

Supervisory Environmental Training Program

NextEra Energy Transmission West, LLC
Suncrest Dynamic Reactive Power Support Project



Welcome and Introductions

- Name
- Company
- Role on Project
- Last Project You Worked On



Today's Agenda

- Goals of Environmental Awareness Training
- Project Background and Overview
- Project Team and Communications
- Environmental Requirements
- Agency Expectations
- Questions and Answers

Environmental Awareness Training

- Required for all onsite construction personnel
 - Supervisory Training
 - Crew-level Environmental Training (tailboards) – workers must be trained prior to working on Project

Environmental Training Objectives

- Meet project personnel
- Understand roles and communication protocols
- Review environmental requirements

Environmental Responsibility

- Environmental compliance is everyone's responsibility
- Know and understand the requirements
- If you don't know or understand a requirement, **ASK!**



NextEra's Environmental Commitment

- NextEra expects all projects to comply with permit conditions and all applicable environmental laws and regulations
- Understand that non-compliance activities can have serious consequences for the project
- Non-compliance is not acceptable to NextEra or the CPUC

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



Consequences of Non-Compliance

- Could result in construction delays or shutdowns
- Violations could result in penalties and agency enforcement actions
- Individuals can be held accountable – fines and/or jail time are possible

Project Expectations

- The project team (construction management, supervisors, foremen, subcontractors, inspectors, and monitors) will work together to:
 - Keep the project in compliance with all laws, regulations, and permit requirements
 - Keep the project moving forward

Project Overview



Scope of Work

- Construct a Static Var Compensator (SVC) dynamic reactive power device on approximately 6 acres
- Construct an approximately 1-mile-long, 230-kilovolt transmission line connecting the SVC to the Suncrest Substation



Project Location

- SVC site was previously used as a construction laydown area as part of the Sunrise Powerlink Project which was completed in 2012
- Transmission line will be installed underground primarily within the confines of Bell Bluff Truck Trail
- Two overhead poles at the end of the transmission line to carry the line overhead into Suncrest Substation, which is the terminus of the project

Regulatory Setting

California Environmental Quality Act

- The California Public Utilities Commission (CPUC) is the project's Lead Agency under CEQA
- CPUC prepared and certified the project's Final Environmental Impact Report (EIR) and granted a Certificate of Public Convenience and Necessity
- The project was determined not to have a significant effect on the environment with the mitigation measures outlined in the EIR
- The Final EIR serves as the project's primary CEQA compliance document

Required Plans

- Hazardous Materials and Waste Management Plan
- Construction Fire Protection Plan
- Construction Noise Minimization Plan
- Construction Demolition and Debris Management Plan
- Traffic Control Plan
- Stormwater Pollution Prevention Plan
- Blasting Plan

Plans are part of the project requirements

QUIZ!

Question: What document serves as the project's primary CEQA environmental compliance document?

ANSWER....

The Final EIR!



Roles and Responsibilities



NextEra Management Team

- NEET Project Manager – Marcos Mora
- NEET Permitting Lead – Andy Flajole
- NEET Environmental Compliance Lead – Adrienne Charbonneau
- NEET Project Engineer – John Bulich

