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# **Spill Prevention, Control and Countermeasures (SPCC) Training**

## **40 CFR Part 112**

### **Naval Air Station Corpus Christi Texas**

#### **CY 2020**

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# Environmental Management System Procedures EMPs



- EMP-01 General Requirements
- EMP-02 Leadership Commitment and Environmental Policy
- EMP-03 Environmental Aspects, Risks and Opportunities
- EMP-04 Legal Requirements and Compliance Obligations
- EMP-05 Environmental Objectives, Targets and POAMs
- EMP-06 Resources, Roles, and Responsibilities
- EMP-07 Competence, Training and Awareness
- EMP-08 Communication
- EMP-09 Documented Information
- EMP 10 Document Control
- EMP-11 Operational Planning and Control
- EMP-12 Emergency Preparedness and Response
- EMP-13 Performance Evaluation Through Monitoring, Measurement & Analysis
- EMP-14 Evaluation of Compliance
- EMP-15 Nonconformity, Corrective Action and Preventive Action
- EMP-16 Control of Records
- EMP-17 Internal Audit
- EMP-18 Management Review & Continual Improvement



# SPCC Plan

## Bottom Line Up Front



To prevent oil discharges from reaching navigable waters of the U.S. or its adjoining shorelines.



For NASCC, this includes any associated wetlands.



# SPCC Plan Regulation



**Required 'site-specific' plans to prevent oil discharges that could affect navigable waters of the U.S.**

**Defines a discharge as any leak or spill of oil products.**



**EPA > Clean Water Act > OPA**

**↑  
TCEQ**

**Authority was granted under the Clean Water Act (CWA) 311 and 501, and is codified under 40 CFR 112**

**NO exclusions and NO grandfathering.**



## Training Required as Specified in 40 CFR Part 112



**All personnel who handle oil products must at a minimum be trained in:**

- **Operation and maintenance of equipment to prevent spills**
- **Spill response procedures**
- **General facility operations**
- **Applicable pollution control laws, rules, and regulations**
- **And the contents of the site specific SPCC Plan**

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**An individual must be designated and trained at each facility who is to be accountable for discharge prevention and who reports to facility management.**





# Training Required as Specified by 40 CFR Part 112



**Spill prevention briefings must be held annually and must at a minimum include:**

- **Any past spills, discharges, or failures of the plan or equipment**
- **Any malfunctioning equipment**
- **Any recently developed precautionary measures that have been implemented**

**Schedule and conduct discharge prevention briefings for “oil handling personnel” at least once a year to assure adequate understanding of the SPCC.**

**If a significant change has been made to the SPCC Plan.**



# What is the SPCC Plan?



## **S**pill **P**revention, **C**ontrol, and **C**ountermeasures **P**lan

EPA's Oil Pollution Prevention regulation establishes requirements for facilities to prevent oil spills from reaching navigable waters of the United States or adjoining shorelines.

The NASCC SPCC Plan is kept on file at the Public Works Environmental Office Building 19 and at NAS website.

[http://www.cnice.navy.mil/regions/cnrse/installations/nas\\_corpus\\_christi/com/environmental\\_support/spcc.html](http://www.cnice.navy.mil/regions/cnrse/installations/nas_corpus_christi/com/environmental_support/spcc.html)



# Types of Oil

## Which May be Regulated Under SPCC



**Animal oils, fats & greases**  
**Asphalt**  
**Aviation gasoline**  
**Bunker fuel**  
**Crude Oil**  
**Cutting Oil**  
**Dielectric fluid**

**Diesel fuel**  
**Heating oil**  
**Hydraulic Oil**  
**Gasoline**  
**Greases**  
**Jet Fuel**  
**Lubricating Oil**

**Machine Coolants**  
**Mineral Spirits**  
**Motor Oil**  
**Naphtha**  
**Natural Gas Condensate**  
**Oily Waste**  
**Oil Refuse**

**Residual Fuels**  
**Stoddard Solvent**  
**Synthetic oils**  
**Tall Oil**  
**Turpentine**  
**Used Oil**  
**Vegetable oils**





## Goals of SPCC Plan

**Familiarize employees with the written SPCC Plan.**

**Identify oil storage locations and handling procedures.**

**Identify spill pathways.**

**Familiarize employees with appropriate spill response procedures and use of response equipment.**



## Who is Trained on the SPCC Plan?



**EPA indicated in a regulatory preamble "oil-handling personnel" are employees engaged in one or more of at least the following functions:**

- **Operation and maintenance of oil storage containers (includes storage drums, tanks and oil-filled equipment);**
- **Operation of equipment related to storage containers;**
- **Emergency response personnel.**

**ANY employee working at NASCC including contractors involved in oil handling, transfer, storage, spill response, or maintenance of oil filled equipment.**

**(ECATTS)**

**ANY fuel oil delivery employees responsible for fueling tanks and equipment on NASCC.**



# Main Elements of the SPCC Plan



**Spill Preventive operating procedures be implemented.**

**Examples:**

- **Routine inspections by SPCC On-Site Coordinator or**
- **Tank custodians observing tank filling procedures**

