Appendix A – NPDES Permits

Nebraska Department of Environmental Quality

Wastewater Section
Suite 400, The Atrium, 1200 'N' Street
PO Box 98922
Lincoln, NE 68509-8922
Tel. 402/471-4220
Fax 402/471-2909

Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES)

This NPDES permit is issued in compliance with the provisions of the Federal Water Pollution Control Act (33 U.S.C. Secs. 1251 *et. seq.* as amended to date), the Nebraska Environmental Protection Act (Neb. Rev. Stat. Secs. 81-1501 *et. seq.* as amended to date), and the Rules and Regulations promulgated pursuant to these Acts. The facility and outfall(s) identified in this permit are authorized to discharge wastewater and are subject to the limitations, requirements, prohibitions and conditions set forth herein. This permit regulates and controls the release of pollutants in the discharge(s) authorized herein. This permit does not relieve permittees of other duties and responsibilities under the Nebraska Environmental Protection Act, as amended, or established by regulations promulgated pursuant thereto.

NPDES Permit No.:	**NE0036820**
IIS File Number	**PCS 32246-P**
Facility Name:	**Lincoln Theresa Street Wastewater Treatment Plant**
Permittee	**City of Lincoln, Nebraska**
Facility Location:	**2400 Theresa Street, Lincoln, Nebraska**
Latitude/Longitude	**42° 50′ 24.63″ North / 96° 41′ 15.74″ West**
Legal Description	**NE ¼, Section 13, Township 10 N, Range 6 E, Lancaster County, Nebraska.**
Receiving Water	**Salt Creek (segment LP2-20000 of the Lower Platte River Basin)**
Effective Date:	**April 1, 2009**
Expiration Date:	**March 31, 2014**

Pursuant to a Delegation Memorandum dated July 26, 1999 and signed by the Director, the undersigned hereby executes this document on behalf of the Director.

Signed this 30th day of March, 2009

Jay D. Ringenberg
Deputy Director

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Part I. Requirements for Outfall 001.

The discharge of treated sanitary wastewater from the Outfall 001, final effluent, is authorized and shall be monitored and limited as specified in the table(s) below. Monitoring shall be conducted by sampling after all treatment processes and prior to discharge into the receiving waters, unless an alternative or more specific monitoring point is specified by the NDEQ.

A. Requirements for Effluent Flow, CBOD, TSS, and pH

Table 1: Discharge Limits and Monitoring Requirements for Flow, CBOD, and TSS

Parameters	Storet #	Units	Discharge Limits			Monitoring Frequency	Sample Type
			Monthly Average	7 Day Average	Daily Maximum		
Effluent Flow	50050	MGD	Report	*	Report	Daily	Measured or Calculated
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082	mg/L	25	40	*	Daily	24-hour Composite
		kg/day	Report	Report	*		
Total Suspended Solids)	00530	mg/L	30	45	*	Daily	24-hour Composite
		kg/day	Report	Report	*		

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type
			Daily Minimum	Daily Maximum		
pH	00400	Standard Units	6.5	9.0	Daily	Grab

Footnotes

B. Limits for Ammonia for Outfall 001

Table 2: Tier 1 Seasonal Discharge Limits for Ammonia for Outfall 001

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type
			Monthly Average	Daily Maximum		
Spring Ammonia (March 1 – May 31)	00610	mg/L	8.3	21.9	Daily	24-hour Composite
		kg/day	619.3	1621.2		
Summer Ammonia (June 1 – Oct. 31)	00610	mg/L	3.0	7.9	Daily	24-hour Composite
		kg/day	243.6	637.8		
Winter Ammonia (Nov. 1 – Feb. 28 [29])	00610	mg/L	9.8	25.7	Daily	24-hour Composite
		kg/day	787.6	2061.8		
Footnotes						

C. Requirements for E. coli for Outfall 001

Table 3: Discharge Monitoring Requirements for E. coli that Apply from May 1 through September 30

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type
			Monthly Geometric Mean	Maximum		
E. coli [(a)]	51040	#/100 ml	126	Report	Daily	Grab

Footnotes:
(a) E. coli requirements do not apply to discharges that occur from October 1 through April 30.

D. Tier 1 Residual Chlorine (TRC) – Outfall 001

The TRC limits specified in Table 4 below are applicable to treated wastewater discharged through Outfall 001 at the Lincoln Theresa Street WWTF when the Salt Creek upstream mean daily flow rate is less than 220 cfs. See *Other Requirements* Part VI (H) for additional specifications concerning tiered TRC limits.

Table 4: Tier 1 Seasonal Discharge Limits for Total Residual Chlorine for Outfall 001

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency [b]	Sample Type
			Monthly Average [a]	Daily Maximum		
Spring Total Residual Chlorine (March 1 – May 31)	50060	mg/L	0.010	0.026	Daily	Grab
		kg/day	0.741	1.939		
Summer Total Residual Chlorine (June 1 – Oct. 31)	50060	mg/L	0.008	0.020	Daily	Grab
		kg/day	0.643	1.683		
Winter Total Residual Chlorine (Nov. 1 – Feb. 28 [29])	50060	mg/L	0.009	0.023	Daily	Grab
		kg/day	0.733	1.919		
Duration of Discharge Tier 1	81381	Days	Report days per month		Daily	Calculated

Footnotes
(a) The monthly average shall be calculated by averaging all the Tier 1 daily TRC values during a calendar month
(b) Monitoring for Total Residual Chlorine is required only when chlorine is added to the treatment process.

E. Tier 2 Residual Chlorine (TRC) – Outfall 001H

The TRC limits specified in Table 5 below are applicable to treated wastewater discharged through Outfall 001 at the Lincoln Theresa Street WWTF when the Salt Creek upstream mean daily flow rate is greater than 220 cfs. See *Other Requirements* Part VI (H) for additional specifications concerning tiered TRC limits.

Table 5: Tier 2 Seasonal Discharge Limits for Total Residual Chlorine for Outfall 001H

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency [b]	Sample Type
			Monthly Average [a]	Daily Maximum		
Spring Total Residual Chlorine (March 1 – May 31)	50060	mg/L	0.024	0.065	Daily	Grab
		kg/day	1.834	4.802		
Summer Total Residual Chlorine (June 1 – Oct. 31)	50060	mg/L	0.023	0.061	Daily	Grab
		kg/day	1.876	4.911		
Winter Total Residual Chlorine (Nov. 1 – Feb. 28 [29])	50060	mg/L	0.023	0.061	Daily	Grab
		kg/day	1.872	4.900		
Duration of Discharge Tier 2	81381	Days	Report days per month		Daily	Calculated

Footnotes
(a) The monthly average shall be calculated by averaging all the Tier 2 daily TRC values during a calendar month.
(b) Monitoring for Total Residual Chlorine is required only when chlorine is added to the treatment process.

F. Requirements for Pesticides, Metals, and Toxicity for Outfall 001

Table 6: Requirements for Outfall 001 for Pesticides, Metals and Toxicity Monitoring

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type
			Monthly Average	Daily Maximum		
Dieldrin	39380	mg/L	Report	Report	Annually	Composite
Polychlorinated Biphenyls	39516	mg/L	Report	Report	Annually	Composite
Dissolved Cadmium [(a)]	01025	mg/L	Report	Report	Annually	Composite
Dissolved Chromium [(a)]	01030	mg/L	Report	Report	Annually	Composite
Dissolved Copper[(a)]	01040	mg/L	Report	Report	Annually	Composite
Dissolved Iron [(a)]	01046	mg/L	Report	Report	Annually	Composite
Dissolved Lead[(a)]	01049	mg/L	Report	Report	Annually	Composite
Dissolved Mercury [(a)]	71890	mg/L	Report	Report	Annually	Composite
Dissolved Nickel [(a)]	01065	mg/L	Report	Report	Annually	Composite
Dissolved Silver [(a)]	01075	mg/L	Report	Report	Annually	Composite
Dissolved Zinc [(a)]	01090	mg/L	Report	Report	Annually	Composite
Spring Chronic Toxicity [(b)] *Ceriodaphnia sp*	61426	TUc	Report	3.33	Annually	Composite
Spring Chronic Toxicity [(b)] *Pimephales promelas*	61428	TUc	Report	3.33	Annually	Composite
Summer Chronic Toxicity [(b)] *Ceriodaphnia sp*	61426	TUc	Report	2.34	Annually	Composite
Summer Chronic Toxicity [(b)] *Pimephales promelas*	61428	TUc	Report	2.34	Annually	Composite
Winter Chronic Toxicity [(b)] *Ceriodaphnia sp*	61426	TUc	Report	2.80	Annually	Composite
Winter Chronic Toxicity [(b)] *Pimephales promelas*	61428	TUc	Report	2.80	Annually	Composite

Footnotes
(a) The analytical procedure used for the determination of metals limits must be sufficiently sensitive to provide accurate results to 0.010 mg/L, except for mercury which is 0.02 µg/L.
(b) Toxicity testing shall be conducted once a year during alternate seasons. (Spring March 1 – May 31; Summer June 1 – Oct. 31; Winter Nov. 1 – Feb. 28[29]).

Part II. Flow Rate Monitoring of the Receiving Stream

The flow rate of Salt Creek upstream of Outfall 001 at Lincoln Theresa Street WWTF shall be reported as specified below. Receiving stream monitoring is required only on those days that Tier 2 TRC limits in Table 5 are applied to the discharge from the Theresa St. WWWTF through Outfall 001.

Table 7: Receiving Stream Monitoring Requirements

Parameter	Storet #	Units	Daily Flow Rate	Measurement Frequency	Sample Type
Stream Flow Rate [(a)]	00060	cfs	Report	Daily	Metered

Part III. Requirements for Outfalls 002 and 003

A. Monitoring Requirements for Outfall 002

Outfall 002 provides the capability to bypass untreated influent wastewater. The untreated wastewater is discharged into Salt Creek through a 42 inch pipe which leads to a box culvert. This permit does not authorize a discharge through Outfall 002. Any discharge through Outfall 002 is subject to the bypass and upset regulations set forth in Appendix A.

Table 8: Monitoring Requirements for Outfall 002

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type [a]
			Monthly Average	Daily Maximum		
Duration of Discharge [a]	50037	Days	Report	Report	Annually	Calculated
Effluent Flow Rate [a]	50051	MGD	Report	Report	Annually	Calculated or Metered

Footnotes:
(a) Duration of discharge and effluent flow rate shall be determined using the best possible determination.

B. Monitoring Requirements for Outfall 003

Outfall 003 provides the capability to bypass untreated influent wastewater. Outfall 003 is a 54-inch bypass line with a flap gate that runs from the pump station wet well to Salt Creek. This permit does not authorize a discharge through Outfall 003. Any discharge through Outfall 003 is subject to the bypass and upset regulations set forth in Appendix A.

Table 9: Monitoring Requirements for Outfall 003

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type [a]
			Monthly Average	Daily Maximum		
Duration of Discharge [a]	50037	Days	Report	Report	Annually	Calculated
Effluent Flow Rate [a]	50051	MGD	Report	Report	Annually	Calculated or Metered

Footnotes:
(a) Duration of discharge and effluent flow rate shall be determined using the best possible determination.

