

Construction Academy

FDOT District 2 - Emy Delgado

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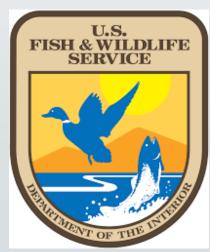
## Construction Project Manager Tips

- Communication is key
- Clearly Explain Expectations and Consequences
- Networking and Relationships
- Outreach for resources
- Acceptance vs Approval
- Visit your project when it rains!

#### What are Environmental Commitments?

- Check for verbal/written commitments
  - Design Project Manager/Team
  - Project Development & Environment (PD&E)
  - Electronic Review Comments (ERC) Review
  - Project Suite (PSEE)
- Environmental Permits
- Culture or Historical Resources
  - Archaeological monitoring during construction
- Wetland Impacts
  - Mitigation, Monitoring and/or Restoration





#### What are Environmental Commitments?

- Endangered and Protected Species
  - (Permit conditions and/or Special Provision 7-1.4)
- Results in construction requirements and/or restrictions which could occur before, during and/or after construction.















#### **Environmental Permits**

#### Permits obtained by FDOT (Contract Documents):

- United States Army Corp of Engineers (USACE) –
   Section 404
- Water Management Districts:
  - Suwannee River (SRWMD)
  - St Johns River (SJRWMD)
  - Southwest Florida (SWFWMD)
  - Northwest Florida (NWFWMD)
  - South Florida (SFWMD)
- United States Coast Guard (USCG)



US Army Corps of Engineers ®





#### Environmental Permits cont.



#### Permits obtained by the Contractor:

- Florida Department of Environmental Protection (FDEP) NPDES
   Stormwater (projects disturbing 1 or more acres) and/or Dewatering (Discharging Groundwater to Surface Water)
  - SWPPP Inspection Reports need to match the field conditions
- Water Management District Dewatering (>100,000 g/day)

A copy of all permits must be posted on the project bulletin board.

Add all permit expirations on your calendar to ensure permits do not expire before project completion.



## **SWPPP** Changes

- Design Memo 24-01 FDOT Design Manual
- Construction Memo 24-01 Structures Design Bulletin Template

	Old Method	New Method			
/	Stormwater Pollution Prevention Plan (SWPPP) Plan Sheet	Form 251-B			
	Doc Located in Roadway Plans	Located in CADD Folder/ Permit			
	Erosion Control Plan Sheets	Stormwater Runoff Control Concept (SRCC)			
	Found in Roadway Plans	Found in the CADD/ Permit Files			
	Prepared by Design	Design started the documents and Contractor will finish it.			

### Question?

When can you close out any of the permits obtained by FDOT?

#### Answer

When can any of the permits obtained by FDOT be closed out?

Once the authorized work listed in the permit is complete or at the end of the construction project.

#### D2 CPAC Letters – PM Resource

- Letter 3-1J Erosion Control Plan Package may include
  - ECP Summary
  - FDOT Form 650-040-03 SWPPP Inspection Report
    - Do not store Contractor's reports in FDOT's electronic system
  - FDOT Form 650-040-07 NPDES Certification
    - Required to be signed by portable toilet subcontractors
  - FDEP NPDES NOI Application & Acknowledgement Letter
  - FDEP Stormwater Training Certification
  - Construction Commencement Notifications from Contract Permits
  - Form 251-B and Stormwater Runoff Control Concept (SRCC)

#### D2 CPAC Letters – PM Resource

- Letter 12-1C3 Closeout for Permit Completion Certifications
  - Copies of permit closeout forms and email submittals saved into FDOT's electronic database for each permitting agency.
    - Refer to the permitted drawing for permitting deviations (not construction deviations)

