

# ENVIRONMENTAL BULLETIN

A routine publication providing environmental-related guidance to NDOT District Staff and Contractors



## FALL 2020 IN THIS ISSUE

NDOT Erosion & Sediment Control Training. 1
Temporary Earth Checks ..... 2
Construction Site Dewatering Guidance ..... 2
Inspection Tips for Regulated Facilities ..... 4

## NDOT Erosion & Sediment Control Training

### Erosion & Sediment Control Inspector Certification Course

This classroom course is designed for NDOT construction site operators, supervisors, and technicians who will be conducting or assisting with construction stormwater site inspections. Learning objectives include Stormwater Pollution Prevention Plan (SWPPP) implementation and its role in project compliance; understanding the NPDES Construction Stormwater Permit; temporary erosion and sediment control considerations and examples; and SWPPP inspection, decision-making and documentation. Participants who successfully complete the course are awarded a five-year inspector certification and can conduct construction stormwater site inspections on NDOT projects. Completion of the NDOT Erosion and Sediment Control Installer Course is recommended prior to enrolling in this course.

### NDOT Erosion and Sediment Control Installer Course

This online course is designed for NDOT construction site operators, supervisors, and technicians who will be installing or maintaining erosion and sediment control best management practices (BMPs) on NDOT construction sites. Learning objectives include an overview of NDOT's construction stormwater program; NDOT erosion control plan reading; the process of accelerated soil erosion; the distinction between erosion control and sediment control; installation and maintenance requirements for erosion and sediment control BMPs; and good housekeeping BMPs. Participants who successfully complete this course are awarded five-year installer certification and can install and/or maintain erosion and sediment control BMPs on NDOT projects.

*\*Note: This course also serves as a 6-month temporary inspector certification for participants waiting to get into a scheduled inspector course.*

## SAVE THE DATE

### **Erosion & Sediment Control Inspector Certification Course**

Oct. 20, 2020 – Lincoln  
Nov. 5, 2020 – Norfolk  
Dec. 2, 2020 – Kearney

*For information on any of these classes, please visit the [UNL-LTAP website here](#).*

More on page 2

### NDOT Erosion and Sediment Control Inspector Re-Certification Course

Inspector re-certification can now be obtained online by accessing the UNL-LTAP training website. This online course provides previously certified inspectors a convenient way to re-certify for another five years. The course is designed for NDOT construction site operations, supervisors, and managers who will be conducting or assisting with construction stormwater site inspections. Learning objectives include stormwater permit requirements; erosion and BMPs; good housekeeping and pollution prevention BMPs; inspection and maintenance procedures; and SWPPP management.

*\*Note: Re-certification can also be obtained by enrolling in the NDOT Erosion and Sediment Control Inspector Certification Course (classroom style).*

## Temporary Earth Checks

Incorporating temporary earth checks into your project is a quick and easy way to manage sediment. Earth checks are constructed with material located on the project so there is no need to order any product. In addition, earth checks can easily be constructed by the grading contractor if the erosion control sub is unavailable. This makes for timely installation of a sediment control BMP prior to any rain events.

Earth checks shall be installed immediately after the rough grading or other soil disturbance activities are completed on a portion of the project. Sediment removal is required when sediment reaches one half the height of the check. Earth checks are paid for by the linear foot for the initial installation. Removal of sediment and repair of checks will be measured based on equipment rental.



**Pictured far left:** Earth checks should be used in conjunction with other BMPs such as perimeter controls. Checks used adjacent to wetlands, waterways and sensitive areas shall include secondary BMP to prevent the discharge of the check material.

**Pictured left:** Earth checks may be vegetated and permanently left in place to stabilize the ditch after construction is completed. This decision is typically made after coordinating with operations staff.



