

Construction Environmental Compliance

An aerial photograph showing a long bridge under construction across a wide body of water. The bridge's concrete piers are visible, extending from a construction site on the shore. The construction site includes several cranes, buildings, and a parking lot. In the foreground, there is a green area with palm trees and a small pond. The background shows a vast expanse of water and distant land.

Construction Academy
FDOT District 2 - Emy Delgado



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 (NFWFMD)
 - 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# 123456-27890
 CONTRACT # T9999
 S.R. # SR 500
 Page 1

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)

850 040-03
 ENVIRONMENTAL MANAGEMENT
 08/07
 John O. Contractor
 COMPANY NAME
 1/1/2008
 INSPECTION DATE
 FRP90909090909
 FDEP Permit #

Date of Rainfall Amount Recorded _____

Location of Control Measure	Approximate Stations		Lt. Or Rt. Of Centerline	Active Work Zone= A	Date Last Disturbed	Date of Stabilization	Control Measures (Use Codes Below)	Current Condition (Use Codes Below)	Corrective Action or Remarks
	From	To		Inactive Work Zone= I					
Racetrack	0+00	988+00	Lt	A	m/d/y		6	M	Repair fence at Sta 790+75 to 823+50
Racetrack	0+00	988+00	Rt	A	m/d/y		6	S	
S-1	25+00	25+00	Lt	A	m/d/y		6 & 7	S	
S-2	25+00	25+00	Rt	A	m/d/y		6 & 7	S	
S-3	250+00	250+00	Lt	A	m/d/y		6 & 7	S	
S-4	250+00	250+00	Rt	A	m/d/y		6 & 7	M	Bales need attention
S-5	375+00	375+00	Lt	A	m/d/y		6 & 7	S	
S-6	375+00	375+00	Rt	A	m/d/y		6 & 7	S	
S-7	425+00	425+00	Lt	A	m/d/y		6 & 7	S	

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.

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 following the inspection. The signature below also shall certify that this facility is in compliance with the Stormwater Prevention Plan and the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities if there are not any incidents of non-compliance identified above.

Name (Responsible Authority) _____
Date Signed _____

Inspector: Jack Wastewater _____
Signature: _____ Date Certified: 1/23/06
Certification # 3069
(or other qualifications as described in Part II #12 of the permit)

CONTROL MEASURE CODES

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
8. Sand Bagging	26. Cleanup of Possible Contamination
9. Berms	27. Excess Dirt Removed from Rdwy Daily
10. Diversion, Interceptor, or Perimeter Ditches	28. Geotextile
11. Flumes	29. Filter Fabric
12. Pipe Slope Drain	30. Rock Bags
13. Ditch Liner	31. Paved Road
14. Rock Bed at Construction Exit	32. Swale
15. Timber Mat or Construction Exit	33. Retention Pond
16. Rip Rap	34. Detention Pond
17. Sediment Trap	35. Tree Protection
18. Sediment Basin	36. _____
	37. _____

CONDITION CODES

U Upgrade Needed
R Replacement Needed
M Maintenance Needed
C Cleaning Needed
I Increase Measures
S Stable (no action)

Other: _____
Other: _____

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 1st to November 30th

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 Spill Prevention Control and Countermeasure Plan (SPCC Plan)
- ▶ 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 <http://www.ecfr.gov/cgi-bin/text-idx?SID=e7d92f87b15501e639071c4f1a9fc975&mc=true&node=pt40.24.112&rgn=div5>
- ▶ EPA Guidance (See Chapter 4)
https://www.epa.gov/sites/production/files/2014-04/documents/spcc_guidance_fulltext_2014.pdf
- ▶ FDEP Tank Compliance <https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-compliance>
- ▶ Step by Step SPCC Plan
https://www.epa.gov/sites/production/files/2013-08/documents/qf_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 5 gallons or greater on any type of surface and any quantity into surface waters. 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 <https://floridadep.gov/pollutionnotice>
 - ▶ 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 <http://laws.flrules.org/2017/95>

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

INCIDENT/ACCIDENT REPORT FORM					
Camper's Name				Date	
Address					
Street	City	State	Zip code		
Name of Person Involved	Last	First	Middle		

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?

NO

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
- Background Sampling (≤ 29 NTU)
- Project Limits
- Point of Discharge
- Locations
- Sampling Frequency

- Waters of the State

- Compliance for all water classifications ≤ 29 NTU

- Outstanding Florida Waters (OFW)

- Zero NTU's

TURBIDITY MONITORING LOG						
Financial Number: _____		Contract Number: _____				
FAP Number: _____		County: _____				
Project Description: _____						
Date: _____			Inspector: _____			
Time: _____			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					
	YES / NO					

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)