Part IV. Influent Requirements

To comply with these monitoring requirements, samples shall be taken at the head-works of the wastewater treatment facility prior to the treatment system. Influent wastewater shall be monitored as specified in the table below.

Table 10: Monitoring Requirements for Influent Wastewater

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type
			Monthly Average	Daily Maximum		
Flow	50050	MGD	Report	Report	Weekly [(a)]	Measured or Calculated
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082	mg/L	Report	Report	Weekly	24 Hour Composite
Total Suspended Solids	00530	mg/L	Report	Report	Weekly	24 Hour Composite
Other Parameters	**Storet #**	**Units**	**Discharge Limits**		**Monitoring Frequency**	**Sample Type**
			Daily Minimum	**Daily Maximum**		
pH	00400	Standard Units	Report	Report	Weekly	Grab

Footnote:
(a) Influent flow must be monitored on the same day as sample collection for CBOD, TSS, and pH.

Abbreviations:
mg/L – milligrams per liter MGD – million gallons per day kg/day – kilograms per day

Part V. Biosolids Monitoring Requirements

The sludge disposal requirements of this permit are set forth below. The disposal of domestic sewage sludge is subject to the requirements of 40 CFR Part 503. This is a Federal regulatory program administered by EPA Region VII. The current contact at EPA can be obtained upon request from NDEQ.

A. Approval

Submission of the Sludge Application Form, Attachment 1, constitutes notice that the Wastewater Treatment Facility intends to land apply sludge and requests approval by the NDEQ. The applicant is eligible to receive automatic approval provided the applicant indicates compliance with and understanding of the regulations and conditions contained in 40 CFR Part 503, and when all of the conditions set forth below are met, unless the Department acts to provide a conditional or circumstantial approval.

1. Sludge application is in compliance with the Federal 503 regulations, including all requirements related to vector and pathogen control.
2. Sludge is not applied within 200 feet of any actively used groundwater well, except for those used exclusively for irrigation.
3. Sludge is not being applied within 1000 feet of any public drinking water supply well.
4. Application sites are not subject to public access.
5. Retain a listing for review by the NDEQ of land application sites used during the year and their legal descriptions plus total tonnage of sludge that was land-applied or disposed of during the year.
6. Retain copies of all reports submitted to the EPA pursuant to the Federal 503 regulations for review by the NDEQ.

B. Non-compliance Reporting Requirements

The permittee shall report to the NDEQ any instance(s) of noncompliance with 40 CFR Part 503. This Non-compliance Report shall be submitted to the NDEQ no later than 7 days after the permittee becomes aware of the non-compliance. The Non-compliance Report shall contain the basic information required and specified in Appendix A of this NPDES permit.

C. Withdrawal of Site Approval(s)

The Department may withdraw site approval(s) for any of the following:

1. Failure to comply with the regulations contained in 40 CFR Part 503.
2. Potential risks to surface or ground water quality.
3. Potential risks to the environment.
4. Potential risks to public health and / or welfare.
5. Other site specific or facility specific considerations.

D. Sludge Monitoring Requirements

Sludge shall be monitored as specified below. A representative sample shall be collected and analyzed prior to application. A representative sample is defined as a sample that is a composite of several sludge samples within the same batch.

Table 11: Sludge Monitoring Requirements

Parameters	Storet #	Units	Sludge Reporting	Measurement Frequency	Sample Type
pH	00400	S.U.	Report	Once per 60 days	Composite
Ammonia (N)	82294	mg/kg	Report	Once per 60 days	Composite
Total Solids	78477	mg/kg	Report	Once per 60 days	Composite
Nitrate (N)	61539	mg/kg	Report	Once per 60 days	Composite
Total Nitrogen	78470	mg/kg	Report	Once per 60 days	Composite
Cadmium, Total	78476	mg/kg	Report	Once per 60 days	Composite
Chromium, Total	78473	mg/kg	Report	Once per 60 days	Composite
Copper, Total	78475	mg/kg	Report	Once per 60 days	Composite
Lead, Total	78468	mg/kg	Report	Once per 60 days	Composite
Nickel, Total	78469	mg/kg	Report	Once per 60 days	Composite
Zinc, Total	78467	mg/kg	Report	Once per 60 days	Composite
Arsenic, Total	61521	mg/kg	Report	Once per 60 days	Composite
Mercury, Total	78471	mg/kg	Report	Once per 60 days	Composite
Molybdenum, Total	78465	mg/kg	Report	Once per 60 days	Composite
Selenium, Total	61518	mg/kg	Report	Once per 60 days	Composite

Part VI. Other Requirements and Conditions

A. Requirements for removal of CBOD and TSS

The 30-day average percent removal of CBOD and TSS by the Lincoln Theresa St. WWTF shall not be less than 85%.

B. Narrative Limits, Discharges authorized under this permit:

1. Shall not be toxic to aquatic life in surface waters of the State outside the mixing zones allowed in NDEQ Title 117, *Nebraska Surface Water Quality Standards*;
2. Shall not contain pollutants at concentrations or levels that produce objectionable films, colors, turbidity, deposits, or noxious odors in the receiving stream or waterway; and
3. Shall not contain pollutants at concentrations or levels that cause the occurrence of undesirable or nuisance aquatic life in the receiving stream.

C. Whole Effluent Toxicity Corrective Action

If the whole effluent toxicity tests results exceed the toxicity limitations in this permit, this is a permit violation and the permittee must initiate corrective actions according to the conditions in Attachment 2, *NDEQ Guidance for Conducting Toxicity Testing and TIE/TRE Studies*.

D. Method Detection Limit Reporting Requirements

The minimum detection limit (MDL) is defined as the level at which the analytical system gives acceptable calibration points. If the analytical results are below the MDL then the reported value on the DMR shall be a numerical value less than the MDL (e.g. <0.005).

E. Certified Operator Requirements

This facility is to be operated and maintained by operators certified in accordance with NDEQ Title 197, *Rules and Regulations for the Certification of Wastewater Treatment Facility Operators in Nebraska*.

F. Permit Attachments

The attachments to this permit (e.g., forms and guidance) may be modified without a formal modification of the permit.

G. Pretreatment Requirements

An annual report shall be submitted to the NDEQ summarizing the City Lincoln's pretreatment program to include a report on monitoring activities and a review of major permit violations. The City of Lincoln shall also inform the NDEQ when a new Significant Industrial User is connected to the POTW.

H. Conditions and Requirements for Application of Tiered TRC Limits to the Effluent Discharge

1. The City of Lincoln is required to use the Tier 1 limits in Table 4 if the flow rate in Salt Creek upstream of the Theresa St. WWTF is below 220 cfs however the City of Lincoln is not required to use Tier 2 limits in Table 5 if the flow rate is above 220 cfs.
2. If the gaging station is found to not be working as designed, then the Tier 1 limits for TRC in Table 4 shall apply to the discharge from Outfall 001.
3. The Department may prohibit the application of Tier 2 limits for TRC in Table 5 for the discharge from Outfall 001 if there are repeated problems with the operation of the gaging station or for any reason to protect the beneficial uses of the receiving stream from impairment. The Department will address the determination to prohibit Tier 2 TRC limits in writing to the City of Lincoln. If the use of Tier 2 limits is prohibited then the TRC limits in Tables 4 will apply to the discharge at all times.

I. Permit Modification and Reopening

This permit may be reopened and modified after public notice and opportunity for a public hearing for reasons specified in Chapter 24 NDEQ Title 119- *Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System*.

J. Infiltration and Inflow Analysis

The City of Lincoln shall submit an "Infiltration/Inflow Analysis" report once in the term of the permit to the Department to include the following;

1. The infiltration/inflow analysis shall demonstrate the nonexistence or possible existence of excessive infiltration/inflow in the sewer system. The analysis should identify the presence, flow rate, and type of infiltration/inflow conditions which exist in the sewer system.
2. For determination of the possible existence of excessive infiltration/inflow, the analysis shall include an estimate of the cost of eliminating the infiltration/inflow conditions. These costs shall be compared with estimated total costs for transportation and treatment of the infiltration/inflow. Cost-effectiveness analysis guidelines should be consulted with respect to the determination.
3. If the infiltration/inflow analysis demonstrated the existence of excessive infiltration/inflow a detailed plan for a Sewer System Evaluation survey shall be included in the analysis. The plan shall outline the tasks to be performed in the survey and their estimated costs.
   a) The sewer system evaluation survey shall identify the location, estimated flow rate, method of rehabilitation, and cost of rehabilitation versus cost of transportation and treatment for each defined source of infiltration/inflow.
   b) A report shall summarize the results of the sewer system evaluation survey. In addition, the report shall include a justification for each sewer section cleaned and internally inspected plus a proposed rehabilitation program for the sewer system to eliminate all defined excessive infiltration/inflow.

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Standard Conditions that Apply to NPDES and NPP Permits

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Appendix A – Standard Conditions that Apply to NPDES and NPP Permits

These general conditions are applicable to all NPDES and NPP permits. These conditions shall not preempt any more stringent requirements found elsewhere in this permit.

A. General Conditions

1. Information Available

All permit applications, fact sheets, permits, discharge data, monitoring reports, and any public comments concerning such shall be available to the public for inspection and copying, unless such information about methods or processes is entitled to protection as trade secrets of the owner or operator under Neb. Rev. Stat. §81-1527, (Reissue 1999) and NDEQ Title 115, Chapter 4.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Clean Water Act and the State Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal even if the permit has not yet been modified to incorporate the requirement.

3. Duty to Reapply

The permittee shall apply for a re-issuance of this permit, if an activity regulated by this permit is to be continued after the expiration date of this permit. The application shall be submitted at least 180 days before the expiration of this permit on an application form supplied by the Department, as set forth in NDEQ Titles 119, Chapter 5 002.

4. Need to Halt or Reduce Activity is 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. Duty to Mitigate

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

6. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes 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 the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

7. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. 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.

8. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director 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 Director upon request copies of records required to be kept by this permit.

10. Inspection and Entry

The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

a. Enter upon 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;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. Land Application of Wastewater Effluent

The permittee shall be permitted to discharge treated domestic wastewater effluent by means of land application in accordance with the regulations and standards set forth in NDEQ Title 119, Chapter 12 002. The Wastewater Section of the Department must be notified in writing if the permittee chooses to land apply effluent.

12. Toxic Pollutants

The permittee shall not discharge pollutants to waters of the state that cause a violation of the standards established in NDEQ Titles 117, 118 or 119. All discharges to surface waters of the state shall be free of toxic (acute or chronic) substances which alone or in combination with other substances, create conditions unsuitable for aquatic life outside the appropriate mixing zone.

13. Oil and Hazardous Substances/Spill Notification

Nothing in this permit shall preclude the initiation of any legal action or relieve the permittee from any responsibilities, liabilities or penalties under section 311 of the Clean Water Act. The permittee shall conform to the provisions set forth in NDEQ Title 126, *Rules and Regulations Pertaining to the Management of Wastes*. If the permittee knows, or has reason to believe, that oil or hazardous substances were released at the facility and could enter waters of the state or any of the outfall discharges authorized in this permit, the permittee shall immediately notify the Department of a release of oil or hazardous substances. During Department office hours (i.e., 8:00 a.m. to 5:00 p.m., Monday through Friday, except holidays), notification shall be made to the Nebraska Department of Environmental Quality at telephone numbers (402) 471-2186 or (877) 253-2603 (toll free). When NDEQ cannot be contacted, the permittee shall report to the Nebraska State Patrol for referral to the NDEQ Immediate Response Team at telephone number (402) 471-4545. It shall be the permittee's responsibility to maintain current telephone numbers necessary to carry out the notification requirements set forth in this paragraph.