SWCA Field Team

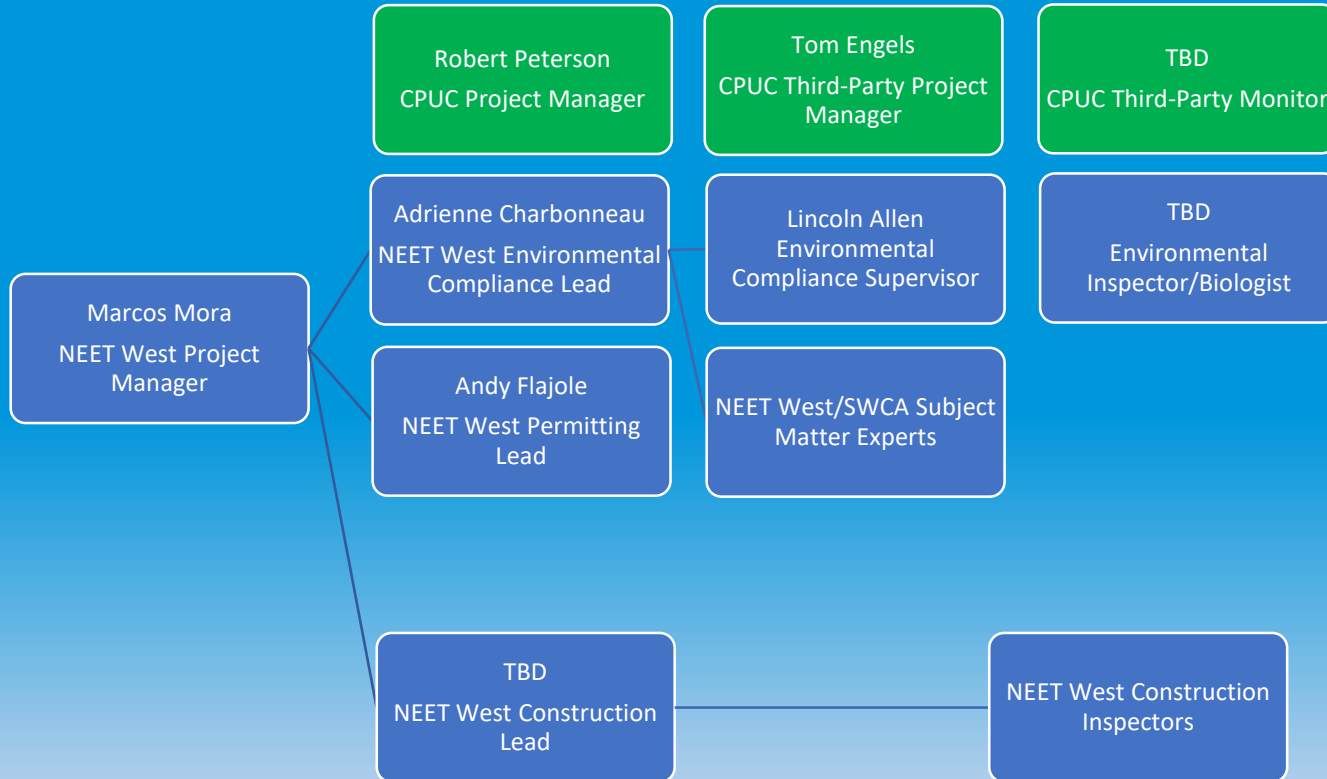
- Environmental Compliance Director – Megan Peterson
- Environmental Compliance Supervisor – Lincoln Allen
- Environmental Inspector/Biologist – TBD
- Qualified SWPPP Developer/QSP – Erika Carrillo
- Cultural Resources Lead – Mandi Martinez
- Biological Resources Lead – Pauline Roberts



Contractor Field Team

- TBD

Communication Flowchart



Key Compliance Source Documents

- Environmental Compliance Matrix
 - Summarizes mitigation measures, permit conditions, and other requirements organized by pre-, during, and post-construction
 - Distributed to key project staff along with copies of relevant source documents
- Project Maps and Drawings
- Environmental Plans

Documentation and Reporting

- Environmental Field Inspection Form
 - Submitted by Environmental Inspectors to the Environmental Compliance Supervisor at the end of each day
- Specialty Monitoring Reports
 - Submitted by specialty monitors (e.g., archaeologists) to the Environmental Compliance Supervisor at the end of each monitoring day
- Compliance Summary Reports
 - Distributed weekly to the defined distribution list by COB each Monday

Compliance Level Criteria

- EI will evaluate the work activity to determine:
 - Consistency with the environmental requirements
 - Intent behind actions (relief of emergency situation, etc)
 - Contractor's compliance record to date for similar events

Compliance Levels

- **Acceptable:** Full compliance with environmental requirements
- **Occurrence:** An occurrence that needs to be addressed/reported, but that doesn't affect the project's compliance record. Examples include:
 - Unanticipated cultural or paleontological resource discovery
 - Sensitive species enters and leaves the project site unharmed
 - A small leak or hazardous material spill that is cleaned up immediately

Compliance Levels

- **Minor problem:** Slight deviation from the environmental requirements with little or no impact to sensitive resources. Examples include:
 - Improperly installed, repaired, or maintained erosion or sediment control devices
 - Neglecting to implement adequate dust control measures
 - placing a small amount of soil or construction material outside the approved construction limits, but not within an exclusion zone

