If the biosolids do not meet the requirements above, the biosolids shall not be land applied.**

There are additional approved vector attraction reduction alternatives available in 40 CFR 503.33 (a.b.r. in ARSD Chapter 74:52:09). The permittee shall inform the department of which alternative the permittee will use in the NOI or application to fulfill these requirements. SDDANR must be informed in writing at least 30 days prior to changing the alternative used if necessary. ***This change may be made without additional public notice.***

### 3.4 Site Restrictions

The permittee shall comply with **all** of the site restrictions listed below for Class B biosolids:

1. Food crops with harvested parts that contact the biosolids/soil mixture and are totally above the land surface, such as melons, tomatoes, etc., shall not be harvested for 14 months after application.
2. Food crops with harvested parts below the land surface, such as potatoes, onions, etc., shall not be harvested for 20 months after application if the biosolids remain on the land surface for *four months or more* prior to incorporation into the soil or 38 months after application if the biosolids remain on the land surface for *less than four months* prior to incorporation into the soil.
3. Other food, fiber, and feed crops, whose edible parts do not touch the surface of the soil, such as apples, corn, soybeans, etc., shall not be harvested from the land within 30 days after application.
4. Animals shall not be allowed to graze on the land within 30 days after application.
5. Turf grown on land where biosolids are applied shall not be harvested for at least one year after application if the harvested turf is placed on either a lawn, or an area with a high potential for public exposure.
6. Public access to land with a high potential for public exposure shall be restricted for one year after application.
7. Public access to land with a low potential for public exposure shall be restricted for 30 days after application.

### 3.5 Biosolids Self-Monitoring

40 CFR 503.16(a)(1) (a.b.r. in ARSD Chapter 74:52:09), specifies the frequency of monitoring per 365-day period based off amount of biosolids land applied for metals, pathogens, and applicable vector attraction reduction requirements. All sampling shall be done prior to land application so the appropriate agronomic rates shall be known. The table below specifies the frequencies of monitoring:

| Amount of sewage sludge (metric tons) | Frequency     |
|---------------------------------------|---------------|
| Greater than zero but less than 290   | Once per year |

|                                                     |                                        |
|-----------------------------------------------------|----------------------------------------|
| Equal to or greater than 290 but less than 1,500    | Once per quarter (four times per year) |
| Equal to or greater than 1,500 but less than 15,000 | Once per 60 days (six times per year)  |
| Equal to or greater than 15,000                     | Once per month (12 times per year)     |

At a minimum for Class B biosolids, all chemical pollutants, pathogens and applicable vector attraction reduction requirements shall be monitored for the following parameters at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the biosolids.

| Parameter                                           | Frequency                    | Reporting Values        | Sample Type            |
|-----------------------------------------------------|------------------------------|-------------------------|------------------------|
| Total Arsenic, mg/kg                                | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Cadmium, mg/kg                                | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Copper, mg/kg                                 | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Lead, mg/kg                                   | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Mercury, mg/kg                                | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Molybdenum, mg/kg                             | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Nickel, mg/kg                                 | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Selenium, mg/kg                               | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Zinc, mg/kg                                   | See Table Above              | Actual value            | Composite <sup>1</sup> |
| Total Solids, %                                     | See Table Above              | Percent                 | Grab or composite      |
| Total volatile solids, raw sludge <sup>2</sup>      | See Table Above <sup>3</sup> | Percent of total solids | Grab                   |
| Total volatile solids, digested sludge <sup>2</sup> | See Table Above <sup>3</sup> | Percent of total solids | Grab                   |
| Total volatile solids, % reduction <sup>2</sup>     | See Table Above <sup>3</sup> | Percent reduction       | Calculate              |
| pH, s.u.                                            | See Table Above              | Actual value            | Instantaneous          |
| Ammonia as N, mg/kg <sup>4</sup>                    | See table above <sup>5</sup> | Actual value            | Grab or composite      |
| Total Kjeldahl Nitrogen, mg/kg <sup>4</sup>         | See Table Above <sup>5</sup> | Actual value            | Grab or composite      |
| Organic Nitrogen, mg/kg <sup>4</sup>                | See Table Above <sup>5</sup> | Actual value            | Calculate <sup>6</sup> |

| Parameter                                               | Frequency                                 | Reporting Values | Sample Type       |
|---------------------------------------------------------|-------------------------------------------|------------------|-------------------|
| Nitrates as N, mg/kg <sup>4</sup>                       | See Table Above <sup>5</sup>              | Actual value     | Grab or composite |
| Total Phosphorous as P, mg/kg <sup>4</sup>              | See Table Above <sup>5</sup>              | Actual value     | Grab or composite |
| Total Potassium as K, mg/kg <sup>4,7</sup>              | See Table Above <sup>5</sup>              | Actual value     | Grab or composite |
| Fecal Coliform, MPN/gram <sup>8</sup>                   | See Table Above                           | Geometric Mean   | Grab              |
| Mean cell residence time, days <sup>9</sup>             | Daily                                     | Days digesting   | Calculate         |
| Digester temperature, °C                                | Continuously or twice daily <sup>10</sup> | Actual value     | Instantaneous     |
| Total amount of biosolids land applied, dry metric tons | Annually                                  | Actual value     | Calculate         |
| Total amount of biosolids generated, dmt                | Annually                                  | Actual value     | Calculate         |

<sup>1</sup> Subsamples of material shall be taken from several locations and time periods and combined to provide a representative composite sample. The sample shall be analyzed for the specified parameters using the methods approved in 40 CFR 503 (a.b.r. in ARSD Chapter 74:52:09).

<sup>2</sup> Sampling for the amount of volatile solids in the raw sludge and the digested sludge is necessary to verify that the sludge meets the requirements for a VAR of at least 38% volatile solids reduction. If a different VAR option is selected, such as incorporation into the soil within 6 hours, this sampling protocol is not applicable.

<sup>3</sup> If a batch process is used, determine the volatile solids reduction for each batch. If a continuous process is used, determine the volatiles solids reduction for material being put in and withdrawn.

<sup>4</sup> For biosolids that are land applied, these parameters must be used to calculate an agronomic loading rate.

<sup>5</sup> The biosolids must be sampled at the appropriate frequency and analyzed for these parameters if land applying that year. If using a contract hauler, this information must be presented to the contractor so the agronomic rate is not exceeded. The permittee is ultimately responsible for ensuring that any contract haulers comply with the permit requirements.

<sup>6</sup> Organic nitrogen is the Total Kjeldahl Nitrogen (TKN) less the Ammonia.

<sup>7</sup> Sampled in accordance with the South Dakota Department of Agriculture's Sludge labeling requirements.