14. Unlawful Acts; Civil Penalty

a. It shall be unlawful for any person:

i) To refuse the right of entry and inspection to any authorized representative of the department when the representative is acting under the provisions of a permit issued by the department;

ii) To violate any air, water, or land quality standards, any emission or effluent standards or limitations, any permit or license condition or limitation, any order of the director, or any monitoring, reporting, or record-keeping requirements contained in or issued or entered into pursuant to the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts;

iii) To make any false statement, representation, or certification in any application, label, record, report, plan, or other document required to be filed or maintained by such acts, rules, or regulations;

iv) To falsify, tamper with, or render inaccurate any monitoring device or method used or required for compliance with a permit or license or such acts, rules, or regulations; or

v) To violate any other provision of or fail to perform any other duty imposed by such acts, rules, or regulations.

b. Each violation of this section or of Neb. Rev. Stat § 81-1506 shall subject a person to a civil penalty of no more than $10,000 per day. In case of a continuing violation, each day shall constitute a separate offense. In assessing the amount of the fine, the court shall consider the degree and extent of the violation, the size of the operation, and any economic benefit derived from noncompliance to violate any air, water, or land quality standards, any emission or effluent standards or limitations, any permit or license condition or limitation, any order of the Director, or any monitoring, reporting, or record-keeping requirements contained in or issued or entered into pursuant to the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts. Violations may also result in federal prosecution.

15. Severability

If any provision of this permit is held invalid, the remainder of this permit shall not be affected.

16. Other Rules and Regulations Liability

The issuance of this permit in no way relieves the obligation of the permittee to comply with other rules and regulations of the Department.

B. Signatory Requirements

1. Applications

a. Applications, reports, or information submitted to the Director shall be signed and certified.

b. All permit applications shall be signed as follows:

i) For a corporation

By a responsible corporate officer: For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or

(b) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

ii) For a partnership or sole proprietorship

By a general partner or the proprietor.

iii) For a municipality, State, Federal, or other public agency

By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(a) The chief executive officer of the agency, or

(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

c. All reports required by permits, and other information requested by the Director shall be signed by a person described in this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

i) The authorization is made in writing by a person described in paragraphs B.1.b(i), b(ii), or b(iii);

ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or any individual occupying a named position) and;

iii) The written authorization is submitted to the Director.

2. Changes to Authorization

If an authorization of paragraphs B.1.b(i), b(ii), or b(iii) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

3. **Certification**

All applications, reports and information submitted as a requirement of this permit shall contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

C. **Monitoring and Records**

1. **Samples**

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. **Records**

Records of monitoring information shall include:

a. The date(s), exact place, and time and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

3. **Test Methods**

Monitoring must be conducted according to test procedures approved in NDEQ Title 119, Chapter 27 002 unless another method is required under 40 CFR subchapter N – Effluent Guidelines and Standards Parts 425 to 471 and subchapter O – Sewer Sludge Parts 501 and 503.

4. **Record Retention**

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), 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 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

5. Representative Sampling

Samples and measurements taken as required within this permit shall be representative of the discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. Monitoring points shall not be changed without notification to the Department and with the written approval of the Director.

a. Composite sampling shall be conducted in one of the following manners
   i) Continuous discharge - a minimum of one discrete aliquot collected every three hours,
   ii) Less than 24 hours - a minimum of hourly discrete aliquots or a continuously drawn sample shall be collected during the discharge, or
   iii) Batch discharge - a minimum of three discrete aliquots shall be collected during each discharge.

b. Composite samples shall be collected in one of the following manners:
   i) The volume of each aliquot must be proportional to either the waste stream flow at the time of sampling or the total waste stream flow since collection of the previous aliquot,
   ii) A number of equal volume aliquots taken at varying time intervals in proportion to flow,
   iii) A sample continuously collected in proportion to flow, and
   iv) Where flow proportional sampling is infeasible or nonrepresentative of the pollutant loadings, the Department may approve the use of time composite samples.

c. Grab samples shall consist of a single aliquot collected over a time period not exceeding 15 minutes.

d. All sample preservation techniques shall conform to the methods adopted in NDEQ Title 119, Chapter 21 006 unless:
   i) In the case of sludge samples, alternative techniques are specified in the 40 CFR, Part 503, or
   ii) Other procedures are specified in this permit.

e. Flow Measurements

   Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be used to insure the accuracy and reliability of measurements. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements. The accepted capability shall be consistent with that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of +/- 10%. The amount of deviation shall be from the true discharge rates throughout the range of expected discharge volumes. Guidance can be obtained from the following references for the selection, installation, calibration and operation of acceptable flow measurement devices:

   i) *Water Management Manual*, U. S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 2001, 327 pp. Available on the Department of Interior, Bureau of Reclamation (website http://www.usbr.gov/pmts/hydraulicslab/pubs/wmm/).
   ii) *NPDES Compliance Inspection Manual*, U. S. Environmental Protection Agency, Office of Enforcement and Compliance Assurance, Publication EPA 305-X-04-001 July 2004. This document is available on EPA website:

   http://www.epa.gov/compliance/resources/publications/monitoring/cwa/inspections/npdesinspect/npdesmanual.html

D. Reporting Requirements

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in NDEQ Title 119, Chapter 4;

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in NDEQ Title 119, Chapter 4; or

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. Anticipated Noncompliance

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

3. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary in NDEQ Title 119, Chapter 24; in some cases, modification or revocation and reissuance is mandatory.

4. Monitoring Reports

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

a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director.

b. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under in NDEQ Title 119, Chapter 27 002, or another method required for an industry-specific waste stream under 40 CFR subchapter N – Effluent Guidelines and Standards Parts 425 to 471 and subchapter O – Sewer Sludge Parts 501 and 503, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

5. Quarterly Discharge Monitoring Reports (DMRs)

The permittee shall report the monitoring results required by this permit on a DMR form supplied or approved by the Department. Monitoring results shall be submitted on a quarterly basis using the reporting schedule set forth below, unless otherwise specified in this permit or by the Department.

Monitoring Quarters	DMR Reporting Deadlines
January - March	April 28
April - June	July 28
July - September	October 28
October - December	January 28

If the permittee monitors any pollutant more frequently than required by this permit, using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the DMR. The frequency of the analysis shall also be reported on the DMR.

6. **Compliance Schedules**

   Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

7. **Immediate Notification**

   a. NPP permittees shall report immediately to the publicly owned treatment works (POTW), any discharge to the POTW that may result in a violation of NDEQ Title 119, Chapter 26.

   b. All permittees shall report immediately to the NDEQ:

      i) Discharges of oil or hazardous substances which threaten waters of the state or public health and welfare, and

      ii) Discharges causing in-stream toxicity (i.e., a fish kill) or an immediate threat to human health.

   Initial notification may be verbal. A written noncompliance notification shall be submitted as set forth in Section D. 9. of this Appendix.

8. **Twenty-four Hour Reporting**

   a. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   b. The following shall be included as information which must be reported within 24 hours under this paragraph.

      i) Any unanticipated bypass which exceeds any effluent limitation in the permit.

      ii) Any upset which exceeds any effluent limitation in the permit.

      iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours.

   c. The Director may waive the written report on a case-by-case basis for reports under Section D if the oral report has been received within 24 hours.

9. **Written Noncompliance Notification**

   The permittee shall submit a written noncompliance report to the NDEQ:

   a. Within five days of becoming aware of any noncompliance with the:

      i) NPP effluent limitations or requirements set forth in this permit, or

      ii) NPDES toxic pollutant effluent limitations or requirements set forth in this permit.

   b. Within seven days of becoming aware of any other noncompliance with the NPDES requirements and/or effluent limitations set forth in this permit. The written notification shall be submitted on a noncompliance form supplied by the Department and shall include:

      i) A description of the discharge and cause of noncompliance,

      ii) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue, and

      iii) The steps taken to reduce, eliminate, and prevent the reoccurrence of the noncompliance.

   c. The submittal of a written noncompliance report does not relieve the permittee of any liability from enforcement proceedings that may result from the violation of permit or regulatory requirements.

10. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph D.7. at the time discharge monitoring reports are submitted.

11. Other Information

Where 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 in any report to the Director, it shall promptly submit such facts or information.

E. Bypass

1. Definitions

a. **Bypass** means the intentional diversion of waste streams from any portion of a treatment facility.

b. **Severe property damage** means 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.

2. Bypass not Exceeding Limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs E.3. and E.4. of this section.

3. Notice

a. Anticipated bypass: If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

b. Unanticipated bypass: The permittee shall submit notice of an unanticipated bypass as required in the 24-hour notice (paragraph D. 7.).

4. Prohibition of Bypass

Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the 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 a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under paragraph E.3. of this section.

The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in paragraph E.4.a., b., and c. of this section.

F. Upset

1. Definition

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations 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.

2. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph F. 3 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.

3. 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 that 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 in paragraph D.7.b. (24-hour notice); and

d. Permittee complied with any remedial measures required under paragraph 4 of this section.

4. Burden of Proof

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

G. Operation and Maintenance

1. Proper Operation and Maintenance

The permittee shall, at all times, maintain in good working order and operate as efficiently as possible, any facilities or systems of control installed by the permittee in order to achieve compliance with the terms and conditions of this permit. This would include, but not be limited to, effective performance based on designed facility removals, effective management, adequate operator staffing and training, adequate laboratory and process controls, and adequate funding that reflects proper user fee schedules.

2. Removed Substances

Solids, sludge, filter backwash or other pollutants removed in the course of treatment or control of wastewater shall be disposed of at a site and in a manner approved by the Nebraska Department of Environmental Quality. The disposal of nonhazardous industrial sludges shall conform to the standards established in or to the regulations established pursuant to 40 CFR, Part 257. The disposal of sludge shall conform to the standards established in or to the regulations established pursuant to 40 CFR, Part 503. If solids are disposed of in a licensed sanitary landfill, the disposal of solids shall conform to the standards established in NDEQ Title 132. Publicly owned treatment works shall dispose of sewage sludge in a manner that protects public health and the environment from any adverse effects which may occur from toxic pollutants as defined in Section 307 of the Clean Water Act. This permit may be modified or revoked and reissued to incorporate regulatory limitations established pursuant to 40 CFR, Part 503.

3. **Changes in Discharge**

   Any facility expansion, production increases or process modifications which will result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants must be reported by the permittee 180 days prior to the expansion, increases or modifications, either by amending the original application or by submitting a new application. This permit may be modified or revoked and reissued as a result of this notification to maintain compliance with applicable state or federal regulations.