#### FOR MORE INFORMATION

Contact Roadside Development and Compliance Unit at (402) 479-4499

## Construction Site Dewatering Guidance

Dewatering is the practice of removing accumulated precipitation (stormwater) or non-stormwater from a work area so construction may be accomplished. It usually involves pumping water from the location of accumulation to a treatment area on the construction site, and sediment is the most common pollutant associated with dewatering operations. Discharges from dewatering activities are prohibited by the NPDES Construction Stormwater Permit (NER160000) unless managed by appropriate controls to remove sediment. The options for managing dewatering operations may differ between construction sites and depend on the condition and volume of the water to be discharged. Contractors may choose to use sediment controls already onsite (e.g. silt checks, wattles, silt fence, slash mulch) or may utilize dedicated dewatering devices such as dewatering bags and other proprietary devices. Below are some common controls that can be used to manage dewatering operations for NDOT projects.

*More on page 3*

### Discharge Pumped Water to a Vegetated Area

The most cost efficient and easiest control for pumped water is to discharge it to a vegetated area. This can be a challenge on NDOT projects as right-of-way is typically limited and the vegetated area must be large enough to filter the volume of water being discharged to it. The general rule of thumb is to monitor the discharge of water as it returns to the waterway and ensure it is not creating a sediment plume. Additional controls will need to be incorporated if clean discharge cannot be achieved with vegetation alone.

### Pumping Directly into a Sediment Trap

A sediment trap (pictured left) is a temporary containment area that allows sediment in collected stormwater to settle out during infiltration or before the runoff is discharged through a stabilized spillway. Sediment traps are formed by excavating or constructing an embankment. If a sediment trap is being used for treating dewatering discharges, it should be designed for that specific use only and not used for storm water runoff treatment. The following should also be considered:

- Rock or silt fence should be installed as overflow protection.
- Place the discharge hose in a manner to prevent bottom scour.



### Dewatering Bag

A dewatering bag (pictured left), also referred to as a gravity bag filter, is a bag made of non-woven geotextile fabric that collects sediment. Water to be treated is pumped into one side of the bag and seeps through the bottom and sides of the bag. A secondary barrier, such as a rock filter bed or straw bale barrier, may be placed beneath and beyond the edges of the bag to capture other escaping sediments that escape the bag.



### Temporary Sediment Control BMP Trap

A temporary sediment control BMP trap (pictured left) may be constructed using the following materials to settle and filter out sediment from dewatering discharge:

- Silt fence
- Silt checks (Excelsior wood fiber logs – Type 2 High, may work best)
- Slash mulch
- Rock or gravel

Install the sediment controls in a ring or hook fashion to fully capture the water to be treated. Inspect and monitor for maintenance requirements.



*More on page 4*

### General Dewatering Practices

If the water is free of pollutants other than sediment, it can be reused on site for dust control, compaction during earthwork activities, or irrigation if possible. Do not discharge stormwater or non-stormwater that has an odor, discoloration other than sediment, an oily sheen, or other pollutants – immediately notify the NDOT Environmental Office upon discovering any such condition.

All discharge operations need to be monitored to ensure only clear water is discharged offsite and the discharge point is protected from erosion. When BMPs are dewatered, this information needs to be documented in the SWPPP. The Nebraska Department of Environment and Energy (NDEE) may require a separate NPDES permit in certain circumstances; for example, if you're dewatering groundwater, the permit will have specific testing, monitoring and discharge requirements.



#### FOR MORE INFORMATION

Contact Roadside Development and Compliance Unit at (402) 479-4499

### Inspection Tips for Regulated Facilities

The following guidance on pages 5 and 6 was issued by the Nebraska Department of Environment and Energy (NDEE), formally the Nebraska Department of Environmental Quality (NDEQ). It gives a good summary of what you can expect if NDEE decides to inspect your facility or project. In all cases, if NDEE inspects your project, please notify our office immediately to assist in coordinating the effort and response.



#### FOR MORE INFORMATION

Contact Roadside Development and Compliance Unit at (402) 479-4499

# Inspection Tips For Regulated Facilities

# NEBRASKA

DEPT. OF ENVIRONMENT AND ENERGY

August 2020

20-013

This guidance document is advisory in nature but is binding on an agency until amended by such agency. A guidance document does not include internal procedural documents that only affect the internal operations of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules and regulations made in accordance with the Administrative Procedure Act. If you believe that this guidance document imposes additional requirements or penalties on regulated parties, you may request a review of the document.

