Permit No.: SD0000078

SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Surface Water Discharge Permit
Authorizing Discharge
Under The South Dakota Surface Water Discharge System

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

Smithfield Foods

is authorized under this permit to discharge to

the Big Sioux River

from its facility located in the Southeast ¼ and the Southwest ¼ of Section 9, Township 101 North, Range 49 West, in Minnehaha County, South Dakota (Latitude 43.565152°, Longitude -96.719948°), in accordance with discharge points, effluent limits, monitoring requirements, and other conditions set forth herein. Authorization is limited to those outfalls specifically listed in the permit. 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 modification; or for denial of a permit renewal application.

This permit shall become effective July 1, 2020.

This permit and the authorization to discharge shall expire at midnight, June 30, 2025.

Signed this 21st day of April 2020,

Authorized Permitting Official

Hunter Roberts
Secretary
Department of Environment and Natural Resources

Amended Date: February 11, 2021
Effective Date: April 1, 2021

TABLE OF CONTENTS

1.0 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 self-monitoring data on discharge monitoring report forms.

"7-day (and weekly) Average" means the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week that begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.

"Acute Toxicity" occurs when, in the LC_{50} test, 50 percent or more mortality is observed for either species at any effluent concentration which is equivalent to ≥ 1.0 TU_a. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.

"ARSD" means the Administrative Rules of South Dakota.

An **"Authorized Release"** is a discharge from a permitted outfall that meets all permit conditions and effluent limits.

"BOD_5" means Five-Day Biochemical Oxygen Demand. BOD is a measurement of the amount of oxygen utilized by the decomposition of organic material, over a specified time period (usually 5 days) in a sample.

A **"Bypass"** is the intentional diversion of waste streams from any portion of a collection system or treatment facility other than the permitted outfall(s). Bypasses may result in releases from the sewer collection system (see **"Sewer Overflow"**) or emergency releases from the treatment facility (see **"Emergency Discharge"**). If a bypass results in a release of wastewater, it shall be sampled and reported as either a sewer overflow from the collection system or an emergency discharge from the treatment facility.

"Chronic Toxicity" occurs when in the IC_{25} test when the survival, growth, or reproduction, as applicable, for either test species, at the effluent dilution(s) designated in this permit, is significantly less (at the 95 percent confidence level) than that observed for the control specimens.

"Composite Samples" shall be flow proportioned. The composite sample shall contain at least four samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

1. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;

2. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;

3. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,

4. Continuous collection of sample, with sample collection rate proportional to flow rate.

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

"DMR" means Discharge Monitoring Report, EPA Form 3320-1, or a report filed electronically by an EPA-approved electronic system, or other forms provided by the Department which are used to report sampling data.

An **"Emergency Discharge"** is a discharge from the treatment or containment system through a release structure or over or through retention dikes or walls. An emergency discharge is distinguished from a sewer overflow in that a sewer overflow discharges wastewater prior to reaching the treatment or containment system. An emergency discharge is an enforceable violation of the permit unless it is an allowable bypass that does not cause effluent limitations to be exceeded, an anticipated bypass approved by the Secretary, or an unanticipated bypass allowed under Section 4.2 – Effluent Violation, Bypass, and Emergency Discharge Reporting Requirements.

"EPA" or **"US EPA"** means United States Environmental Protection Agency.

"Existing Source" means any building, structure, facility or installation from which there is or may be a discharge of pollutants, which is not considered a New Source.

A **"Grab Sample**,**"** for monitoring requirements, is a single "dip and take" sample collected at a representative point in the discharge stream.

"Inhibition Concentration, 25 Percent (IC_{25})" is a point estimate of the toxicant concentration that would cause a 25-percent reduction in a biological measurement (e.g. reproduction, growth), calculated from a continuous model (i.e. Interpolation Method).

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

"Instream Waste Concentration (IWC)" is the concentration of a toxicant in the receiving water after mixing. It is also referred to as the receiving water concentration (RWC).

"Lethal Concentration, 50 Percent (LC_{50})" is the toxic or effluent concentration that would cause mortality in 50 percent of the test organisms over a specified period of time.

"MGD" is the measure of flow rate meaning million gallons per day.

"Mixing Zone (Zone of mixing)" is an area in a stream where an effluent or discharge mixes with the upstream water under ARSD 74:51:01:01. A mixing zone for wastewater discharges to flowing waters is allowed under ARSD 74:51:01:26. Lakes are not allowed a mixing zone under ARSD 74:51:01:27.

"No Observed Effect Concentration (NOEC)" is the highest tested concentration of an effluent or a toxicant that causes no observable adverse effect on the test species (i.e., the highest concentration of toxicant at which the values for the observed responses are not statistically different from the controls). NOEC is determined using hypothesis testing.

"New Source" means any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under section 307(c) of the Act which will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:

1. The building, structure, facility or installation is constructed at a site at which no other source is located; or

2. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

3. The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.

Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of #2 or #3 above but otherwise alters, replaces, or adds to existing process or production equipment.

Construction of a new source as defined under this definition has commenced if the owner or operator has:

1. Begun, or caused to begin as part of a continuous onsite construction program:

    a. Any placement, assembly, or installation of facilities or equipment; or

    b. Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

2. Entered into a binding contractual obligation for the purchase of facilities or equipment which is intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts

for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

"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.

"PTI" means Preliminary Toxicity Investigation. Up to a 30-day period where the permittee investigates the cause(s) of a whole effluent toxicity exceedance and if the toxicity is known, includes a proposal for its elimination.

"Process Wastewater" means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product.

"Reasonable Potential (RP)" is the likelihood that an effluent will cause or contribute to an excursion above a water quality standard based on a number of factors, including the use of data (e.g. whole effluent toxicity test data). In the context of this document, references to RP and WET limits include both lethal and sub-lethal effects.

"SDDENR" means the South Dakota Department of Environment and Natural Resources.