4. **Changes in Toxic Discharges from Manufacturing, Commercial, Mining and Silvicultural Facilities**

   Permittees discharging from manufacturing, commercial, mining and silvicultural facilities shall report to the Department:

   a. If any toxic pollutant not limited in this permit is discharged from any NPDES outfall as a result of any activity that will or has occurred and results in its routine or frequent discharge. The Department shall be informed if that discharge exceeds the following notification levels:

      i) 100 micrograms per liter (0.1 mg/L) for any toxic pollutant,

      ii) 200 micrograms per liter for acrolein and acrylonitrile (0.2 mg/L),

      iii) 500 micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol (0.5 mg/L),

      iv) 1000 micrograms per liter for antimony (1 mg/L),

      v) Five times the maximum concentration value reported for that pollutant in the permit application or

      vi) An alternative level established by the Director, and

   b. If any toxic pollutant not limited in this permit is discharged from an NPDES outfall as a result of any activity that will or has occurred and results in its nonroutine discharge. The Department shall be informed if that discharge exceeds the following notification levels:

      i) 500 micrograms per liter (0.5 mg/L) for any toxic pollutant,

      ii) 1000 micrograms for antimony (1 mg/L),

      iii) Ten times the maximum concentration value reported for that pollutant in the permit application, or

      iv) An alternative level established by the Director.

5. **Changes in Sludge Quality**

   The permittee shall provide written notice to the Department of any alteration or addition that results in a significant change in the permittee's sludge use or disposal practices. This permit may be modified or revoked and reissued as a result of this notification to maintain compliance with applicable state or federal regulations.

6. **Changes of Loadings to Publicly Owned Treatment Work (POTW)**

   All POTWs must provide adequate notice to the Director of the following:

   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to NDEQ Title 119, Chapter 26, if it were directly discharging those pollutants; and

   b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

   For purposes of this paragraph, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

H. Definitions

Administrator: The Administrator of the USEPA.

Aliquot: An individual sample having a minimum volume of 100 milliliters that is collected either manually or in an automatic sampling device.

Annually: Once every calendar year.

Bimonthly: Once every other month.

Biosolids: Sewage sludge that is used or disposed through land application, surface disposal, incineration, or disposal in a municipal solid waste landfill.

Biweekly: Once every other week.

Bypass: The intentional diversion of wastes from any portion of a treatment facility.

Daily Average: An effluent limitation that cannot be exceeded and is calculated by averaging the monitoring results for any given pollutant parameter obtained during a 24-hour day.

Department: Nebraska Department of Environmental Quality.

Director: The Director of the Nebraska Department of Environmental Quality.

Industrial Discharge: Wastewater that originates from an industrial process and / or is noncontact cooling water and / or is boiler blowdown.

Industrial User: A source of indirect discharge (a pretreatment facility).

Monthly Average: Is an effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a calendar month.

Passive Discharge: A discharge from a POTW that occurs in the absence of an affirmative action and is not authorized by the NPDES permit (e.g. discharges due to a leaking valve, discharges from an overflow structure) and / or is a discharge from an overflow structure not designed as part of the POTW (e.g. discharges resulting from lagoon berm / dike breaches).

Publicly Owned Treatment Works (POTW): A treatment works as defined by Section 212 of the Clean Water Act (Public Law 100-4) which is owned by the state or municipality, excluding any sewers or other conveyances not leading to a facility providing treatment.

Semiannually: Twice every year

Significant Industrial User (SIU): All industrial users subject to Categorical Pretreatment Standards or any industrial user that, unless exempted under Chapter 1, Section 105 of NDEQ Title 119, discharges an average of 25,000 gallons per day or more of process water; or contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW; or is designated as such by the Director on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any National Pretreatment Standard or requirement.

Sludge: Any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect.

30-Day Average: Is an effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a calendar month.

Total Toxic Organics (TTO): The summation of all quantifiable values greater than 0.01 milligrams per liter (mg/l) for toxic organic compounds that may be identified elsewhere in this permit. (If this term has application in this permit, the list of toxic organic compounds will be identified, typically in the Limitations and Monitoring Section(s) and/or in an additional Appendix to this permit.)

Toxic Pollutant: Those pollutants or combination of pollutants, including disease causing agents, after discharge and upon exposure, ingestion, inhalation or assimilation into an organism, either directly from the environment or indirectly by ingestion through food chains will, on the basis of information available to the administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunction (including malfunctions in reproduction) or physical deformations in such organisms or their offspring.

Upset: An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee, excluding such factors as operational error, improperly designed or inadequate treatment facilities or improper operation and maintenance or lack thereof.

Volatile Organic Compounds (VOC): The summation of all quantifiable values greater than 0.01 milligrams per liter (mg/l) for volatile, toxic organic compounds that may be identified elsewhere in this permit. (See the definition for Total Toxic Organics above. In many instances, VOCs are defined as the volatile fraction of the TTO parameter. If the term "VOC" has application in this permit, the list of toxic organic compounds will be identified, typically in the Limitations and Monitoring Section(s) and/or in an additional Appendix to this permit.)

Weekly Average: Is an effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a fixed calendar week. The permittee may start their week on any weekday but the weekday must remain fixed. The Department approval is required for any change of the starting day.

"X" Day Average: An effluent limitation defined as the maximum allowable "X" day average of consecutive monitoring results during any monitoring period where "X" is a number in the range of one to seven days.

I. Abbreviations

CFR: Code of Federal Regulations

kg/Day: Kilograms per Day

MGD: Million Gallons per Day

mg/L: Milligrams per Liter

NOI: Notice of Intent

NDEQ: Nebraska Department of Environmental Quality

NDEQ Title 115: *Rules of Practice and Procedure*

NDEQ Title 117: *Nebraska Surface Water Quality Standards*

NDEQ Title 118: *Ground Water Quality Standards and Use Classification*

NDEQ Title 119: *Rules and Regulations Pertaining to the Issuance of Permits under the National Pollutant Discharge Elimination System*

NDEQ Title 126: *Rules and Regulations Pertaining to the Management of Wastes*

NDEQ Title 132: *Integrated Solid Waste Management Regulations*

NPDES: National Pollutant Discharge Elimination System

NPP: Nebraska Pretreatment Program

POTW: Publicly Owned Treatment Works

µg/L: Micrograms per Liter

WWTF: Wastewater Treatment Facility

NPDES #NE0036820
IIS #32246

Nebraska Department of Environmental Quality

NPDES Wastewater Section
1200 'N' Street, Suite 400, The Atrium
PO Box 98922
Lincoln, NE 68509-8922
Tel. 402/471-4220 / Fax 402/471-2909

• Sludge Application Approval Form •

NPDES Permit Attachment 1

Submission of this Sludge Application Form constitutes notice that the Wastewater Treatment Facility intends to land apply sludge and requests approval by NDEQ The municipal wastewater treatment facility generating and applying the sludge needs to be in compliance with the Federal regulations contained in *40 CFR Part 503* which is administered by E.P.A. Region VII.

Wastewater Treatment Facility Name

_____

Application Site Location(s): Provide a brief narrative description of the site location and /or where the NDEQ could review complete documentation pertaining to the site location.

_____

_____

Sludge Application Checklist

Please circle the correct response and provide additional information as requested

A "No" answer to any question in this box disqualifies the facility from automatic approval.

1) Are those who produce, dispose of or land apply sludge from the municipal wastewater treatment facility aware that any sludge produced, disposed of or land applied must be in compliance with the Federal regulations contained in *40 CFR Part 503*? **Yes** **No**

2) Are the wastewater treatment facility's sludge production, disposal and handling procedures in compliance with *40 CFR Part 503*? **Yes** **No**

I certify that the information submitted in this document is correct to my best knowledge and belief.

_____ _____
Signature* Date Signed

_____ _____
Printed Name Title

***Either the Ranking Elected Official *or* the Authorized Representative may sign**

Attachment 2 Guidance for Conducting Toxicity Testing and TIE/TRE Studies

1 .**Test Procedures**
Acute and chronic toxicity is a measure of the toxic effect that a waste water effluent may have on living organisms (i.e., *Pimephales promelas* and *Ceriodaphnia* species). Acute and chronic toxicity analyses are conducted using the EPA approved Whole Effluent Toxicity (WET) test methods set forth in 40 CFR, Part 136 (July 1996 edition). These test methods establish standardized conditions and require that certain chemical and physical analyses be conducted in conjunction with the toxicity analysis.

2. **Results Reporting**
Test results are reported in terms of toxic units. Acute toxic units are abbreviated TUa, and are the inverse of the LC_{50} (i.e., the concentration of effluent that is lethal to 50% of the organisms) expressed as a decimal fraction. Chronic toxic units are abbreviated TUc, and are the inverse of the NOEC (i.e., the highest concentration of effluent at which there is no observed effect on the organisms) with respect to growth or reproductive inhibition) expressed as a decimal fraction. The tables below provide examples of the LC_{50} and NOEC conversions to toxic units.

LC_{50}	Decimal Fraction	TUa
0.1 %	0.001	1000
1%	0.01	100
10%	0.1	10
25%	0.25	4
50%	0.5	2
100%	1	1

NOEC	Decimal Fraction	TUc
0.1 %	0.001	1000
1%	0.01	100
10%	0.1	10
25%	0.25	4
50%	0.5	2
100%	1	1

3. **Initial Response to Non-Compliance**
If the permit limits for toxicity are exceeded, the permittee typically needs to perform the following actions.
a. Submit a written non-compliance report (NCR) within 5 days. In the NCR, identify any suspect sources of the toxicity and describe any measures being taken to reduce toxicity.
b. Conduct a follow-up toxicity testing with both organisms within four (4) weeks.

4. **Return to Compliance**
If the follow-up test results are in compliance with the limits in the permit, the permittee typically needs to perform the following actions.
a. Within 30 days submit the results of the follow-up test in a written report to the NDEQ. The written report should discuss the effect of the measures taken to reduce toxicity. The report should also provide the NDEQ with a recommendation relative to their success and, if ongoing, the need to continue implementing these measures.
b. Testing can generally be resumed on the routine schedule established in the permit, unless the NDEQ specifies otherwise. The NDEQ can require additional follow-up testing on a case-by-case basis (e.g., if there was no apparent reason why toxicity decreased). Any measures taken to reduce toxicity will generally need to be continued as Best Management Practices), unless the NDEQ provides a written approval for their discontinuance.

5. **Actions to Address Continued Non-Compliance**
If the follow-up toxicity test results are not in compliance with the permit limits, the permittee typically needs to perform. Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE) as specified below. The permittee is responsible for maintaining compliance with the toxicity limits in this permit. The undertaking of the TIE/TRE process does not constitute compliance unless or until compliance with the permit limits is achieved. See explanatory note below concerning Departmental actions to address non-compliance.
a. Development and implementation of a Toxicity Identification Evaluation (TIE) needs to begin immediately. A summary plan for the initiation of the TIE should be submitted to the NDEQ within 30 days of when the follow-up of non-compliant result is received. A meeting with the NDEQ to discuss TIE/TRE alternatives within this period is encouraged.
b .A complete TIE/TRE schedule should be submitted to the NDEQ within 90 days. The NDEQ will seek clarification on at least some aspects of the schedule, and may request some modification.
c. The TIE and TRE processes should continue concurrently; i.e., as the TIE process identifies toxicity sources, reasonable measures to reduce the toxicity from these sources should be taken. The TIE/TRE schedule may need to be revised in response to ongoing TIE/TRE activities.
d .Sometimes it is possible to forego or discontinue the TIE process, and proceed directly with the TRE process. However, before abandoning the TIE process, it is important that:
i. the source of the toxicity be known; and
ii. NDEQ concurs with this approach.

