



Wastewater Section

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Fact Sheet
General NPDES Permit Authorizing Land Application
Of Concrete Grooving/Grinding Slurry
NPDES NEG500000

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A. Applicability

1. Land application sites authorized by the permit

The general permit is applicable for the land application of concrete grooving/grinding slurry. The permit specifically addresses the proper employment of procedures for the land application of the concrete grooving/grinding slurry.

2. Areas of Application

The permit is applicable throughout the State of Nebraska. Statewide application is appropriate because the potential land application sites may be found throughout the state excluding tribal lands and Waters of the State (streams, lakes, wetlands and ground water) within the State of Nebraska.

3. Limitations of Coverage

The permit has provisions for the Department to evaluate the land application of concrete grooving/grinding slurry based on environmental criteria. These evaluations shall be made on any given site within the State. The permit provides written best management practices and limitations for the land application of concrete grooving/grinding slurry.

- a. The permit does not authorize the discharge of concrete grooving/grinding slurry to Waters of the State.
- b. The permit does not authorize concrete grooving/grinding slurry land application in the following circumstances:
 - 1) Those land application activities regulated by an existing NPDES permit;
 - 2) The tribal lands within the State of Nebraska;
 - 3) That may create potential, negative water quality impacts in the receiving stream, water body; ground water, and wetland;
 - 4) That adversely affect a listed endangered or threatened species or its critical habitat;
 - 5) That have effluent standards established in Title 119 and/or well head protection areas;
 - 6) Land application that adversely affects a recognized historical property.

B. Authority and Purpose

The general permit is being issued according to the NDEQ Title 119, Chapter 25 – Rules and Regulations Pertaining to the Issuance of Permits under the National Pollutant Discharge Elimination System. The regulation was promulgated pursuant to the Nebraska Environmental Protection Act (Neb. Rev. Stat. §§ 81-1501 *et seq.*) and the Federal Clean Water Act (33 U.S.C. §§ 1251 *et seq.*). The National Pollutant Discharge Elimination System (NPDES) is authorized in Section 402 of the Federal Clean Water Act.

The permit contains requirements for the employment of BAT (Best Available Technology) and BMP (Best Management Practices). The effluent pollutants levels are regulated by discharge limitations set forth in the permit. The permit limitations can be based upon protection of human health, water quality, and technology-based standards. These standards are established in NDEQ Title 117 – *Nebraska Surface Water Quality Standards* and Title 118 – *Ground Water Standards and Use Classification*. NDEQ Title 119 establishes no technological standards that apply to eligible sources for coverage under the permit.

C. Area of Application

The permit has application throughout the State of Nebraska. Statewide application is appropriate because these potential land application sites may occur throughout the state. There may be water quality concerns associated with land application. The permit provides the Department an opportunity to revoke the land application authorization based on environmental quality determinations. These determinations can be made on any land application site within the state.

D. Description of the Discharges

The permit is designed to control the pollutant levels being land applied as a resulting of the spreading of slurry from concrete grooving or grinding. These originate during the construction of new or restored existing concrete highways and/or streets. The primary pollutant of concern is pH.

E. Permit Term

The permit is to be issued for a five-year term. This is the maximum time period allowed pursuant to NDEQ Title 119, Chapter 16 002. In Appendix A. - *General Conditions 7* a re-opener clause allows for the modification, suspension, revocation, or reissuance according to NDEQ Title 119, Chapter 24.

F. Proposed Changes to the Existing Permit

On the basis of a preliminary staff review, the Nebraska Department of Environmental Quality has made a tentative determination to reissue the permit with change. The change made to this permit is the increase of the maximum dry tonnage from 5 dry tons per acre to 40 tons per acre. This change came after the release of a study which evaluated the composition of the concrete slurry and the effects of application to the soil and vegetation. The study concluded that up to 40 tons per acre could be applied to the soil without adverse effects on vegetation growth and soil composition. The 5 tons per acre limit was included in the original permit without substantial knowledge of the impacts of land application or the chemical makeup of the concrete slurry that was present within Nebraska. The new limit still remains protective of water quality since the slurry will still be land applied either at the agronomic rate or at the 40 tons per acre rate, whichever is less, in accordance with Title 119.

G. Permit Requirements and Conditions

The following paragraphs summarize the content of each section. When it is appropriate, an explanation is provided. The permit consists of the following:

1. An authorization page;

The first page of the permit identifies the general permit, the effective date, the expiration date, and the authorization signature.

2. Table of Contents

This page identifies the Parts, Sections, Appendices, and Attachment of the permit. The intent of the Table of Contents is to aid the permittee in utilization of the permit.

3. Part I. Applicability

- c. This portion identifies the areas of the state to which the permit applies (i.e. the permit has statewide application). In addition, it describes the eligible land application areas that are authorized under the terms and conditions of the permit. Several limitations on coverage are also set forth in this part of permit;
- d. Area of Application section explains that the permit has statewide coverage. The exceptions are listed in the Limitations on Coverage section.
- e. Limitations on Coverage section explain the restrictions on where the concrete grooving/grinding slurry may be land applied.

4. Part II. Authorization for Land Application

The Director has considered and determined that discharges under this permit are authorized without the submission of a notice of intent. This is in accordance with Title 119, Chapter 25 002.02E. The following were considered in making this determination:

- a. The type of discharge is land application and is prohibited from Waters of the State.
- b. Because the high pH slurry is not discharged to Waters of the State, it is not exposed to aquatic life.
- c. The volume of the discharge has been considered.
- d. Dischargers can be identified through the Public Agency contracting their services.
- e. The number of dischargers has been considered.

