

Tracking Environmental Commitments During Construction

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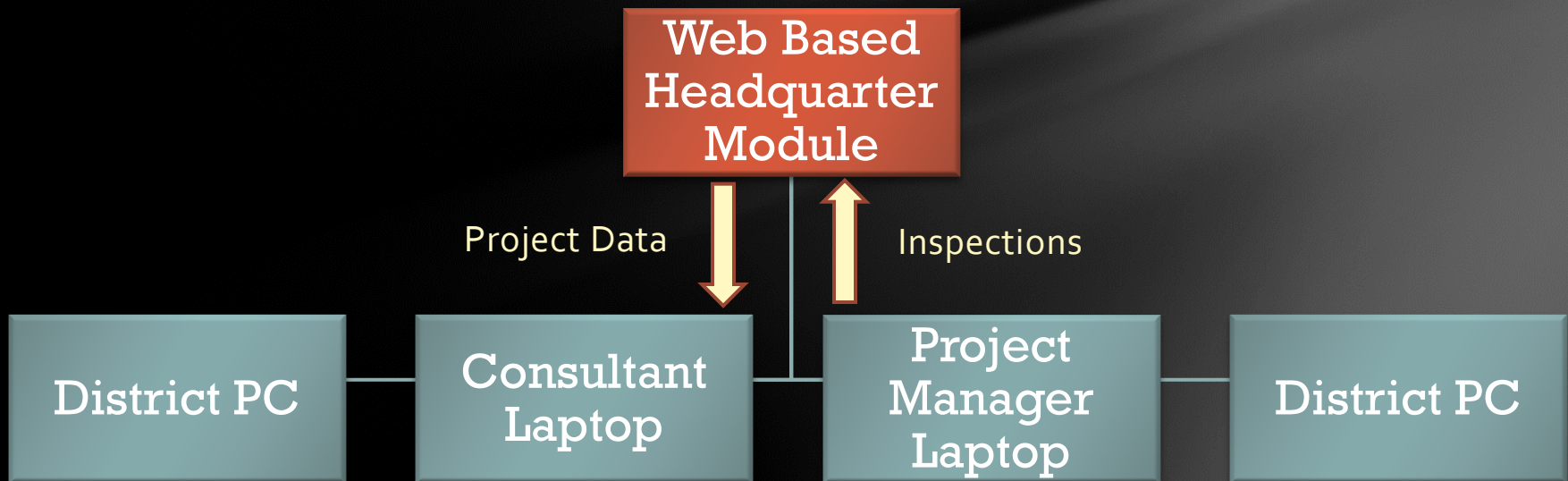


Overview

- ❖ What is ECODatabase
- ❖ Identifying Commitments to Track (Pre-Construction)
 - Project Setup
 - Project Review
 - Inspection Summary Sheet
- ❖ Documenting Commitments in the System (Construction)
 - Logging Inspections
 - Inspection Report Distribution
 - Corrective Actions
 - Inspection Reminders/Past Due Notices
 - Threatened and Endangered Species/Migratory Bird Surveys
- ❖ Reporting Commitments when Completed (Post-Construction)
- ❖ NDOR Certified Erosion Control Inspector List

What is ECO-Database?

- ❖ Electronic reporting software used to identify, document, and report environmental commitments on NDOR construction projects.
- ❖ Consists of inspection software loaded on field machines and a web based headquarter module that manages the data.
- ❖ A sync process exchanges data between user machines and headquarters.



Identifying Commitments – Project Setup

- ❖ Projects are manually created within the ECODatabase system and then additional project information is automatically pulled in from the *SiteManager* database on a regular basis:
 - Project Name/Number/Control Number
 - Project Description/Location
 - Project Manager/Responsible Charge
 - Prime Contractor
 - Key Dates (Letting, Notice to Proceed, Start & Completion)

[Create Project](#) [Refresh this list](#) [Export to excel](#)

Project numbers marked in green came from the SMP/PES database.

