Inspections
Support Activities
Enforcement

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Water Quality Division
Outline

• Inspection Overview:
  – Introduction
  – Paperwork
  – Site Walk
  – Closing Statements

• Requirements for Support Activities
  – Concrete and asphalt batch plants

• Common Problems

• DEQ Enforcement Overview
Inspection Overview
Introduction

• Routine inspections are can be unannounced
• Follow-up inspections are typically scheduled
• Many inspections are complaints or referrals
Signage

• Is the required signage posted:
  – Copy of OKR10 authorization or NOI
  – Brief description of project
  – Local contact person
  – Location of SWP3
Paperwork

• Have you obtained coverage under OKR10
• Have you developed your SWP3
  – Have all the required elements been addressed
  – Are you familiar with the contents of your SWP3
  – Is the site map accurate
• Have you kept copies of all required documentation
SWP3 Documentation

• Inspection reports
• Corrective action reports
• Employee training

• If you have support activities:
  – Routine facility inspection
  – Quarterly visual monitoring
  – Annual Comprehensive Site Compliance Evaluation Reports (ACSCERs)
  – Numeric Effluent Limitations Monitoring (NELMs)/Discharge Monitoring Report (e-DMRs) *asphalt batch plant only*
Inspection Frequency

• Every 14 days AND within 24 hours of the end of a storm event of 0.5 inches or greater AND within 24 hours of a discharge generated by snowmelt
  – 7 days if discharging to Aquatic Resource of Concern (ARC) or an Outstanding Resource Water (ORW) or in the Lake Thunderbird watershed

• Can be reduced once per month if stabilized
  – If construction resumes, frequency resumes

• Form must be completed within 24 hours
Corrective Action

• You must implement corrective actions within 7 days if:
  – A BMP was not installed according to SWP3
  – A BMP was not installed correctly
  – A BMP needs to be repaired or replaced
  – BMPs are not sufficient
  – Prohibited discharge or exceedance (asphalt batch plants)
Corrective Action Report

• Within 24 hours, document:
  – Triggering condition and nature of condition
  – Date and time of condition and how it was identified

• Within 7 days of discovery document:
  – Any follow up actions
  – Summary of modifications and date they will be completed
  – Whether SWP3 modifications are needed
  – Certification statement
Employee Training

• Prior to earth-disturbing or pollutant generating activities, training must be provided for personnel that are responsible for:
  – Design, installation, maintenance and/or repair of BMPs
  – Application and storage of chemicals
  – Inspections and/or corrective actions
Employee Training

- Personnel must be trained in the following if related to job duties:
  - Location of all BMPs and how they are to be maintained
  - Proper procedures in regard to pollution prevention requirements
  - When and how to conduct inspections, record findings, and corrective actions
Site Walk
What do we want to see?

• Areas cleared, graded, excavated without stabilization
• Areas that have been stabilized
• Material, waste, borrow, and maintenance areas, and equipment storage
• Areas where stormwater typically flows
• All stormwater controls
• All points of discharge, including exit points
What are we looking for?

• Are there conditions that could lead to leaks, spills, etc.
• Are all BMPs and installed correctly and operational
• Are additional controls needed
• Are there signs of erosion or sedimentation
• Any incidents of noncompliance
What if a discharge is occurring?

- Identify points of discharge
- Observe and document discharge:
  - Color, odor, floating/settled/suspended solids, foam, oil sheen, etc.
- Are controls operating effectively
- Initiate corrective action if needed
Closing Statements

• Review any issues that were observed during the inspections
  – Discuss corrective actions if needed
  – Schedule follow-up inspection if needed

• Sign inspection form

• You will receive a hardcopy of the inspection form
Support Activities
Support Activities

• Concrete batch plant
  – Requires mobile batch plant permit (OKGMT)

• Asphalt batch plant
OKG11MT???

• OKG11MT is a general permit issued by DEQ. Each General permit Authorization is tied to a specific mobile concrete batch plant.

• Every mobile concrete batch plant operating in Oklahoma should have this permit.

• What does it allow?

• How can this affect my job site?
What does the OKG11MT allow

• Allows a mobile concrete batch plant to operate at a temporary job site.

