

Who Can Inspect?

NDR10-0000

Inspectors Need to Be

- ▶ Familiar with permit conditions
 - ▶ Familiar with installation and operation of BMPs
 - ▶ Someone knowledgeable and experienced in the application of ESC BMPs will oversee the inspection and maintenance
- 

**Does the
inspector need to
be certified?**

NO!

But it's not a bad idea



When to inspect?

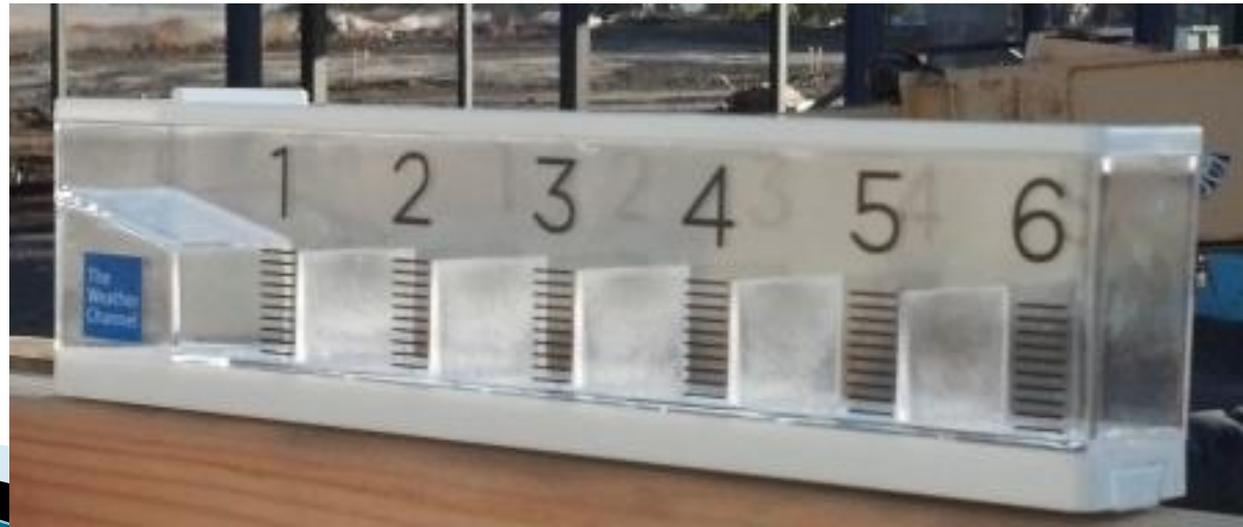
NDR10-000

Inspection Frequency

- ▶ Inspect at least once every 14 calendar days
 - ▶ **AND** within 24hrs after any storm event of $>1/2$ " of rain per 24hr period during active construction
 - ▶ Dewatering? – Inspect daily
- 

How do I know if it's rained >0.5 "?

- ▶ Use a rain gauge near the site or utilize the nearest National Weather Service precipitation gauge station
- ▶ Any gauge used shall be located within 5 miles of the stormwater discharge



But it's stabilized...

- ▶ Stabilized areas that don't yet meet final stabilization may be inspected 1x/mo
- ▶ May be suspended for areas that meet final stabilization



But it's COLD out there

- ▶ May suspend where earthwork has been suspended due to frozen ground conditions
- ▶ Must resume as soon as runoff occurs or the ground begins to thaw at the site.
- ▶ <http://ndawn.ndsu.nodak.edu/soil-temps.html>



But there's a tornado today

- ▶ There may be times when an inspection may not be practical
- ▶ You must record a description of why the inspection could not be performed at the designated time



