



**Okeechobee Clean Energy Center
Environmental Construction Compliance
Training
July 10, 2017**

Agenda

- Permit Overview
- Key Areas of Focus
- Agency Inspections
- Maintaining Environmental Compliance
- Construction Staging Areas
- Takeaways
- Contacts
- Questions

To ensure permit compliance, consult your environmental construction compliance lead prior to performing any new construction activities

Permit Overview

- Site Certification- Florida Department of Environmental Protection
- NPDES- General Stormwater Permit for Construction Activities
- Activities that may require a permit
 - Water use
 - Dewatering
 - Boring
 - Additional offsite laydown/staging

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Environmental Construction Compliance focuses on all aspects of the environment

Key Areas of Focus

- Housekeeping
- Wildlife protection
- Construction Staging Area
- Storm water management / SWPPP
- Construction materials and waste management
- Spill prevention and countermeasures
- Cultural Significance
- Fugitive Dust
- Environmental training
- Permit compliance

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Everything has an appropriate place...littering is not acceptable

Housekeeping

- Covered containers and/or covered garbage bins for general waste collection should be placed throughout the site and emptied when full
- Dumpsters should be placed throughout the site, and designated for specific materials
- Containers should be closed when not in use, and clearly labeled
- No smoking areas should be identified and clearly labeled



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Our goal is to stay in compliance with all wildlife regulations associated with state and federally listed species

Wildlife

- Avoid wildlife impacts and interactions
- Vehicular traffic in designated areas only and obey speed limits at all times
- Ground disturbances must be restored
- Environmental Services will be available throughout construction in the event that a species of concern is observed



If you see dead or injured wildlife stop work in that area and call the NEE site manager immediately. Do not touch it!

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Eastern Indigo Snakes

- **Large dark blue to jet black snakes**
 - Can be up to 8 ft long
 - They are about 1 inch in diameter
- **They are not venomous**
- **They have red markings around chin**
- **Common foods include other snakes (including venomous species), frogs, small mammals, birds, and fish**
- **Can be easily confused with other black snakes, so a picture will be helpful for identification purposes**
- **Our permits require us to report sightings (location and direction the snake was moving)**



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Eastern Indigo Snakes

- Indigo snake habitat is commonly found within many transmission corridors and around substations
- NEE installs signage during construction projects when working in favorable habitat and trains contractors on what to look for
- If you see one, **STOP WORK**, notify your construction manager immediately, and call your Environmental Services contact. We are required to report sightings to applicable agencies
- These snakes can be easily confused with other black snakes, so a picture, taken from a safe distance, will be helpful for identification purposes



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Eastern Indigo Snake



- Indigo snakes will eat almost any animal that is small enough to swallow.
- They do not kill their prey by constriction, but swallow their prey alive.
- Common foods include other snakes (including venomous species), frogs, small mammals, birds, and fish.

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Eastern Indigo Snake

- Indigo snakes are active snakes that spend a great deal of time foraging for food and mates
- They are one of the few truly diurnal snake species, meaning that they are active during the day and rest at night
- During times of inactivity, such as at night or during cooler months, indigo snakes often hide in gopher tortoise burrows
- Eastern indigo snakes can be easily confused with other black snakes, so a picture will be helpful for identification purposes
- If seen and you have a camera/phone available, take a picture of the snake
- **REMEMBER:**
 - **Zero Today – Safety First!**
 - **DO NOT disturb/harass the animal**

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Construction Area
Protected Species Habitat