• Construct & operate total retention surface impoundment for their industrial wastewater

• Land apply their industrial wastewater
OKG11MT Industrial Wastewater

• Wastewater is considered industrial wastewater if it is associated with the follow activities:
  – Mix plant operation clean up (if dry brush method is not used)
  – Truck mixer drum washout
  – External truck wash & oil spray down
• Industrial wastewater for this permit is stored in temporary total retention surface impoundments.
• Any water (example: stormwater) that mixes or comingles with industrial wastewater is now considered industrial wastewater.
OKG11MT Land Application

• Industrial wastewater from the OKG11MT permit may be used for dust suppression at a job site if it meets the following requirements:
  – Wastewater should be inspected first.
    • No oil sheen
    • pH between 6.5 – 9.0 s.u.
  – No land application if within 2 feet of seasonal groundwater.
  – No land application when it is precipitating.
  – No land application when the soil is saturated or frozen.
  – No runoff from land application.
OKG11MT Closure Requirements and Relocation

• The owner/operator of the authorization must close all temporary impoundment associated with industrial wastewater within fifteen (15) days of moving/relocating the mobile batch plant.

• The owner/operator must submit a affidavit of closure to DEQ within ten (10) days of completion of closure.

• The permittee shall notify DEQ within seven (7) days each time the batch plant is moved.
  – Form 616-G11MTR found on DEQ’s website.
Addendum F of OKR10

- Routine facility inspections
- Monitoring
  - Quarterly visual monitoring
  - Numeric effluent limitation monitoring (NELM)
- Annual Comprehensive Site Compliance Evaluation Report (ACSCERs)
- Employee training
- Other controls
Routine Facility Inspections

• Must inspect all areas of the facility where industrial materials or activities are exposed to stormwater
• Correct deficiencies as soon as practicable, but no later than 14 days of inspection
• Document the results of your inspection and any corrective actions
Corrective Actions

• You must review and revise your BMPs if:
  – Prohibited discharge or exceedance occurs
  – Your BMPs are insufficient or modifications are needed to meet permit requirements
  – Controls are not being properly operated or maintained
• Modifications must be made before the next storm event if possible
• Within 14 days, you must document any corrective actions taken
Monitoring Requirements

• Must be performed on storm event that:
  – results in discharge from your site
  – follows the preceding measurable storm event by at least 72 hours

• A ‘measurable’ rain event is defined as at least 0.1”
Quarterly Visual Monitoring

- Once per quarter
- Conducted during daylight hours
- Must be collected within first 30 minutes of discharge
- Table F-1 Visual Monitoring
<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>METHOD</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color and Extent</td>
<td>Visual</td>
<td>Clear, yellow, red, blue, green, brown, black, milky, etc.</td>
</tr>
<tr>
<td>Odor</td>
<td>Smell</td>
<td>None, earthy, sewage, musky, rotten eggs, petroleum, etc.</td>
</tr>
</tbody>
</table>
| Clarity or turbidity              | Come up with your own test such as: remove label from 2-liter clear plastic bottle, fill the bottle with the sample, and try to see things through it | 1) can’t see through the bottle  
2) Can see through but cannot read newsprint  
3) Can see through and can read newsprint  
4) Pretty clear, but not as clear as bottled water  
5) As clear as bottled water |
| Floating solids                   | Visual          | Yes/no-describe                                                         |
| Settled solids                    | Use same 2-liter bottle | Tablespoons or cups of material or millimeters of solids on bottom after 24 hours |
| Suspended solids                  | Look through containers | What do you see?                                                        |
| Foam                              | Visual          | Yes/no-how thick is the form? How much of the surface does it cover? What color is the foam? |
| Oil sheen                         | Visual          | Color and extent                                                         |
| Other obvious indicators of stormwater pollution | Indicate what you observed that would lead a reasonable person to believe that the stormwater was polluted | Tell it like you see it |
Numeric Effluent Limitation Monitoring (NELMs)

- Applies only to asphalt batch plant
- Must be done at least once per year

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
<th>MONITORING FREQUENCY</th>
<th>SAMPLE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Suspended Solids</td>
<td>23 mg/L, daily max. 15 mg/L, 30-day avg.</td>
<td>1/year</td>
<td>Grab</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>15 mg/L, daily max. 10 mg/L, 30-day avg.</td>
<td>1/year</td>
<td>Grab</td>
</tr>
<tr>
<td>pH</td>
<td>6.5-9.0, min. and max.</td>
<td>1/year</td>
<td>Grab</td>
</tr>
</tbody>
</table>