"Secretary" means the Secretary of the South Dakota Department of Environment and Natural Resources, or authorized representative.

"Severe Property Damage" is substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that 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.

"Sewage Sludge" is any solid, semi-solid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. Sewage sludge includes but is not limited to solids removed during primary, secondary or advanced wastewater treatment, scum, septage, portable toilet pumpings, and sewage sludge products. Sewage sludge does not include grit, screenings, or ash generated during the incineration of sewage sludge.

"Surface Water Discharge (SWD) Permitting Program" is the state program that regulates the discharge of pollutants into the state's waters. This is the state's implementation of the federal NPDES program.

"Test Acceptability Criteria (TAC)" are specific criteria for determining whether toxicity test results are acceptable, pursuant to EPA's WET test methods in 40 CFR 136 (additional TAC may be established by the Department). The effluent and reference toxicant must meet specific criteria as defined in the test method.

"Toxic Unit - Acute (TU_a)" is 100 times the reciprocal of the effluent concentration that causes 50 percent of the organisms to die in an acute toxicity test ($TUa = 100/LC_{50}$) (see LC_{50}).

"Toxic Unit - Chronic (TU_c)" is 100 times the reciprocal of the effluent concentration that causes no observable effect on the test organisms in a chronic toxicity test ($TUc = 100/IC_{25}$).

"Toxicity Identification Evaluation (TIE)" is a set of site-specific procedures used to identify the specific chemical(s) causing effluent toxicity.

"Toxicity Reduction Evaluation (TRE)" is a site-specific study conducted in a step-wise process to identify the causative agents of effluent toxicity, isolate the source of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity after the control measures are put in place.

"Toxic Pollutant" is any pollutant listed as toxic under §307(a)(1) of the Federal Clean Water Act.

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

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

"Water Quality-based Effluent Limit (WQBEL)" is a NPDES permit limit that is developed to assure protection of aquatic life or human health consistent with applicable State water quality standards.

"Whole Effluent Toxicity (WET)" is the total toxic effect of an effluent measured directly with a toxicity test.

"Whole Effluent Toxicity (WET) Test" is a procedure using living organisms to determine whether a chemical or an effluent is toxic. A toxicity test measures the degree of the effect of a specific chemical or effluent on exposed test organisms.

2.0 PERMIT COVERAGE

2.1 Permit Transfers

1. Coverage under this 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 permit holder in accordance with South Dakota Codified Law 1-40-27.

2. The Secretary will notify the existing and new permittee of his or her intent to transfer, modify, or revoke and reissue the permit based on the information received and other permit information.

2.2 Reopener Provisions

This 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. Water Quality Standards: The water quality standards of the receiving waters applicable to this permit are modified in such a manner as to require different effluent limits than contained in this permit;

2. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted that calls for different effluent limits than contained in this permit;

3. Effluent Guidelines: Effluent limit guidelines are promulgated or revised for point sources covered by this permit;

4. Total Maximum Daily Load: Additional controls in the permit are necessary to implement a total maximum daily load approved by the Secretary and/or EPA;

5. Noncompliance: The discharger is a significant contributor of pollution to waters of the state, presents a health hazard, or is in noncompliance with the conditions of the permit;

6. Whole Effluent Toxicity: This permit may be reopened and modified (following proper administrative procedures) to include, whole effluent toxicity (WET) limits, a compliance date, a compliance schedule, a change in the whole effluent toxicity protocol, additional or modified numerical limitations, or any other conditions related to the control of toxicants if one or more of the following events occur:

   a. Toxicity was detected late in the life of the permit near or past the deadline for compliance.

   b. The TRE results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion.

   c. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the permit issuing authority agrees that numerical controls are the most appropriate course of action.

d. Following the implementation of numerical controls on toxicants, the permit issuing authority agrees that a modified whole effluent protocol is necessary to compensate for those toxicants that are controlled numerically.

e. The TRE reveals other unique conditions or characteristics which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.

7. Chronic Whole Effluent Toxicity: To include chronic whole effluent toxicity limits if any other information or data are developed indicating that chronic whole effluent toxicity limits are needed. If acceptable to the permit issuing authority, and if in compliance with current regulations, this permit may be reopened and modified to incorporate TRE conclusion relating to additional numerical limits, a modified compliance schedule, and or modified whole effluent protocol.

8. Other Changes: Other conditions or standards change so that the discharge no longer qualifies for this permit, such as the permittee being designated as a major discharger, changes in necessary influent or effluent pollutant monitoring, additional industrial pretreatment requirements become applicable to the permittee, or other items.

2.3 Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain coverage under a new permit. The permit application must be submitted at least 180 days before the expiration date of this permit. Periodically during the term of this permit and at the time of reissuance, the permittee may be requested to reaffirm its eligibility to discharge under this permit.

2.4 Continuation of the Expired Permit

An expired permit continues in full force and effect until a new permit is issued. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must submit an application at least 180 days before the expiration date of the permit.

2.5 Property Rights

1. The Secretary's issuance of this 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 permit, design criteria, approved plans and specifications, and operation under this 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 severably 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 Permit Actions

The Secretary may modify, revoke and reissue, or terminate coverage under this 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 permit. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2.7 Severability

The provisions of this permit are severable, and if any provision of this 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 permit, shall not be affected thereby.

3.0 EFFLUENT LIMITS

3.1 Description of Discharge Points

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under this permit are a violation of the South Dakota Water Pollution Control Act and could subject the person(s) responsible for such discharge to penalties under Section 34A-2-75 of the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from the permittee first learning of an unauthorized discharge could subject the permittee to penalties as provided under the South Dakota Water Pollution Control Act.

Outfall Number	Description of Discharge Points
001A	Any discharge from the discharge structure located north of the wastewater treatment plant to the Big Sioux River (Latitude 43.566679°, Longitude -96.720198°).

3.2 Prohibition of Bypass and Emergency Discharges

1. The permittee may allow bypasses to occur that do not result in a discharge and will not result in a violation of the effluent limits, but only if for essential maintenance to ensure efficient operation.