<sup>8</sup> Seven individual representative biosolids samples shall be taken each year within a two-week time period and analyzed for fecal coliform bacteria. The sample shall be analyzed using standard method 9221C as required by the EPA Region VIII Biosolids Management Handbook. Fecal coliform monitoring is only required if the microbiological limit is used as the pathogen reduction method.

<sup>9</sup> Mean cell residence time is only required if the minimum mean cell residence time process requirement is used as the pathogen reduction method.

<sup>10</sup> Temperature in the digesters must be monitored continuously or at least twice daily, with the readings being taken at least 5 hours apart. A log showing temperature is maintained for a sufficient period of time shall be kept. This frequency shall only be required if the minimum mean cell residence time process requirement is used as a pathogen reduction method.

| Soil Sampling Parameter             | Frequency <sup>1</sup> | Sample Depth             | Sample Type            |
|-------------------------------------|------------------------|--------------------------|------------------------|
| Phosphorus as P, mg/kg <sup>2</sup> | Annually               | 0-6 inches               | Composite <sup>3</sup> |
| Shallow Nitrate as N, mg/kg         | Annually               | 0-1 foot and<br>1-2 feet | Composite <sup>3</sup> |
| Deep Nitrate as N, mg/kg            | Annually <sup>4</sup>  | 2-5 feet <sup>5</sup>    | Composite <sup>3</sup> |
| pH, s.u.                            | Annually               | Actual value             | Composite <sup>3</sup> |

<sup>1</sup> Soil samples shall be taken yearly from fields prior to land application. If the field is not being used for biosolids application that calendar year, soil sampling is not required.

<sup>2</sup> Phosphorus shall be analyzed using either the sodium bicarbonate extraction Olsen method or the AB-DPTA extraction analytical method for soils with a pH greater than 6.5 s.u. or the Bray Kurtz I method for soils with pH less than or equal to 6.5 s.u. as outlined in the 1999 version of the EPA Region VIII Biosolids Management Handbook.

<sup>3</sup> A minimum of six representative samples for each 320 (or less) acre area are to be collected, composited, and analyzed.

<sup>4</sup> At the request of the permittee, SDDANR will evaluate each land application site on a case-by-case basis to determine if the deep nitrate soil monitoring frequency can be reduced to once every five years. SDDANR will evaluate whether or not the site is located over a shallow aquifer or if deep soil monitoring is warranted. This will be done using the published South Dakota Geological Survey county studies, precipitation data, number of years biosolids were applied to the field, irrigation records, hydrologic reports, first occurrence of aquifer materials maps, and well log information located near the fields. ***This change will be made without additional public notice.***

<sup>5</sup> Samples are to be collected down to either 5 feet or to the confining layer, whichever is shallower. Each foot increment is to be composited with the other samples from the site and one analysis for nitrate is to be conducted for each increment e.g. 2 to 3 feet, 3 to 4 feet, and 4 to 5 feet.

### 3.6 Best Management Practices

If the permittee is generating Class B biosolids or Class A biosolids that are sold or given away in bulk and land applied by the permittee or contractor hired by the permittee, the permittee shall operate and maintain the land application site operations in accordance with the following requirements. The permittee shall provide to SDDANR a current Biosolids Management Plan as part of the NOI or application submittal. At a minimum, this plan shall include the elements found below. After approval of the Biosolids Management Plan by SDDANR, the plan becomes an enforceable part of the permit.

1. If the permittee would like to add or remove field application sites from its Biosolids Management Plan, it must notify SDDANR in writing at least 30 days prior to the change for site review and approval.
2. Application of biosolids shall be conducted in a manner that will not contaminate groundwater. The Secretary will determine on a case-by-case basis if the land application sites are located over a shallow aquifer. This will be done by using published South Dakota Geological Survey county studies, hydrologic reports, first occurrence of aquifer materials maps, and well log information located near the fields.

If the land application site is located over a shallow aquifer, additional soil monitoring may be required.

3. There shall be no runoff of biosolids from land application sites. Biosolids shall not be applied to land within 10 meters of waters of the state.
4. Application of biosolids shall not exceed the agronomic rate for available nitrogen of the crops grown on the site. At a minimum, the permittee is required to follow the methods for calculating agronomic rate outlined in the 1999 version of the Region VIII Biosolids Management Handbook (other methods may be approved by SDDANR on a case-by-case basis). The permittee shall notify the applicator of the total nitrogen content (as N on a dry weight basis) in the biosolids.
5. Biosolids shall not be applied to frozen, ice-covered, or snow-covered sites if the slope of the land is greater than six percent.
6. Biosolids shall not be applied to frozen, ice-covered, or snow-covered sites if the slope of the land is between 3 and 6 percent, unless one of the following requirements is met:
  - a. There is 80 percent vegetative ground cover; or
  - b. SDDANR has approved a plan demonstrating adequate runoff containment measures.
7. Biosolids shall not be land applied to sites where the available phosphorous content of the soil exceeds the following levels:
  - a. For soil pH greater than 6.5 s.u.
    1. 100 ppm based on sodium bicarbonate extraction method (e.g. Olsen); or
    2. 50 ppm based on AB-DPTA extraction analytical method;
  - b. For soil pH 6.5 s.u. or less:
    1. 170 ppm based on the Bray P1 extraction method.

The city may request these limits be modified if different limits are justified based on local conditions. The alternative limits are required to be developed in cooperation with the local agricultural extension office or university and must be approved by SDDANR. ***This change may be made without additional public notice.***
8. Biosolids shall not be applied to waters of the state or to any site with standing water.
9. The specified cover crop shall be planted during the next available planting season. If this does not occur, the city shall notify SDDANR in writing. Additional restrictions may be placed on the application of the biosolids on that site on a case-by-case basis to control nitrate movement. Soil monitoring may be increased under the discretion of SDDANR.
10. The biosolids or the application of the biosolids shall not cause or contribute to the harm of a threatened or endangered species or result in the destruction or adverse modification of critical habitat of a threatened or endangered species during or after application.
11. Biosolids shall not be applied on the site when weather and/or soil conditions prohibit proper application procedures.

12. Biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative pollutant loading rates have been reached. Prior to land applying biosolids that are subject to the cumulative pollutant loading rates, the permittee must submit a request to SDDANR to apply these biosolids.
13. Prior to land application of biosolids which meet the cumulative pollutant loading rates, the following conditions must be met:
  - a. Contact SDDANR to determine if biosolids subject to cumulative pollutant loading rates have been applied to the site since July 19, 1993.
  - b. If biosolids have not been applied to the site since July 19, 1993, the biosolids may be applied to the site.
  - c. If biosolids have been applied to the site and the cumulative amount of each pollutant applied to date is known, this can be used to determine if additional amounts can be applied.

If biosolids have been applied to the site and the cumulative amount of each pollutant applied to date is not known, biosolids shall not be applied to the site.