	Project number	Control number	Project name	NPDES Authorization Number	District	Manager	Let date	Status
EDIT	STP-4-4(108)	42654	E. JCT. US-281 - LAWRENCE	NER114199	4	Meyer, Steve	2/6/2014	Construction
EDIT	STP-41-5(107)	42591	IN GENEVA & WEST	No Permit Required	4	Anderson, Tom	2/6/2014	Construction
EDIT	RD-281-3(1014)	80948	BARTLETT NORTH & SOUTH	No Permit Required	8	Ziska, Dan	2/6/2014	Construction
EDIT	S-75-2(1059)	13216	UNION SOUTH	NER114184	1	Hobelman, Ryan	2/6/2014	Construction

Identifying Commitments – Project Review

- ❖ ECODatabase sign-off incorporated into existing Environmental Review Process within Planning and Project Development Division
 - Roadside Stabilization Unit
 - ✓ Manages the ECODatabase System
 - ✓ Reviews for stormwater and erosion control conditions
 - Environmental Permits Unit
 - ✓ Reviews for wetland and 404 permit conditions
 - ✓ Reviews for threatened and endangered species conditions
 - Environmental Documents Unit
 - ✓ Reviews for NEPA related conditions
- ❖ After reviews are completed, an ECOD Inspection Summary Report is generated and sent to the construction project manager.

Identifying Commitments – Project Review

Questions for Project: E. JCT. US-281 - LAWRENCE

Show only category group(s): EDU - NEPA T&E - Threatened and End
 LPA - Checklist 12-20 Questions

[Save Changes](#) [Refresh this list](#) [Back to Project](#)

These project checklist questions approved by: RSU approved by Ronald Poe on 12/17/2013 at 2:21 PM
 EPU approved by Justin Williams on 12/18/2013 at 9:06 AM
 T&E approved by Melissa Marinovich on 12/18/2013 at 8:57 AM
 EDU approved by Project Reviewer on 12/17/2013 at 4:04 PM

Question

(EDU - NEPA) NEPA Conditions

- Has the construction process protected worker health and safety as required by the Construction Safety and Health Department of Labor and NDOR specifications?
- Has coordination with emergency services such as police and fire departments occurred?
- Has coordination with the utility companies occurred?
- Was a news release published?
- Has airport coordination been completed?
- Has the contractor coordinated with DEQ regarding the wellhead protection area(s)?

Project name	NPDES Authorization Number	District	Manager	Let date	Status	Review
E. JCT US-20 NORTH	No Permit Required	5	Carnahan, Brian	2/6/2014	Construction	SPTD

ECOD Inspection Summary Report

❖ Sent to Construction Project Manager and District Environmental Coordinator before construction begins.

- Contains Project Review Status
- Outlines Required Inspections in ECOD
- Highlights Species Conditions



Project Set Up Complete.

State-Wide Environmental Compliance Oversight Program - District 5

E. JCT US-20 NORTH

Environmental Inspection Summary Report Construction Project Set-up Review

This form was prepared to print on 3/27/2014. Changes made to this project after that date will not be reflected on this form. Please review this form carefully for accuracy with project commitments before completing the ES Construction Authorization Form.

NDOR Project Number:	STP-87-4(117)
Control Number:	61606
MS4 Permit?:	No
NPDES Permit Number:	No Permit Required
404 Permit#:	No Permit Required
T&E Species Assigned:	Migratory Birds

Project Review Status

Project Review completed for: (All reviews completed on 2/12/2014)

<input checked="" type="checkbox"/>	Erosion Control/Stormwater
<input checked="" type="checkbox"/>	Threatened and Endangered Species
<input checked="" type="checkbox"/>	Wetlands/404 Permitting
<input checked="" type="checkbox"/>	Environmental Documents/NEPA

Summary of Required Inspections Anticipated

Inspection Types Enabled for Project	Estimated # Inspections	Typical frequency	Responsible party
Routine Environmental Inspection (Construction Phase)	12	Once every 14 days	NDOR Project Inspector
Migratory Birds		Every 3-days during Bird nesting season (April 1 - September 1 for trees/shrubs, April 1 - Sept 30 for bridges/culverts)	NDOR Project Inspector

Species Notes

Swift Fox: A swift fox survey will be needed within 2-weeks prior to construction start. Contact Melissa Marinovich (Melissa.marinovich@nebraska.gov) to schedule this survey with NDOR Environmental. Migratory Birds: Migratory bird surveys are only required if they are part of the Contractor's plan to avoid impacts to migratory birds in trees, bridges, culverts, etc. Trees and shrubs should be cleared prior to April 1 if possible. Bridges or culverts should be netted or cleaned before April 1, if possible. Refer to NDOR Avian Protection Plan on NDOR website at: <http://www.transportation.nebraska.gov/environment/guides/avian-protection-plan.pdf>