Compliance Levels

- **Non-compliance:** Violates the environmental requirements and results in an impact to resources or places resources at risk. Examples include:
 - Continuing to operate equipment within 50 feet of possible buried cultural materials after being directed by the Environmental Inspector or Specialty Environmental Monitor not to enter area;
 - Slash, soil, or construction material placed outside approved construction work limits in environmentally sensitive area (e.g., fenced exclusion zone, etc.); or
 - Performing construction activities in area that requires a monitor without required monitor on-site

If Non-Compliances Occur

- The Environmental Inspector will communicate any noncompliance issues immediately to the field crews so the issue can be corrected promptly
- A Non-compliance Report will be documented in EI's daily report and will provide a corrective action and timeframe if the issue cannot be immediately resolved
- Once the non-compliance issue has been resolved, the EI will document the resolution in his/her daily report

Grounds to Halt or Redirect Work

- Environmental Inspectors and Specialty Environmental Monitors may temporarily halt or redirect an activity if there is potential to:
 - Harm protected wildlife species
 - Harm protected cultural resources
 - Violate certain state codes (e.g., water quality)



Questions so far?



Environmental Requirements



The Basics

- All new project personnel must receive environmental training
- Ensure biological/cultural monitors are onsite prior-to and during ground-disturbing activities
- Review project plans and ensure that resources and/or work area limits are clearly marked
- Stay within approved project work area limits at all times
- Avoid fenced/flagged environmentally sensitive areas



The Basics

- Ensure that vehicles and equipment arrive to the project in good working order and leak-free condition
- Park vehicles and equipment on paved or graveled surfaces
- Limit refueling and maintenance of vehicles and other construction equipment to designated staging areas
- Maintain proper spill prevention and cleanup equipment in all refueling areas
- If allowed, smoking will be confined to vehicles or approved smoking areas in staging areas

The Basics

- Deposit food scraps, containers, cans, bottles, and other trash from the project area in closed trash containers
- Remove trash containers from work areas to a consolidated location at the SVC staging area daily
- Close waste containers when not in use and ensure they are properly labeled



Biological Resources

General Guidelines for Activities

- Minimize impacts to vegetation (remove no more than what is required for construction)
- Do not park or drive on unpaved areas underneath oak trees to avoid impacts to root structures
- Coordinate with environmental team on any tree trimming ahead of time so appropriate surveys can be conducted
- Coordinate with Environmental Inspector/Biologist to ensure they are onsite to conduct survey/monitoring as necessary prior to starting work

Preconstruction Surveys

- Be aware that preconstruction surveys are required
 - Prior to the beginning of construction or as construction enters areas that have not been previously disturbed
 - Prior to tree trimming for nesting birds and bats
 - Prior to and during the migratory bird nesting season (Feb 1-Sept 15)
- Coordinate with the Environmental Inspector/Biologist on a daily basis to keep the environmental team apprised of work schedules to ensure all required biological surveys have been performed

Additional Required Surveys

- Preconstruction biological and cultural surveys will be needed for any new work areas not previously surveyed or evaluated in the CEQA document
- Examples include
 - Change in vault location
 - New staging area
 - Expanded facility footprint



Exclusion Fencing and Flagging

- Exclusion zones will be necessary to protect
 - Sensitive plant populations (e.g. felt-leaved monardella)
 - Active bird nests and buffers
 - At boundary of waterbodies
 - Dripline of Engelmann oak trees
 - Around any unanticipated cultural or biological resource discovery

Watch for and adhere to signs installed by environmental inspectors and biological monitors



Biological Monitor

- Must be present during all ground-disturbing activities that may impact sensitive resources, including:
 - Initial clearing and vegetation removal
 - Perimeter fence installation
 - Excavation
 - Movement of construction equipment and other activities outside of fenced or paved areas within wildlife habitat



Biological Monitor

- Will flag or clearly mark sensitive areas with appropriate buffers
- Has the authority to stop work to protect sensitive resources



General Wildlife Protection

- Do not approach or harm **ANY** wildlife
- If special-status species are encountered, stop construction activity in immediate vicinity and notify the Environmental Inspector/Biologist
- If active bird nests are encountered, do not disturb the nest and notify the Environmental Inspector/Biologist
- Notify Environmental Inspector/Biologist of any trapped, injured, or dead animals