14. If the permittee applies the biosolids to land not owned by the permittee, the owner or lease holder of the land on which the biosolids is applied shall be provided notice and necessary information to comply with the site restrictions in **Section 3.4 – Site Restrictions**. The permittee is ultimately responsible for ensuring that these site restrictions are followed.
15. If biosolids, or material derived from biosolids such as compost, is to be stockpiled for 30 days or longer, measures must be taken to prevent erosion (by wind or water) from occurring. Best management practices should also be used if stockpiles are used for treatment of biosolids (i.e., composting). If a treatment pile is considered to have caused a problem, the permittee may be required to update the best management practices to account for the issue.
16. The city shall inspect the application of the biosolids to active sites **daily** when land applying. An inspection notebook shall be kept which includes the following:
  - a. name of inspector;
  - b. date and time of biosolids application,
  - c. weather conditions at time of application and for 24 hours prior to and following application;
  - d. the method used to apply the biosolids;
  - e. observations made; and
  - f. the date and nature of any corrective actions required or taken.

### **3.7 Land Application Recordkeeping Requirements**

1. Concentration of: Arsenic, Cadmium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc;
2. A description of how the pathogen reduction requirements were met;
3. A description of how the vector attraction reduction requirements were met;

4. A description of how the best management practices were met;
5. A description of how the site restrictions were met;
6. Yearly certification statements for pathogen reduction and vector attraction reduction requirements, best management practices, and site restrictions followed.

This statement shall be as follows: "I certify under penalty of law that the pathogen requirements in Part 3.2 of the permit, one of the vector attraction reduction alternatives in Part 3.3 of the permit, the best management practices in Part 3.6 of the permit, and the site restrictions in Part 3.4 of the permit have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements, the vector attraction reduction requirements, the management practices and the site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment."

7. For each land application site where biosolids are land applied during the reporting year the following information shall be maintained:
  - a. Site name;
  - b. Site owner and/or operator;
  - c. Person or entity that applies the biosolids to the land;
  - d. Latitude and longitude of site;
  - e. Street address or Section, Township, and Range;
  - f. Size (hectares);
  - g. Crop to be grown or harvested on application site;
  - h. Application rate (metric tons/hectare); and
  - i. Cumulative pollutant loading rate (Kg/Ha), if applicable.
  - j. Cumulative pollutant loading rate certification statement, if applicable.

### **3.8 Reporting Requirements**

The permittee is required to monitor, collect, and provide the following information for each reporting year:

1. The total amount of biosolids, in dry metric tons, that is generated by the facility during the reporting year;
2. A summary of any biosolids received from other facilities:
  - a. Summary of total amount of biosolids received, in dry metric tons;
  - b. Summary of amount of biosolids received from each individual facility, in dry metric tons;
  - c. Name of each facility sending biosolids; and
  - d. Location of each facility.
3. A summary of any biosolids sent to other facilities/operations:
  - a. Summary of total amount of biosolids sent to other facilities, in dry metric tons;

- b. Summary of amount of biosolids sent to each individual facility, in dry metric tons;
  - c. Name of each facility receiving biosolids; and
  - d. Location of each facility.
- 4. The amount of biosolids, in dry metric tons, placed in storage during the reporting year and the total amount of biosolids already in storage and how long it has been stored.
  - 5. The amount of biosolids land applied during the reporting year.
  - 6. The amount of biosolids in drying beds.

The permittee shall develop an annual biosolids report in accordance with 40 CFR 503.18 (a.b.r. in ARSD Chapter 74:52:09). This report shall include the results of all monitoring performed in accordance with the self-monitoring requirements of the permit, information on best management practices, land application sites, site restrictions, and certifications. This report shall be submitted to SDDANR no later than **February 19<sup>th</sup> of each year**. Each report is for the previous calendar year.

#### 4.0 Biosolids Limits- – *Outfall 202 – Class A*

Effective immediately and lasting through the life of this permit, all biosolids or materials derived from biosolids generated by the permittee to be distributed to the public shall meet the requirements listed below. **If the biosolids do not meet these requirements, the biosolids shall not be sold or given away to the public for the application to a lawn or home garden.**

#### 4.1 Chemical

If the biosolids or material derived from biosolids are sold or given away to the public, it shall meet at all times one of the following conditions:

1. The ceiling pollutant concentration listed in Table 1 and the monthly average pollutant concentrations in Table 3; or
2. The ceiling pollutant concentration listed in Table 1 and the annual loading concentrations in Table 4.

| <i>Pollutant</i>        | <i>Table 1</i>                            | <i>Table 2</i>                              | <i>Table 3</i>                                 | <i>Table 4</i>                                 |
|-------------------------|-------------------------------------------|---------------------------------------------|------------------------------------------------|------------------------------------------------|
|                         | Daily<br>Maximum<br>mg/Kg <sup>1, 2</sup> | Cumulative<br>Loading<br>Kg/Ha <sup>1</sup> | Monthly<br>Average<br>mg/Kg <sup>1, 2, 3</sup> | Annual<br>Loading<br>Kg/Ha/Year <sup>1,2</sup> |
| <b>Total Arsenic</b>    | 75                                        | 41                                          | 41                                             | 2.0                                            |
| <b>Total Cadmium</b>    | 85                                        | 39                                          | 39                                             | 1.9                                            |
| <b>Total Copper</b>     | 4300                                      | 1500                                        | 1500                                           | 75                                             |
| <b>Total Lead</b>       | 840                                       | 300                                         | 300                                            | 15                                             |
| <b>Total Mercury</b>    | 57                                        | 17                                          | 17                                             | 0.85                                           |
| <b>Total Molybdenum</b> | 75                                        | N/A                                         | N/A                                            | N/A                                            |
| <b>Total Nickel</b>     | 420                                       | 420                                         | 420                                            | 21                                             |
| <b>Total Selenium</b>   | 100                                       | 100                                         | 100                                            | 5.0                                            |
| <b>Total Zinc</b>       | 7500                                      | 2800                                        | 2800                                           | 140                                            |

<sup>1</sup> See definitions in draft general permit.

<sup>2</sup> All limits are on a dry weight basis and are based on 40 CFR 503.13 (a.b.r. in ARSD Chapter 74:52:09).

<sup>3</sup> All biosolids used for land application must meet the ceiling concentrations for pollutants listed in this table.

<sup>4</sup> If biosolids that exceed Table 3 values are land applied to a site, that site thereafter is subject to the cumulative pollutant loading rates in Table 2.

<sup>5</sup> These limits represent the maximum allowable levels of pollutants for land application of any biosolids generated by the facility based on an average of all samples taken during a 30-day period.