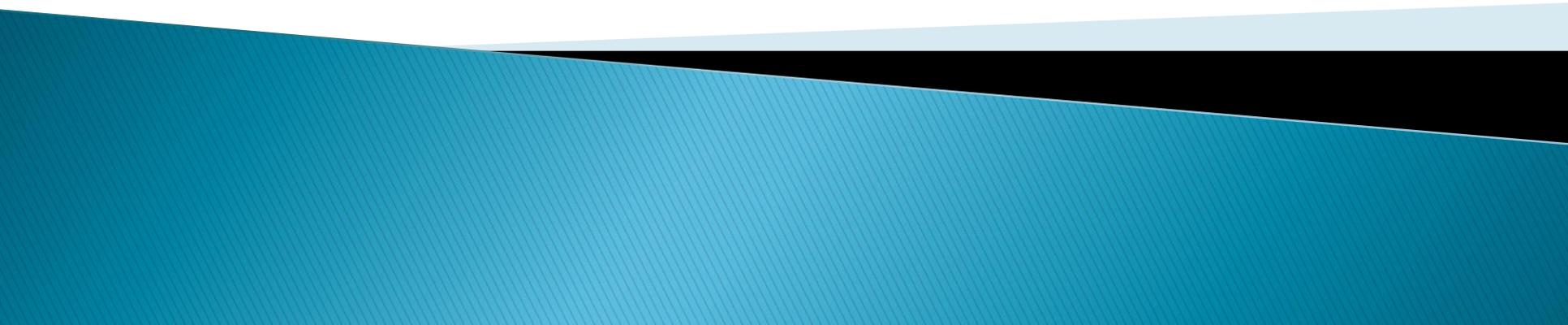
Problematic Areas

- ▶ Some BMPs may need more frequent inspection based on location (e.g., sensitive areas or waters of the state) or as a result of recurring maintenance issues
 - ▶ BMPs found in need of maintenance between inspections must be repaired or supplemented with appropriate measures ASAP
- 

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 INSPECTION	3	4	5 	6 	7
8	9	10  0.25"	11  0.5"	12  1"	13 	14
15  2.5"	16  INSPECTION	17	18	19	20	21
22	23 	24 	25 	26 	27 	28 
29 	30  INSPECTION	31 				

What to look for during inspection?

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General Area Inspection

- ▶ All BMPs identified in the SWPPP to ensure correct operation and in serviceable condition
 - ▶ Discharge outlets from areas used for storage of materials, permanent stormwater control measures and vehicle maintenance areas
 - ▶ Look for evidence of or potential for pollutants entering a drainage system
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Dewatering

- ▶ Include the dewatering site
 - ▶ Areas where the BMPs are being implemented
 - ▶ The discharge location
- 

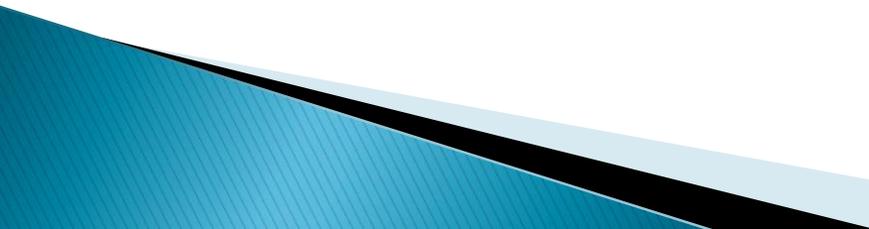
Specific Controls

- ▶ Devices similar to silt fence or fiber rolls must be repaired, replaced, or supplemented when nonfunctional or the sediment reaches $1/3$ of the height of the device
 - ▶ Sediment basins must be drained and the sediment removed when the depth collected in the basin reaches $1/2$ the storage volume
- 

What to do if I find a problem?

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- ▶ If inspections or other information indicates a control has been used inappropriately, or incorrectly, you must replace or modify the control...
 - See a problem? Fix it!

 - ▶ If inspections identify BMPs that are not operating effectively, maintenance shall be arranged and accomplished as soon as practicable...
 - See a problem? Fix it FAST!
- 

Specific Control Time Tables

- ▶ Devices similar to silt fence or fiber rolls must be repaired within 24 hours of discovery, or as soon as field conditions allow access
 - ▶ Sediment basins must be drained and sediment removal must be completed within 72 hours of discovery, or as soon as field conditions allow access
- 

How to document inspections?

NDR10-000

Paperwork

- ▶ All inspections and maintenance conducted during construction must be recorded *in writing*
 - ▶ Records of each inspection and maintenance activity shall include:
- 

DATE AND TIME

**NAME OF
INSPECTOR**



FINDINGS

INCLUDE BOTH GOOD,
WHAT NEEDS TO BE
FIXED AND HOW IT WILL
BE FIXED



CORRECTIVE ACTIONS TAKEN

including

DATE & TIME

WHO DID THE FIXING



**DATE & AMOUNT
OF RAINFALL
EVENTS $> \frac{1}{2}$ " IN
24HR**



WHEN AND WHY SWPPP WAS UPDATED



Dewatering

- ▶ Document the inspections of the dewatering operation – who/when/what was seen
- ▶ Actions taken to correct any problems

No inspections?

- ▶ If an inspection is not practical, record a description of why the inspection could not be performed at the designated time

Which Records to keep?

- ▶ A copy of the Notice of Intent
 - ▶ The coverage letter from the Department
 - ▶ A copy of the SWPPP
 - ▶ Site inspection records
 - ▶ The general permit NDR10-0000
- 

Where to keep records?