Stay on Existing Roads

- Keep all vehicles on existing access roads if possible
- Limit vehicle speeds to 15 MPH to avoid wildlife collisions



Inspect Excavations for Trapped Wildlife

- Inspect trenches or excavations for trapped wildlife twice daily – early morning and evening
 - Notify your Supervisor and Biological Monitor *immediately* if you find trapped wildlife
- Cover steep-walled trenches and excavations at the end of each workday or install escape ramps to allow wildlife to exit on their own



Migratory Birds



Migratory Birds

- Active nests of most bird species that we see everyday are protected under the Migratory Bird Treaty Act
- Over 800 bird species, including raptors and song birds, receive special protection under the MBTA
- Nests may be built in
 - Trees
 - Shrubs
 - Buildings
 - Construction equipment
 - Gravel roads



Nesting Bird Protection

- February 1-July 31 is nesting bird season; Pre-construction surveys are required
- Notify your supervisor if you detect nest building
- When buffers are implemented by the Environmental Inspector/Biological Monitor ***there will be no construction activity within the buffer zone until birds have fledged!***

Nesting Bird Protection

- If you find a nest, **stop** activity in the vicinity of the nest, do not disturb the nest, and **alert** the onsite environmental inspector/biologist and foreman



Raptor Protection

- Construct all structures to minimize impacts to raptors
- Confirm that all structures conform to the Avian Interaction Committee (APLIC) Guidelines

Minimize Night Lighting

- Minimize construction night lighting on adjacent habitats
 - Set lighting at lowest illumination for human safety and security
 - Place selectively
 - Shield
 - Direct downward to maximum extent practicable



Penalties Related to Wildlife

- USFWS and CDFW can levy fines and make arrests for harming special status species
- Violations can result in penalties of up to \$100,000 (\$200,000 for eagles) and one year in jail
 - It is illegal to “take” any species that is listed as endangered or threatened
- Intentionally and maliciously killing any animal, including rodents and snakes, without a license or permit is a violation of California law.



Sensitive Plant Protection

- Avoid or minimize disturbance to sensitive plants
 - Biological Monitor will flag/fence sensitive plant populations
- If avoidance is not possible, NEET West will implement measures to compensate for impacts
 - Measures will be consistent with the East San Diego County MSHCP
- Minimize disturbance of Engelmann oak habitat
 - Work area will be defined by the Biological Monitor

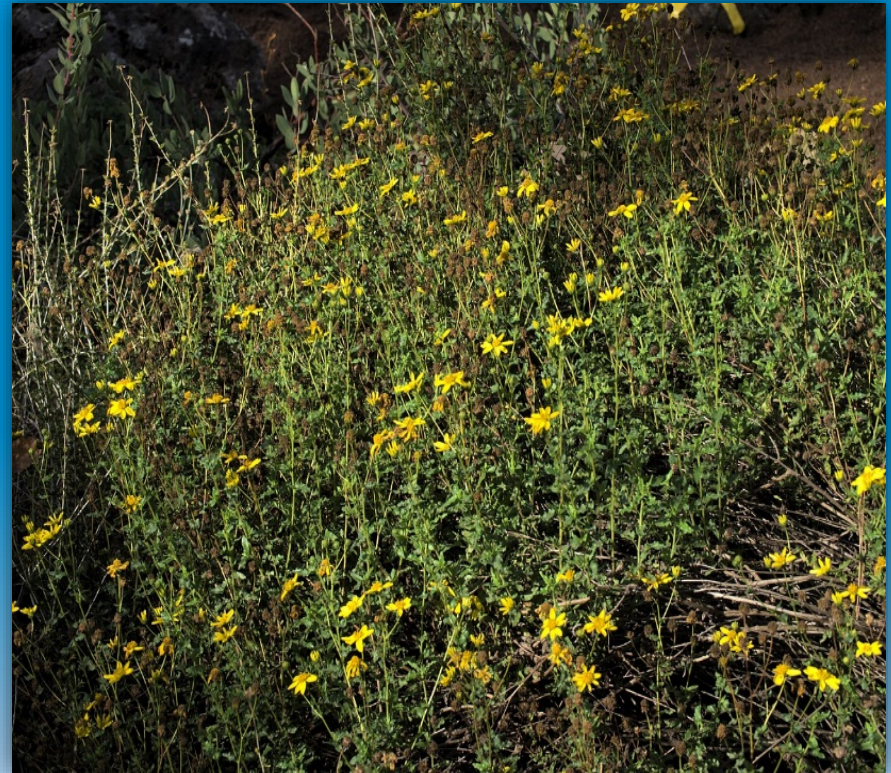
Felt-leaved Monardella

- Status
 - CRPR 1B.2
- Habitat
 - Grows under chaparral and oak woodlands
- Description
 - Flowering plant with hairy purple stems and white or purple-tinged flowers