Note: On-On-going non-compliance with a toxicity limit will typically be addressed in one of two ways depending on whether agreement can be achieved between the NDEQ and permittee on the TIE/TRE schedule and procedures. If agreement can be achieved, the NDEQ and the permittee may wish to enter into a Consent Order. If agreement can not be achieved, the NDEQ may proceed unilaterally via administrative and/or enforcement actions. In most instances, it is advantageous for all parties if a mutually agreed to TIE/TRE process can be implemented. For that reason, early meetings and discussions with the Department are encouraged.

Nebraska Department of Environmental Quality

Wastewater Section
Suite 400, The Atrium, 1200 'N' Street
PO Box 98922
Lincoln, NE 68509-8922
Tel. 402/471-4220
Fax 402/471-2909

Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES)

This NPDES permit is issued in compliance with the provisions of the Federal Water Pollution Control Act (33 U.S.C. Secs. 1251 *et. seq.* as amended to date), the Nebraska Environmental Protection Act (Neb. Rev. Stat. Secs. 81-1501 *et. seq.* as amended to date), and the Rules and Regulations promulgated pursuant to these Acts. The facility and outfall(s) identified in this permit are authorized to discharge wastewater and are subject to the limitations, requirements, prohibitions and conditions set forth herein. This permit regulates and controls the release of pollutants in the discharge(s) authorized herein. This permit does not relieve permittees of other duties and responsibilities under the Nebraska Environmental Protection Act, as amended, or established by regulations promulgated pursuant thereto.

NPDES Permit No.:	**NE0112488**
IIS File Number	**PCS 31988-P**
Facility Name:	**Lincoln Northeast Wastewater Treatment Plant**
Permittee	**City of Lincoln, Nebraska**
Facility Location:	**7000 North 70th Street, Lincoln, Nebraska**
Latitude/Longitude	**40° 50′ 6.83′′ North / 96° 37′ 0.17′′ West**
Legal Description	**NE ¼, Section 34, Township 11 N, Range 7 E, Lancaster County, Nebraska.**
Receiving Water	**Salt Creek (segment LP2-20000 of the Lower Platte River Basin)**
Effective Date:	**April 1, 2009**
Expiration Date:	**March 31, 2014**

Pursuant to a Delegation Memorandum dated July 26, 1999 and signed by the Director, the undersigned hereby executes this document on behalf of the Director.

Signed this 31st day of March, 2009

Jay D. Ringenberg
Deputy Director

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Part I. Requirements for Outfall 001.

The discharge of treated sanitary wastewater from the Outfall 001, final effluent, is authorized and shall be monitored and limited as specified in the table(s) below. Monitoring shall be conducted by sampling after all treatment processes and prior to discharge into the receiving waters, unless an alternative or more specific monitoring point is specified by the NDEQ.

A. Requirements for Effluent Flow, CBOD, TSS, and pH

Table 1: Discharge Limits and Monitoring Requirements for Flow, CBOD, and TSS

Parameters	Storet #	Units	Discharge Limits			Monitoring Frequency	Sample Type
			Monthly Average	7 Day Average	Daily Maximum		
Effluent Flow	50050	MGD	Report	*	Report	Daily	Measured or Calculated
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082	mg/L	25	40	*	Daily	24-hour Composite
		kg/day	Report	Report	*		
Total Suspended Solids)	00530	mg/L	30	45	*	Daily	24-hour Composite
		kg/day	Report	Report	*		

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type
			Daily Minimum	Daily Maximum		
pH	00400	Standard Units	6.5	9.0	Daily	Grab

Footnotes

B. Limits for Ammonia for Outfall 001

Table 2: Tier 1 Seasonal Discharge Limits for Ammonia for Outfall 001						
Parameters	**Storet #**	**Units**	**Discharge Limits**		**Monitoring Frequency**	**Sample Type**
			Monthly Average	**Daily Maximum**		
Spring Ammonia (March 1 – May 31)	00610	mg/L	17.5	46.0	Daily	24-hour Composite
		kg/day	408.8	1070.2		
Summer Ammonia (June 1 – Oct. 31)	00610	mg/L	11.2	29.3	Daily	24-hour Composite
		kg/day	243.9	638.6		
Winter Ammonia (Nov. 1 – Feb. 28 [29])	00610	mg/L	12.7	33.2	Daily	24-hour Composite
		kg/day	283.1	741.1		
Footnotes						

C. Requirements for E. coli for Outfall 001

Table 3: Discharge Monitoring Requirements for E. coli that Apply from May 1 through September 30						
Parameters	**Storet #**	**Units**	**Discharge Limits**		**Monitoring Frequency**	**Sample Type**
			Monthly Geometric Mean	**Maximum**		
E. coli [(a)]	51040	#/100 ml	126	Report	Daily	Grab
Footnotes: (a) E. coli requirements do not apply to discharges that occur from October 1 through April 30.						

D. Tier 1 Residual Chlorine (TRC) – Outfall 001

The TRC limits specified in Table 4 below are applicable to treated wastewater discharged through Outfall 001 at the Lincoln Northeast WWTF when the Salt Creek upstream mean daily flow rate is less than 259 cfs. See *Other Requirements* Part VI (H) for additional specifications concerning tiered TRC limits.

Table 4: Tier 1 Seasonal Discharge Limits for Total Residual Chlorine for Outfall 001

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency [b]	Sample Type
			Monthly Average [a]	Daily Maximum		
Spring Total Residual Chlorine (March 1 – May 31)	50060	mg/L	0.021	0.055	Daily	Grab
		kg/day	0.484	1.267		
Summer Total Residual Chlorine (June 1 – Oct. 31)	50060	mg/L	0.017	0.046	Daily	Grab
		kg/day	0.379	0.993		
Winter Total Residual Chlorine (Nov. 1 – Feb. 28 [29])	50060	mg/L	0.019	0.050	Daily	Grab
		kg/day	0.428	1.121		
Duration of Discharge Tier 1	81381	Days	Report days per month		Daily	Calculated

Footnotes
(a) The monthly average shall be calculated by averaging all the Tier 1 daily TRC values during a calendar month
(b) Monitoring for Total Residual Chlorine is required only when chlorine is added to the treatment process.

E. Tier 2 Residual Chlorine (TRC) – Outfall 001H

The TRC limits specified in Table 5 below are applicable to treated wastewater discharged through Outfall 001 at the Lincoln Northeast WWTF when the Salt Creek upstream mean daily flow rate is greater than 259 cfs. See *Other Requirements* Part VI (H) for additional specifications concerning tiered TRC limits.

Table 5: Tier 2 Seasonal Discharge Limits for Total Residual Chlorine for Outfall 001H

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency [b]	Sample Type
			Monthly Average [a]	Daily Maximum		
Spring Total Residual Chlorine (March 1 – May 31)	50060	mg/L	0.050	0.133	Daily	Grab
		kg/day	1.181	3.091		
Summer Total Residual Chlorine (June 1 – Oct. 31)	50060	mg/L	0.053	0.140	Daily	Grab
		kg/day	1.164	3.048		
Winter Total Residual Chlorine (Nov. 1 – Feb. 28 [29])	50060	mg/L	0.052	0.137	Daily	Grab
		kg/day	1.165	3.050		
Duration of Discharge Tier 2	81381	Days	Report days per month		Daily	Calculated

Footnotes
(a) The monthly average shall be calculated by averaging all the Tier 2 daily TRC values during a calendar month.
(b) Monitoring for Total Residual Chlorine is required only when chlorine is added to the treatment process.

F. Requirements for Pesticides, Metals, and Toxicity for Outfall 001

Table 6: Requirements for Outfall 001 for Pesticides, Metals and Toxicity Monitoring

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type
			Monthly Average	Daily Maximum		
Dieldrin	39380	mg/L	Report	Report	Annually	Composite
Polychlorinated Biphenyls	39516	mg/L	Report	Report	Annually	Composite
Dissolved Cadmium [a]	01025	mg/L	Report	Report	Annually	Composite
Dissolved Chromium [a]	01030	mg/L	Report	Report	Annually	Composite
Dissolved Copper[a]	01040	mg/L	Report	Report	Annually	Composite
Dissolved Iron [a]	01046	mg/L	Report	Report	Annually	Composite
Dissolved Lead[a]	01049	mg/L	Report	Report	Annually	Composite
Dissolved Mercury [a]	71890	mg/L	Report	Report	Annually	Composite
Dissolved Nickel [a]	01065	mg/L	Report	Report	Annually	Composite
Dissolved Silver [a]	01075	mg/L	Report	Report	Annually	Composite
Dissolved Zinc [a]	01090	mg/L	Report	Report	Annually	Composite
Spring Chronic Toxicity [b] *Ceriodaphnia sp*	61426	TUc	Report	14.96	Annually	Composite
Spring Chronic Toxicity [b] *Pimephales promelas*	61428	TUc	Report	14.96	Annually	Composite
Summer Chronic Toxicity [b] *Ceriodaphnia sp*	61426	TUc	Report	1124	Annually	Composite
Summer Chronic Toxicity [b] *Pimephales promelas*	61428	TUc	Report	11.24	Annually	Composite
Winter Chronic Toxicity [b] *Ceriodaphnia sp*	61426	TUc	Report	12.65	Annually	Composite
Winter Chronic Toxicity [b] *Pimephales promelas*	61428	TUc	Report	12.65	Annually	Composite

Footnotes
(a) The analytical procedure used for the determination of metals limits must be sufficiently sensitive to provide accurate results to 0.010 mg/L except for mercury which is 0.02 µg/L.
(b) Toxicity testing shall be conducted once a year during alternate seasons. (Spring March 1 – May 31; Summer June 1 – Oct. 31; Winter Nov. 1 – Feb. 28[29]).

Part II. Flow Rate Monitoring of the Receiving Stream

The flow rate of Salt Creek upstream of Outfall 001 at Lincoln Northeast WWTF shall be reported as specified below. Receiving stream monitoring is required only on those days that Tier 2 TRC limits in Table 5 are applied to the discharge from the Northeast WWWTF through Outfall 001.

Table 7: Receiving Stream Monitoring Requirements

Parameter	Storet #	Units	Daily Flow Rate	Measurement Frequency	Sample Type
Stream Flow Rate [(a)]	00060	cfs	Report	Daily	Metered

Part III. Influent Requirements

To comply with these monitoring requirements, samples shall be taken at the head-works of the wastewater treatment facility prior to the treatment system. Influent wastewater shall be monitored as specified in the table below.

Table 8: Monitoring Requirements for Influent Wastewater

Parameters	Storet #	Units	Discharge Limits		Monitoring Frequency	Sample Type
			Monthly Average	Daily Maximum		
Flow	50050	MGD	Report	Report	Weekly [(a)]	Measured or Calculated
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082	mg/L	Report	Report	Weekly	24 Hour Composite
Total Suspended Solids	00530	mg/L	Report	Report	Weekly	24 Hour Composite
Other Parameters	**Storet #**	**Units**	**Discharge Limits**		**Monitoring Frequency**	**Sample Type**
			Daily Minimum	**Daily Maximum**		
pH	00400	Standard Units	Report	Report	Weekly	Grab

Footnote:
(a) Influent flow must be monitored on the same day as sample collection for CBOD, TSS, and pH.

