#### NPDES: After the N.O.T. – What's Next?

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#### **Apex Quick Facts**

- Privately-held company with 30year history of customer satisfaction
- 700+ employees in nearly 50 offices nationwide
- Full suite of professional and field environmental services serving over 2,000 clients across the US each year



NPDES: After the Notice of Termination (N.O.T.) – What's Next?

**N**ational

**P**ollutant

Discharge

**E**limination

**S**ystem

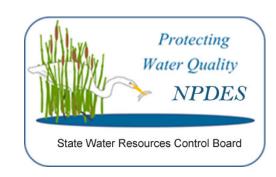


## General Construction Permit – Steps during Construction

- Develop
   Stormwater
   Pollution
   Prevention Plan
   (SWPPP)
- Notice of Intent
- Manage SWPPP
- Inspections
- Plan changes
- BMP maintenance
- Repeat

#### **Notice of Termination**

- Inspection
- Stabilization
- All temporary Best Management Practices (BMPs) removed
- All permanent BMPs cleaned
- Long-term maintenance plan in place for permanent BMPs



#### Did You Know?

The EPA, through the NPDES, has post-construction stormwater maintenance requirements

#### **EPA Post-Construction Minimum Control**

#### Minimum Federal Requirements

- Possess an ordinance or other regulatory mechanism requiring the implementation of post-construction runoff controls to the extent allowable under state, tribal, or local law
- Develop and implement strategies which include a combination of structural and/or non-structural BMPs
- Ensure adequate long-term operation and maintenance of controls
- Determine the appropriate BMPs and measurable goals for this minimum control measure

## Examples of Local Regulatory N.O.T Requirements - VA

General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10)s

- 4. Reason for Terminating Coverage Under the General Permit: (The operator shall submit an N.O.T. after one or more of the following conditions have been met.)
  - A. Necessary permanent control measures included in the SWPPP for the site are in place and functioning effectively and final stabilization has been achieved on all portions of the site for which the operator is responsible. When applicable, long-term responsibility and maintenance requirements for permanent control measures shall be recorded in the local land records prior to the submission of a notice of termination;
  - B. Another operator has assumed control over all areas of the site that have not been finally stabilized and obtained coverage for the ongoing discharge;
  - C. Coverage under an alternative VPDES or state permit has been obtained; or
  - D. For residential construction only, temporary soil stabilization has been completed and the residence has been transferred to the homeowner.

### Examples of Local Regulatory N.O.T Requirements - VA

General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10)

5. Permanent Control Measures Installed: (When applicable, a list of the on-site and off-site permanent control measures (both structural and non-structural) that were installed to comply with the stormwater management technical criteria. Attach a separate list if additional space is needed.)

## Examples of Local Regulatory N.O.T. Requirements - CA

#### IV. BASIS OF TERMINATION – of NPDES Permit

- 1. The construction project is complete and the following conditions have been met.
  - All elements of the SWPPP have been completed.
  - Construction materials and waste have been disposed of properly.
  - The site is in compliance with all local stormwater management requirements.
  - A post-construction stormwater operation and management is in place.

### Examples of Local Regulatory N.O.T Requirements - CA

#### IV. BASIS OF TERMINATION – of NPDES Permit

- 2. Construction activities have been suspended, either temporarily or indefinitely and the following conditions have been met.
  - All elements of the SWPPP have been completed.
  - Construction materials and waste have been disposed of properly.
  - All denuded areas and other areas of potential erosion are stabilized.
  - An operation and maintenance plan for erosion and sediment control is in place.
  - The site is in compliance with all local stormwater management requirements.

To Whom It May Concern:

Kent Conservation District recently performed our annual inspection of the storm water facility at the above referenced address. During our inspection, the following items were noted and our office request the following items be performed:

On the south end of the building there is a stormwater facility. Very near to this facility, there is a garbage dumpster. This dumpster is leaking and trash is finding its way into the stormdrain. There are collected sediments on the pavement in the area of this stormdrain. This matter needs to be resolved and the sediment removed from the pavement. Any collected sediments in the pipe system also need to be removed.