San Diego County Sunflower

- Status
 - CRPR 1B.3
- Habitat
 - Grows in chaparral and coastal sage scrub
- Description
 - Hairy flowering shrub up to 3 feet tall with yellow flowers



Engelmann Oak

- Status
 - CRPR 4.2
- Habitat
 - Mesas, savannahs and woodlands above the dry coastal plain
- Description
 - Generally evergreen with upright form to 65 feet



Tree Protection

- Avoid impacts to Engelmann oak trees
- Avoid placing materials, equipment, or stockpiles within the tree's dripline

There is no tree removal planned for this project



QUIZ!

Question: If a landowner approves a tree for removal on their property, is it okay to proceed?

ANSWER....

NO...The FEIR did not include tree removal, only trimming. The Environmental Team would need to secure additional approvals to conduct tree removal.

Cultural Resources

Cultural Resources

- All project workers involved with ground-disturbing activities will receive a pamphlet with instructions on how to identify cultural resources and what to do if an unanticipated discovery is made during construction



Laws and Regulations

- Cultural resources and human remains are protected under local, state and federal laws. The applicable agencies, laws and regulations for the project include
 - California Environmental Quality Act
 - State Office of Historic Preservation
 - California Public Resources Code, Penal Code, and Health and Safety Code

Prehistoric Resources

- Prehistoric Archeological Site:
 - Concentrations of stone tools or stone flakes, ground stone tools such as mortars and pestles
 - Evidence of fire (e.g., ash deposits, charcoal, burnt earth etc.)
 - Any bones (human or animal), teeth, or shells



Historic Resources

- Historic Archeological Site:
 - Concentrations of glass bottles, broken dishes, buttons, cut animal bones, hardware, household items, etc.
 - Buildings or other structural foundations
 - Trash pits
 - Privies (buried outhouses)
 - Wells
 - Stone walls or footings
 - Gravestones



Unanticipated Discoveries

- In the unlikely event that previously unidentified cultural resources are uncovered during project
 - **Halt or redirect all work within 50 feet of the discovery**
 - Secure the find and contact NEET West's cultural resources specialist and/or designated representative including the Environmental Inspector or onsite environmental monitor **immediately**
 - The specialist will inspect the discovery and determine whether further investigation is required

****Do not resume work until directed by NEET West ****

Unanticipated Discoveries – Human Remains

- In the unlikely event that human remains or suspected human remains are uncovered
 - **Halt or redirect all work within 100 feet of the discovery**
 - Secure the find and contact the Environmental Inspector, Environmental Compliance Supervisor, or NEET West's Environmental Compliance Lead **immediately**
 - The EI and/or Environmental Compliance Supervisor will contact the Cultural Resources Specialist
 - The Cultural Resources Specialist will inspect the find and determine whether the remains are human
 - If the remains are human, the cultural resources specialist will immediately **notify the County coroner**

Penalties Related to Cultural Resources

- Unauthorized removal or intentional disturbance can result in fines and imprisonment
 - Removal or possession of Native American remains or grave goods is a felony
 - It is a misdemeanor to damage archaeological or historic objects or sites on private or public land

Air Quality

Air Quality

- Speed limits
 - Vehicle speeds limited to 15 mph
 - Turn around in established and designated areas only
- Water truck and dust palliative
 - Apply water or non-toxic soil stabilizers to access roads, staging areas, work areas, and stockpiles



Air Quality

- Construction equipment emissions
 - All off-road equipment 50 HP or greater must meet CARB Tier 3 emission standard
 - Maintain construction equipment per manufacturers specifications
- Vehicle use and idling time
 - Minimize vehicle use and idling time to the extent feasible
 - Use “common sense” approach to vehicle use