Abbreviations:
mg/L – milligrams per liter MGD – million gallons per day kg/day – kilograms per day

Part IV. Biosolids Monitoring Requirements

The sludge disposal requirements of this permit are set forth below. The disposal of domestic sewage sludge is subject to the requirements of 40 CFR Part 503. This is a Federal regulatory program administered by EPA Region VII. The current contact at EPA can be obtained upon request from NDEQ.

A. Approval

Submission of the Sludge Application Form, Attachment 1, constitutes notice that the Wastewater Treatment Facility intends to land apply sludge and requests approval by the NDEQ. The applicant is eligible to receive automatic approval provided the applicant indicates compliance with and understanding of the regulations and conditions contained in 40 CFR Part 503, and when all of the conditions set forth below are met, unless the Department acts to provide a conditional or circumstantial approval.

1. Sludge application is in compliance with the Federal 503 regulations, including all requirements related to vector and pathogen control.
2. Sludge is not applied within 200 feet of any actively used groundwater well, except for those used exclusively for irrigation.
3. Sludge is not being applied within 1000 feet of any public drinking water supply well.
4. Application sites are not subject to public access.
5. Retain a listing for review by the NDEQ of land application sites used during the year and their legal descriptions plus total tonnage of sludge that was land-applied or disposed of during the year.
6. Retain copies of all reports submitted to the EPA pursuant to the Federal 503 regulations for review by the NDEQ.

B. Non-compliance Reporting Requirements

The permittee shall report to the NDEQ any instance(s) of noncompliance with 40 CFR Part 503. This Non-compliance Report shall be submitted to the NDEQ no later than 7 days after the permittee becomes aware of the non-compliance. The Non-compliance Report shall contain the basic information required and specified in Appendix A of this NPDES permit.

C. Withdrawal of Site Approval(s)

The Department may withdraw site approval(s) for any of the following:

1. Failure to comply with the regulations contained in 40 CFR Part 503.
2. Potential risks to surface or ground water quality.
3. Potential risks to the environment.
4. Potential risks to public health and / or welfare.
5. Other site specific or facility specific considerations.

D. Sludge Monitoring Requirements

Sludge shall be monitored as specified below. A representative sample shall be collected and analyzed prior to application. A representative sample is defined as a sample that is a composite of several sludge samples within the same batch.

Table 9: Sludge Monitoring Requirements

Parameters	Storet #	Units	Sludge Reporting	Measurement Frequency	Sample Type
pH	00400	S.U.	Report	Once per 60 days	Composite
Ammonia (N)	82294	mg/kg	Report	Once per 60 days	Composite
Total Solids	78477	mg/kg	Report	Once per 60 days	Composite
Nitrate (N)	61539	mg/kg	Report	Once per 60 days	Composite
Total Nitrogen	78470	mg/kg	Report	Once per 60 days	Composite
Cadmium, Total	78476	mg/kg	Report	Once per 60 days	Composite
Chromium, Total	78473	mg/kg	Report	Once per 60 days	Composite
Copper, Total	78475	mg/kg	Report	Once per 60 days	Composite
Lead, Total	78468	mg/kg	Report	Once per 60 days	Composite
Nickel, Total	78469	mg/kg	Report	Once per 60 days	Composite
Zinc, Total	78467	mg/kg	Report	Once per 60 days	Composite
Arsenic, Total	61521	mg/kg	Report	Once per 60 days	Composite
Mercury, Total	78471	mg/kg	Report	Once per 60 days	Composite
Molybdenum, Total	78465	mg/kg	Report	Once per 60 days	Composite
Selenium, Total	61518	mg/kg	Report	Once per 60 days	Composite

Part V. Other Requirements and Conditions

A. Requirements for removal of CBOD and TSS

The 30-day average percent removal of CBOD and TSS by the Lincoln Northeast WWTF shall not be less than 85%.

B. Narrative Limits, Discharges authorized under this permit:

1. Shall not be toxic to aquatic life in surface waters of the State outside the mixing zones allowed in NDEQ Title 117, *Nebraska Surface Water Quality Standards*;
2. Shall not contain pollutants at concentrations or levels that produce objectionable films, colors, turbidity, deposits, or noxious odors in the receiving stream or waterway; and
3. Shall not contain pollutants at concentrations or levels that cause the occurrence of undesirable or nuisance aquatic life in the receiving stream.

C. Whole Effluent Toxicity Corrective Action

If the whole effluent toxicity tests results exceed the toxicity limitations in this permit, this is a permit violation and the permittee must initiate corrective actions according to the conditions in Attachment 2, *NDEQ Guidance for Conducting Toxicity Testing and TIE/TRE Studies*.

D. Method Detection Limit Reporting Requirements

The minimum detection limit (MDL) is defined as the level at which the analytical system gives acceptable calibration points. If the analytical results are below the MDL then the reported value on the DMR shall be a numerical value less than the MDL (e.g. <0.005).

E. Certified Operator Requirements

This facility is to be operated and maintained by operators certified in accordance with NDEQ Title 197, *Rules and Regulations for the Certification of Wastewater Treatment Facility Operators in Nebraska.*

F. Permit Attachments

The attachments to this permit (e.g., forms and guidance) may be modified without a formal modification of the permit.

G. Pretreatment Requirements

An annual report shall be submitted to the NDEQ summarizing the City Lincoln's pretreatment program to include a report on monitoring activities and a review of major permit violations. The City of Lincoln shall also inform the NDEQ when a new Significant Industrial User is connected to the POTW.

H. Conditions and Requirements for Application of Tiered TRC Limits to the Effluent Discharge

1. The City of Lincoln is required to use the Tier 1 limits in Table 4 if the flow rate in Salt Creek upstream of the Northeast. WWTF is below 259 cfs however the City of Lincoln is not required to use Tier 2 limits in Table 5 if the flow rate is above 259 cfs.
2. If the gaging station is found to not be working as designed, then the Tier 1 limits for TRC in Table 4 shall apply to the discharge from Outfall 001.
3. The Department may prohibit the application of Tier 2 limits for TRC in Table 5 for the discharge from Outfall 001 if there are repeated problems with the operation of the gaging station or for any reason to protect the beneficial uses of the receiving stream from impairment. The Department will address the determination to prohibit Tier 2 TRC limits in writing to the City of Lincoln. If the use of Tier 2 limits is prohibited then the TRC limits in Tables 4 will apply to the discharge at all times.

I. Permit Modification and Reopening

This permit may be reopened and modified after public notice and opportunity for a public hearing for reasons specified in Chapter 24 NDEQ Title 119- *Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System.*

J. Infiltration and Inflow Analysis

The City of Lincoln shall submit an "Infiltration/Inflow Analysis" report once in the term of the permit to the Department to include the following;

1. The infiltration/inflow analysis shall demonstrate the nonexistence or possible existence of excessive infiltration/inflow in the sewer system. The analysis should identify the presence, flow rate, and type of infiltration/inflow conditions which exist in the sewer system.
2. For determination of the possible existence of excessive infiltration/inflow, the analysis shall include an estimate of the cost of eliminating the infiltration/inflow conditions. These costs shall be compared with estimated total costs for transportation and treatment of the infiltration/inflow. Cost-effectiveness analysis guidelines should be consulted with respect to the determination.
3. If the infiltration/inflow analysis demonstrated the existence of excessive infiltration/inflow a detailed plan for a Sewer System Evaluation survey shall be included in the analysis. The plan shall outline the tasks to be performed in the survey and their estimated costs.
   a) The sewer system evaluation survey shall identify the location, estimated flow rate, method of rehabilitation, and cost of rehabilitation versus cost of transportation and treatment for each defined source of infiltration/inflow.
   b) A report shall summarize the results of the sewer system evaluation survey. In addition, the report shall include a justification for each sewer section cleaned and internally inspected plus a proposed rehabilitation program for the sewer system to eliminate all defined excessive infiltration/inflow.

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Standard Conditions that Apply to NPDES and NPP Permits

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Appendix A – Standard Conditions that Apply to NPDES and NPP Permits

These general conditions are applicable to all NPDES and NPP permits. These conditions shall not preempt any more stringent requirements found elsewhere in this permit.

A. General Conditions

1. Information Available

All permit applications, fact sheets, permits, discharge data, monitoring reports, and any public comments concerning such shall be available to the public for inspection and copying, unless such information about methods or processes is entitled to protection as trade secrets of the owner or operator under Neb. Rev. Stat. §81-1527, (Reissue 1999) and NDEQ Title 115, Chapter 4.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Clean Water Act and the State Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal even if the permit has not yet been modified to incorporate the requirement.

3. Duty to Reapply

The permittee shall apply for a re-issuance of this permit, if an activity regulated by this permit is to be continued after the expiration date of this permit. The application shall be submitted at least 180 days before the expiration of this permit on an application form supplied by the Department, as set forth in NDEQ Titles 119, Chapter 5 002.

4. Need to Halt or Reduce Activity is 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. Duty to Mitigate

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

6. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes 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 the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

7. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. 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.

8. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director 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 Director upon request copies of records required to be kept by this permit.

10. Inspection and Entry

The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

a. Enter upon 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;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. Land Application of Wastewater Effluent

The permittee shall be permitted to discharge treated domestic wastewater effluent by means of land application in accordance with the regulations and standards set forth in NDEQ Title 119, Chapter 12 002. The Wastewater Section of the Department must be notified in writing if the permittee chooses to land apply effluent.

12. Toxic Pollutants

The permittee shall not discharge pollutants to waters of the state that cause a violation of the standards established in NDEQ Titles 117, 118 or 119. All discharges to surface waters of the state shall be free of toxic (acute or chronic) substances which alone or in combination with other substances, create conditions unsuitable for aquatic life outside the appropriate mixing zone.

13. Oil and Hazardous Substances/Spill Notification

Nothing in this permit shall preclude the initiation of any legal action or relieve the permittee from any responsibilities, liabilities or penalties under section 311 of the Clean Water Act. The permittee shall conform to the provisions set forth in NDEQ Title 126, *Rules and Regulations Pertaining to the Management of Wastes*. If the permittee knows, or has reason to believe, that oil or hazardous substances were released at the facility and could enter waters of the state or any of the outfall discharges authorized in this permit, the permittee shall immediately notify the Department of a release of oil or hazardous substances. During Department office hours (i.e., 8:00 a.m. to 5:00 p.m., Monday through Friday, except holidays), notification shall be made to the Nebraska Department of Environmental Quality at telephone numbers (402) 471-2186 or (877) 253-2603 (toll free). When NDEQ cannot be contacted, the permittee shall report to the Nebraska State Patrol for referral to the NDEQ Immediate Response Team at telephone number (402) 471-4545. It shall be the permittee's responsibility to maintain current telephone numbers necessary to carry out the notification requirements set forth in this paragraph.