2. An emergency discharge or bypass other than that described in Paragraph 1 above, is prohibited and the Secretary may take enforcement action against a permittee, unless:

   a. The emergency discharge or bypass was unavoidable to prevent loss of life, threat to public health, personal injury, or severe property damage;

   b. There were no feasible alternatives to the emergency discharge or bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent an emergency discharge or bypass that occurred during normal periods of equipment downtime or preventive maintenance; and,

   c. The permittee submitted notices as required under **Section 4.2 – Effluent Violation, Bypass, and Emergency Discharge Reporting Requirements.**

3. The permittee shall sample an emergency discharge for the parameters and at the frequencies listed in **Section 3.7 – Self-Monitoring Requirements –*Emergency Discharges***. The sample results shall be reported in accordance with the reporting requirements listed in **Section 4.1 – Reporting of Monitoring Results**.

4. The Secretary may approve an emergency discharge or bypass, after considering its adverse effects, if the Secretary determines that it will meet the three conditions listed above in Paragraph 2.

5. If a bypass or emergency discharge occurs or is expected to occur, the permittee shall take the appropriate measures to minimize the discharge of pollutants.

3.3 Proper Operation and Maintenance

1. The permittee shall at all times properly operate and maintain all facilities and treatment and control systems that 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.

2. Proper operation and maintenance may also include adequate laboratory controls and appropriate quality assurance procedures.

3. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3.4 Inspection Requirements

The permittee shall inspect its treatment system and outfalls regularly as outlined below. The inspections shall be performed to determine if proper operation and maintenance procedures are being undertaken at the facility. The permittee shall maintain a notebook recording information obtained during the inspection.

1. Facility Inspections. The permittee shall inspect the treatment system and discharge location on at least a **daily** basis. At a minimum, the notebook shall include the following:

    a. Date and time of the inspection;

    b. Name of the inspector(s);

    c. Identification of operational problems and/or maintenance problems;

    d. Recommendations, as appropriate, to remedy identified problems;

    e. A brief description of any actions taken with regard to problems identified; and,

    f. Other information, as appropriate.

2. The permittee shall maintain the notebook(s) for the facility in accordance with proper record-keeping procedures and shall make the notebook(s) available for inspection, upon request, by the Secretary or the US EPA

3.5 Compliance Schedule

1. The permittee shall achieve compliance with the effluent limits specified for discharges in accordance with the following schedule:

    a. Starting on the first effective day of the permit (**July 1, 2020**), nitrate-nitrogen (as N) and ammonia-nitrogen (as N) shall be monitored during a discharge, according to the sampling requirements in **Section 3.6** of the permit. There shall be no interim nitrate-nitrogen (as N) limits. There shall be interim ammonia-nitrogen (as N) limits carried over from the previous permit.

    b. The permittee shall investigate treatment and operational options for reducing nitrate-nitrogen (as N) and ammonia-nitrogen (as N) levels in the discharge. The permittee shall submit compliance progress reports on a **quarterly** basis to SDDENR starting on **October 1, 2020.** These reports shall include details on evaluating the treatment system, hiring an engineer, and determining what changes are needed to come into compliance with the final effluent limits for nitrate-nitrogen (as N) and ammonia-nitrogen (as N).

    c. By **June 30, 2023**, the facility shall complete any necessary adjustments to the wastewater treatment processes and operations to comply with the final effluent limits for nitrate-nitrogen (as N) and ammonia-nitrogen (as N).

    d. On **July 1, 2023**, the final effluent limits for nitrate-nitrogen (as N) and ammonia-nitrogen (as N) in **Section 3.6** of the permit shall become effective.

2. The milestones must be completed by the date specified. The permittee shall submit to the SDDENR a written notice of compliance or noncompliance with each milestone by the date specified above. If the permittee is not in compliance with

the milestone, the notice shall include the cause of any noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

3.6 Effluent Limits – *Outfall 001*

Upon the effective date of this permit and lasting through the life of the permit, the quality of effluent discharged by the facility shall, as a minimum, be monitored and meet the effluent limits as set forth in the following table:

Effluent Parameter		Effluent Limit and Reporting Values		Monitoring Requirements	
		30-Day Average [1]	Daily Maximum [1]	Frequency	Sample Type [1]
Five-Day Biochemical Oxygen Demand (BOD_5)	January 1 – December 31	Report, mg/L	Report, mg/L	5 d. / week	24-Hour Composite
	September 1 – May 31	1,113 lb/d	2,226 lb/d	5 d. / week	Calculated
	June 1 – August 31	779 lb/d	2,226 lb/d	5 d. / week	Calculated
Total Suspended Solids (TSS)		Report, mg/L	Report, mg/L	5 d. / week	24-Hour Composite
		1,325 lb/d	2,650 lb/d	5 d. / week	Calculated
Ammonia-Nitrogen (as N)	January 1 – December 31	Report, mg/L	Report, mg/L	3 d. / week	24-Hour Composite [2]
INTERIM Ammonia-Nitrogen (as N), effective through **June 30, 2023**	April 1 – May 31	70 lb/d	123 lb/d	3 d. / week	Calculated [2]
	June 1 – August 31	58 lb/d	102 lb/d	3 d. / week	Calculated [2]
	September 1 – October 31	75 lb/d	131 lb/d	3 d. / week	Calculated [2]
	November 1 – March 31	163 lb/d	285 lb/d	3 d. / week	Calculated [2]
FINAL Ammonia-Nitrogen (as N), effective starting **July 1, 2023**	January 1 – 31	117 lb/d	234 lb/d	3 d. / week	Calculated [2]
	February 1 – 29	117 lb/d	234 lb/d	3 d. / week	Calculated [2]
	March 1 – 31	73 lb/d	234 lb/d	3 d. / week	Calculated [2]
	April 1 – 30	81 lb/d	143 lb/d	3 d. / week	Calculated [2]
	May 1 – 31	82 lb/d	143 lb/d	3 d. / week	Calculated [2]
	June 1 – 30	67 lb/d	117 lb/d	3 d. / week	Calculated [2]
	July 1 – 31	53 lb/d	117 lb/d	3 d. / week	Calculated [2]