Documenting Commitments – Logging Inspections

ECOD Inspection Tool

- ❖ Software installed on user machines
- ❖ Inspection reports are tailored to each project:
 - Commitments become inspection questions in the field
 - Inspectors only have access to projects they are responsible for and inspections that they may conduct .
- ❖ NDOR environmental inspections are recorded using the ECOD system
 - Routine Environmental Inspection (Construction Phase)
 - Routine Environmental Inspection (Establishment Phase)
 - Environmental Compliance Oversight Inspection
 - Environmental Compliance Audit
 - Stormwater Permit Close-Out Inspection
 - Threatened and Endangered Species Survey
 - Migratory Birds Survey

Documenting Commitments – Logging Inspections



ECODatabase - Routine Environmental Inspection (Construction Phase) Project: Test Project (For Training Purposes only)

Cancel



Save and Continue



Inspection Information

Primary inspector: Gabe Robertson
Inspector Certification number: 0086
Expires: 2/18/2019
Inspection type: Routine Environmental Inspection (Construction Phase)
Inspection date: 3/27/2014

Erosion Control
Certification Number
auto-populates the
report.

Inspectors present:

*Weather during previous 24hrs:

Project status:

Construction


Description of current construction activity:




Date of most recent precipitation since last inspection (leave blank if none):

Amount that fell (inches, #.## format):

















Describe additional precipitation that fell prior to this date if applicable:

Documenting Commitments – Logging Inspections

 **ECODatabase - Projects List**

[Corrective Actions](#)  [Sync with HQ](#)  [Log out](#) 

Projects

Inspection	Name	Status	Control Number	Date of last inspection	Corrective Actions
	Test Project (For Training Purposes only)	Construction	000000	3/27/2014	
	COMSTOCK SOUTH	Establishment	61513	3/24/2014	
	56TH STREET - WAVERLY INTERCHANGE	Construction	12477	3/21/2014	
	ALBION WEST	Establishment	31833	3/21/2014	
	Sidney EB Rest Area Parking	Construction		3/21/2014	
	FULLERTON SOUTH	Construction		3/21/2014	
	N-112 - BEATTY	Construction	13034	3/21/2014	
	BIG SPRINGS SOUTHWEST	Construction	61279	3/21/2014	

Inspector Access: Inspectors only have access to projects they are responsible for.

Corrective Action Button: Corrective Action Button will glow if items are pending

Documenting Commitments – Logging Inspections

Documentation*

1. Is a complete notice posted in a publicly accessible location near where the construction activity is underway? Notice must include a copy of Discharge Authorization Notice (DAN), SWPPP Location and Contact Person with Phone Number.

Yes
 No
 N/A

Notes:

2. Is the SWPPP available for review during normal business hours? Document the SWPPP location in the Notes field.

Yes
 No

Notes:

Temporary Erosion Control Plan*

1. Are the locations and installation/removal dates, of erosion and sediment control measures, documented on the Temporary Erosion and Sediment Control Plan?

No
 N/A

Notes:

NEPA Conditions*

1. Is the contractor in compliance with the approved bridge demolition plan, including lead based paint and asbestos?

Yes
 No
 N/A

Notes:

2. If hazardous materials are present, are the appropriate safety measures followed?

Yes
 No
 N/A

Notes:

Wetlands and Waters of the US*


1. Have measures been taken to avoid areas identified on Green Sheet Attachment 1?

Yes

Questions are generated from environmental commitments and are specific to each project.

Answering "No" requires an action to be logged, and then the system will generate a corrective action that must be addressed.

Documenting Commitments – Logging Inspections








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ECODatabase - Environmental Compliance Oversight Inspection

Project: Test Project (For Training Purposes only)

2581.0

Project List 
Inspection List 
Checklist Questions 
Field BMPs 
Summary 

BMP Category

Erosion Control →

Sediment Control

Good Housekeeping

BMP

Mulching ↘

Compost

Tackifier

Hydromulch

Soil Binders

Soil Roughening

Slope Tracking

Berms and Diversions

Benching

Temporary Slope Drains

Erosion Checks, Type Wattle (Slope Application)

Cover Crop Seeding

Temporary Seeding

Permanent Seeding

Sodding

Erosion Control (RECP)

Other

Other

Notes

- Mulch must be uniform and applied within 24 hours of seeding
- Mulch should have a depth of 1 - 2 inches
- Mulch is anchored approximately 6 inches into the soil
- An approved tackifier may be used to hold mulch in place

Erosion Control - Mulching

1 **BMP Location: Same as Previous**

Station 345 - 348 Right

2 **BMP Problem Type:**

Missing

3 **Action items (select all that apply):**

Install missing BMP.