14. Unlawful Acts; Civil Penalty

a. It shall be unlawful for any person:

i) To refuse the right of entry and inspection to any authorized representative of the department when the representative is acting under the provisions of a permit issued by the department;

ii) To violate any air, water, or land quality standards, any emission or effluent standards or limitations, any permit or license condition or limitation, any order of the director, or any monitoring, reporting, or record-keeping requirements contained in or issued or entered into pursuant to the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts;

iii) To make any false statement, representation, or certification in any application, label, record, report, plan, or other document required to be filed or maintained by such acts, rules, or regulations;

iv) To falsify, tamper with, or render inaccurate any monitoring device or method used or required for compliance with a permit or license or such acts, rules, or regulations; or

v) To violate any other provision of or fail to perform any other duty imposed by such acts, rules, or regulations.

b. Each violation of this section or of Neb. Rev. Stat § 81-1506 shall subject a person to a civil penalty of no more than $10,000 per day. In case of a continuing violation, each day shall constitute a separate offense. In assessing the amount of the fine, the court shall consider the degree and extent of the violation, the size of the operation, and any economic benefit derived from noncompliance to violate any air, water, or land quality standards, any emission or effluent standards or limitations, any permit or license condition or limitation, any order of the Director, or any monitoring, reporting, or record-keeping requirements contained in or issued or entered into pursuant to the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts. Violations may also result in federal prosecution.

15. Severability

If any provision of this permit is held invalid, the remainder of this permit shall not be affected.

16. Other Rules and Regulations Liability

The issuance of this permit in no way relieves the obligation of the permittee to comply with other rules and regulations of the Department.

B. Signatory Requirements

1. Applications

a. Applications, reports, or information submitted to the Director shall be signed and certified.

b. All permit applications shall be signed as follows:

i) For a corporation

By a responsible corporate officer: For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or

(b) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

ii) For a partnership or sole proprietorship

By a general partner or the proprietor.

iii) For a municipality, State, Federal, or other public agency

By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(a) The chief executive officer of the agency, or

(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

c. All reports required by permits, and other information requested by the Director shall be signed by a person described in this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

i) The authorization is made in writing by a person described in paragraphs B.1.b(i), b(ii), or b(iii);

ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or any individual occupying a named position) and;

iii) The written authorization is submitted to the Director.

2. Changes to Authorization

If an authorization of paragraphs B.1.b(i), b(ii), or b(iii) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

3. **Certification**

All applications, reports and information submitted as a requirement of this permit shall contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

C. **Monitoring and Records**

1. **Samples**

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. **Records**

Records of monitoring information shall include:

a. The date(s), exact place, and time and methods of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. The date(s) analyses were performed;

d. The individual(s) who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

3. **Test Methods**

Monitoring must be conducted according to test procedures approved in NDEQ Title 119, Chapter 27 002 unless another method is required under 40 CFR subchapter N – Effluent Guidelines and Standards Parts 425 to 471 and subchapter O – Sewer Sludge Parts 501 and 503.

4. **Record Retention**

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), 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 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

5. Representative Sampling

Samples and measurements taken as required within this permit shall be representative of the discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. Monitoring points shall not be changed without notification to the Department and with the written approval of the Director.

a. Composite sampling shall be conducted in one of the following manners
   i) Continuous discharge - a minimum of one discrete aliquot collected every three hours,
   ii) Less than 24 hours - a minimum of hourly discrete aliquots or a continuously drawn sample shall be collected during the discharge, or
   iii) Batch discharge - a minimum of three discrete aliquots shall be collected during each discharge.

b. Composite samples shall be collected in one of the following manners:
   i) The volume of each aliquot must be proportional to either the waste stream flow at the time of sampling or the total waste stream flow since collection of the previous aliquot,
   ii) A number of equal volume aliquots taken at varying time intervals in proportion to flow,
   iii) A sample continuously collected in proportion to flow, and
   iv) Where flow proportional sampling is infeasible or nonrepresentative of the pollutant loadings, the Department may approve the use of time composite samples.

c. Grab samples shall consist of a single aliquot collected over a time period not exceeding 15 minutes.

d. All sample preservation techniques shall conform to the methods adopted in NDEQ Title 119, Chapter 21 006 unless:
   i) In the case of sludge samples, alternative techniques are specified in the 40 CFR, Part 503, or
   ii) Other procedures are specified in this permit.

e. Flow Measurements

   Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be used to insure the accuracy and reliability of measurements. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements. The accepted capability shall be consistent with that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of +/- 10%. The amount of deviation shall be from the true discharge rates throughout the range of expected discharge volumes. Guidance can be obtained from the following references for the selection, installation, calibration and operation of acceptable flow measurement devices:

   i) *Water Management Manual*, U. S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 2001, 327 pp. Available on the Department of Interior, Bureau of Reclamation (website http://www.usbr.gov/pmts/hydraulicslab/pubs/wmm/).
   ii) *NPDES Compliance Inspection Manual*, U. S. Environmental Protection Agency, Office of Enforcement and Compliance Assurance, Publication EPA 305-X-04-001 July 2004. This document is available on EPA website:

   http://www.epa.gov/compliance/resources/publications/monitoring/cwa/inspections/npdesinspect/npdesmanual.html

D. Reporting Requirements

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in NDEQ Title 119, Chapter 4;

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in NDEQ Title 119, Chapter 4; or

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. Anticipated Noncompliance

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

3. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary in NDEQ Title 119, Chapter 24; in some cases, modification or revocation and reissuance is mandatory.

4. Monitoring Reports

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

a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director.

b. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under in NDEQ Title 119, Chapter 27 002, or another method required for an industry-specific waste stream under 40 CFR subchapter N – Effluent Guidelines and Standards Parts 425 to 471 and subchapter O – Sewer Sludge Parts 501 and 503, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

5. Quarterly Discharge Monitoring Reports (DMRs)

The permittee shall report the monitoring results required by this permit on a DMR form supplied or approved by the Department. Monitoring results shall be submitted on a quarterly basis using the reporting schedule set forth below, unless otherwise specified in this permit or by the Department.

Monitoring Quarters	DMR Reporting Deadlines
January - March	April 28
April - June	July 28
July - September	October 28
October - December	January 28

If the permittee monitors any pollutant more frequently than required by this permit, using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the DMR. The frequency of the analysis shall also be reported on the DMR.

6. **Compliance Schedules**

   Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

7. **Immediate Notification**

   a. NPP permittees shall report immediately to the publicly owned treatment works (POTW), any discharge to the POTW that may result in a violation of NDEQ Title 119, Chapter 26.

   b. All permittees shall report immediately to the NDEQ:

      i) Discharges of oil or hazardous substances which threaten waters of the state or public health and welfare, and

      ii) Discharges causing in-stream toxicity (i.e., a fish kill) or an immediate threat to human health.

   Initial notification may be verbal. A written noncompliance notification shall be submitted as set forth in Section D. 9. of this Appendix.

8. **Twenty-four Hour Reporting**

   a. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   b. The following shall be included as information which must be reported within 24 hours under this paragraph.

      i) Any unanticipated bypass which exceeds any effluent limitation in the permit.

      ii) Any upset which exceeds any effluent limitation in the permit.

      iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours.

   c. The Director may waive the written report on a case-by-case basis for reports under Section D if the oral report has been received within 24 hours.

9. **Written Noncompliance Notification**

   The permittee shall submit a written noncompliance report to the NDEQ:

   a. Within five days of becoming aware of any noncompliance with the:

      i) NPP effluent limitations or requirements set forth in this permit, or

      ii) NPDES toxic pollutant effluent limitations or requirements set forth in this permit.

   b. Within seven days of becoming aware of any other noncompliance with the NPDES requirements and/or effluent limitations set forth in this permit. The written notification shall be submitted on a noncompliance form supplied by the Department and shall include:

      i) A description of the discharge and cause of noncompliance,

      ii) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue, and

      iii) The steps taken to reduce, eliminate, and prevent the reoccurrence of the noncompliance.

   c. The submittal of a written noncompliance report does not relieve the permittee of any liability from enforcement proceedings that may result from the violation of permit or regulatory requirements.

10. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph D.7. at the time discharge monitoring reports are submitted.

11. Other Information

Where 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 in any report to the Director, it shall promptly submit such facts or information.

E. Bypass

1. Definitions

a. **Bypass** means the intentional diversion of waste streams from any portion of a treatment facility.

b. **Severe property damage** means 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.

2. Bypass not Exceeding Limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs E.3. and E.4. of this section.

3. Notice

a. Anticipated bypass: If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

b. Unanticipated bypass: The permittee shall submit notice of an unanticipated bypass as required in the 24-hour notice (paragraph D. 7.).

4. Prohibition of Bypass

Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the 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 a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under paragraph E.3. of this section.

The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in paragraph E.4.a., b., and c. of this section.

F. Upset

1. Definition

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations 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.

2. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph F. 3 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.

3. 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 that 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 in paragraph D.7.b. (24-hour notice); and

d. Permittee complied with any remedial measures required under paragraph 4 of this section.

4. Burden of Proof

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

G. Operation and Maintenance

1. Proper Operation and Maintenance

The permittee shall, at all times, maintain in good working order and operate as efficiently as possible, any facilities or systems of control installed by the permittee in order to achieve compliance with the terms and conditions of this permit. This would include, but not be limited to, effective performance based on designed facility removals, effective management, adequate operator staffing and training, adequate laboratory and process controls, and adequate funding that reflects proper user fee schedules.

2. Removed Substances

Solids, sludge, filter backwash or other pollutants removed in the course of treatment or control of wastewater shall be disposed of at a site and in a manner approved by the Nebraska Department of Environmental Quality. The disposal of nonhazardous industrial sludges shall conform to the standards established in or to the regulations established pursuant to 40 CFR, Part 257. The disposal of sludge shall conform to the standards established in or to the regulations established pursuant to 40 CFR, Part 503. If solids are disposed of in a licensed sanitary landfill, the disposal of solids shall conform to the standards established in NDEQ Title 132. Publicly owned treatment works shall dispose of sewage sludge in a manner that protects public health and the environment from any adverse effects which may occur from toxic pollutants as defined in Section 307 of the Clean Water Act. This permit may be modified or revoked and reissued to incorporate regulatory limitations established pursuant to 40 CFR, Part 503.

3. **Changes in Discharge**

   Any facility expansion, production increases or process modifications which will result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants must be reported by the permittee 180 days prior to the expansion, increases or modifications, either by amending the original application or by submitting a new application. This permit may be modified or revoked and reissued as a result of this notification to maintain compliance with applicable state or federal regulations.

4. **Changes in Toxic Discharges from Manufacturing, Commercial, Mining and Silvicultural Facilities**

   Permittees discharging from manufacturing, commercial, mining and silvicultural facilities shall report to the Department:

   a. If any toxic pollutant not limited in this permit is discharged from any NPDES outfall as a result of any activity that will or has occurred and results in its routine or frequent discharge. The Department shall be informed if that discharge exceeds the following notification levels:
      i) 100 micrograms per liter (0.1 mg/L) for any toxic pollutant,
      ii) 200 micrograms per liter for acrolein and acrylonitrile (0.2 mg/L),
      iii) 500 micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol (0.5 mg/L),
      iv) 1000 micrograms per liter for antimony (1 mg/L),
      v) Five times the maximum concentration value reported for that pollutant in the permit application or
      vi) An alternative level established by the Director, and
   b. If any toxic pollutant not limited in this permit is discharged from an NPDES outfall as a result of any activity that will or has occurred and results in its nonroutine discharge. The Department shall be informed if that discharge exceeds the following notification levels:
      i) 500 micrograms per liter (0.5 mg/L) for any toxic pollutant,
      ii) 1000 micrograms for antimony (1 mg/L),
      iii) Ten times the maximum concentration value reported for that pollutant in the permit application, or
      iv) An alternative level established by the Director.