## 4.2 Pathogens

If the biosolids or materials derived from biosolids are to be sold or given away to the public, the biosolids shall meet be Class A pathogen reduction requirements as described below. Class A pathogen requirements require both a process requirement **and** a numeric microbiological limit. **If the biosolids does not meet Class A requirements, the biosolids cannot be sold or given away to the public.**

| <i>Microbiological Limit <sup>1</sup></i>                                                                                              |            | <i>Process Requirement</i>                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------|
| Fecal Coliforms shall be less than 1,000 MPN/gram of total solids<br><br>OR<br><br>Salmonella shall be <3 MPN/ 4 grams of total solids | <b>AND</b> | One of the six Class A pathogen process requirements found in 40 CFR 503.22 (a) (3-8). |

<sup>1</sup> Seven individual representative samples shall be taken each year within a two-week time period and analyzed for either fecal coliform or salmonella.

The permittee shall inform the department of which alternative the permittee plans on using to fulfill these requirements. SDDANR must be informed in writing at least 30 days prior to its use. ***This change may be made without additional public notice.***

## 4.3 Vector Attraction Reduction

For Class A biosolids, the biosolids or materials derived from biosolids shall meet one of the vector attraction reduction (VAR) requirements found in 40 CFR 503.33 (b)(1-8).

The permittee shall inform the department of which alternative the permittee will use in the NOI or application to fulfill these requirements. SDDANR must be informed in writing at least 30 days prior to changing the alternative used if necessary. ***This change may be made without additional public notice.***

## 4.4 Biosolids Self-Monitoring Requirements

40 CFR 503.16(a)(1) (a.b.r. in ARSD Chapter 74:52:09), specifies the frequency of monitoring per 365-day period based off amount of biosolids land applied for metals, pathogens, and applicable vector attraction reduction requirements. All sampling shall be done prior to land application so the appropriate agronomic rates shall be known. The table below specifies the frequencies of monitoring:

| Amount of sewage sludge (metric tons) | Frequency     |
|---------------------------------------|---------------|
| Greater than zero but less than 290   | Once per year |

|                                                     |                                        |
|-----------------------------------------------------|----------------------------------------|
| Equal to or greater than 290 but less than 1,500    | Once per quarter (four times per year) |
| Equal to or greater than 1,500 but less than 15,000 | Once per 60 days (six times per year)  |
| Equal to or greater than 15,000                     | Once per month (12 times per year)     |

At a minimum for Class A biosolids, all chemical pollutants, pathogens and applicable vector attraction reduction requirements shall be monitored for the following parameters at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the biosolids.

| Parameter                                   | Frequency <sup>1</sup>         | Reporting Values | Sample Type            |
|---------------------------------------------|--------------------------------|------------------|------------------------|
| Total Arsenic, mg/kg                        | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Cadmium, mg/kg                        | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Copper, mg/kg                         | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Lead, mg/kg                           | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Mercury, mg/kg                        | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Molybdenum, mg/kg                     | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Nickel, mg/kg                         | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Selenium, mg/kg                       | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Zinc, mg/kg                           | See Table Above                | Actual value     | Composite <sup>1</sup> |
| Total Solids, %                             | See Table Above <sup>2</sup>   | Percent          | Grab or composite      |
| pH, s.u.                                    | See Table Above                | Actual value     | Instantaneous          |
| Ammonia as N, mg/kg <sup>3</sup>            | See Table Above <sup>5</sup>   | Actual value     | Grab or composite      |
| Total Kjeldahl Nitrogen, mg/kg <sup>3</sup> | See Table Above <sup>5</sup>   | Actual value     | Grab or composite      |
| Organic Nitrogen, mg/kg <sup>3</sup>        | See Table Above <sup>5</sup>   | Actual value     | Calculate <sup>4</sup> |
| Nitrates as N, mg/kg <sup>3</sup>           | See Table Above <sup>5</sup>   | Actual value     | Grab or composite      |
| Total Phosphorous as P, mg/kg <sup>3</sup>  | See Table Above <sup>5</sup>   | Actual value     | Grab or composite      |
| Total Potassium as K, mg/kg <sup>3</sup>    | See Table Above <sup>5</sup>   | Actual value     | Grab or composite      |
| Fecal Coliform, MPN/gram                    | See Table Above <sup>2,6</sup> | Actual Value     | Grab                   |
| Salmonella, MPN/4 grams                     | See Table Above <sup>2,7</sup> | Actual Value     | Grab                   |

| Parameter                                   | Frequency <sup>1</sup>                   | Reporting Values        | Sample Type   |
|---------------------------------------------|------------------------------------------|-------------------------|---------------|
| Compost bay temperature, °C                 | Continuously or twice daily <sup>8</sup> | Actual value            | Instantaneous |
| Number of days composting, days             | Annually                                 | Maximum; Yearly Average | Calculate     |
| Total amount of co-compost generated, dmt   | Annually                                 | Actual value            | Calculate     |
| Total amount of co-compost distributed, dmt | Annually                                 | Actual Value            | Calculate     |

<sup>1</sup> Subsamples of material shall be taken from several locations and time periods and combined to provide a representative composite sample. The sample shall be analyzed for the specified parameters using the methods approved in 40 CFR 503 (a.b.r. in ARSD Chapter 74:52:09).

<sup>2</sup> Total solids shall be determined when fecal coliform or salmonella bacterial compliance samples are collected.

<sup>3</sup> For biosolids that are given away or sold for land application, these parameters must be used to calculate an agronomic loading rate.

<sup>4</sup> Organic nitrogen is the Total Kjeldahl Nitrogen (TKN) less the Ammonia.

<sup>5</sup> Sampled in accordance with the South Dakota Department of Agriculture's Sludge labeling requirements.

<sup>6</sup> Seven individual representative biosolids samples shall be taken at the appropriate frequency within a two-week time period and analyzed for fecal coliform bacteria. Fecal coliform monitoring is only required if the microbiological limit is used as the pathogen reduction method.

<sup>7</sup> Seven individual representative co-compost samples shall be taken at the appropriate frequency within a two-week time period and analyzed for salmonella bacteria. If a different pathogen testing option is selected, such as fecal coliform, this sampling protocol is not required.

<sup>8</sup> Temperature in the composting bays must be monitored continuously or at least twice daily, with the readings being taken at least 5 hours apart. A log showing temperature is maintained for a sufficient period of time shall be kept. This is only applicable if the permittee uses this process requirement as a pathogen reduction method.

<sup>9</sup> A log containing the number of days composting for each batch of biosolids must be kept verifying that the biosolids were composted for the appropriate time.