Immediate action required
(select this only in situations where there is an imminent threat to the environment)



Other actions
(this is required if you have not picked an item from step 3 above)

Comments (225 Character limit):

Install temporary mulch on disturbed areas.

Upload pictures *(can do this on Edit Report page also):*


[Upload](#)
[Upload](#)
[Upload](#)

Delete this BMP 
Save BMP 

Findings

Seq	BMP	Location	Problem Type
-----	-----	----------	--------------

Documenting Commitments – Logging Inspections



State-Wide Environmental Compliance Oversight Program
 District T: Test Project (For Training Purposes only)
 Environmental Compliance Oversight Inspection
 Inspection Date:

Project Number: **Test Project**

Project Status: **Construction**

Control Number: **000000**

Prime Contractor: **Example Prime Contractor**

Current Activity:

NPDES Permit #: **NER__Test**

Primary Inspector: **Gabe Robertson**

Inspectors Present:

Inspection Day weather:

Most recent precipitation date: Amount that fell (inches):

Other precipitation dates and amounts (since last inspection):

Project Description: **NDOR Example Construction Project for training purposes. District staff can select this project to test the new software installed on their machines (ECO-Database).**

Contract ID Number: **0000**

Wetlands Permit #: **Not Reported**

Certification Number: **00866**

Introduction:

An ENVIRONMENTAL COMPLIANCE OVERSIGHT INSPECTION was conducted for this project to allow NDOR to determine the environmental compliance status and any instances of Corrective Actions.

Findings:

The Environmental Compliance Oversight Inspection reviewed environmental commitments and evaluated the effectiveness of measures taken to manage environmental compliance. Findings and any instances of Corrective Actions are provided in the following section of the report. At the time of inspection, Findings may have been reported as Corrective Action. Failure to complete Corrective Actions may be a violation of the National Stormwater Permit issued for this project.

- ❖ Sign and Seal button makes the reports final and un-editable.
- ❖ Inspectors can make a draft of the report before signing.

Summary of findings	
<u>Previous (unresolved) Corrective Actions</u>	<u># Corrective Action Findings</u>
Total number of previous (unresolved) corrective actions:	6
<u>Documentation Corrective Actions</u>	<u># Corrective Action Findings</u>
Total number of documentation corrective actions:	0
<u>BMP Corrective Actions</u>	<u># Corrective Action Findings</u>
Total number of BMP corrective actions:	0
Total combined number of corrective actions:	6

Certification

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

This document has not yet been electronically signed by Gabe Robertson.

Make Draft

Sign and Seal Now

NOTE: This report was formatted to print on 3/27/2014. It represents the most current information available for this inspection period at the time it was formatted on the user's computer.

Documenting Commitments – Inspection Report Distribution

- ❖ Completed inspection reports are automatically distributed (email) to pre-defined groups for review.
- ❖ Email contains web links to both the inspection report and corrective action log for the project.
 - PDFs of the report and corrective action log can be generated and printed using the included links.



Documenting Commitments – Corrective Actions

Inspection type:

Environmental Compliance Audit

General Inspection Report Type

Migratory Birds

Routine Environmental Inspection (Establishment Phase)

Threatened and Endangered Species

Environmental Compliance Oversight Inspection

LPA Checklist 12-20 - Environmental Compliance Inspection Audit Form

Routine Environmental Inspection (Construction Phase)

Stormwater Permit Close-Out Inspection

Wetlands Mitigation Monitoring

Status: pending pending past due completed

Limit: from 0 << < > >>

[Refresh this list](#) [PDF](#) [Punch List](#)