The approved plan for this location was approved on July 10, 2002, by Kent Conservation District. The approved plan requires that the facility by maintained per the DE Sediment and Stormwater Regulations. We will be performing a follow up inspection to ensure compliance within 60 days.

Please call my office upon receiving this correspondence, to schedule a meeting so that I may provide you with technical assistance and a better understanding of that work that needs to be completed.

Local Enforcement Efforts

Kent Conservation District, Delaware

Dear Permittee.

By letter dated 07/07/2010 you were advised that a condition of the permit for the above referenced project requires that you submit an inspection report to the District in accordance with a specific schedule. To date, this information has not been provided. Failure to submit the required documents is a violation of your permit and District rules.

To bring this matter into compliance, you must submit a certified "Statement of Inspection for Proper Operation and Maintenance" form within 14 days. Your response should be directed to me at the Tampa Service office.

If this matter is not brought into compliance in a timely manner at the staff level, the case may be referred to the District's Legal Department for further enforcement action.

If you have any questions, please contact TAMPA Service Office.

Local Enforcement Efforts

Tampa, Florida

To Whom It May Concern:

The addressee above is listed as the owner of a non-point source water quality facility located in the City of Bee Cave city limits or ETJ, and you are responsible for maintenance of the facility in accordance with the City's Code of Ordinances, associated environmental and drainage criteria manuals, and approved development plans. This location was recently inspected, and a copy of the inspection report is enclosed with this letter. This water quality facility requires an annual operating permit, and any maintenance required per the inspection report attached shall be performed within 30 days of the date of this letter. Please review the permitting procedures below and submit all required information along with applicable permit fees to the City of Bee Cave's Community Services Department within 30 days of the date of this letter.

Local Enforcement Efforts

Bee Cave, Texas

Subject: Report on required maintenance for permanent storm water quality facilities

Due June 30, 2018

To the Owner(s) of 512 N Ventu Park Rd (PCID 139): 317

The developer of the subject property was required to install a permanent storm water treatment system as a condition of developing the property. This system removes pollutants from the property's storm water runoff to protect the downstream natural receiving waters. The installed system is referenced in a Covenant and Deed Restriction upon the subject property, recorded by the County of Ventura as document number 20130917-00159196-0 1/8.

Frequent maintenance of these facilities is necessary for them to operate effectively. Neglecting maintenance could result in an illegal discharge of pollution subject to fines and/or flooding due to blocked storm drains. Maintenance procedures are required by City Municipal Code Section 7-8.201(e) as a preventative measure. Please review the Deed Restriction for the site (typically found among property title documents) and follow the prescribed maintenance including equipment manufacturer's recommendations.

Local Enforcement Efforts

Thousand Oaks, California

#### NPDES N.O.T. Process

- 'Key Turnover' or final sale of property
- N.O.T. of NPDES Permit OR
- N.O.C. Notice of Change of Permit Ownership (NC)

#### All "Other Conditions" to Meet:

- Soil stabilization
- Removal of all 'temporary BMPs'
- Removal of sediment buildup
- Long-term operation plan

# Advantages of On-Site Inspection During the N.O.T.



- Regulatory EPA\*
  - Local Differences
- Property Damage
- Public Perception

One Big Box agreed to pay a \$1.3M penalty and implemented a nationwide compliance program to resolve alleged violations of the Clean Water Act. (2008)

Another Big Box agreed to pay a \$3.1M civil penalty and reduce stormwater runoff at its sites by instituting better control measures. (2004)