Stormwater Management

Erosion Control

- Used to prevent soil particles from being mobilized by wind or rain
- Reduce erosion of soils and stockpiles
 - Water for dust control
 - Establish perimeter silt fences
 - Use fiber rolls
- Minimize soil disturbance areas
- Where feasible, limit construction to dry periods
- Revegetate disturbed areas

Sediment Control

- Sediment Control Measures
 - Used once soil particles have been mobilized
 - Intercept runoff, reduce flow velocity, and allow sediment to drop out of suspension before leaving the work area
 - Divert runoff from less stable to more stable areas
 - Consist of silt fencing, straw wattles, gravel bags, etc.

Construction Best Management Practices

- Use silt fences
- Stabilize construction entrances
- Establish storm drain inlet protection



Construction Best Management Practices

- Use fiber rolls/straw wattles
 - Along the toe, top, face, and at grade breaks of exposed and erodible slopes
 - Down-slope of exposed soil areas
 - Around temporary stockpiles
 - Along project perimeter
- Consist of certified weed-free wood excelsior, rice or wheat straw, or coconut fibers



Culvert and Stormwater Conveyance Protection

- Avoid culverts and existing stormwater conveyance structures
- If avoidance is not feasible:
 - Notify the Environmental Inspector, Environmental Compliance Supervisor and NEET West Compliance Lead if culverts need to be removed as additional authorizations/approval may be required
 - Do not work within 48 hours of forecasted rain event of 0.5 inches or greater
 - Keep temporary piping onsite to maintain unexpected water flow



Hazardous Materials Management

Hazardous Materials and Waste Management

- Examples of hazardous wastes used onsite include used hydraulic oil, fuels, solvents, aerosols, and lubricants
- Comply with all laws applicable to the generation, storage, transportation and disposal of hazardous waste
- Label should have the words “hazardous waste”, describe hazardous characteristics, and accumulation start date
- Store in sealed containers in good condition
- Store < 180 days
- Obtain shipping and receipt manifests
- Keep a monthly log of the cumulative amount of waste generated



hazardous waste

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR INFORMATION:

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

DOT / HAZARDOUS ID NO. / DOCUMENT NO. _____

ACCUMULATION START DATE _____ EPA WASTE NO. _____

U.S.T. PROPER SHIPPING NAME AND OR OR IN OR IN NO. WITH PRECE.

handle with care!



UNIVERSAL WASTE

GENERATOR INFORMATION (Optional)

SHIPPER _____

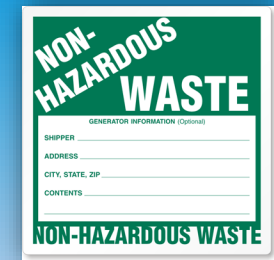
ADDRESS _____

CITY, STATE, ZIP _____

CONTENTS _____

ACCUMULATION START DATE _____

UNIVERSAL WASTE



NON-HAZARDOUS WASTE

GENERATOR INFORMATION (Optional)