To make compliance easy, the Nebraska Department of Environment and Energy (NDEE) has developed the following tips to help regulated facilities make the inspection process more effective. Note that for the drinking water program, inspections are generally referred to as "surveys." This document applies to both inspections and surveys.

NDEE's vision is to see everyone living in, working in, and enjoying a healthy Nebraska environment, and this is achieved through our mission: protect and improve human health, the environment, and energy resources.

To make this vision and mission possible, NDEE has also updated its Return to Compliance process in order to provide clear, consistent, and concise feedback for facilities. More information can be found on page 2 under "What happens after an inspection?" and in a separate document titled "A Guide to NDEE's Return to Compliance Process."

to assess facility conditions; a partial inspection is conducted to assess a specific part of a facility's operations; a desk audit is an evaluation of facility records; and a complaint investigation takes place if NDEE receives a complaint about alleged violations at a regulated facility.

## ? Why does NDEE conduct facility inspections?

Inspections are tools used to collect information about a facility's operations, waste streams, and air emissions to ensure they are in compliance with the environmental regulations that make NDEE's vision possible. State law allows NDEE to conduct inspections, where the inspector has legal authority to enter a facility to determine compliance with state environmental permits, laws, and regulations.

## ? What is NDEE's inspection process?

Inspections generally consist of an opening conference, a records review, a facility tour, and an exit interview. Inspectors are not required to sign waivers to enter facilities. They also may take photographs, conduct tests, and take samples during the inspection for documentation and to ensure their findings are accurate.

NDEE conducts several types of inspections: routine, partial, desk audit, and complaint. A routine inspection is done regularly

## ? How can I be prepared for an inspection?

NDEE typically conducts unannounced inspections to assure an inspector observes the facility as it normally operates. However, there are best practices facilities can use in their day-to-day operations that lead to better compliance with their permits and make the inspection process more efficient. Please note that all operations are different, so not all of these tips may apply to you.

### 1) If you have a permit, read and understand it and the regulations that apply to your facility

A permit is your primary tool for meeting environmental regulations, so it's important that the permit is understood. If you have questions, do not hesitate to reach out to your permit writer or inspector.

Be sure to plan ahead and apply for a new or reissued permit on time, according to regulation time frames. This ensures a prompt reissuance of the revised or new permit.

### 2) Keep documents organized and easy to find

Record keeping requirements are essential. Accurate, organized records save time during inspections and help facilities remedy concerns before a problem occurs.

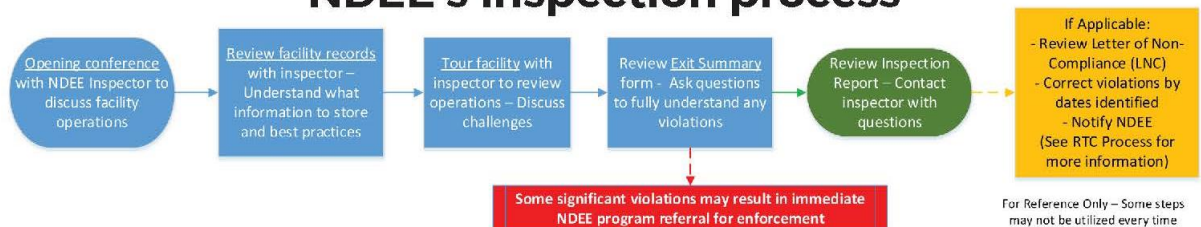
### 3) Regularly check all required equipment

A well-maintained facility and properly functioning control equipment and operations are better for the environment and your community. A maintenance log and a log of equipment and meter readings can help you keep track of completed work and prevent violations.

### 4) Have backup staff available

A second person with knowledge about records and the facility's process can answer questions and lead the tour during an inspection, save time, and help the facility stay in compliance in the event

## NDEE's inspection process



the primary is not available. Keep in mind, some operators/installers are required to have a state license or certification.

**5) Label equipment or materials properly and make sure those labels are consistent with your records (when applicable).**

**? What kinds of records will an inspector review?**

The inspector has the legal authority to access and copy records. Specific records the inspector needs to see depend on which NDEE program is conducting the inspection. Some programs may need to review records from 3-5 years ago, depending on your permit. If you're unsure of how long your records need to be retained, please contact your inspector or permit writer.