#### 4.5 Best Management Practices

If the permittee is generating Class A biosolids that are sold or given away in bags or units less than one metric ton, the permittee shall operate and maintain the site operations in accordance with the following requirements. The permittee shall provide to SDDANR a current Biosolids Management Plan as part of the NOI or application submittal. At a minimum, this plan shall include the elements found below. After approval of the Biosolids Management Plan by SDDANR, the plan becomes an enforceable part of the permit.

1. An information sheet shall be provided to the person or entity who receives the biosolids. The information sheet shall contain:
  - a. the facility generating biosolids name and address;

- b. a statement that prohibits the application of the biosolids to the land except in accordance with the instructions on the information sheet; and
  - c. the annual application rate for the biosolids that does not cause the annual pollutant loading rates in Table 4 to be exceeded.
2. If biosolids, or material derived from biosolids such as compost, is to be stockpiled by the permittee for 30 days or longer, measures must be taken by the permittee to prevent erosion (by wind or water) from occurring.
3. The permittee shall keep record of the person or entity that receives biosolids. This information shall include the following:
  - a. the name and address of the person or entity that receives the biosolids;
  - b. the date biosolids are sold or given away; and
  - c. the amount of biosolids sold or given away.

#### **4.6 Recordkeeping Requirements**

At a minimum, the following records shall be kept for all co-composting activities:

1. Concentration of: Arsenic, Cadmium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc;
2. A description of how the pathogen reduction requirements were met;
3. A description of how the vector attraction reduction requirements were met;
4. A description of how the best management practices were met;
5. Yearly certification statements for pathogen reduction and vector attraction reduction requirements, and best management practices followed.

This statement shall be as follows: “I certify under penalty of law that the pathogen requirements in Part 4.2 of the permit, both of the vector attraction reduction alternatives in Part 4.3 of the permit, and the best management practices in Part 4.5 of the permit have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements, the vector attraction reduction requirements, and the management practices have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment.”

#### **4.7 Reporting Requirements**

The permittee is required to monitor, collect, and provide the following information for each reporting year:

1. The total amount of biosolids, in dry metric tons, that is generated by the facility during the reporting year;
2. A summary of any biosolids received from other facilities:
  - e. Summary of total amount of biosolids received, in dry metric tons;

- f. Summary of amount of biosolids received from each individual facility, in dry metric tons;
  - g. Name of each facility sending biosolids; and
  - h. Location of each facility.
- 3. A summary of any biosolids sent to other facilities/operations:
  - e. Summary of total amount of biosolids set to other facilities, in dry metric tons;
  - f. Summary of amount of biosolids sent to each individual facility, in dry metric tons;
  - g. Name of each facility receiving biosolids; and
  - h. Location of each facility.
- 4. The amount of biosolids, in dry metric tons, placed in storage during the reporting year and the total amount of biosolids already in storage and how long it has been stored.
- 5. The amount of biosolids land applied during the reporting year.
- 6. The amount of biosolids in drying beds.

The permittee shall develop an annual biosolids report in accordance with 40 CFR 503.18 (a.b.r. in ARSD Chapter 74:52:09). This report shall include the results of all monitoring performed in accordance with the self-monitoring requirements of the permit, information on best management practices, land application sites, site restrictions, and certifications. This report shall be submitted to SDDANR no later than **February 19<sup>th</sup> of each year**. Each report is for the previous calendar year.

## 5.0 Biosolids Limits – *Outfall 203 – Landfill Disposal*

Effective immediately and lasting through the life of this permit, all biosolids generated by this facility to be disposed of at an appropriate landfill shall meet the requirements listed below. Biosolids disposal must comply with the state's solid waste regulations. **Not all landfills in the state are permitted to accept biosolids.**

### 5.1 Chemical

There will be no metals limits for Outfall 203. However, the permittee must comply with the monitoring requirements, including passing the paint filter test, the toxicity characteristic leaching procedure (TCLP), and testing for percent solids. **If the biosolids fails either the paint filter or the TCLP tests, the biosolids cannot be sent to the landfill.**

### 5.2 Pathogens

There are no pathogen reduction requirements for biosolids that are disposed of at the landfill.

### 5.3 Vector Attraction Reduction

For the disposal in an appropriate landfill, the biosolids shall be covered with soil or other material at the end of each operating day to meet the alternative for vector attraction reduction.

### 5.4 Biosolids Self-Monitoring

Effective immediately, all biosolids disposed of at an appropriate permitted landfill shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the nature of the biosolids.

| Parameter                                             | Frequency                         | Reporting Values | Sample Type       |
|-------------------------------------------------------|-----------------------------------|------------------|-------------------|
| Total Solids, %                                       | Prior to disposal at the landfill | Percent          | Grab or composite |
| Paint filter test <sup>1</sup>                        | Prior to disposal at landfill     | Pass or Fail     | Grab              |
| TCLP <sup>1</sup>                                     | Every 5 years                     | Pass or Fail     | Grab              |
| Total amount of biosolids landfilled, dry metric tons | Annually                          | Actual Value     | Calculate         |

<sup>1</sup> Biosolids disposed of at an appropriate permitted landfill must be tested for compliance with the Part 258 regulations. This includes a paint filter test using the method specified in EPA SW-846 *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, Method 9095 and a Toxicity Characterization Leaching Procedure (TCLP) using Method 1311. The city of Hot Springs shall also contact the landfill for additional

testing requirements that the permitted landfill may have. If biosolids are not disposed of at a landfill, this sampling protocol is not applicable.

## **5.5 Best Management Practices**

If the permittee is generating biosolids that are landfilled, the permittee shall operate in accordance with the following requirements. The permittee shall provide to SDDANR a current Biosolids Management Plan as part of the NOI or application submittal. At a minimum, this plan shall include the elements found below. After approval of the Biosolids Management Plan by SDDANR, the plan becomes an enforceable part of the permit.

1. Landfill disposal shall be conducted in a manner that will not contaminate the groundwater underlying the site.
2. Landfill disposal shall be conducted in a manner that will not cause or contribute to a violation of any receiving water quality standard from discharges of surface runoff.
3. Landfill disposal shall not cause or contribute to the harm of threatened or endangered species or result in the destruction or modification of critical habitat of threatened or endangered species.
4. Landfill disposal shall not restrict the flow of a 100-year flood.
5. Public access to the site shall be restricted so the public is not exposed to potential health and safety hazards.

## **5.6 Recordkeeping Requirements**

At a minimum, the following records shall be kept for all landfill disposal of biosolids:

1. Analytical results for the paint filter tests, percent solids, and the Toxicity Characteristic Leaching Procedures (TCLP);
2. A description of how the vector attraction reduction requirements were met;
3. A description of how the best management practices were met;
4. Yearly certification statements for pathogen reduction and vector attraction reduction requirements, and best management practices followed.