Effluent Parameter		Effluent Limit and Reporting Values		Monitoring Requirements	
		30-Day Average [1]	Daily Maximum [1]	Frequency	Sample Type [1]
	August 1 – 31	37 lb/d	117 lb/d	3 d. / week	Calculated [2]
	September 1 – 30	61 lb/d	155 lb/d	3 d. / week	Calculated [2]
	October 1 – 31	61 lb/d	155 lb/d	3 d. / week	Calculated [2]
	November 1 – 30	117 lb/d	234 lb/d	3 d. / week	Calculated [2]
	December 1 – 31	117 lb/d	234 lb/d	3 d. / week	Calculated [2]
Fecal Coliform	January 1 – December 31	--	400 # / 100 mL	5 d. / week	Grab
Escherichia coli (E. coli)	May 1– September 30	126 # / 100 mL	235 # / 100 mL	5 d. / week	Grab
Dissolved Oxygen (DO)		The DO of the discharge shall not be less than 5.0 mg/L in any sample.		5 d. / week	Instantaneous
pH		The pH of the discharge shall not be less than 6.5 standard units or greater than 9.0 standard units in any sample.		Daily	Instantaneous [2, 3]
Total Residual Chlorine		--	0.019 mg/L [4]	Daily	Instantaneous
Oil and Grease (Visual) [5, 6]		--	Report Presence or Absence	Daily	Visual
Oil and Grease (HEM) [5, 6]		--	Report, lb/d	Weekly and Contingent	Calculated
		--	10 mg/L	Weekly and Contingent	Grab
Nitrate-Nitrogen (as N)	Effective through **June 30, 2023**	Report, mg/L	Report, mg/L	Weekly	24-Hour Composite
	Effective starting **July 1, 2023**	50 mg/L	88 mg/L	Weekly	24-Hour Composite

Effluent Parameter		Effluent Limit and Reporting Values		Monitoring Requirements	
		30-Day Average [1]	Daily Maximum [1]	Frequency	Sample Type [1]
Chronic Whole Effluent Toxicity (WET) [7]	January 1 – 31	--	2.3 Tu_c	Semiannually	24-Hour Composite
	February 1 – 29	--	2.1 Tu_c	Semiannually	24-Hour Composite
	March 1 – 31	--	2.7 Tu_c	Semiannually	24-Hour Composite
	April 1 – 30	--	2.4 Tu_c	Semiannually	24-Hour Composite
	May 1 – 31	--	3.0 Tu_c	Semiannually	24-Hour Composite
	June 1 – 30	--	3.5 Tu_c	Semiannually	24-Hour Composite
	July 1 – 31	--	3.3 Tu_c	Semiannually	24-Hour Composite
	August 1 – 31	--	2.0 Tu_c	Semiannually	24-Hour Composite
	September 1 – 30	--	2.8 Tu_c	Semiannually	24-Hour Composite
	October 1 – 31	--	2.0 Tu_c	Semiannually	24-Hour Composite
	November 1 – 30	--	3.1 Tu_c	Semiannually	24-Hour Composite
	December 1 – 31	--	2.1 Tu_c	Semiannually	24-Hour Composite
Effluent Water Temperature [8, 9]		Report, °C	Report, °C	Daily	Instantaneous [2, 9]
Total Nitrogen [8]		Report, mg/L	Report, mg/L	Monthly	24-Hour Composite
Total Phosphorus [8]		Report, mg/L	Report, mg/L	Monthly	24-Hour Composite
Carbonaceous Five-Day Biochemical Oxygen Demand ($CBOD_5$) [8]		Report, mg/L	Report, mg/L	Monthly	24-Hour Composite
Flow Rate [8]		Report, MGD	Report, MGD	Continuous	Instantaneous
No chemicals, such as corrosion inhibitors, biocides, descalers, etc., shall be added to the discharge without prior written permission from the SDDENR. **Additional additives must be submitted in advance for approval and may be approved by the Secretary without additional public notice.**					

Amended Date: February 11, 2021
Effective Date: April 1, 2021

Effluent Parameter	Effluent Limit and Reporting Values		Monitoring Requirements	
	30-Day Average [1]	Daily Maximum [1]	Frequency	Sample Type [1]

[1] See **Section 1.0 – Definitions**.

[2] The pH and temperature of the effluent shall be determined when the ammonia samples are collected.

[3] The pH shall be taken within 15 minutes of sample collection with a pH meter. The pH meter must be capable of simultaneous calibration to two points on the pH scale that bracket the expected pH and are approximately three standards units apart. The pH meter must read to 0.01 standard units and be equipped with temperature compensation adjustment. Readings shall be reported to the nearest 0.1 standard units.

[4] SDDENR considers the analytical detection limit for total residual chlorine to be 0.05 mg/L. If the effluent value is less than the analytical detection limit, "NODI B – Below Detection Limit/No Detection" shall be used for reporting purposes.

[5] The visual observation for a visible film or sheen shall be conducted downstream of the permittee's discharge into the receiving stream, where the discharge does not cause turbulence in the receiving stream. If downstream observation is not feasible due to outfall accessibility issues, effluent visual oil and grease shall be observed at a consistent location (for example, where other effluent monitoring is conducted, such as sampling or flow measurement). If a visible film or sheen is observed, a grab sample shall be taken of the discharge and analyzed using EPA Method 1664.

[6] The permittee shall sample for Oil and Grease using EPA Method 1664 (hexane extraction method) to monitor for compliance with the TPH limit.