Table 3.1 Numeric Effluent Limitations for Asphalt Batch Plants
NELMs

• For each rainfall monitoring event, document:
  – Date and duration (in hours) of storm event
  – Rainfall measurements (in inches)
  – Time (in days) since previous measurable storm event
  – Estimate of total volume (in gallons) of discharge sample

• For snowmelt monitoring, identify date of sampling
NELMs

• If you exceed any of the effluent limits:
  – Conduct follow-up monitoring within 30 days, or during the next qualifying runoff event
  – Monitoring must be conducted for the pollutant(s) that exceeded
  – Continue to monitoring, at least quarterly, until you meet the effluent limit(s)
# Chain of Custody Record

## Client Information
- **Company Name:** Oklahoma DEGWAD
- **Contact Name:** Brandon Tyler
- **Address:** 707 N. Robinson
  - P.O. Box 1677
  - OKC, OK 73101
- **City, State, Zip:**
- **Phone Number:**
- **Fax Number:**
- **Email Address:**

## Billing Information
- **PO Number:**
- **Project Name/Number:** WQD - Holly West
- **Quote Number:**
- **Sampler’s Signature:**
- **Required QC Level:**
- **Bill Monthly:** Yes
- **Shipping Method:** UPS / FedEx / Airborne
  - DHL / GCT / Hand / Mail
  - (Rush turn times with surcharge and must be pre-approved by lab)

## Which Regulations Apply?
- [ ] RCRA
- [ ] POTW
- [ ] NPDSS
- [ ] USDA/FDA
- [ ] RECAP/RISC

## Matrix Code:
- [ ] AQ = Aquifer
- [ ] DW = Drinking
- [ ] WW = Waste
- [ ] MW = Monit. Well
- [ ] LQ = Liquid
- [ ] SOL = Solid

## Sample ID/Description
- **001 - 1**
  - **Date:** 12/14/16 07:00
  - **Type:** C
  - **Matrix:** LWW
  - **Quantity:** 1
  - **Test:** pH
  - **Result:** 8.4

- **001 - 2**
  - **Date:** 12/14/16 07:10
  - **Type:** G
  - **Matrix:** LWW
  - **Quantity:** 1
  - **Test:** pH
  - **Result:** 8.4

- **001 - 3**
  - **Date:** 12/14/16 07:10
  - **Type:** G
  - **Matrix:** LWW
  - **Quantity:** 1
  - **Test:** pH
  - **Result:** 8.4

## Relinquished by:
- **Brandon Tyler**

## Field Notes:
- **Received on Ice:** Yes
- **Temp:** 4°C

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All samples submitted to Green Country Testing for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples.

Green Country Testing reserves the right to return unused sample portions.

Green Country Testing
6825 East 38th Street, Tulsa, OK 74145
918-538-3977 • Fax (918) 528-7756

Part 1 - Laboratory Copy  Part 2 - Report Copy  Part 3 - Client’s Temporary Copy
Substantially Identical Outfalls

• Applies to outfalls with substantially identical effluents
• Must monitor outfalls on a rotating basis
• Applies only to visual monitoring
Substantially Identical Outfalls

• Must document each outfall and the rational for determination including:
  – Location of outfalls
  – Why the discharges are similar
    • Industrial activities, pollutants expected to be present, etc.
  – Estimates of site of drainage areas
  – Estimates of runoff coefficient of drainage areas
ACSCERs/Employee Training

- ACSCERs due March 1\textsuperscript{st}
- Your stormwater employee training program must include:
  - Spill response, good housekeeping, and material management practices
  - Identify periodic dates for training (e.g. every 6 months)
Other Controls

- Good housekeeping
- Minimizing exposure
- Preventative maintenance
- Final stabilization
- Spill prevention
Site Walk and Common Problems
Signage
SWP3 and Documentation

• Is the SWP3 developed, signed and certified
• Is the operator familiar with the contents
• Is the site map accurate
• Are inspections and corrective actions being conducted and documented
Site Map

IRONSTONE PHASE TWO

CURLEX
SILT FENCE
WASH OUT
INLETS

DISTANCE

DEPARTMENT OF ENVIRONMENTAL QUALITY
Disturbed Areas

• Have they been inactive for more than 14 days?
  – 7 days in certain areas

• Are perimeter controls in place?
Material Storage/Staging Areas

• Is there evidence of spills or leaks?
• Are spill kits available?
• Equipment maintenance?
Material Storage/Staging Areas
Material Storage/Staging Areas
New Requirements