# Advantages of On-Site Inspection During the N.O.T.

#### **Awareness**

- Regulatory
- Property damage
- Public perception

#### **Identification**

- Types of systems
  - Above ground
  - Below ground
  - Retention
  - Detention

# **Got Stormwater?**

# Advantages of On-Site Inspection During the N.O.T.

#### **Awareness**

- Inventory
- Condition of systems
  - Neglected
  - Improperly installed

#### **Identification**

- Analyze data
  - Regulatory requirements (inspection, etc.)
  - Repair/remediation/maintenance
- Analyze budget
  - Repairs or remediation
  - Maintenance frequency

# **Got Stormwater?**

## Suggested Steps at N.O.T. Inspection

At Key Turnover to the Owner/Operator from GC or construction permit holder:

- Communicate with the site engineer to arrange a site inspection
- Inspect site for Key Turnover readiness
- Solicit recommendations from engineer and stormwater professional regarding site readiness and long-term maintenance considerations

## Suggested Steps at N.O.T. Inspection

- Have a stormwater professional attend/conduct the N.O.T. site inspection
  - Provide site inspection report
  - Provide maintenance recommendations
- Verify all local regulatory requirements for post-construction NPDES have been met
- Identify any necessary corrections to system to the GC with a timeline for correcting
- Implement system maintenance

## The Consequences...

- Forgotten temporary BMPs remain in place
- Final site clean-up is neglected
- Improperly installed BMPs are retained
- Neglect of system

#### All can cause failure of system:

- NOV Notice of Violation
- Additional expense

# Temporary BMP Examples

Temporary BMPs left in place can cause unnecessary property damage.







# Temporary BMP Examples







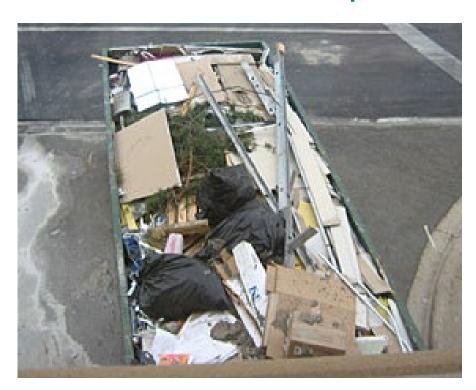


# Temporary BMP Examples





# Final Site Clean-Up Examples





# Abandoned BMPs Examples

Property development stopped due to economy. No inspections, no maintenance. *Marietta, Georgia* 







Massive erosion. No inspections, no prior maintenance. *Lafayette, Louisiana* 













Outlet to system: \$45K rehab *Lafayette, Louisiana* 

Massive erosion. No inspections, no prior maintenance. *Lafayette, Louisiana* 













\$25K proposal – declined. Unknown resolution.









City NOV issued. \$23K remediation. No maintenance EVER.









City NOV issued. \$4,500 just to remove unmanaged vegetation. No maintenance EVER.

No maintenance. Location of access.





Inconsistent maintenance, broken structures. Pubic liability issues – public perception.





### **Public Perception**

This social phenomenon is the difference between an absolute truth based on facts and a virtual truth shaped by popular opinion, media coverage and/or reputation.





# Public Perception



## Industry Research

#### **Research on Post-Construction Inspections & Maintenance**

6 Multi-site retailers (>500 locations) interviewed regarding planned maintenance and post-construction inspections:

- 3 have planned maintenance and indicated significant savings regarding planned maintenance and fewer repairs and remediations.
- 1 has recently begun the assessment phase in preparation of a post-construction stormwater planned maintenance program.
- 2 continue to have 'reactive' issues without an inspection or planned maintenance schedule—both felt that there was a larger dollar amount attached to a reactive response. Significant repair and remediation costs create a reciprocal issue with regard to budgets.

## After the N.O.T. – What Now? Wrap Up.

#### **Summary – Benefits of NOT Inspection**

- 1. Awareness of the system on-site
- 2. Identification of necessary maintenance/regulatory compliance
- 3. Inventory of all assets on site
- 4. Prevention of future remediation costs



# Thank you!

#### **Anna Griggs**

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