- ▶ Keep at the site in a field office, trailer, or shed, or in a vehicle that is on-site during normal working hours
 - ▶ If no on-site location, then keep at a readily available alternative location. Preferably with the SWPPP contact
 - ▶ If site is inactive, then store at a local office
- 

Odd Ball Situations

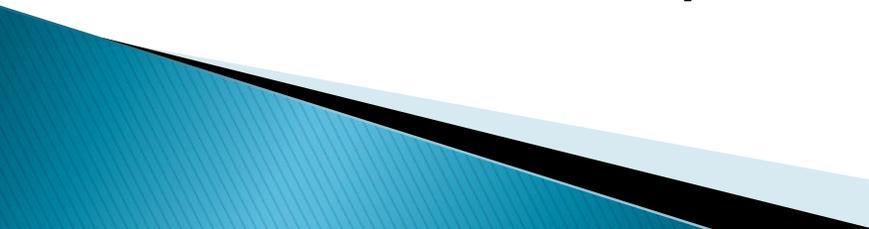
Linear Projects

- ▶ Can submit an alternative inspection plan for long, narrow, linear construction projects
 - Or similar projects in remote areas where vehicle traffic is restricted or could compromise native vegetation or stabilization measures
- ▶ Submit SWPPP and proposed inspection plan to the Department 30 days prior to beginning an alternative
- ▶ Any alternative plan must provide for the timely recognition and repair of erosion and sediment damage

INDUSTRIAL PERMIT

NDR05-0000

Inspection Frequency

- ▶ Inspect the stormwater control system at least once during a 6 month period: Jan–Jun; Jul–Dec
 - ▶ At least one inspection should be within 48 hours of a rainfall or snowmelt event resulting in a stormwater discharge
 - ▶ Written records summarize the scope of inspection, major observations relating to the SWPPP and any corrective actions taken
- 

Areas to inspect

- ▶ Discharge outlets from areas used for industrial activities
 - ▶ Areas used for storage of materials
 - ▶ Structural control measures,
 - ▶ Vehicle maintenance areas
 - ▶ BMPs
- 

Alternative Inspection Schedule

- ▶ May submit an alternative inspection plan for inactive operations
 - or sites where an employee is not normally stationed or does not routinely visit.
 - ▶ Submit SWPPP and inspection plan to the NDDOH 30 days prior to beginning
 - ▶ Any plan must have an inspection interval not less than once in three years
- 

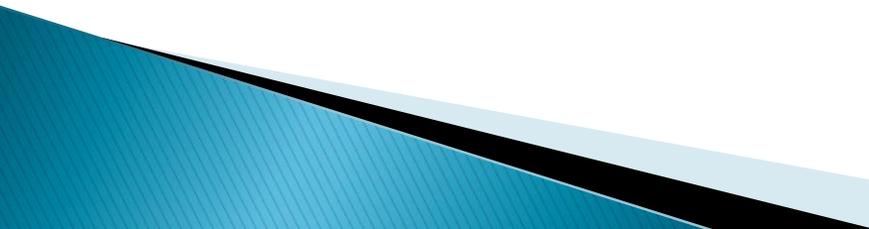
MINING PERMIT

NDR32-0000

Inspection Frequency

- ▶ Active facilities 2 /yr (1 x Jan–Jun; 1 x Jul–Dec)
 - Within 48 hours or ASAP following storm events of ≥ 1 " 24hrs
 - AND at least 1x/6 mo period when no storm events occur
- ▶ Temporary or portable facilities (sand and gravel, batch plants) inspect on a monthly basis while active
 - 1x/6mo until final stabilization when inactive
- ▶ Inactive operations inspected 1x/3yr

Annual Inspection Summary

- ▶ List all incidents of sediment or significant material residue accumulation, or erosion due to stormwater discharges observed during the calendar year
 - ▶ Include the inspection date, outfall identification or location of incident, description of incident, estimated quantity of material or size of area affected, brief explanation of potential cause and remedial actions taken
- 

Annual Location Record

- ▶ For portable or temporary facilities.
 - Permit number
 - Name and mailing address of owner/operator
 - Site or plant name
 - Site location
 - Start date of each site
- Estimated total disturbed area
- Name water bodies within 2000'
- Status (active, reclaiming, inactive)
- Date of final stabilization or when contoured to contain all discharges

Annual Report Submission

- ▶ Location Record and/or Inspection Summary due to the Department by January 31 of each year
 - ▶ Covers the activities occurring during the preceding calendar year (January 1 through December 31)
- 