• Waste container lids or covers must be implemented and kept closed when project is inactive (Part 3.3.3.B.3.e(1))
Soil Stockpiles
New Requirements

• Temporary stabilization must be implemented on stockpiles (Part 3.3.2)
Areas Where Stormwater Flows
Areas Where Stormwater Flows
Areas Where Stormwater Flows
Discharge Points
Discharge Points
Discharge Points
Discharge Points
Discharge Points
Inlet Protection
Inlet Protection
Common Problems

- BMP installation, maintenance, etc.
- Stabilization
- Buffers
- De-watering
- Concrete washout
Are BMPs installed correctly?
Are BMPs installed correctly?
Are BMPs installed correctly?
Are they functioning as intended?
Are they functioning as intended?
Or do they need maintenance?
BMP Maintenance
Or do they need maintenance?
Are they adequate for the flow/velocity?
Placement
Placement
Is Silt Fence Adequate?

• Depends on:
  – Soil type, slope, rainfall, etc.
  – Installation
    • Failure to trench, backfill and compact
    • Inadequately attached to post
  – Placement
    • Perimeter vs piece-meal
    • Long straight runs vs. short curves or J-hooks
  – Maintenance
Ponding height max. 24”

POST SPACING:
7’ max. on open runs
4’ max. on pooling areas

Attach fabric to upstream side of post

FLOW

Drive over each side of silt fence 2 to 4 times with device exerting 60 p.s.i. or greater

100% compaction

POST DEPTH:
As much below ground as fabric above ground

100% compaction
Is Silt Fence Adequate?

• In general, 100 ft of silt fence can handle stormwater from approximate 0.25 acres of disturbed land.
Is Silt Fence Adequate?

• Installing silt fence along property boundaries produces ‘concentrated’ runoff
• If your silt fence is over-topping after a moderate rain event, additional controls may be needed
• Silt fence is not appropriate for areas with active flow
Stabilization
Stabilization

• Stabilization must be implemented when work has ceased for 14 or more calendar days
  – Can be temporary or permanent cessation
• ‘Immediately’ means as soon as practicable but no later than the end of the next work day
• Installation must be completed no later than 14 days after initiation
• Requirements are reduced to 7 days in certain areas
Stabilization
New Requirements

• Large bare area is now defined as an area with 10ft$^2$ or more with no perennial vegetative cover established (Part 3.3.2.B.1.a and Part 8)
Addendum H-Buffers

• If your project is adjacent Waters of the State:
  – You must maintain 50 feet of (100 feet in certain areas) natural buffer

• Measured from top of the bank to disturbed portion of your site

• Can use equivalent controls if vegetative buffer can’t be maintained
Buffers
De-watering
De-watering

• No discharge of visible floating solids or foam
• Use an oil-water separator or other filtration device
• If possible, use vegetated, upland areas to infiltrate discharge
• Use velocity dissipation at discharge points
Concrete Washout
Concrete Washout

• Do not dump into storm sewers!
• Direct wash water into a leak-proof container or pit
  – Must be designed so that no overflows occur due to inadequate sizing or precipitation
• If overflow or discharge occurs, cleanup immediately
• Locate washout as far away as possible from stormwater inlets and/or conveyances
Stormwater BMPs
Enforcement Overview
Routine → Inspection → Follow-up → NOV → CO

Referral → Inspection → Follow-up → ECO
## Enforcement Summary

<table>
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<tr>
<th>Fiscal Year</th>
<th>NOVs</th>
<th>ECOs</th>
<th>COs</th>
<th>Penalties/SEPs</th>
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<td>2010</td>
<td>40</td>
<td>-</td>
<td>7</td>
<td>$84,850*</td>
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<tr>
<td>2011</td>
<td>13</td>
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<td>4</td>
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<td>28</td>
<td>1</td>
<td>4</td>
<td>$33,250</td>
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<tr>
<td>2017</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>$30,300</td>
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*50,000 Supplemental Environmental Project (SEP)
Questions, Comments, Discussion
Workshop Survey

https://www.surveymonkey.com/r/5PMKSYS