The requirements of this permit apply to Eligible Agencies and the operator even though a NOI is not required to be submitted.

In addition, this part sets forth the following:

- f. This section explains the reasons why an alternative permit and application are required to obtain a discharge authorization;

5. Part III. Concrete Grooving/Grinding Slurry Handling Best Management Practices

This section requires:

a. Site Inspections

The permittee is required to make site inspections prior to grooving/grinding operations to identify sensitive areas (wetlands, lakes streams, and enclosed storm water drains);

b. Equipment Practices and Requirements

- 1) The operator shall insure the machinery used in the grooving/grinding operations has well maintained systems capable of collecting the slurries and leaving a damp surface.
- 2) When necessary, the construction of settlement ponds.

c. Land Application of Slurry

This section outlines the following Best Management Practices:

- 1) Maintenance of the proper slurry pH levels;
- 2) Requirements for the land application along highway rights-of-ways or agricultural cropland; and
- 3) Slurry shall not be applied to crops that are intended for distribution in their raw form for direct human consumption (e.g. fresh produce).

d. Land Application Is Not Permitted in the following Areas or Conditions

- 1) Where the ground water level is less than 30 inches below the surface;
- 2) Within 100 feet of a stream, lake, or wetland; and
- 3) Any location where the slurry could enter a closed drainage system.

e. Slurry Collection and Pond Decanting

In those situation when the slurry must be captured and contained the following requirements shall apply:

- 1) An allowance is made for the construction slurry collection ponds; and
- 2) Outlines the proper pond closure procedures and disposal of the dry slurry.

10. Part IV Other Conditions and Requirements

This portion of the permit contains the following provisions:

- a. Compliance with the Terms and Conditions: A disclaimer stating that compliance with the permit does not provide a liability shield from any environmental damage that might result from discharges authorized under the permit.
- b. The Land Application of Slurry Shall Not Contain Pollutants Concentrations or Levels:
 - 1) Provide no increases in pollutant quantities or concentrations; and
 - 2) Except in instances where there is no net increase in pollutant quantities or concentration in the receiving water body.
- c. Immediate Reporting Requirements: A requirement to immediately report conditions or events that may be indicative or related to the introduction of pollution in the discharge.
- d. On October 22, 2015, EPA published the Clean Water Act National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, which requires electronic reporting of NPDES information rather than the currently required paper based reports from the permitted facilities. Facilities must submit electronically information required in Appendix A of 40 CFR Part 127, 40 CFR 122.26(b)(15), and 40 CFR 122.26(b)(14)(x).

11. Part V Recordkeeping and Reporting Requirements

This part summarizes and references reporting requirements that are found elsewhere in the permit. It is intended to aid the permittee in identifying the reporting requirements contained in the permit.

12. Appendix A – Standard Conditions that Apply to this NPDES Permit

This appendix was modified to meet the conditions and requirements for this NPDES General Permit for the Land Application of Concrete Grooving/Grinding Slurry issued by the Department. These conditions

and requirements are based on State and Federal regulatory requirements that pertain to all NPDES permits

H. Supporting Documentation

1. NDEQ Title 117 - *Nebraska Surface Water Quality Standards* (Revised December 13, 2014);
2. NDEQ Title 118 - *Ground Water Quality Standards and Use Classifications* (Revised March 27, 2006);
3. NDEQ Title 119 - *Rules and Regulations Pertaining to the Issuance of Permits under the National Pollutant Discharge Elimination System* (Revised May 16, 2005);
4. *USEPA Technical Support Document for Water Quality-based Toxic Control* (EPA 505/2-90-001 PB91-127415, March, 1991);
5. Mamo, Martha, et al (2015). *Evaluation of Concrete Grinding Residue (CGR) Slurry Application on Vegetation and Soil Responses Along Nebraska State HWY 31*. Unpublished Final Report.
6. 40 CFR, Part 122, 124, and 125, NPDES Regulations; and
7. Nebraska Non-game and Endangered Species Conservation Act (Neb. Rev. Stat. §§ 37-430 through 317 – 438).

I. Information Requests

Inquiries concerning the draft permit, its basis or the public comment process may be directed to:

Lisa Giesbrecht, NPDES Permits Unit Tel. 402/471-8830 or 402/471-4220 Fax: 402/471-2909

A TDD operator is available at 711.

Copies of the supporting material used in the development of the permit are available for review and copying at the Department's office between 8:00 a.m. and 5:00 p.m. on weekdays.

Office Location:

Nebraska Department of Environmental Quality
The Atrium, Suite 400
1200 N Street
Lincoln, NE

Mailing Address:

NPDES Permits Unit
Nebraska Department of Environmental Quality
PO Box 98922
Lincoln, Nebraska 68509-8922

J. Submission of Formal Comments or Requests for Hearing

The date on which the public notice period ends is specified in the public notice. During the public notice period, the public may submit formal comments or objections, and/or petition the Department to hold a public hearing concerning the issuance of the draft permit. All such requests need to: be submitted in written form, state the nature of the issues to be raised, and present arguments and factual grounds to support them. The Department shall consider all written comments, objections and/or hearing petitions, received during public comment period, in making a final decision regarding permit issuance.

Formal comments, objections and/or hearing requests need to be submitted to:

Lisa Giesbrecht, NPDES Permits Unit

Location Address

Nebraska Department of Environmental Quality
The Atrium, Suite 400
1200 N Street
Lincoln, Nebraska

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