COMMON BMP ISSUES TO LOOK FOR



No inlet protection



BMPs not installed correctly





10/14/2008





10/14/2008



10/14/2008

Inappropriate BMPs



Mud flowing from the site

4 2:05 PM



DRAWDOWN DEVICE NEEDED

12 10 3448

No BMPs



10/14/2008



10/14/2008



10/14/2008

BMPs not maintained





10/15/2008



06.26.2009 10:54



4 1:50 PM



09.23.2008 20:34



15 4:18 PM



4 2:07 PM





06.15.2009 12:16

TRACKING





09.24.2008 00:57



09.23.2008 20:35



12 10 48 AM



27 3:18 PM



09.22.2008 22:45



10/14/2008



10/14/2008



09.23.2008 02:02



09.23.2008 02:18



32ND Ave S

09.24.2008 01:25



09.24.2008 01:25



24 10:56 AM



24 10:57 AM

LACK OF BMPS





09.23.2008 20:12





15 4:41 PM



15 4:15 PM



LOOK AT OUTFALLS





4 8:51 AM



DEWATERING





06.17.2009 14:20



06.17.2009 14:19

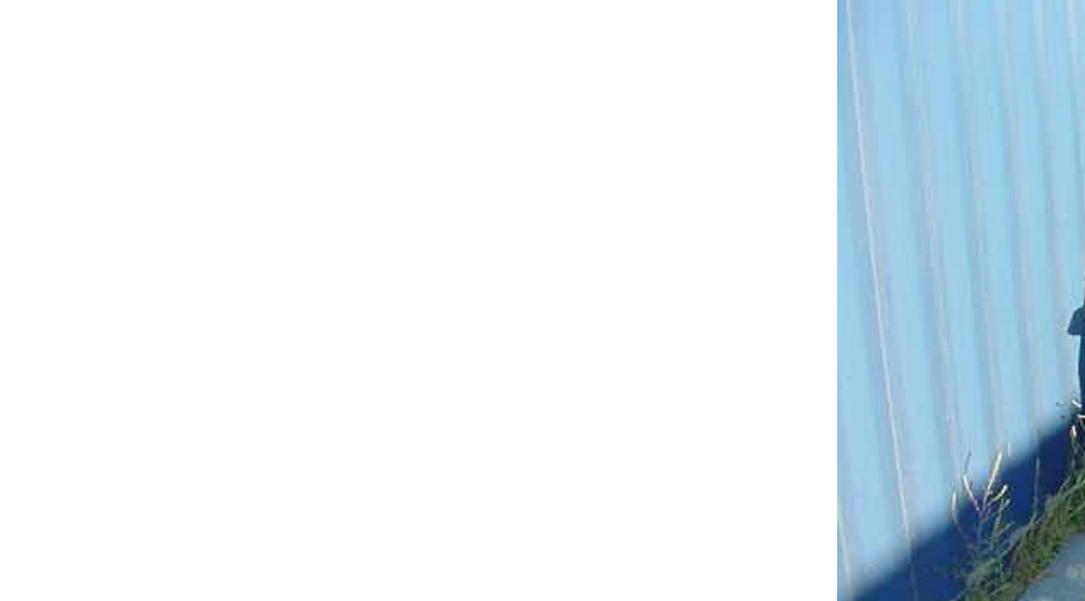
SIGNIFICANT MATERIAL STORAGE

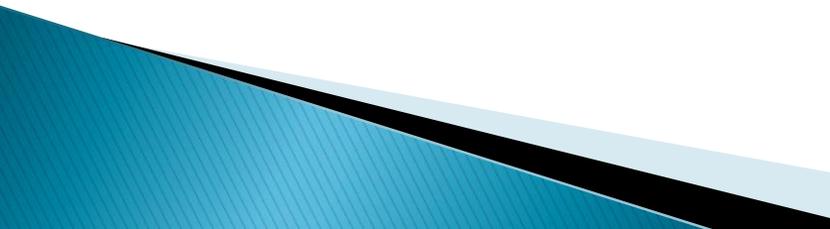


09.23.2008 20:52



10/14/2008







**REMOVE BMPS WHEN STABILIZED
(or not needed)**





09.24.2008 00:08



09.22.2008 23:02



09.22.2008 23:01



06.17.2009 15:57

Wet Weather Inspections





24 9:44AM



10/15/2008







17 10:58 AM



24 9:48 AM



12 2:36 PM



12 2:58 PM



7 10:05 AM



ROAD
CLOSED

NO
LEFT
TURN

7 10:05 AM



06.16.2009 15:37



7 10:10 AM





06.16.2009 14:16



06.16.2009 14:15



7 9:31 AM



7 9:42AM





06.16.2009 14:05



06.16.2009 14:02



...AND CLEAN UP AFTER
YOURSELF



06.17.2009 16:11