You may have records you keep confidential for business reasons. NDEE inspectors may need to review these records during an inspection to ensure the facility is in compliance. If a record is needed to verify compliance, it must be made available to the inspector, but a claim for confidentiality may be made at the same time the information is requested. The department will evaluate the claim in accordance with NDEE regulation and state law. For more information on confidentiality regarding trade secrets, please visit <http://deq.ne.gov/publica.nsf/pages/14-009>.

**Records that may be reviewed during an inspection**

*Records depend on the program conducting the inspection. This list is not comprehensive.*

- Facility process information
- Analytical results for waste determinations
- Annual reports
- Self-monitoring reports
- Operation records
- Training records
- Waste handling and disposal information
- Current permits or fact sheets
- Previous non-compliance letters
- Supplemental documents for applications/permits
- Maintenance schedules and records
- Material purchasing records
- Hazardous and nonhazardous waste manifests
- Air emissions data, water discharge data, and other monitoring data
- Emergency response and spill control procedures and plans
- Engineering assessments
- Landfill receipts or other bills of lading

**? What can I expect during the opening conference and facility tour?**

The opening conference and the facility tour are the main tools the inspector will use to gather information about your facility and its operations. Most inspections focus on one NDEE program—air, energy, land, or water—but some may cover multiple programs. Depending on the type of inspection, the inspectors may ask about the following:

- Facility processes
- Waste generation
- Air emissions
- Wastewater generation and discharge
- Problems experienced by the business
- Permit requirements
- Other environmental aspects of the business

It is important to provide accurate answers to the inspector's questions. If you do not know the answer, it is OK to ask another

knowledgeable person at your facility, or tell the inspector you will have an answer in the near future. Be sure to follow up in the time frame provided.

**? What can I expect during the exit interview?**

Inspectors will discuss their preliminary findings with facility representatives at the end of their inspection. At this time, the inspector will provide you with an Exit Summary form that briefly describes what was observed and discussed in an effort to provide clarity and certainty.

The Exit Summary form is intended to ensure there is a common understanding of the results of an inspection and provide facilities with information about their observed compliance immediately. This is not a legal document or a citation; in some cases, additional review is needed before a compliance determination is made. To read more about the Exit Summary, visit <http://deq.ne.gov/publica.nsf/pages/EAD012>.

**? What happens after an inspection?**

Following an inspection, NDEE will send an inspection report to you by mail or email. If you have any questions regarding your report, contact your inspector.

If violations are found at your facility, you may also receive a Letter of Non-Compliance (LNC). An LNC identifies any violations, recommends corrective action to be taken, and establishes a reasonable schedule to return to compliance. The agency's aim with the LNC is to promote a prompt return to compliance and minimize harm to human health and the environment through cooperative efforts. You are encouraged to contact NDEE with any questions regarding your LNC.

The LNC is a key part of NDEE's updated Return to Compliance (RTC) process. It takes the place of varying notifications and is the single tool NDEE will use to outline violations at a facility. This helps ensure consistency across the agency and improves clarity in communications between NDEE and facilities.

For more information about the LNC and the RTC process, see "A Guide to NDEE's Return to Compliance Process" document.

**? Does NDEE provide other resources to ensure my facility is in compliance?**

Yes. NDEE intends to make compliance easy for facilities, which in turn helps protect the environment and Nebraska residents' health. NDEE offers a Compliance Assistance Program that provides assistance across all agency divisions. This program is designed to help facilities and businesses understand applicable regulations and how to comply with them.

NDEE also provides Compliance Assistance Visits. If a facility requests a visit, NDEE compliance assistance staff, or other staff, will come to your facility and advise you on regulatory obligations and possible options to help you maintain compliance. For more information or for assistance, call NDEE at (402) 471-2186, email [NDEE.assistance@nebraska.gov](mailto:NDEE.assistance@nebraska.gov), or visit <http://deq.ne.gov/Publica.nsf/pages/06-193>.