### Question?

# When can the Contractor stop completing the SWPPP Inspection Reports?

FM# 123458-27890  CONTRACT# T9999  S.R. # SR 500  Page 1  Date of R  Amount				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STORMWATER POLLUTION PREVENTION PLAN CONSTRUCTION INSPECTION REPORT (Weekly and within 24 hrs. of the end of a storm that is 0.50 in. or greater)  Rainfall t Recorded					DAVIRONMENTAL MANAGEMENT   John O. Contracts   COMPANY NAME   1/1/2008   INSPECTION DATE   ERP90909090905   FDEP Permit #
Location of Control Measure	Approxima From	te Stations To	Lt.OrRt. Of Centerline	Active Work Zone= A Inactive Work Zone=I	Date Last Disturbed	Date of Stabilization	Control Measu res (Use Codes Below)	Current Condition (U se Codes Below)	Corrective Action or Remarks
Racetrack	0+00	988+00	Lt	A	m/d/y		6	М	Repair fence at Sta 790+75 to 823+50
Racetrack	0+00	988+00	Rt	Α	m/d/v		6	S	
3-1	25+00	25+00	Lt	Α	m/d/y		6 & 7	S	
S-2	25+00	25+00	Rt	Α	m/d/y		6 & 7	S	
3-3	250+00	250+00	Lt	Α	m/d/y		6 & 7	S	
-4	250+00	250+00	Rt	Α	m/d/y		6 & 7	M	Bales need attention
-5	375+00	375+00	Lt	Α	m/d/y		6 & 7	S	
-6	375+00	375+00	Rt	Α	m/d/y		6 & 7	S	
6-7	425+00	425+00	Lt	Α	m/d/y		6 & 7	S	
I certify under penalty of lawthat 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 kin o wledge 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.  All maintenance operations needed to assure proper operation of all controls, BMPs, practices, or measures identified in the Stormwater Pollution Prevention Plan shall be done in a timely manner, but in no case later than 7 calendar days to llowing the inspection. The signature belo walso shall certify that this facility is in compliance with the Stormwater Prevention Plan and the State of Florida Generic Permit br Stormwater Prevention Plan and the State of Florida Generic Permit br Stormwater Orschaffes of non-compliance identified above.				m 1. Tempor 2. Perman 3. Tempor 4. Artificial to 6. Buffer 2 to 6. Sift Fen m 7. Hay Bal 8. S. 10. Sen m 11. Flumes 12. Pipe Sk. 13. Ditch Li 14. Rock Be 15. The por 17. Sedimen or 18. Tempor 17. Sedimen or 17. Sedimen or 18. Tempor 17. Sedimen or 18. Tempor	1. Temporary Grassing   19. Storm Inlet Sediment Trap   2. Permanent Plant, Sod, or Seed   20. Stone Outlet Structure   3. Temporary Mulching   21. Curbs and Gutters   4. Artificial Covering   22. Storm Sewers   5. Buffer Zone   23. Velocity Control Devices   6. Silt Fence   24. Turbidity Barrier   7. Hay Bales   25. Haul Roads Dampened for Dust Control Search   8. Sand Bagging   26. Cleanup of Possible Contamination   27. Telegrape   28. Telegrape   28. Telegrape   29. Telegrape   29. Telegrape   29. Telegrape   29. Telegrape   29. Telegrape   20. Telegrape   29. Telegrape   20. Telegrape   20. Telegrape   21. Telegrape   22. Telegrape   23. Telegrape   24. Turbidity Barrier   25. Telegrape   26. Telegrape   27. Telegrape   28. Telegrape   29. Telegrape				S Stable (no action)
		onsible Authority)		Signa Certif	cation #. 3069		art    #12 of the per		Date Certifed: 1/23/06

#### Answer

When can the Contractor stop completing the SWPPP Inspection Reports?

Once the Contractor has filed the Notice of Termination (NOT) with FDEP.



#### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER NOTICE OF TERMINATION (RULE 62-621.300(6), F.A.C.)

You must use this form to terminate coverage under the Generic Permit for Stormwater Discharge from Large and Small Construction Activities provided in subsection 62-621.300(4), F.A.C., the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity provided in subsection 62-621.300(5), F.A.C. as well as the conditional exclusion for "no exposure" of industrial activities and materials to stormwater provided in paragraph 62-620.100(2)(o), F.A.C.

All information provided on this form shall be typed or printed in ink.