This statement shall be as follows: "I certify under penalty of law that the vector attraction reduction alternatives in Part 5.3 of the permit and the best management practices in Part 5.5 of the permit have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the vector attraction reduction requirements and the management practices have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment."

## 5.7 Reporting Requirements

The permittee is required to monitor, collect, and provide the following information for each reporting year:

1. The total amount of biosolids, in dry metric tons, that is generated by the facility during the reporting year;
2. A summary of any biosolids received from other facilities:
  - i. Summary of total amount of biosolids received, in dry metric tons;
  - j. Summary of amount of biosolids received from each individual facility, in dry metric tons;
  - k. Name of each facility sending biosolids; and
  - l. Location of each facility.
3. A summary of any biosolids sent to other facilities/operations:
  - i. Summary of total amount of biosolids sent to other facilities, in dry metric tons;
  - j. Summary of amount of biosolids sent to each individual facility, in dry metric tons;
  - k. Name of each facility receiving biosolids; and
  - l. Location of each facility.
4. The amount of biosolids, in dry metric tons, placed in storage during the reporting year and the total amount of biosolids already in storage and how long it has been stored.
5. The amount of biosolids landfilled during the reporting year.

The permittee shall develop an annual biosolids report in accordance with 40 CFR 503.18 (a.b.r. in ARSD Chapter 74:52:09). This report shall include the results of all monitoring performed in accordance with the self-monitoring requirements of the permit, information on best management practices, land application sites, site restrictions, and certifications. This report shall be submitted to SDDANR no later than **February 19<sup>th</sup> of each year**. Each report is for the previous calendar year.

|                                                         |
|---------------------------------------------------------|
| Modified: June 27, 2023<br>Effective: September 1, 2023 |
|---------------------------------------------------------|

## **6.0 MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS**

### **6.1 Representative Sampling**

Samples taken in compliance with the monitoring requirements established under this permit shall be collected from locations representative of the quality of biosolids generated at the treatment works and immediately prior to land application.

### **6.2 Monitoring Procedures**

Monitoring shall be conducted according to test procedures approved under 40 CFR Part 503 (a.b.r in ARSD Chapter 74:52:09), unless other test procedures have been specified in this permit.

### **6.3 Reporting of Monitoring Results**

The permittee is required to report annually as required in 40 CFR 503.18 (a.b.r in ARSD Chapter 74:52:09). This report is to include the results of all monitoring performed in accordance with the self-monitoring requirements of the permit, the required information on pathogen requirements, vector attraction reduction requirements, information on management practices, land application sites, site restrictions, and the required signed certification statements. This report shall be submitted no later than **February 19<sup>th</sup> of each year**. Each report is for the previous calendar year. If no biosolids were applied during the reporting period, “no biosolids were applied” shall be reported. Biosolids monitoring results may be reported in the testing laboratory’s normal format. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with Section 2.4 and submitted to the Secretary via NetTools.

In accordance with SDCL 1-41-27, the Secretary is authorized to accept a document with an electronic signature. SDDANR shall provide for the authenticity of each electronic signature by adhering to any standards established by the South Dakota Bureau of Information and Telecommunications pursuant to SDCL 53-12-47 and 53-12-50 or any other standards established by rules promulgated pursuant to SDCL Chapter 1-26.

### **6.4 Signatory Requirements**

1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the Secretary shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to the Secretary; and,
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of

superintendent or equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may be either a named individual or any individual occupying a named position.)

3. If an authorization under 2.a above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Secretary.
4. Any person signing a document under this section shall make 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 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.”

#### **6.5 Additional Monitoring by the Permittee**

If the permittee monitors, at the designated points, any pollutants more frequently than required by this permit, using test procedures approved under 40 CFR 503 (a.b.r. in ARSD, Section 74:52:09) or as specified in this permit, the results of this monitoring shall be used in determining compliance with this permit and shall be submitted in the Annual Biosolids report. Such increased frequency shall also be indicated.

#### **6.6 Records Contents**

Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The initials or names of the individuals who performed the sampling or measurements;
3. The dates analyses were performed;
4. The time analyses were initiated;
5. The initials or names of individuals who performed the analyses;
6. References and written procedures, when available, for the analytical techniques or methods used; and
7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

#### **6.7 Duty to Provide Information**

The permittee shall furnish to the Secretary, within a reasonable time, any information the Secretary may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The

permittee shall also furnish to the Secretary, upon request, copies of records required to be kept by this permit.

#### **6.8 Other Information**

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Secretary, it shall promptly submit such facts or information.

#### **6.9 Planned Changes**

The permittee shall give notice to the Secretary as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of biosolids produced, or could result in noncompliance with permit conditions.

#### **6.10 Retention of Records**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least **five** years from the date of the sample, measurement, report, or application. This period may be extended by request of the Secretary at any time. Data collected on site, copies of Annual Biosolids Reports, and a copy of this permit must be maintained on site during the duration of the permitted activity.

#### **6.11 Twenty-four Hour Notice of Noncompliance Reporting**

1. The permittee shall report any noncompliance including transportation accidents, spills, and uncontrolled runoff from biosolids transfer or land application sites which may seriously endanger health or the environment as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances as follows:
  - a. During regular business hours (8:00 a.m. - 5:00 p.m. Central Time), the report shall be made at (605) 773-3351.
  - b. Outside of normal business hours, the permittee shall contact the South Dakota Emergency Management at (605) 773-3231.
1. Violation of any of the Table 1 metals limits, the pathogen limits, the vector attraction reduction limits or the management practices for biosolids that has been land applied shall be reported to the Secretary within 24 hours from the time the permittee becomes aware of the circumstances either by telephone or email as follows:
  - a. Via telephone at (605) 773-3351. Outside of normal business hours (8:00 a.m. – 5:00 p.m. Central Time), the permittee shall leave a message.
  - b. Via email at [SWDPermits@state.sd.us](mailto:SWDPermits@state.sd.us).
2. A written submission shall also be provided within five days of becoming aware of the circumstances above. The written submission shall contain:

- a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected; and,
  - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
3. The Secretary may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Surface Water Quality Program, South Dakota Department of Agriculture and Natural Resources, Pierre, (605) 773-3351.
4. Reports shall be submitted in accordance with Section 3.3 of this permit.

The permittee shall give advance notice to the Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

#### **6.12 Other Noncompliance Reporting**

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Section 3.3 are submitted. The reports shall contain the information listed in Section 3.11 paragraph 3.

## **7.0 COMPLIANCE REQUIREMENTS**

### **7.1 Duty to Comply**

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Secretary advance notice of any activity which may result in permit noncompliance.