Do not Feed, Harm or Kill any Wildlife

If Eastern Indigo Snake is Sighted

**STOP WORK, TAKE PICTURE (if able), NOTIFY
SUPERVISOR & REPORT SIGHTINGS TO
MANAGER**



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Gopher Tortoise

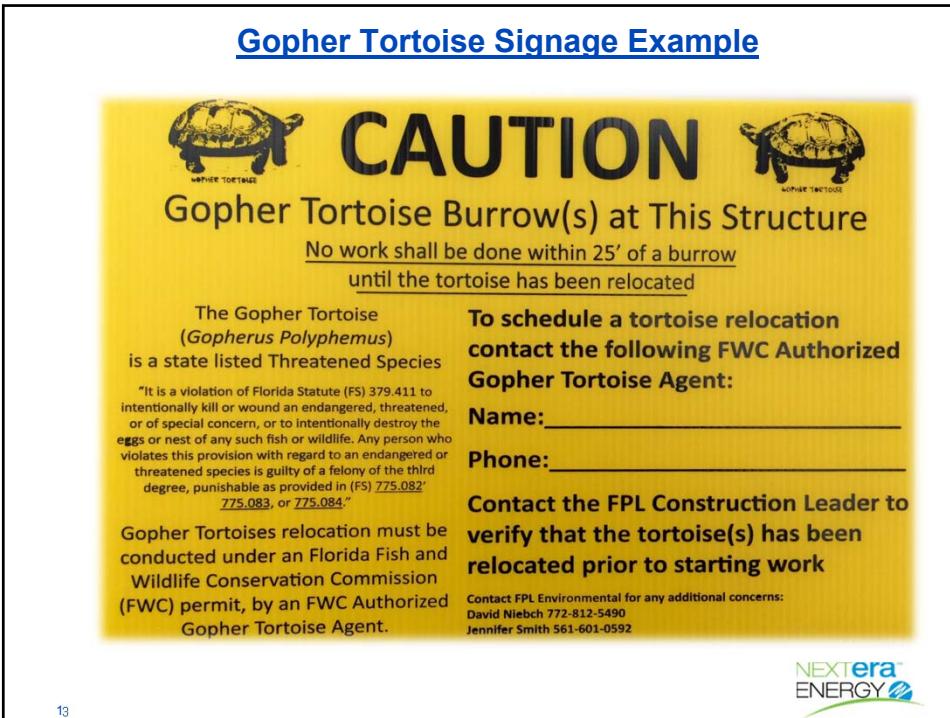
- Illegal to take, harm, or harass this species
- Protection extends to the burrow and 50' around the entrance to the burrow
- Destruction or 'Take' of a Gopher Tortoise and/or a burrow is not authorized without a permit
- Killing a Gopher Tortoise may be punishable with a criminal citation, significant fines, and may include imprisonment
- There are exemptions for Utility ROW Maintenance (Mowing, Grubbing, Tree Removal)



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Gopher Tortoise Signage Example



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Wetlands

- There are federally protected wetlands across the entire site
- **It may not look “wet” but that doesn’t mean it’s not protected!**
- If you don’t know – **don’t go!**
- Ask supervisor before entering any areas of question



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Identify potential pollutants during construction and develop a mitigation plan to prevent them from impacting nearby land and waterways

Storm Water Management / SWPPP

- **National Pollutant Discharge Elimination System (NPDES) Permit compliance may be required**

- Ensure that regular storm water inspections are being performed and the SWPPP map is being updated according to the rules outlined in the General Permit
- Keep BMP's in the correct location and in good condition
- Prevent pollutants from entering waterways



Ensure we are complying with the permit requirements



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How to Control Sedimentation/Erosion

- Black silt screens, yellow staked turbidity barrier, and floating boom are three ways to control sediment/erosion
- Contact your Environmental Services representative with sediment/erosion control questions
- You must use sediment/erosion control when working in or around wetlands or other water bodies (pond, lake, canal, drainage ditch, etc.)



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Requirements When Using Sediment/Erosion Controls



- SWPPP inspections should follow the schedule outlined in the permit
- Know who is conducting the inspections
- You must repair all ruts and restore work area to grade once construction is complete



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Examples of Improper Sediment/Erosion Control Installation and Maintenance



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All regulated materials and waste, both hazardous and non-hazardous, shall be stored and disposed of according to any state or federal laws

Construction Materials and Waste Management

- **Ensure that:**



- All hazardous waste and oil or other petroleum products are stored in secondary containment
- All containers are sealed, labeled, and in good condition
- Any flammable products are stored in a flame resistant cabinet
- Spill kits and clean-up materials are available on site
- Emergency contacts in a readily available and visible area
- Encourage awareness so that employees are better prepared

Environmental Services is available for questions...when in doubt ask!



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Construction Materials and Waste Management (Cont.)

- All waste both hazardous and non-hazardous shall be labeled and, if applicable, describe hazardous characteristics, and accumulation start date
- Stored in sealed containers in good condition
- Store < 180 days
- Obtain shipping and receipt manifests (if required)
- Keep a monthly log of the cumulative amount of hazardous waste generated



Used aerosols may be considered hazardous waste. Please check with your environmental lead prior to disposing



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Examples of Improper Storage



Waste must be stored in closed containers



Containers must be labeled



Best management practice would be to place this pump on an impermeable liner with built-up berm on all sides



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The SPCC rule includes requirements for oil spill prevention, preparedness, and response to prevent discharges to navigable waters and adjoining shorelines

Spill Prevention Control and Countermeasures Plan

- **A construction site project must meet SPCC regulatory requirements if it meets the following three criteria:**
 - It stores, uses, transfers, or otherwise handles oil;
 - It has a maximum aboveground storage capacity greater than 1,320 gallons of oil (which includes both bulk and operational storage volumes) OR total underground storage capacity greater than 42,000 gallons of oil; AND
 - There is a reasonable expectation (based on the location of your site) that an oil spill would reach navigable waters or adjoining shorelines of the U.S.
- **SPCC plans must identify procedures in place and control measures installed to prevent oil spills, and countermeasures to contain, clean up, or mitigate the effects of any oil spills that occur**



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The main goal is to prevent spills and releases to the environment, but also to be prepared to respond to an incident

Spill Prevention

Prevent spills:

- Know your SPCC plan
- Provide secondary containment to prevent any potential spills
- Spill Kits must be accessible, clearly labeled, and located in appropriate areas
- Only authorized employees carry out refueling following the approved refueling procedures



Environmental Services is available for questions...when in doubt ask!