#### D2 Contractor's Submittals – PM Resource

- Section 3 Erosion Control Plan Summary Template
  - Section 3a NPDES SWPPP Inspection Report (disturbing ≥1 acre)
  - Section 3a Duly Authorized Representative (disturbing ≥1 acre)
  - Section 3c FDEP NPDES Notice of Change
- Section 10 Request DHR to Review Proposed Borrow Pit Site
  - Section 10a Request for Endangered Species Inspection of the Proposed Borrow Pit Site
- Section 18 Disposal of Waste Oil

Link: Contractor Submittal Package Menu (fdot.gov)

#### Common Additional Plan Submittals

- Exposed Erodible Earth Plan
  - Spec 104-6.1 750,000 square feet (about 13 football fields)
  - Must include temporary drainage and treatment
- Water Diversion Plan
  - Must include methods to keep sediment from downstream
- Demolition Plan
  - Must include methods to keep sediment and all types of debris from entering the waterway
- Hurricane Plan
  - June 1<sup>st</sup> to November 30<sup>th</sup>

#### Bulk Oil Containers EPA 40 CFR 112

- If/when total aboveground storage capacity of the construction site is 1,320 gallons of oil or more
  - The Contractor must complete and implement a <u>Spill Prevention Control and</u> <u>Countermeasure Plan (SPCC Plan)</u>
- Amount includes cumulative capacity of all containers 55 gallons and greater
- Quantities do not include mobile transfer fueling trucks and oil trucks which
   /are occupied on a daily use.
- Construction site includes the entire project limits, including all off-site areas used for the project
- Purpose to develop plans designed to prevent oil discharges from reaching navigable waters of the U.S. and adjoining shorelines
- "Oil" defined as:
  - Petroleum and non-petroleum based, Crude oil
  - Refined products (gasoline, on road and off-road diesel, new motor oil)
  - Waste oil, Hydraulic oil, Animal fats and vegetable oils
- Contractor must provide a copy of the SPCC plan to the Project Manager and post it on project bulletin board.





#### Bulk Oil Containers EPA 40 CFR 112 Cont.

- Electronic Code of Federal Regulations <a href="http://www.ecfr.gov/cgi-bin/text-idx?SID=e7d92f87b15501e639071c4f1a9fc975&mc=true&node=pt40.24.11">http://www.ecfr.gov/cgi-bin/text-idx?SID=e7d92f87b15501e639071c4f1a9fc975&mc=true&node=pt40.24.11</a> <a href="https://www.ecfr.gov/cgi-bin/text-idx?SID=e7d92f87b15501e639071c4f1a9fc975&mc=true&node=pt40.24.11">https://www.ecfr.gov/cgi-bin/text-idx?SID=e7d92f87b15501e639071c4f1a9fc975&mc=true&node=pt40.24.11</a>
- EPA Guidance (See Chapter 4)
  <a href="https://www.epa.gov/sites/production/files/2014-04/documents/spcc guidance fulltext 2014.pdf">https://www.epa.gov/sites/production/files/2014-04/documents/spcc guidance fulltext 2014.pdf</a>
- ► FDEP Tank Compliance <a href="https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-compliance">https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-compliance</a>
- Step by Step SPCC Plan
  <a href="https://www.epa.gov/sites/production/files/2013-08/documents/qf">https://www.epa.gov/sites/production/files/2013-08/documents/qf</a> app guidance 0.pdf



## Pollution Notification Chapter 403 Section 076 F.S.

- **Reportable pollution release** is defined as "the release or discharge of a substance from an installation to the air, land, or waters of the state".
- Includes any unauthorized spill from sanitary sewer, petroleum, oil and many others.
- The reportable limits are spills <u>5 gallons or greater on any type of surface and any quantity into surface waters</u>. This law also proceeds the reporting requirements from the FDEP Construction Generic Permit (CGP) for projects disturbing more than an acre for coverage under the National Pollutant Discharge Elimination System (NPDES).
- Contractor (and each of their subcontractors) shall be responsible for a reportable pollution release to all parties within 24 hours from the time the discharge begins:
  - The Florida Department of Environmental Protection (FDEP) at <a href="https://floridadep.gov/pollutionnotice">https://floridadep.gov/pollutionnotice</a>
  - Division of Emergency Management State Watch Office (SWO) (800-320-0519 or 850-413-9911)
  - CEI
- Section 403.076-078 F.S. Public Notice of Pollution Act <a href="http://laws.flrules.org/2017/95">http://laws.flrules.org/2017/95</a>

## Question?

Who is responsible for reporting a fuel or oil spill that occurs on a construction site?