SHIPPER _____

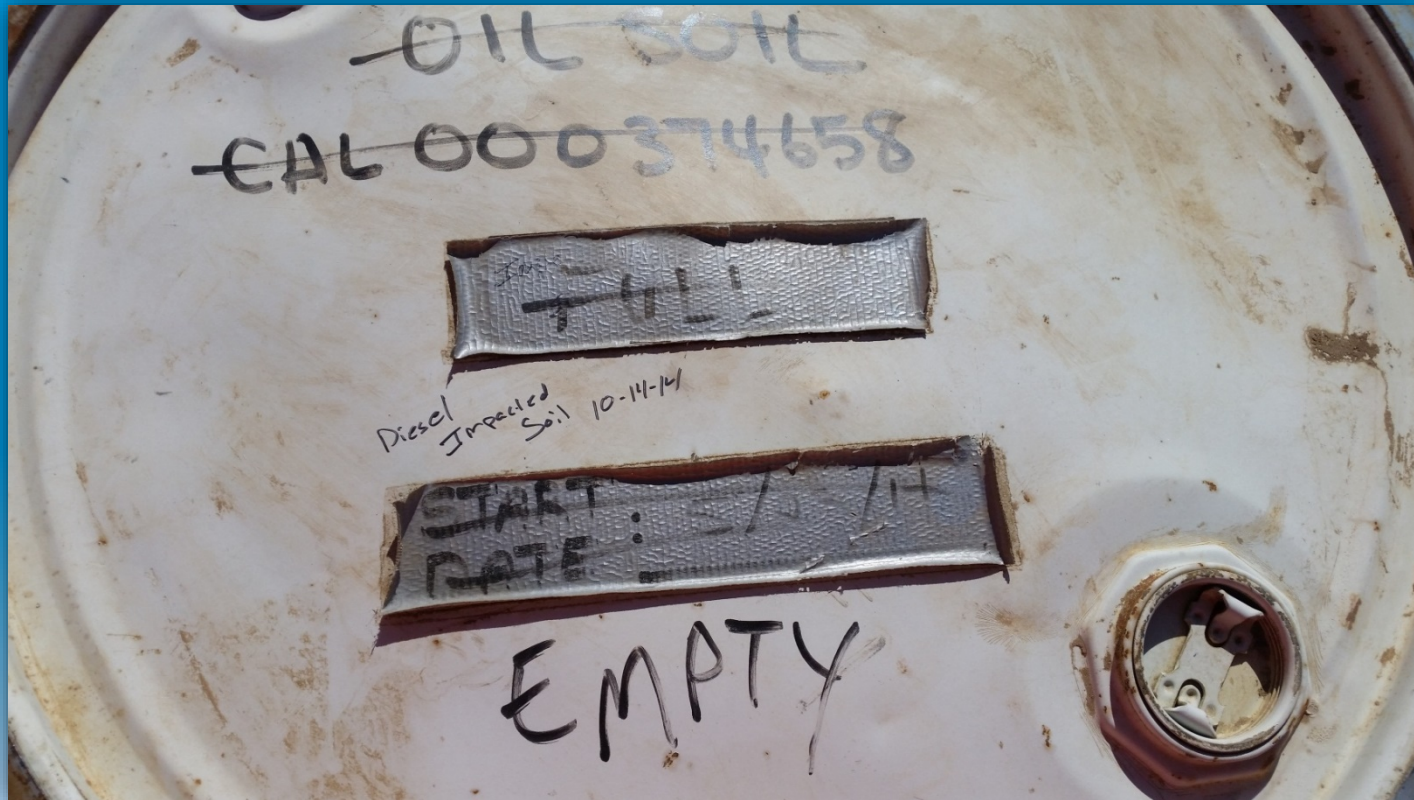
ADDRESS _____

CITY, STATE, ZIP _____

CONTENTS _____

NON-HAZARDOUS WASTE

Proper Labeling?



Spill Prevention

- 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.
- A construction site project must adhere to 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
 - There is a reasonable expectation (based on the location of the site) that an oil spill would reach navigable waters of the U.S.

Spill Prevention

- Prevent spills:
 - Only authorized employees may carry out refueling following the approved refueling procedures
 - Provide secondary containment to prevent any potential spills
 - Spill Kits must be accessible, clearly labeled, and located in appropriate areas
 - Training must be provided to all employees prior to commencement of work

Spill Response

- If a spill occurs:
 - Cease work in affected area and contain the spill
 - Notify Environmental Inspector, Environmental Compliance Supervisor, or NEET West Compliance Lead
 - Initiate clean-up immediately if safe to do so
 - Use manufacturer's recommendations for containing and cleaning up
 - Document type and amount of each product spilled
 - Retain incident and response documentation for a minimum of 5 years

QUIZ!

True or False: Placing a fuel can on the ground for a few minutes next to a dry stormwater drainage channel is okay?

ANSWER....

FALSE! The stormwater drainage channel can lead to flowing drainages, therefore fuel should be stored away from drainages, dry or wet.