5. **Changes in Sludge Quality**

   The permittee shall provide written notice to the Department of any alteration or addition that results in a significant change in the permittee's sludge use or disposal practices. This permit may be modified or revoked and reissued as a result of this notification to maintain compliance with applicable state or federal regulations.

6. **Changes of Loadings to Publicly Owned Treatment Work (POTW)**

   All POTWs must provide adequate notice to the Director of the following:

   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to NDEQ Title 119, Chapter 26, if it were directly discharging those pollutants; and
   b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

   For purposes of this paragraph, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

H. Definitions

Administrator: The Administrator of the USEPA.

Aliquot: An individual sample having a minimum volume of 100 milliliters that is collected either manually or in an automatic sampling device.

Annually: Once every calendar year.

Bimonthly: Once every other month.

Biosolids: Sewage sludge that is used or disposed through land application, surface disposal, incineration, or disposal in a municipal solid waste landfill.

Biweekly: Once every other week.

Bypass: The intentional diversion of wastes from any portion of a treatment facility.

Daily Average: An effluent limitation that cannot be exceeded and is calculated by averaging the monitoring results for any given pollutant parameter obtained during a 24-hour day.

Department: Nebraska Department of Environmental Quality.

Director: The Director of the Nebraska Department of Environmental Quality.

Industrial Discharge: Wastewater that originates from an industrial process and / or is noncontact cooling water and / or is boiler blowdown.

Industrial User: A source of indirect discharge (a pretreatment facility).

Monthly Average: Is an effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a calendar month.

Passive Discharge: A discharge from a POTW that occurs in the absence of an affirmative action and is not authorized by the NPDES permit (e.g. discharges due to a leaking valve, discharges from an overflow structure) and / or is a discharge from an overflow structure not designed as part of the POTW (e.g. discharges resulting from lagoon berm / dike breaches).

Publicly Owned Treatment Works (POTW): A treatment works as defined by Section 212 of the Clean Water Act (Public Law 100-4) which is owned by the state or municipality, excluding any sewers or other conveyances not leading to a facility providing treatment.

Semiannually: Twice every year

Significant Industrial User (SIU): All industrial users subject to Categorical Pretreatment Standards or any industrial user that, unless exempted under Chapter 1, Section 105 of NDEQ Title 119, discharges an average of 25,000 gallons per day or more of process water; or contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW; or is designated as such by the Director on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any National Pretreatment Standard or requirement.

Sludge: Any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect.

30-Day Average: Is an effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a calendar month.

Total Toxic Organics (TTO): The summation of all quantifiable values greater than 0.01 milligrams per liter (mg/l) for toxic organic compounds that may be identified elsewhere in this permit. (If this term has application in this permit, the list of toxic organic compounds will be identified, typically in the Limitations and Monitoring Section(s) and/or in an additional Appendix to this permit.)

Toxic Pollutant: Those pollutants or combination of pollutants, including disease causing agents, after discharge and upon exposure, ingestion, inhalation or assimilation into an organism, either directly from the environment or indirectly by ingestion through food chains will, on the basis of information available to the administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunction (including malfunctions in reproduction) or physical deformations in such organisms or their offspring.

Upset: An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee, excluding such factors as operational error, improperly designed or inadequate treatment facilities or improper operation and maintenance or lack thereof.

Volatile Organic Compounds (VOC): The summation of all quantifiable values greater than 0.01 milligrams per liter (mg/l) for volatile, toxic organic compounds that may be identified elsewhere in this permit. (See the definition for Total Toxic Organics above. In many instances, VOCs are defined as the volatile fraction of the TTO parameter. If the term "VOC" has application in this permit, the list of toxic organic compounds will be identified, typically in the Limitations and Monitoring Section(s) and/or in an additional Appendix to this permit.)

Weekly Average: Is an effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a fixed calendar week. The permittee may start their week on any weekday but the weekday must remain fixed. The Department approval is required for any change of the starting day.

"X" Day Average: An effluent limitation defined as the maximum allowable "X" day average of consecutive monitoring results during any monitoring period where "X" is a number in the range of one to seven days.

I. Abbreviations

CFR: Code of Federal Regulations

kg/Day: Kilograms per Day

MGD: Million Gallons per Day

mg/L: Milligrams per Liter

NOI: Notice of Intent

NDEQ: Nebraska Department of Environmental Quality

NDEQ Title 115: *Rules of Practice and Procedure*

NDEQ Title 117: *Nebraska Surface Water Quality Standards*

NDEQ Title 118: *Ground Water Quality Standards and Use Classification*

NDEQ Title 119: *Rules and Regulations Pertaining to the Issuance of Permits under the National Pollutant Discharge Elimination System*

NDEQ Title 126: *Rules and Regulations Pertaining to the Management of Wastes*

NDEQ Title 132: *Integrated Solid Waste Management Regulations*

NPDES: National Pollutant Discharge Elimination System

NPP: Nebraska Pretreatment Program

POTW: Publicly Owned Treatment Works

µg/L: Micrograms per Liter

WWTF: Wastewater Treatment Facility

NPDES #NE0112488
IIS #31988

Nebraska Department of Environmental Quality

NPDES Wastewater Section
1200 'N' Street, Suite 400, The Atrium
PO Box 98922
Lincoln, NE 68509-8922
Tel. 402/471-4220 / Fax 402/471-2909

• Sludge Application Approval Form •

NPDES Permit Attachment 1

Submission of this Sludge Application Form constitutes notice that the Wastewater Treatment Facility intends to land apply sludge and requests approval by NDEQ The municipal wastewater treatment facility generating and applying the sludge needs to be in compliance with the Federal regulations contained in *40 CFR Part 503* which is administered by E.P.A. Region VII.

Wastewater Treatment Facility Name

_____

Application Site Location(s): Provide a brief narrative description of the site location and /or where the NDEQ could review complete documentation pertaining to the site location.

_____

_____

Sludge Application Checklist

Please circle the correct response and provide additional information as requested

A "No" answer to any question in this box disqualifies the facility from automatic approval.

1) Are those who produce, dispose of or land apply sludge from the municipal wastewater treatment facility aware that any sludge produced, disposed of or land applied must be in compliance with the Federal regulations contained in *40 CFR Part 503*? **Yes** **No**

2) Are the wastewater treatment facility's sludge production, disposal and handling procedures in compliance with *40 CFR Part 503*? **Yes** **No**

I certify that the information submitted in this document is correct to my best knowledge and belief.

_____ _____
Signature* Date Signed

_____ _____
Printed Name Title

*** Either the Ranking Elected Official *or* the Authorized Representative may sign**

Attachment 2 Guidance for Conducting Toxicity Testing and TIE/TRE Studies

1 .**Test Procedures**
Acute and chronic toxicity is a measure of the toxic effect that a waste water effluent may have on living organisms (i.e., *Pimephales promelas* and *Ceriodaphnia* species). Acute and chronic toxicity analyses are conducted using the EPA approved Whole Effluent Toxicity (WET) test methods set forth in 40 CFR, Part 136 (July 1996 edition). These test methods establish standardized conditions and require that certain chemical and physical analyses be conducted in conjunction with the toxicity analysis.

2. **Results Reporting**
Test results are reported in terms of toxic units. Acute toxic units are abbreviated TUa, and are the inverse of the LC_{50} (i.e., the concentration of effluent that is lethal to 50% of the organisms) expressed as a decimal fraction. Chronic toxic units are abbreviated TUc, and are the inverse of the NOEC (i.e., the highest concentration of effluent at which there is no observed effect on the organisms) with respect to growth or reproductive inhibition) expressed as a decimal fraction. The tables below provide examples of the LC_{50} and NOEC conversions to toxic units.

LC_{50}	Decimal Fraction	TUa
0.1 %	0.001	1000
1%	0.01	100
10%	0.1	10
25%	0.25	4
50%	0.5	2
100%	1	1

NOEC	Decimal Fraction	TUc
0.1 %	0.001	1000
1%	0.01	100
10%	0.1	10
25%	0.25	4
50%	0.5	2
100%	1	1

3. **Initial Response to Non-Compliance**
If the permit limits for toxicity are exceeded, the permittee typically needs to perform the following actions.
a. Submit a written non-compliance report (NCR) within 5 days. In the NCR, identify any suspect sources of the toxicity and describe any measures being taken to reduce toxicity.
b. Conduct a follow-up toxicity testing with both organisms within four (4) weeks.

4. **Return to Compliance**
If the follow-up test results are in compliance with the limits in the permit, the permittee typically needs to perform the following actions.
a. Within 30 days submit the results of the follow-up test in a written report to the NDEQ. The written report should discuss the effect of the measures taken to reduce toxicity. The report should also provide the NDEQ with a recommendation relative to their success and, if ongoing, the need to continue implementing these measures.
b. Testing can generally be resumed on the routine schedule established in the permit, unless the NDEQ specifies otherwise. The NDEQ can require additional follow-up testing on a case-by-case basis (e.g., if there was no apparent reason why toxicity decreased). Any measures taken to reduce toxicity will generally need to be continued as Best Management Practices), unless the NDEQ provides a written approval for their discontinuance.

5. **Actions to Address Continued Non-Compliance**
If the follow-up toxicity test results are not in compliance with the permit limits, the permittee typically needs to perform. Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluations (TRE) as specified below. The permittee is responsible for maintaining compliance with the toxicity limits in this permit. The undertaking of the TIE/TRE process does not constitute compliance unless or until compliance with the permit limits is achieved. See explanatory note below concerning Departmental actions to address non-compliance.
a. Development and implementation of a Toxicity Identification Evaluation (TIE) needs to begin immediately. A summary plan for the initiation of the TIE should be submitted to the NDEQ within 30 days of when the follow-up of non-compliant result is received. A meeting with the NDEQ to discuss TIE/TRE alternatives within this period is encouraged.
b .A complete TIE/TRE schedule should be submitted to the NDEQ within 90 days. The NDEQ will seek clarification on at least some aspects of the schedule, and may request some modification.
c. The TIE and TRE processes should continue concurrently; i.e., as the TIE process identifies toxicity sources, reasonable measures to reduce the toxicity from these sources should be taken. The TIE/TRE schedule may need to be revised in response to ongoing TIE/TRE activities.
d .Sometimes it is possible to forego or discontinue the TIE process, and proceed directly with the TRE process. However, before abandoning the TIE process, it is important that:
i. the source of the toxicity be known; and
ii. NDEQ concurs with this approach.

Note: On-On-going non-compliance with a toxicity limit will typically be addressed in one of two ways depending on whether agreement can be achieved between the NDEQ and permittee on the TIE/TRE schedule and procedures. If agreement can be achieved, the NDEQ and the permittee may wish to enter into a Consent Order. If agreement can not be achieved, the NDEQ may proceed unilaterally via administrative and/or enforcement actions. In most instances, it is advantageous for all parties if a mutually agreed to TIE/TRE process can be implemented. For that reason, early meetings and discussions with the Department are encouraged.