#### Answer

Who is responsible for reporting a fuel or oil spill that occurs on a construction site?

- Owner/Driver that caused the spill
  - ■If owner not responsive → Contractor
  - ■If Contractor not responsive → CEI/FDOT

### Contamination

#### **Common Types:**

- Soil and Groundwater
  - Solvents
  - Petroleum
  - PFAS/PFOS
- Paint wash water & blast media
- Asbestos
- Ash (COJ)
- EzBase
- Treated Timbers
- Arsenic

## Common Types of Disposal Documentation:

- Manifest
- Weight Tickets
- Transfer of Ownership Agreements



## Question?

What information is needed when a spill occurs?

#### Answer

What information is needed when a spill occurs?

- Photos of spill, wreckage, truck
- Vehicle information:
  - US DOT #, license plate #, truck #
- Driver information:
  - Insurance company contact
  - Contractor clean-up company
- Copy of accident report
- Spill Material & Quantity



### Question?

Can a contractor .....

Place a Transite pipe out of service in FDOT row?

Drive a foundation through the Transite pipe in FDOT ROW?

Crush the Transite pipe in FDOT ROW?



#### Answer

Can a contractor .....

Place a Transite pipe out of service in FDOT row?

Drive a foundation through the Transite pipe in FDOT ROW? NO

Crush the Transite pipe in FDOT ROW? NO

## Best Management Practices (BMP's)

#### **Common issues:**

- Not installed properly
  - Silt Fence not trenched in
  - Floating Turbidity Curtain gaps in between segments
- Not maintained properly
  - Cannot use tape
- Not replaced properly
  - Silt Fence not correctly spliced



Refer to Spec 104-6.2 for installation and application of BMP's

https://www.fdot.gov/programmanagement/Implemented/URLinSpecs/FLErosionSedimentManual.shtm

#### Location Awareness

- Fuel Tanks
- Port-A-Lets
- Stockpiles
- Generators / dewatering pumps
- Chemical drums/totes
- Trash dumpsters







## Chemical BMP's

#### **Common types:**

- Alum (lowers pH)
- Polymers/ Polyacrylamides
- Floc Logs
- Chitosan

Construction team must ensure Contractor is taking pH readings when applying types of chemical treatment.

Note: Introducing a form of agitation gives better results.



## Surface Water Quality Standards Rule 62-302.530 F.A.C.

- Collect Turbidity Samples
  - Observations
  - Dewatering Activities
    - Establish Natural Background prior to discharging
  - Waterway Impacts



- Calibrate Daily
- Don't guess ntu, collect a sample
- Perform joint sampling w/Contractor

- Turbidity Monitoring
  - Natural Background is usually <15 NTU</p>
  - Background Sampling (≤ 29 NTU)
  - Project Limits
  - Point of Discharge
  - Locations
  - Sampling Frequency

(= Z / 1410)											
TURBIDITY MONITORING LOG											
Financial Number: FAP Number: Project Description:	Financial Number: Contract Number:  FAP Number: County:										
Date:	Inspector:										
Time:	me: Condition										
Locations	Compliance Circle one	Up Stream NTU's	Mid Stream NTU's (work area)	Down Stream NTU's	Difference in NTU'S	Comments					
	YES / NO										
	YES / NO										

- Waters of the State
  - Compliance for all water classifications ≤ 29 NTU
- Outstanding Florida Waters (OFW)
  - Zero NTU's

#### **CPPR Process & Documentation**

#### Pre-Construction Meeting Agendas/Minutes

Set the initial stage for overall understanding of consequences

#### Progress Meeting Agendas/Minutes

 Document verbal communications in the meeting's minutes to use as supporting documentation in the CPPR Process

#### Daily Work Reports (DWR's)

- Document environmental field deficiencies and verbal communications made in the field.
- Joint environmental inspections are highly recommended

#### **CPPR Process**

- Use of photo log and DWR documentation to help support possible appeal
- Environmental category grade should match the field conditions

#### FDOT District 2 Construction Environmental Guide List

https://fldot.sharepoint.com/sites/D2/TransportationOperations/Construction/SitePages/Home.aspx