Blasting

- All blasting must be done in compliance with the approved Blasting Plan
- For spillage around the borehole either
 - Place spillage in the borehole, or
 - Clean up and return to the delivery vehicle or appropriate containers for off-site disposal
- Clean equipment in an area where wastewater can be properly contained
- To prevent the potential for groundwater contamination
 - Select products that have appropriate water resistance for the site conditions

Fire Prevention

Fire Prevention

- Follow the requirements of the Construction Fire Prevention Plan
- Carry fire suppression equipment on all vehicles and within 50 feet of each work area
- Restrict on-road vehicle parking to paved or graveled surfaces
 - Unless required for an emergency or worker safety
- Smoking will be confined to vehicles or approved smoking areas Install spark arrestors on all off-road equipment



Red Flag Warnings

- Red Flag Warnings are issued by the National Weather Service
- Monitor weather and fire danger on a daily basis
- Restrict work activities during Red Flag Warnings
- If it is not possible to stop or restrict work activities due to safety or time-sensitive activities, limit activities to those needed to
 - Complete the current task
 - Establish safe working conditions
 - Assign a crew member to fire watch for each separate and distinct work area

Noise, Traffic, and Emergency Services

Noise Mitigation

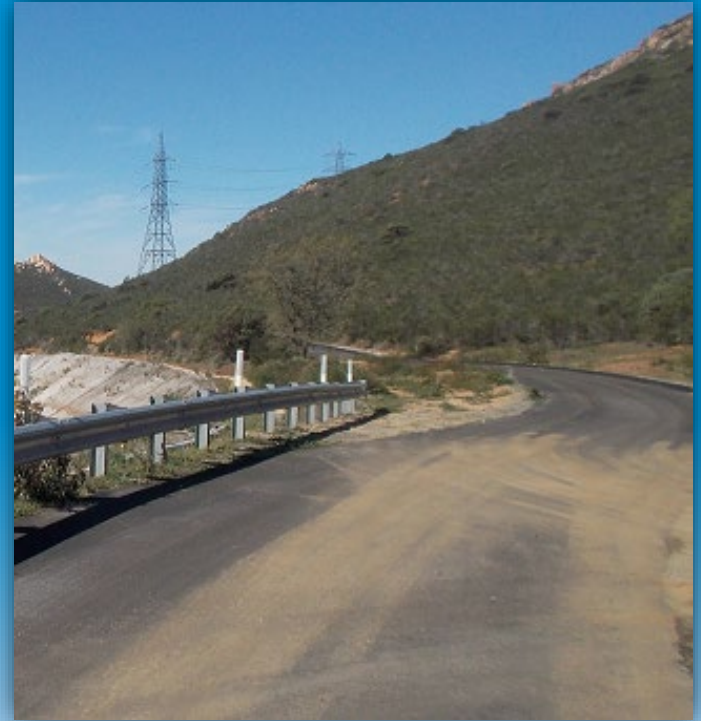
- The Construction Noise Mitigation Plan minimizes noise disturbance in noise-sensitive areas.
- Understand and follow all noise requirements including
 - Make sure all mufflers are in good condition and appropriate for the equipment
 - Construct temporary sound barriers as required
 - Notify residences within 500 feet of construction sites at least 7 days prior to construction
 - Designate a construction liaison and post their phone number

Traffic Control

- Maintain two-way traffic flow to the extent feasible
- Do not drive heavy equipment or haul trucks through residential areas
- If no other route is available, restrict driving heavy equipment and haul trucks through residential areas to 7am through 7pm, Monday through Friday
- Outside of those times, provide notice to adjacent property hours 48 hours in advance
- Use signers, flaggers and other measures as required in the Traffic Control Plan
- Notify SDG&E 5 days in advance of road closures

Emergency Service Coordination

- For work on the private portion of Bell Bluff Truck Trail
 - Coordinate with emergency services if traffic flow will be affected
- For closures on Bell Bluff Truck Trail, have staff available at all times to
 - Place plates over open trenches
 - Move construction equipment
 - Clear any other obstructions



Agency Expectations

Scenarios

Scenario 1

- An operator goes to start / warm-up a piece of heavy equipment on Monday morning and notices a bird nesting in a nearby tree
- The bird nest is about 200 feet away and does not seem bothered by the noise or his presence
 - What should he do?

Scenario 1 Answer

- Turn off the equipment and alert the onsite environmental inspector or monitor

Scenario 2

- A worker sees a toad on the ground that has entered a work area. The toad looks like a common garden toad. What should she do?

Scenario 2 Answer

- She should alert the onsite environmental inspector or monitor immediately
- She should not attempt to move the toad on her own, and should not attempt to confine or trap it until the biologist arrives

Questions/Discussion Wrap-Up & Evaluations