[7] In addition, there shall be no Acute toxicity (LC_{50}) at any effluent dilution. The Acute WET limit is $<1.0\ TU_a$, which is equivalent to $LC_{50} >100\%$ effluent. Any value $\geq 1.0\ TU_a$ will constitute a failure. The results shall be reported in TU_a, where $TU_a = 100/LC_{50}$. See **Section 3.8** Whole Effluent Toxicity requirements.

[8] This parameter shall be monitored and reported, but does not have an effluent limit associated with it.

[9] The water temperature of the effluent shall be taken as a field measurement. Measurement shall be made with a mercury-filled, or dial-type thermometer, or a thermistor. Readings shall be reported to the nearest whole degree Celsius.

3.7 Self-Monitoring Requirements – *Emergency Discharges*

All emergency discharges shall be monitored for the following parameters at the frequency and with the type of measurement indicated. Promptly upon discovery of an emergency discharge, the discharge shall be monitored as shown below. Knowingly discharging or failing to report a discharge within a reasonable time from the permittee first learning of a discharge could subject the permittee to penalties as provided under the South Dakota Water Pollution Control Act. The permittee shall report the monitoring results in accordance with **Section 4.1 – Reporting of Monitoring Results.**

Effluent Parameter	Frequency	Reporting Values [1]	Sample Type [1]
Duration of Discharge, days	Monthly	Monthly Total [2]	Calculate
Total Flow, million gallons	Monthly	Monthly Total	Calculate
Flow Rate, million gallons per day	Daily	Actual Value	Calculate
pH, standard units	Daily	Actual Value	Instantaneous [3, 4]
Effluent Water Temperature, °C	Daily	Actual Value	Instantaneous [3, 5]
Total Residual Chlorine, mg/L	Daily	Actual Value	Grab [6]
Dissolved Oxygen (DO), mg/L	Daily	Actual Value	Grab
Five-Day Biochemical Oxygen Demand (BOD_5), mg/L	Daily	Actual Value	Grab
Total Suspended Solids (TSS), mg/L	Daily	Actual Value	Grab
Ammonia-Nitrogen (as N), mg/L	Daily	Actual Value	Grab [3]
Nitrate-Nitrogen (as N), mg/L	Daily	Actual Value	Grab
Fecal Coliform	Daily	Actual Value	Grab
Escherichia coli (E. coli), #/100 mL	Daily	Actual Value	Grab
Oil and Grease, visual	Daily	Presence or absence of visible pollutants	Visual
Oil and grease (HEM), mg/L	Once per Discharge	Actual Value	Grab [7]

[1] See **Section 1.0 – Definitions**.

[2] The date and time of the start and termination of each event shall also be reported.

[3] The pH and temperature of the effluent shall be determined when the ammonia samples are collected.

[4] The pH shall be taken within 15 minutes of sample collection with a pH meter. The pH meter must be capable of simultaneous calibration to two points on the pH scale that bracket the expected pH and are approximately three standard units apart. The pH meter must read to 0.01 standard units and

be equipped with temperature compensation adjustment. Readings shall be reported to the nearest 0.1 standard units.

[5] The water temperature of the effluent shall be taken as a field measurement. Measurement shall be made with a mercury-filled, or dial type thermometer, or a thermistor. Readings shall be reported to the nearest whole degree Celsius.

[6] SDDENR considers the analytical detection limit for total residual chlorine to be 0.05 mg/L. If the effluent value is less than the analytical detection limit, "below detection level" shall be used for reporting purposes.

[7] EPA method 1664A shall be used for analysis.

3.8 Whole Effluent Toxicity Testing

1. Whole Effluent Toxicity (WET) Testing - Chronic Toxicity

Upon the effective date of this permit, the permittee shall, at least **semiannually (alternating quarters)** conduct chronic static renewal toxicity tests on a **24-hour composite** sample of the final effluent. Three samples shall be collected on days 1, 3, and 5.

The Department recommends sampling be completed at the beginning of the monitoring period (i.e. if quarterly monitoring, the first two months of the quarter), thus reserving time for complications (i.e. invalid tests, weather, etc.). Any repeated tests must be completed in the same monitoring period. Failure to obtain a valid test will be considered a failure to sample and is a violation of this permit. All sample(s) shall be collected at the outfall(s) as specified in this permit.

Dilution water shall be standard laboratory (reconstituted) with the general characteristics of **very hard** water. The dilution series shall include at least 5 effluent dilutions which include and bracket the instream waste concentration (IWC) and a control. This permit authorizes a mixing zone; therefore, the Chronic IWCs for this permit vary monthly as shown in the table below. The dilution series for this permit also vary monthly in the table below as follows: **(1) 100%; (2) (IWC + 100)/2; (3) IWC; (4) IWC/2; and (5) IWC/4; and Control.**

Month	IWC	Dilution Series					
January	44%	100%	72%	44%	22%	11%	Control
February	47%	100%	73%	47%	23%	12%	Control
March	37%	100%	68%	37%	18%	9%	Control
April	41%	100%	71%	41%	21%	10%	Control
May	33%	100%	66%	33%	16%	8%	Control
June	29%	100%	64%	29%	14%	7%	Control
July	30%	100%	65%	30%	15%	7%	Control
August	49%	100%	74%	49%	24%	12%	Control
September	35%	100%	68%	35%	18%	9%	Control

Month	IWC	Dilution Series					
October	50%	100%	75%	50%	25%	12%	Control
November	32%	100%	66%	32%	16%	8%	Control
December	48%	100%	74%	48%	24%	12%	Control

The 7-day chronic static renewal toxicity tests; including the dilution water, reference (control) toxicant and effluent sample shall be conducted in accordance with the procedures, test conditions, and Test Acceptability Criteria (TAC) as set out in the latest revision of "*Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," Fourth Edition, October 2002, (EPA-821-R-02-013, Table IA,* 40 *CFR 136).*

The permittee shall conduct the chronic 7-day static renewal toxicity test using *Ceriodaphnia dubia* (water flea) using the Chronic Toxicity Test Method 1002.0 and *Pimephales promelas* (fathead minnow) using Chronic Toxicity Test Method 1000.0. The above tests shall be conducted at 25° C.