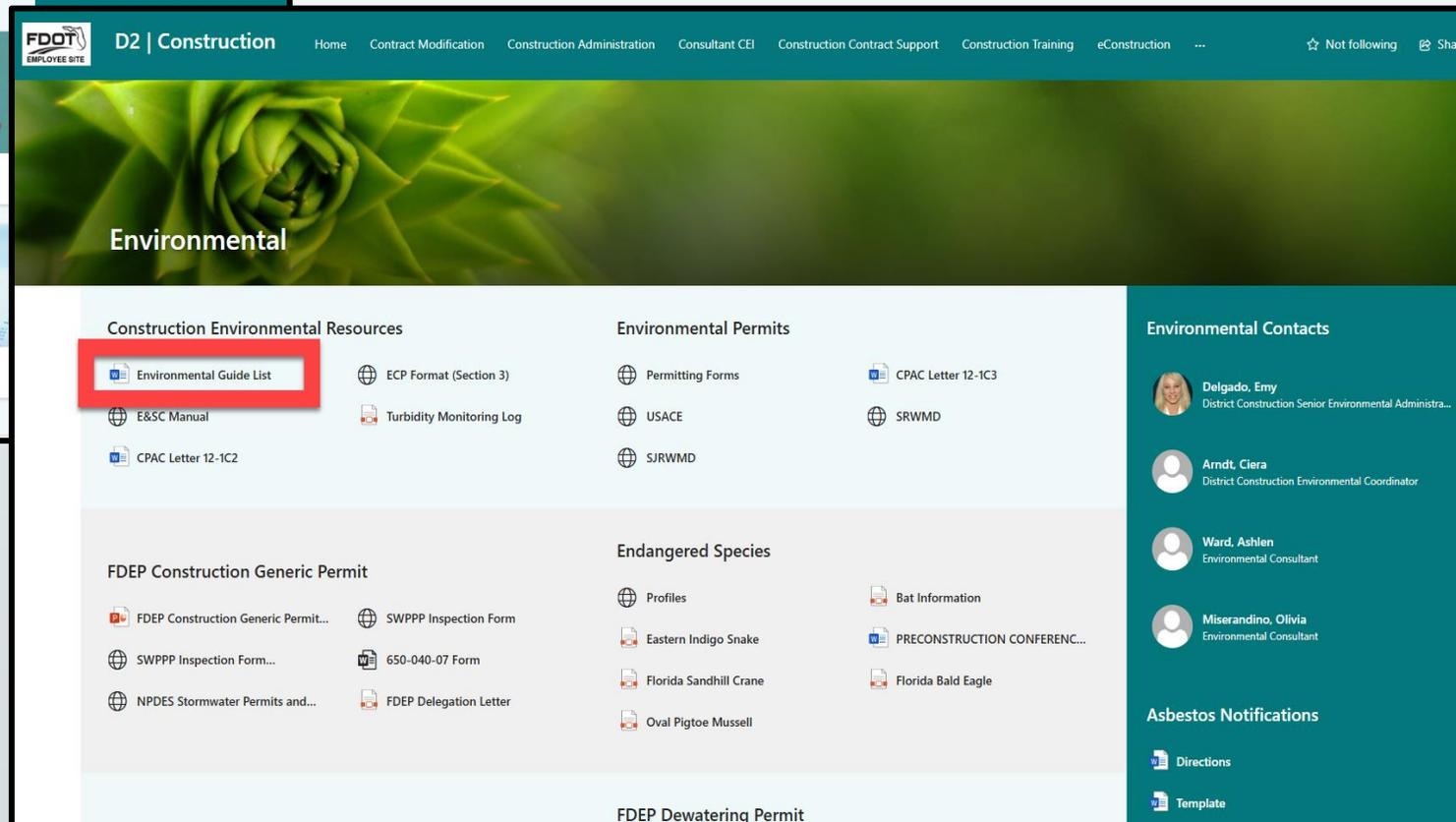
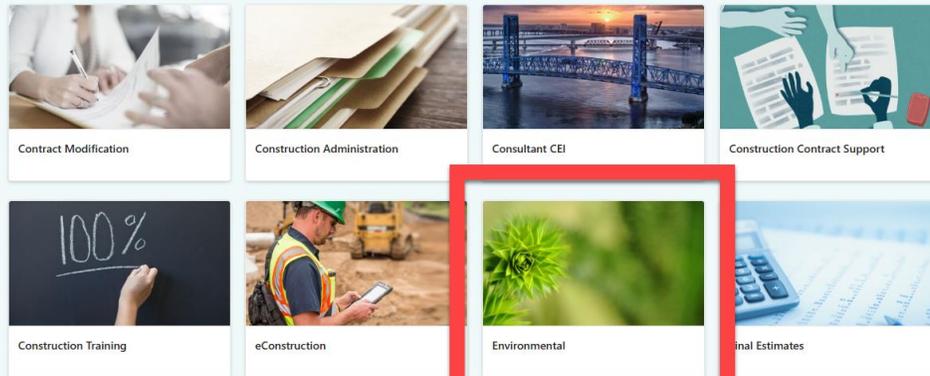
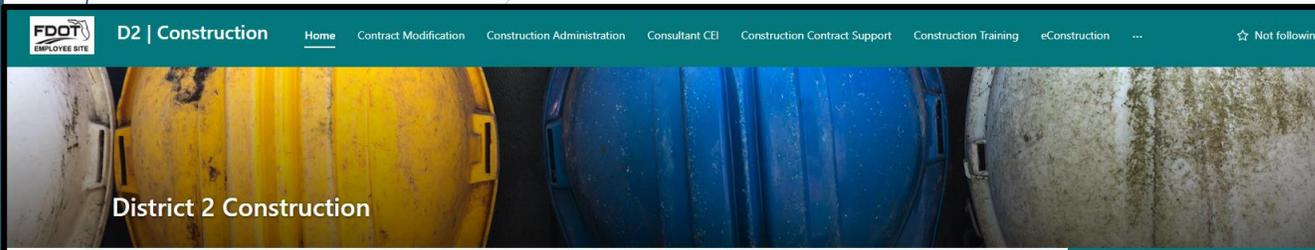
- ▶ Document environmental field deficiencies and verbal communications made in the field.
- ▶ Joint environmental inspections are highly recommended