### **7.2 Duty to Mitigate**

The permittee shall take all reasonable steps to minimize or prevent any land application of biosolids in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

### **7.3 Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### **7.4 Inspection and Entry**

The permittee shall allow the Secretary or EPA, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit including but not limited to biosolids treatment, collection, storage, facilities or area, transport vehicles and containers, and land application sites; and,
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the South Dakota Water Pollution Control Act, any substances or parameters at any location including but not limited to digested biosolids before dewatering, dewatered biosolids, biosolids transfer or staging areas, any ground or surface waters at the land application sites, or biosolids, soils, or any vegetation on land application sites.
5. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, so that the Secretary or authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, will be permitted to enter without delay for the purposes of performing their responsibilities.

|                                                    |
|----------------------------------------------------|
| Modified: June 27, 2023<br>Effective: July 1, 2023 |
|----------------------------------------------------|

**7.5 Removed Substances**

Collected screenings, grit, solids, biosolids, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard in accordance with applicable requirements of SDCL 34A-2, -6, and -11.

**7.6 Availability of Reports**

Except for data determined to be confidential under ARSD, Section 74:52:02:17, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of SDDANR. Permit applications, permits, and biosolids data shall not be considered confidential.

**8.0 PENALTIES FOR NONCOMPLIANCE****8.1 Penalties for Violations of Permit Conditions**

Any person who violates a permit condition is in violation of the provisions of SDCL 34A-2-36, and is subject to penalties under SDCL 34A-2-75. In addition to a jail sentence authorized by SDCL 22-6-2, such violators are subject to a criminal fine not to exceed ten thousand dollars per day of violation. The violator is also subject to a civil penalty not to exceed ten thousand dollars per day of violation, or for damages to the environment of this state. Nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

**8.2 Penalties for Tampering**

Any person who falsifies, tampers with, or knowingly render inaccurate, any monitoring device or method required to be maintained under this permit is in violation of the provisions of SDCL 34A-2-77, and is subject to penalties under SDCL 34A-2-75. In addition to a jail sentence authorized by SDCL 22-6-2, such violators are subject to a civil penalty not to exceed ten thousand dollars per day of violation, or for damages to the environment of this state.

**8.3 Penalties for Falsification of Reports**

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is in violation of the provisions of SDCL 34A-2-77, and is subject to penalties under SDCL 34A-2-75. In addition to a jail sentence authorized by SDCL 22-6-2, such violators are subject to a criminal fine not to exceed ten thousand dollars per day of violation. The violator is also subject to a civil penalty not to exceed ten thousand dollars per day of violation, or for damages to the environment of this state.

#### **8.4 Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude SDDANR from taking any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the federal Clean Water Act.

|                                                    |
|----------------------------------------------------|
| Modified: June 27, 2023<br>Effective: July 1, 2023 |
|----------------------------------------------------|

**Appendix A**  
**Notice of Intent**

DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

NOTICE OF INTENT (NOI)

to Obtain Coverage Under the General Permit for  
the Disposal of Biosolids

Submit form to: SD Department of Agriculture and Natural Resources  
Surface Water Quality Program  
523 East Capitol Avenue  
Pierre, SD 57501

Type of Coverage:

☐ New ☐ Renewal – Permit Coverage Number: \_\_\_\_\_

1. Facility Information:

Name of the Facility: \_\_\_\_\_

Facility Contact Person: \_\_\_\_\_ Facility Contact Title: \_\_\_\_\_

Facility Contact Phone: \_\_\_\_\_ Facility Contact Email: \_\_\_\_\_

Facility Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Facility Physical Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

County: \_\_\_\_\_ Facility Phone Number: \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ Source (GPS, Google, etc.): \_\_\_\_\_

Legal: Quarter(s): \_\_\_\_\_ Section(s): \_\_\_\_\_ Township(s): \_\_\_\_\_ Range(s): \_\_\_\_\_

Is facility located on Tribal lands? ☐ Yes ☐ No

2. Owner Information:

Name of the Owner: \_\_\_\_\_

Owner Contact Person: \_\_\_\_\_

Owner Contact Phone: \_\_\_\_\_ Owner Contact Email: \_\_\_\_\_

Owner Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Type of Ownership: ☐ Private ☐ Federal ☐ State ☐ Municipal ☐ Other (state type): \_\_\_\_\_

3. Contractor Information:

Is a contractor responsible for any operation or maintenance activities at the facility? ☐ Yes ☐ No If yes, fill out the following information.

Contractor Company (if applicable): \_\_\_\_\_

Contractor Contact Name: \_\_\_\_\_

Contractor Contact Phone: \_\_\_\_\_ Contractor Contact Email: \_\_\_\_\_

Contractor Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Date Contract is Valid through: \_\_\_\_\_

Description of Contractor Responsibilities:

#### 4. Coverage Applicability

If any of the following questions are answered with **Yes**, general permit coverage is not applicable for this facility. Contact SD DANR for the appropriate permit application.

Does the facility incinerate or use a biosolids surface disposal lagoon? ☐ Yes ☐ No

Does the facility dispose of biosolids less frequently than once per five years? ☐ Yes ☐ No

#### 5. Facility Type:

Please check the box that best describes your facility:

☐ Sewage Treatment Plant

☐ Class I

☐ Wet-Weather design flow equal to or greater than 1 MGD

☐ Serves 10,000 people or more

☐ Design flow less than 1 MGD and serves less than 10,000 people

☐ Compost Facility

☐ Septage Management Facility

☐ Beneficial Use Facility

#### 6. Facility Operations:

- a. Please provide a line drawing and/or 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.
- b. Please provide a map that shows the location of all biosolids management facilities, including locations where biosolids are stored, treated, or disposed. The map also must show the location of all wells, springs, and other surface water within ¼ mile of the facility property line.

Please check the box next to the disposal options the facility will use during this permit cycle. If multiple disposal options are selected, please note which one is primary and secondary (or backup).

| Outfall                         | Description                                 |
|---------------------------------|---------------------------------------------|
| <input type="checkbox"/><br>201 | Class B Biosolids Bulk Land Application     |
| <input type="checkbox"/><br>202 | Class A Biosolids Distributed to the Public |
| <input type="checkbox"/><br>203 | Landfill                                    |

If necessary, attach additional outfall information to the NOI.

#### 7. Wastewater Treatment Facility Information:

Year system was originally constructed: \_\_\_\_\_

List any modifications and the year(s) of any additions or modifications since originally constructed:

| Year | Modification/Addition Description |
|------|-----------------------------------|
|      |                                   |
|      |                                   |

If necessary, attach additional modification information to the NOI

Design Information:

|                   |                       |                   |                    |
|-------------------|-----------------------|-------------------|--------------------|
|                   | <u>Average Design</u> |                   | <u>Peak Design</u> |
| Flow (MGD):       | _____                 | Flow (MGD):       | _____              |
| Organic Capacity: | _____                 | Organic Capacity: | _____              |

Operational Information:

Average influent flow (MGD): \_\_\_\_\_

Average effluent flow (MGD): \_\_\_\_\_

## 8. Sludge Information

Please enter the annual quantities of the last 5 years for biosolids production, disposal, and storage amount:

| Year | Produced (dry metric tons) | Disposed (dry metric tons) | Stored (dry metric tons) |
|------|----------------------------|----------------------------|--------------------------|
|      |                            |                            |                          |
|      |                            |                            |                          |
|      |                            |                            |                          |
|      |                            |                            |                          |
|      |                            |                            |                          |

\*If multiple disposal methods were used, please specify how much was disposed in each method.