The use of alternate testing procedures or methods shall be approved in advance by the Department (including, but not limited to the use of EDTA, CO_2 overlay, chlorine removal from the effluent sample if the effluent is chlorinated, etc.). The facility is approved to test for both species on a semiannual basis (alternating quarters).

Chronic toxicity occurs when the toxicant concentration causes a 25-percent reduction in a biological measurement (e.g., survival and reproduction or survival and growth), calculated from a continuous model (i.e. Interpolation Method). The effluent value must be less than (<) the TU_c limit to indicate a passing test. Any value greater than or equal to (≥) the TU_c limit will constitute a failure. The results shall be reported in TU_c, where $TU_c = 100/IC_{25}$. This permit has additional requirements if any sample is found to be chronically toxic [See *Sections: 3.8 (2), (3), (4), and (5)]*.

In addition, there shall be no Acute toxicity (LC_{50}) at any effluent dilution as outlined in the current version of the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, October 2002 (as allowed by Sections 11.1.2 for Method 1000.0 and 13.1.2 for Method 1002.0).

The Acute WET limit is <1.0 TU_a, which is equivalent to LC_{50} >100% effluent. Acute toxicity is defined as mortality to 50% or more of the test organisms at any effluent dilution. The effluent value must be < 1.0 TU_a to indicate a passing test. Any value ≥ 1.0 TU_a will constitute a failure. The results shall be reported in TU_a, where $TU_a = 100/LC_{50}$. This permit has additional requirements if any sample is found to be acutely toxic [See *Sections: 3.8 (2), (3), (4), and (5)]*.

WET test data results shall be summarized on the latest revision of the "Region 8 Chronic Toxicity Test Report Form", complete lab data packet and the chain of custody shall be submitted along with the completed Discharge Monitoring Report (DMR) for the end of the calendar period during which the whole effluent toxicity test was conducted.

If the results of a total of 24 consecutive WET tests (12 tests using *Ceriodaphnia dubia* and 12 *Pimephales promelas*) indicate no Chronic or Acute toxicity, the permittee may request in writing to the Department to allow a reduction to quarterly Chronic toxicity testing of alternating species, or alternating quarters. The Department may approve or deny the request based on the results and other available information without additional public notice. If the request is approved, the test procedures are to be the same as specified above for the test species.

2. Accelerated Testing

When the WET limit is exceeded during routine testing, the permittee shall perform an accelerated schedule of WET testing to establish whether a pattern of toxicity exists. There are two specific paths (KNOWN and UNKNOWN) for accelerated testing and they are as follows:

a. If a WET permit limit is exceeded and the source of the toxicity is **KNOWN** (e.g., a temporary plant upset, etc.), the facility shall immediately initiate a preliminary toxicity investigation (PTI). The permittee shall also conduct one additional toxicity test using the same species and test method that failed. **This test shall begin within 14 days of notification/receipt of the test results exceeding the permit limit**. If this additional accelerated test does not exceed WET permit limits, then the permittee may return to their regular testing frequency. If the additional accelerated test exceeds a WET permit limit, then there is considered to be a pattern of toxicity. The permittee must submit a TIE/TRE work plan with a time table to eliminate the toxicity. This TIE/TRE work plan shall be considered part of the permit.

b. If a WET permit limit is exceeded, and the source of the toxicity is **UNKNOWN**, the facility must immediately initiate a preliminary toxicity investigation (PTI). The permittee also must conduct accelerated testing that shall consist of 12 WET tests conducted at a maximum of 4-week intervals over a 10-month period using the same species and test method that failed. The Department reserves the right to increase the accelerated testing frequency to bi-weekly upon written notification to the permittee. **Accelerated testing shall begin within 14 days of notification/receipt of the test results exceeding the permit limit.** If none of the additional test exceeds WET permit limit(s), then the permittee may return to their regular testing frequency. If any of the accelerated tests exceed WET permit limit(s), then there is considered to be a pattern of toxicity. The permittee

must submit a TIE/TRE work plan with a time table to eliminate the toxicity. This TIE/TRE work plan shall be considered part of the permit.

3. Pattern of Toxicity

There is considered to be a pattern of toxicity if any one accelerated WET test exceeds the permit limit or is considered a failure pursuant to the accelerated testing requirements, using a full dilution series and the species found to be most sensitive. A pattern of toxicity may also be established based on all past toxicity failures as a whole using Best Professional Judgment (BPJ) (i.e. failed sample every spring, etc.). The establishment of a pattern of toxicity triggers a PTI and a TIE/TRE.

4. Preliminary Toxicity Investigations (PTI)

Any WET limit violation or an established pattern of toxicity requires the permittee to automatically begin an evaluation of the possible cause(s) of the toxicity. This is the permittees chance to find the cause of the toxicity and make a proposal for its elimination. A maximum of 30 days is allowed for this evaluation. This period may be extended if extenuating circumstances exist and written approval is granted prior to exceeding 30 days. Close coordination and communication with the Department is also required. The results of this investigation will aid in determining the need for further investigations, studies, TIE/TRE, permit modification, and/or enforcement action.

5. Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE)

If the PTI cannot determine the cause of the WET failures, then the permittee shall begin the formal TIE/TRE process. A TIE/TRE is done when toxicity is evident based on an established Pattern of Toxicity.

If the Department is requiring a TIE/TRE, the permittee shall be notified in writing. Once a TIE/TRE has begun, the permittee shall submit a TIE/TRE work plan to the Department within 30 days following the effective date of the TIE/TRE notification letter. The permittee shall also submit monthly progress reports that will be due by the 1st of every month until the TIE/TRE is closed. Once the TIE/TRE has begun, accelerated testing may cease.