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>



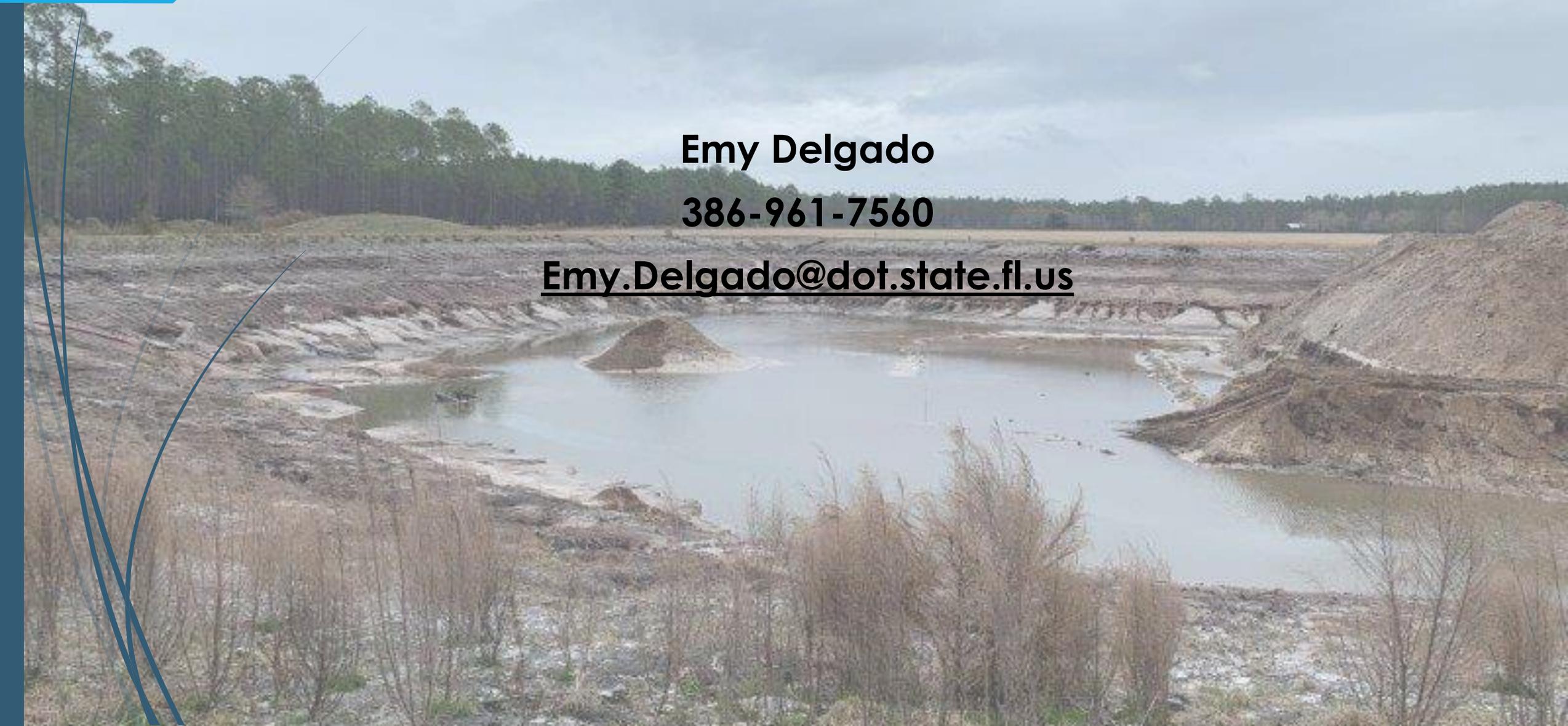


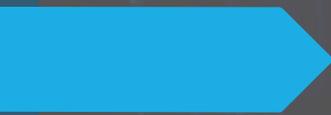
FDOT D2 Contact Information

Emy Delgado

386-961-7560

Emy.Delgado@dot.state.fl.us





QUESTIONS?