Does the facility transfer biosolids to another facility? ☐ Yes ☐ No

If yes, please provide the following:

Name of Facility \_\_\_\_\_

Address \_\_\_\_\_

Contact \_\_\_\_\_

Does the facility accept biosolids from another facility? ☐ Yes ☐ No

If yes, please provide the following:

Name of Facility \_\_\_\_\_

Address \_\_\_\_\_

Contact \_\_\_\_\_

Do you expect any major changes in the biosolids handling in the next 5 years? ☐ Yes ☐ No

If yes, please explain:

\_\_\_\_\_

\_\_\_\_\_

If a septage management facility, what types of septage will be handled?

- ☐ Class I
- ☐ Class II
- ☐ Class III

If the facility has submitted an annual report for the previous year, previous biosolids constituents' concentrations are on file and do not need to be submitted. If a new facility or the previous years annual report was not submitted, please submit the most recent biosolids sample results for the following:

Arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, nitrate, ammonia, total Kjeldahl nitrogen, phosphate, total solids (%), Volatile Solids (% of total), pH.

## 9. Pathogen Reduction Class and Alternative:

Please indicate what class and what alternative the facility will employ to satisfy the pathogen reduction requirement.

- ☐ 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 fecal coliform*
- ☐ Class B – Alternative 2 *Process to Significantly Reduce Pathogens (PSRP)*
- ☐ Class B – Alternative 3 *Equivalency determination*

If equivalency, please specify \_\_\_\_\_

## 10. Vector Attraction Reduction:

Please indicate what vector attraction reduction alternative the facility will employ to satisfy the vector attraction reduction requirement.

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

Has the facility submitted discharge monitoring results to SDDANR? ☐ Yes ☐ No

Indicate any discharge sample analyses which are performed by a contract laboratory or consulting firm:

## 11. Biosolids Sampling Plan

Does the facility have a biosolids sampling plan? ☐ Yes ☐ No

If yes, please attach a copy of the sampling plan.

If no, please provide a narrative of the biosolids sampling completed by the facility.

---



---



---

Indicate any sample analyses which are performed by a contract laboratory or consulting firm:

| Laboratory/Firm | Contact Information | Parameters Analyzed |
|-----------------|---------------------|---------------------|
|                 |                     |                     |
|                 |                     |                     |

Does this NOI substantially duplicate an application or NOI by the same applicant which was denied by SDDANR or USEPA within the past five years and which has not been reversed by a court of competent jurisdiction?

☐ Yes ☐ No

List other information which you feel should be brought to the attention of SDDANR in regard to the issuance of permit coverage under the General Permit:

**12. Biosolids Management Plan**

Please submit the facilities Biosolids Management Plan within 90 days of the facility being granted coverage under this General Permit. The requirements of the Plan can be found in Attachment 1 of the Statement of Basis.

**13. NOI Certification** (NOI must be signed by the authorized chief elected official or executive officer of the facility)

*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.*

|                                      |  |
|--------------------------------------|--|
| Authorized Representative Name:      |  |
| Authorized Representative Signature: |  |
| Authorized Representative Title:     |  |
| Date:                                |  |

A **Completed NOI** contains the following information (please check):

- ☐ NOI form (5 pages)
- ☐ Certification of Applicant (2 pages)
- ☐ Facility Map
- ☐ Biosolids Line Diagram
- ☐ Additional information to complete NOI questions (if applicable)

**For Office Use Only**

NOI Reviewer comments:

|                                                                                                |  |                             |  |
|------------------------------------------------------------------------------------------------|--|-----------------------------|--|
| Facility Eligible for General Permit? <input type="checkbox"/> Yes <input type="checkbox"/> No |  |                             |  |
| Date NOI Received:                                                                             |  | Date Coverage is Effective: |  |
| <b>NOI Reviewer:</b>                                                                           |  | <b>Review Date:</b>         |  |

## **Appendix B**

### **Notice of Termination**

**DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES  
NOTICE OF TERMINATION (NOT)**

to Terminate Coverage Under the General Permit for  
Disposal of Biosolids

Submit form to: SD Department of Agriculture and Natural Resources  
Water Quality Program  
523 East Capitol Avenue  
Pierre, SD 57501

**This form is required to be submitted when a biosolids permit is no longer required or necessary. Submission of this form shall not in no way relieve the permittee of permit obligations required prior to submission of this form.**

**1. Facility Information:**

Permit Number: SDL02

Name of the Facility: \_\_\_\_\_

Facility Contact Person: \_\_\_\_\_ Facility Contact Title: \_\_\_\_\_

Facility Contact Phone: \_\_\_\_\_ Facility Contact Email: \_\_\_\_\_

Facility Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Facility Physical Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

County: \_\_\_\_\_ Facility Phone Number: \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ Source (GPS, Google, etc.): \_\_\_\_\_

Legal: Quarter(s): \_\_\_\_\_ Section(s): \_\_\_\_\_ Township(s): \_\_\_\_\_ Range(s): \_\_\_\_\_

**2. Owner Information:**

Name of the Owner: \_\_\_\_\_

Owner Contact Person: \_\_\_\_\_

Owner Contact Phone: \_\_\_\_\_ Owner Contact Email: \_\_\_\_\_

Owner Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Type of Ownership: ☐ Private ☐ Federal ☐ State ☐ Municipal ☐ Other (state type): \_\_\_\_\_

**3. NOT Certification** (NOT must be signed by the authorized chief elected official or executive officer of the facility)

*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.*

|                                      |  |
|--------------------------------------|--|
| Authorized Representative Name:      |  |
| Authorized Representative Signature: |  |
| Authorized Representative Title:     |  |
| Date:                                |  |

| For Office Use Only                                                                                        |  |                                |  |
|------------------------------------------------------------------------------------------------------------|--|--------------------------------|--|
| NOT Reviewer comments:                                                                                     |  |                                |  |
| Facility Eligible for General Permit Termination? <input type="checkbox"/> Yes <input type="checkbox"/> No |  |                                |  |
| Date NOT Received:                                                                                         |  | Date Termination is Effective: |  |
| NOT Reviewer:                                                                                              |  | Review Date:                   |  |