The permittee shall use the most recent editions as guidance as set forth by EPA for the TIE/TRE process and procedures: Methods for Aquatic Toxicity Identification Evaluations, Phase 1, Toxicity Characterization Procedures (EPA/600/6-91/003); Phase 2, Toxicity Identification Procedures (EPA/600/R-92/080); Phase 3, Toxicity Confirmation Procedures (EPA/600/R-92/080); and Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents Phase 1 (EPA/600/6-91/005F).

If toxicity spontaneously disappears in the midst of the TIE phase, the Department may require the permittee to conduct additional accelerated testing to demonstrate that no pattern of toxicity remains. This shall follow the UNKNOWN toxicity path of accelerated testing. If no additional pattern of toxicity is demonstrated, the TIE/TRE will be closed and normal WET testing shall resume.

TIE/TRE shall be reported on the DMRs for the species that the TIE/TRE is being conducted. If the facility is using NetDMR, NODI 8 shall be used and TIE/TRE shall be typed in the comment section of the electronic DMR.

A numerical limit, compliance schedule, or an enforcement action may be subsequently imposed on the permittee based off the results of the TIE/TRE and shall be considered part of this permit. The TIE/TRE will not be considered closed until written notification has been received from the Department.

3.9 Monitoring Procedures

1. Effluent samples taken in compliance with the monitoring requirements established under this permit shall be collected prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

2. Monitoring shall be conducted according to test procedures approved under ARSD Section 74:52:03:06 (a.b.r. 40 CFR, Part 136), unless other test procedures have been specified in this permit or approved by the Secretary. Analysis methods shall be sufficiently sensitive to ensure the minimum detection level for a pollutant is below the permit limit. If no sufficiently sensitive method is available, the method with the lowest minimum detection level shall be used.

3.10 Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit at the designated points, using test procedures approved under ARSD Section 74:52:03:06 (a.b.r. 40 CFR 136) or as specified in this permit, the results of this monitoring shall be used in determining compliance with this permit and reported to SDDENR.

4.0 MONITORING, RECORD KEEPING & REPORTING REQUIREMENTS

4.1 Reporting of Monitoring Results

1. Effluent monitoring results shall be summarized for each month, reported on separate Discharge Monitoring Report Forms (as defined in **Section 1.0 – Definitions**), and submitted to SDDENR via NetDMR as follows: **001A** DMRs shall be submitted **monthly**, and **001W** DMRs shall be submitted **quarterly**.

2. Effluent results obtained from all other sources shall be reported on Emergency Discharge Reporting Summary Forms in Appendix A.

3. All reports must be submitted no later than the 28th day of the month following the completed reporting period. If no discharge occurs during the reporting period, "no discharge" shall be reported.

4. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with **Section 4.6 – Signatory Requirements** and submitted to the Secretary at the following address:

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

   In accordance with 40 CFR, Part 122, all permit reports shall be submitted electronically starting no later than **December 21, 2020.**

5. In accordance with SDCL 1-40-39, the Secretary is authorized to accept a document with an electronic signature. SDDENR 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.

4.2 Effluent Violation, Bypass, and Emergency Discharge Reporting Requirements

1. Any possible or actual endangerment to health or the environment attributed to an effluent violation, bypass, or emergency discharge shall be reported as soon as possible, but no later than 24 hours after becoming 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.

2. Effluent violations, bypass, and emergency discharges that do not meet the conditions above shall be reported to the Secretary within 24 hours from the time the permittee becomes 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 leave a message at 1-800-GET-DENR (1-800-438-3367).

3. The permittee shall submit notice of bypass as follows:

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Secretary at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass to the secretary at (605) 773-3351 by the first workday (8:00 a.m. – 5:00 p.m. Central Time) following the day the permittee became aware of the circumstances.

4. The Secretary may require the permittee to notify the general public or downstream users that could be or will be impacted by the effluent violation, bypass, or emergency discharge.

a. In making the decision to require public notification, the Secretary will consider the potential impacts as a result of the discharge, the downstream beneficial uses (such as drinking water or recreation), and the potential for public contact.

b. If required by the Secretary, the permittee shall notify the public and/or downstream users as soon as possible, but in no case more than 24 hours after the discharge begins.

5. In addition to verbal notification, the permittee shall submit a written report of the circumstances regarding the effluent violation, bypass, or emergency discharge to the Secretary. The permittee shall use the Emergency Discharge Reporting Form in **Appendix A** to report an emergency discharge. Effluent violations shall be reported on the Discharge Monitoring Report forms required in **Section 4.1 – Reporting of Monitoring Results**.

a. Reports shall be submitted in accordance with **Section 4.1 – Reporting of Monitoring Results**.

b. The written submission shall contain:

i. A description of the event and its cause;
ii. The period of the event, including exact dates and times;
iii. Where the wastewater was discharged;
iv. The estimated time the event is expected to continue if it has not been corrected;
v. Any adverse effects, such as fish kills;
vi. If public notification was required, describe how the public was notified of the discharge; and
vii. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the event.

c. The written report shall be submitted by the 28th day of the following month. The Secretary may require a written report to be submitted sooner or may require additional information if the discharge has the potential to impact human health or the environment.

4.3 Other Noncompliance Reporting Requirements

1. The permittee shall submit a written report of all instances of permit noncompliance not reported under **Section 4.2 - Effluent Violation, Bypass, Emergency Discharge, and SSO Reporting Requirements.**

    a. Reports shall be submitted in accordance with **Section 4.1 – Reporting of Monitoring Results**.

    b. The written submission shall contain:

        i. A description of the event and its cause;
        ii. The period of the event, including exact dates and times;
        iii. Where the wastewater was discharged;
        iv. The estimated time the event is expected to continue if it has not been corrected;
        v. Any adverse effects, such as fish kills;
        vi. If public notification was required, describe how the public was notified of the discharge; and
        vii. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the event.

2. The written report shall be submitted by the 28th day of the following month. The Secretary may require a written report to be submitted sooner or may require additional information if the discharge has the potential to impact human health or the environment.