Inspection type	BMP Category	Details	Problem type	Location	Action taken	Inspection date	Due date	Date action taken	Submitted on	Uploaded on	Pending
Environmental Compliance Oversight Inspection	Erosion Control (RECP)	Details	Maintenance	1175+00 east slope at Hwy. 6 overpass.		3/25/2014	4/1/2014			3/27/2014	pending
Routine Environmental Inspection (Construction Phase)	Other	Details	Installation	Throughout project	Has been re pinned and added a little new in areas that was needed	3/21/2014	3/28/2014	3/25/2014	3/26/2014	3/26/2014	completed
Routine Environmental Inspection (Construction Phase)	Silt Fence	Details	Maintenance	STA 209+00, right side of ramp 2 EB	Ground still a little frozen to pull post	3/21/2014	3/28/2014	3/25/2014	3/26/2014	3/26/2014	completed
Routine Environmental Inspection (Construction Phase)	Slash Mulch	Details	Missing	Box at approximate STA 1208, both right and left	added a little extra slash mulch	3/21/2014	3/28/2014	3/25/2014	3/26/2014	3/26/2014	completed
Routine Environmental Inspection (Construction Phase)	Area Inlet Protection	Details	Missing	STA 1003, median	They shoveled some dirt but didnt mess with the vegetation area as to keep this inlet protected	3/21/2014	3/28/2014	3/25/2014	3/26/2014	3/26/2014	completed

Documenting Commitments – Corrective Actions

- ❖ A “Corrective Action Punch List” can be printed and filled out by contractor or inspector as things are completed.
- ❖ Inspectors then date-out each completed action within the system and items are removed from their to do list.



ECOD - Corrective Action Punch List

Project: 56TH STREET - WAVERLY INTERCHANGE

Created on 3/27/2014

Inspection type	BMP category	Location	Inspection date	Due date	Inspector
Environmental Compliance Oversight Inspection	Erosion Control (RECP)	1175+00 east slope at Hwy. 6 overpass.	3/25/2014	4/1/2014	Ron Prochaska

Corrective Action/Inspector comments:

Repair broken/malfunctioning BMP. Erosion blanket has been damaged by wind. Needs to be repaired and re-attached.

Applicable Reference(s)

Corrective action taken:

Signed off by:

Action date:

Documenting Commitments – Inspection Reminders/Past Due Notices

- ❖ ECODatabase allows NDOR to schedule inspections and send out inspection reminders/past-due notices.
 - One day before an inspection is due, an “inspection reminder email” will be sent out to project inspectors.
 - Likewise one day after an inspection should have been logged in the system, an “inspection past-due notice email” will be send to project inspectors as well as select upper management personnel within the District.
- ❖ These are auto-generated by the system based off of the inspection frequency and phase of the project.
- ❖ Currently programming email notices for Threatened and Endangered Species Surveys.....

Inspection schedule List								
for Project: SEWARD EAST								
<input type="button" value="Update Inspection schedules"/> <input type="button" value="Back to Project"/>								
Allow inspections for project	Inspection type	Start date	Construction	Winter conditions	Ongoing monitoring	Establishment	Send upcoming notifications	Send past due notifications
<input checked="" type="checkbox"/>	14-Day Routine - 1/2" Rain Event Compliance Inspection (Construction Phase)		14 day ▼	30 day ▼	30 day ▼	30 day ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Environmental Compliance Audit		one time ▼	▼	▼	▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Environmental Compliance Oversight Inspection		30 day ▼	one time ▼	▼	one time ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Green Sheet Compliance Inspection		30 day ▼	30 day ▼	30 day ▼	30 day ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Monthly Compliance Inspection (Establishment Phase)		30 day ▼	30 day ▼	30 day ▼	30 day ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Documenting Commitments – Logging Inspections

- ❖ Threatened and Endangered Species/Migratory Bird Surveys also logged using ECODatabase.
- ❖ Surveys are submitted on a weekly basis.
- ❖ Species are specific to each project and the time of year the survey is being completed.
- ❖ Reports are automatically sent to Headquarters for review and are then made available to Partner Agencies such as FHWA and USFWS.

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ECODatabase - Threatened and Endangered Species
Project: Test Project (For Training Purposes only)

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Project List Inspection List **Survey Checklist** Edit Report

Weekday

- Sunday 3/23/2014
- Monday 3/24/2014
- Tuesday 3/25/2014
- Wednesday 3/26/2014
- Thursday 3/27/2014
- Friday 3/28/2014
- Saturday 3/29/2014

Species List

Whooping Crane

Species Notes

Survey Checklist

Please select a day and a species from above to get started.