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Spill Response



Survey

- Assess the area for safety
- Determine the type of spill kit needed



Stop

- Stop the source of the spill



Confine

- Prevent the spill from leaving the area



Clean Up

- Remove contaminates from area



Report

- Call your supervisor & Environmental Services



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Know Your Spill Kit



Booms

PPE

Adsorbent Granules

Shovel

Adsorbent Pads

Waste Bag

Report spills to Environmental Services and site manager immediately!

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Prepare the area before fueling

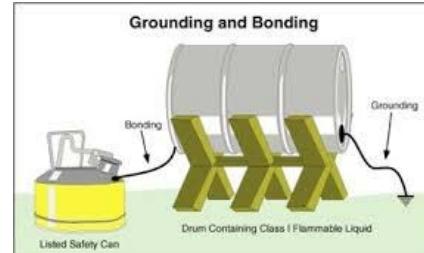
Refueling Procedures

- 1. No smoking**
- 2. Shut engine off**
- 3. Ensure the fuel tank is grounded**
- 4. Place drip pan or adsorbent pads under fill spout**





DRIP DEFENDER



Grounding and Bonding

Bonding

Grounding

Listed Safety Can

Drum Containing Class I Flammable Liquid

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Refueling Procedures (cont.)

1. Insert nozzle
2. Turn fuel pump on
3. Begin fueling: DO NOT TOP OFF TANK
4. Turn fuel pump off
5. Remove nozzle in a vertical position to eliminate leakage
6. Secure gas cap
7. Return drip pan to storage location or dispose of adsorbent pads
8. Immediately clean-up & report spills



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Cultural Significance



- Finds can include:
 - Arrowheads, scrapers, stone tools and chips
 - Historic bottles and broken ceramics
 - Buried layers of charcoal and ash
- If you find something, **STOP WORK** in that area and contact the construction manager

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Dust is considered a pollutant!

Fugitive Dust

- By definition, fugitive dust means solid airborne particulate matter emitted from any source other than a stack or chimney
- Allowing fugitive dust to cross the property line and interfere with the use of adjacent properties constitutes a violation



Minimize dust!



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Make an effort to minimize the dust created by construction to the extent possible

Fugitive Dust BMP's



- Spraying water to control dust during construction operations
- Applying water, chemicals or some other covering on material stockpiles and other surfaces that can create air-borne dust
- Minimizing track out by using control mat, rumble track, etc.

Implement and maintain dust BMP's



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Speed Limit

- Safety is our #1 priority – please drive carefully. Look out for others and wildlife
- **Obey the speed limit**
 - SR 60 can have high traffic; be a good neighbor!
 - More people are going to be on site – working/driving. Please keep an eye out
- Stay on all designated right-of-ways



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Whatever you do...DON'T PANIC!!!



Agency Inspections

- Respectfully request their name, title, the agency they are representing, and a form of identification
- Contact the NEE site lead/construction manager immediately
- If any inadequacies are found during the visit that could not be fixed immediately make sure to take notes and follow up after the visit
- Contact Environmental Services and provide them a summary of the visit
- Environmental Services will provide the communication/follow-up with the visiting agency

You catch more bees with honey...

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Maintaining Environmental Compliance

- Job site activities are subject to agency inspections
- Unauthorized impacts:
 - Fill in wetlands
 - Excessive Clearing
 - Lack of or poorly maintained erosion/turbidity controls
 - Impacts to protected species including habitats
 - Equipment Fuel/Fluid leaks/spills in sensitive areas
- Environmental questions and concerns should be directed to your Environmental Services representative

If something doesn't look right it probably isn't!



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Ignorance of the law is no excuse for not adhering to environmental regulations

Consequences of Non-Compliance / NOV's

- Costly construction delays and schedule impacts
- Revocation or suspension of permits
- Reduced regulatory/agency confidence
- Damage to sensitive environmental resources
- Possible fines and/or jail time for Endangered Species Act violations
- Bad reflection on NextEra as a company



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Takeaway

- **Maintain your focus / commitment to the Environment while ensuring your safety**
- **Continue open communication with Environmental Services**
 - We are here to help you!
- **Make notifications as soon as possible**
- **Always be observant of wildlife issues in substations and/or transmission right of ways**



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Environmental Contact List

- **Corporate Environmental Construction Compliance Assurance:**
 - Adrienne Charbonneau (850) 445-7015
 - Natalie Vitola (561) 313-5241



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