4.4 Notification of Toxic Pollutants

The permittee shall notify the Secretary if any discharge of toxic pollutants has occurred or will occur. Notification is required if the permit does not contain a limit for the toxic pollutant and if the pollutant will exceed one of the following notification levels, as appropriate:

1. Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile;

2. Five hundred micrograms per liter (500 μg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;

3. One milligram per liter (1 mg/L) for antimony;

4. Five (5) times the maximum concentration value reported for that pollutant in the permit application: or

5. One hundred micrograms per liter (100 μg/L) for all other parameters.

4.5 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.

4.6 Signatory Requirements

1. All permit applications, reports or information submitted to the Secretary shall be signed and certified by either a principal executive officer or ranking elected official.

   a. For a corporation: by a responsible corporate officer;

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;

   c. For a municipality, State, Federal, or other public agency: 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 in Paragraph 1 of this section 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 Paragraph 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 include 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.*

4.7 Retention of Records

1. The permittee shall retain records of all monitoring information and other data required by this permit. This includes:

   a. Data collected on site;

   b. Copies of all Discharge Monitoring Report Forms;

   c. A copy of the permit;

   d. All calibration and maintenance records;

   e. All original strip chart recordings for continuous monitoring instrumentation;

   f. Copies of all other reports required by this permit; and

   g. Records of all data used to complete the application for this permit.

2. This information must be retained for a period of at least three 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 Discharge Monitoring Reports, and a copy of this permit must be maintained on site during the duration of the permitted activity.

4.8 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 SDDENR. The name and address of the permittee, permit applications, notices of intent, permits, and effluent data shall not be considered confidential.

4.9 Duty to Provide Information

1. 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.

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

4.10 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 pollutant discharged, or could result in noncompliance with permit conditions. This notification also applies to pollutants that are not subject to effluent limits or other notification requirements in this permit.

4.11 Notification of Spills and Releases

1. A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to the department immediately if any one of the following conditions exists:

   a. The release or spill threatens or is in a position to threaten the waters of the state (surface water or ground water);

   b. The release or spill causes an immediate danger to human health or safety;

   c. The release or spill exceeds 25 gallons;

   d. The release or spill causes a sheen on surface water;

   e. The release or spill of any substance that exceeds the ground water quality standards of ARSD Chapter 74:54:01;

   f. The release or spill of any substance that exceeds the surface water quality standards of ARSD Chapter 74:51:01;

   g. The release or spill of any substance that harms or threatens to harm wildlife or aquatic life;

   h. The release or spill of crude oil in field activities under SDCL chapter 45-9 is greater than 1 barrel (42 gallons); or

   i. The release or spill is required to be reported according to SARA Title III List of Lists, Consolidated List of Chemicals Subject to Reporting Under the Emergency Planning and Community Right to Know Act, US Environmental Protection Agency.

2. To report a release or spill, call the department at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central time). To report the release after hours, on weekends or holidays, call State Radio Communications at 605-773-3231. Reporting the release to the department does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, the responsible person must also contact local authorities to determine the local reporting requirements for releases.

5.0 COMPLIANCE REQUIREMENTS

5.1 Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the South Dakota Water Pollution Control Act and the federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application (a violation of a condition of this permit is subject to SDCL Section 34A-2-75).

5.2 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any wastewater discharge and/or sludge disposal or reuse in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

5.3 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.

5.4 Upset Conditions

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limits if the requirements of Paragraph 2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review (i.e., Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limits).

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and the permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required under **Section 4.2 – Effluent Violation, Bypass, and Emergency Discharge Reporting Requirements**; and,

d. The permittee complied with mitigation measures required under **Section 5.2 – Duty to Mitigate.**

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

5.5 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. Except as provided in **Section 5.4 – Upset Conditions**, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

5.6 Penalties for Falsification of Reports

1. 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.

2. Any person who falsifies, tampers with, or knowingly renders 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.

3. 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.

5.7 Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Federal Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5.8 Oil and Hazardous Substance Liability

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

6.0 ADDITIONAL PERMIT CONDITIONS

6.1 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; 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.

6.2 Removed Substances

1. Collected screenings, grit, solids, sludges, 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.

2. Sludge/digestor supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the State.

APPENDIX A

Emergency Discharge Reporting Form

EMERGENCY DISCHARGE REPORTING FORM

This form is to be used to summarize the reporting requirements for any emergency discharge or upset from the permitted facility.

Facility Contact:		**Phone:**	

Description of Event *(Attach additional sheets if necessary)*

Please check the boxes below, as appropriate, to indicate the type of emergency release being reported (See* Definitions *for an explanation of each term).

☐**Emergency Discharge** ☐**Other**

Date and Time the discharge began or was discovered:	
Date and Time the discharge was stopped:	

Describe the events resulting in the discharge and its cause(s):

Where did the event occur and where was the wastewater released to:

Describe the steps taken or planned to reduce, eliminate, and prevent reoccurrence:

Time and Date 24-Hour Notice of Noncompliance given to SDDENR:	
Duration of discharge (include dates and times):	
Total flow, million gallons:	
Describe any adverse effects, such as fish kills, etc.:	

ANALYTICAL RESULTS

Parameter	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7
Date and time of sample							
Flow Rate, million gallons per day							
pH, standard units							
Water Temperature, °C							
Total Residual Chlorine, mg/L							
Dissolved Oxygen (DO), mg/L							
Five-Day Biochemical Oxygen Demand (BOD5), mg/L							
Total Suspended Solids (TSS), mg/L							
Ammonia-Nitrogen (as N), mg/L							
Nitrate-Nitrogen (as N), mg/L							
Fecal Coliform, #/100 mL							
Escherichia coli (E. coli), #/100 mL							
Oil and grease, visual							
Oil and grease (HEM), mg/L							

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.

Name (print): _____ Title: _____

Signature: _____ Date: _____