Survey Checklist Day Records

Day	Start time	Stop time	Count	Species	Actions
Sunday 3/23/2014					
No target species survey on this day.					
Monday 3/24/2014					
No target species survey on this day.					
Tuesday 3/25/2014					
No target species survey on this day.					
Wednesday 3/26/2014					

Reporting Commitments when Completed

- ❖ ECODatabase has the ability to query data in the system and generate summary reports.

Report type List

Select the type of report from the list below.

	Title
SELECT	Average Days to Perform Corrective actions
SELECT	Project inspections
SELECT	Number of Corrective Actions
SELECT	Percent Environmental Commitments Inspection Reports Submitted
SELECT	Percent Environmental Commitments In Compliance
SELECT	Percent Corrective Actions Completed Within Seven Days
SELECT	T & E Species Summary Report

Reporting Commitments when Completed



Project Close-Out Report - PLATTE RIVER TO US-81

District: 4
 Control Number: 42302
 Project Number: STPD-92-d(107)

Environmental Compliance Oversight Inspection

Documentation	Date Satisfied	One-Time	Seasonal
Is a complete notice posted in a publicly accessible location near where the construction activity is underway? Notice must include a copy of Discharge Authorization Notice (DAN), SWPPP Location and Contact Person with Phone Number.	2/14/2014	N	N
Is the SWPPP available for review during normal business hours? Document the SWPPP location in the Notes field.	2/14/2014	N	N
Are inspection reports current and complete? Reports should cover all disturbed areas and must include findings of inspection and the corrective actions required.	2/14/2014	N	N
Is there a Spill Prevention Plan on-site?	2/14/2014	N	N
Have borrow, waste, or plant site approvals been acquired?	2/14/2014	N	N
Temporary Erosion Control Plan	Date Satisfied	One-Time	Seasonal
Are the locations and installation/removal dates, of erosion and sediment control measures, documented on the Temporary Erosion and Sediment Control Plan?	2/14/2014	N	N
Are the following dates recorded: 1)Dates when grading occurred 2) Dates when construction activities temporarily or permanently ceased on a portion of the site.	2/14/2014	N	N
Are material stockpiles documented on the Temporary Erosion and Sediment Control Plan?	2/14/2014	N	N

NDOR Certified Erosion Control Inspector List

- ❖ NDOR requires inspectors to be certified in the Erosion Control Inspector Certification Program.
- ❖ The list of certified inspectors is managed through ECODatabase. A link to the database is available on NDOR's Environmental Website.
- ❖ Inspector ID's automatically populate the inspection report.
- ❖ The system issues notifications to individuals through email when their certification is about to expire. The notice contains a web link to the UNL-LTAP training site so they can re-certify.

NDOR Certified Erosion & Sediment Control Inspectors

Last name:

Agency/Company:

Show at most: from 0 << < > >>

[Refresh this list](#)

Last name	First name	Middle Initial	Certification ID#	Agency/Company	Exam date	Recertification date	Exam town
Lierman	Rich		0112	D1 NDOR	3/26/2014	3/26/2019	ONLINE COURSE
Klaus	Ronald		0115	D1 NDOR	3/21/2014	3/21/2019	ONLINE COURSE
Lee	Jason		0137	D1 NDOR	3/20/2014	3/20/2019	ONLINE COURSE
Knutson	Dewaine		0261	D1 NDOR	3/20/2014	3/20/2019	ONLINE COURSE
Hobelman	Ryan		0263	D1 NDOR	3/20/2014	3/20/2019	ONLINE COURSE
McCoy	Tim		0274	D1 NDOR	3/20/2014	3/20/2019	ONLINE COURSE
Schoen	Brian		0106	D1 NDOR	3/20/2014	3/20/2019	ONLINE COURSE

Online Training is
Now Available.

Down the road....

- ❖ Maintenance Facilities – Environmental Inspections
 - ❖ Tank Inspections
 - ❖ SPCC etc.
 - ❖ Facility Runoff Control Plan (FRCP) Inspections
- ❖ Post Construction BMP - Maintenance Inspections
- ❖ Wetland Mitigation Sites – Inspection/Tracking

Questions?

Gabe Robertson

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