**Control measures installed to prevent oil from reaching navigable waters.**

**Examples:**

- **Secondary containment or**
- **Diversiory structures**

**Countermeasures to contain, cleanup, and mitigate the effects of an oil spill.**

**Examples:**

- **Cleanup and spill equipment availability on site**
- **Available list of contacts and phone numbers for employee use during spills**



# Potential Spill Pathways



**In some areas, oil can enter the “Navigable Waters of the U.S. or adjoining shorelines” by:**

- **Direct / indirect discharge into a storm drain**
- **Direct / indirect discharge to any associated wetlands areas that lead to Corpus Christi Bay, Oso Bay, and Laguna Madre**

**Never allow oil to drain into an open drain or into a ditch or waterway.**

**Oil containing equipment (i.e. vehicle, tractor, mower) is never to be rinsed or washed near a storm drain or waterway.**





# Spill Prevention- Routine Inspections

**SPCC plan includes the frequency schedule and checklist necessary for your inspection.**

**Ensure that necessary maintenance and repairs are completed as scheduled and recorded.**

**SPCC specific inspections are conducted on a weekly, monthly, quarterly, and annual basis as outlined in the Periodic Inspection Checklist.**

**Inspection records must be kept for a minimum of three years.**

**(STI SP001 Monthly Inspection form)**



# Spill Prevention- Fuel Deliveries



**Tank Truck Drivers loading or unloading materials on NASCC shall:**

- **Inspect vehicle prior to departure to ensure that all lines are disconnected and all drains and vents are closed.**
- **Remain with vehicle at ALL TIMES while loading or unloading**
- **Drain lines to storage tanks and close the drain valves before disconnecting and ensure that appropriate containment is located beneath connections**
- **Immediately report all spillage to PW Environmental personnel**



# Spill Prevention- Fuel Operations

**No smoking is permitted during fueling operations.**

**The delivery driver must remain with the vehicle at all times during the fueling operation.**

**The delivery driver will insure that the vehicle is properly positioned and that drip pans or absorbent pads are beneath all fuel line connections.**

**The delivery driver will have:**

- **proper spill control supplies (booms, pads, etc.)**
- **a list of contact numbers and**
- **a working cell phone**





# Spill Prevention- Alarms and Shut-Off Valves

**Monitor activity of leak detection / overfill protection systems and respond immediately to alarms.**

**DO NOT assume alarms are false even if repeatedly activated.**

**DO NOT leave fueling station unsupervised during loading operations.**

**Perform regular tests on monitoring systems to ensure operational capabilities.**



## Secondary Containment- Requirements



**All bulk storage containers of oil must be located in containment sufficient for the entire capacity of the largest container and have sufficient freeboard to contain an additional 10% volume.**

**Secondary containment must be impervious material.**

**Secondary containment is NOT required for Qualified Oil- Filled Operational Equipment such as transformers, electrical switches, and elevator tanks, but still must be routinely inspected.**



# Spill Response



## Discovery of Release

- Extinguish or remove any ignition source
- ID the material & point of release
- Notify Fire Dept
- Notify Navy Environmental
- Initiate the spill reporting procedure
- Reference SDS for spilled substance

## Containment of Release

- Attempt to stop the release at source
- Contain material to prevent release to environment
- Recover or clean up spill material
- Arrange for disposal of waste
- Navy Environmental is responsible for reporting to outside agencies

## Documentation

The SPCC on-site coordinator or tank custodian will report the following information:

- Date, time, and duration of release
- Type of incident
- Material involved
- Volume of material spilled
- SPCC Plan discrepancies
- Actions taken to avoid future incidents

## After a Spill

The SPCC on-site coordinator or tank custodian will report the following information:

- How to prevent another occurrence
- Effectiveness of the response

Remember to restock your spill kit:

- Floor dry
- Absorbent, booms, pads, socks
- Caution tape, labels, bags
- Shovels, brooms, pans



# **SPILL RESPONSE INFORMATION**

## **EXTREMELY IMPORTANT**

**ONLY RAIN MAY ENTER THE STORM DRAIN.**

KEEP ALL CHEMICALS AND SPILLS FROM ENTERING STORM DRAINS, BAYS, PONDS, & CRITICAL HABITAT.

## **WHAT TO DO**

**STEP 1** - IF MATERIAL SPILLED PRESENTS A POTENTIAL TO HARM HUMAN LIFE, EVACUATE THE AREA IMMEDIATELY. **CALL 911.**

**STEP 2** - SHUT OFF SOURCE OF SPILL, IF POSSIBLE.

**STEP 3** - CONTAIN SPILL WITH PROPER ABSORBENTS IN ASSIGNED SPILL KITS.

**STEP 4** - NOTIFY COMMAND DUTY OFFICER (CDO)  
**361-534-9093.**

**STEP 5** - NOTIFY & SUBMIT SPILL REPORT WITH PHOTOS TO ENVIRONMENTAL DEPT. **361-961-5353/3776/5356**

**Spillers are responsible for cleanup actions and costs.**

**Reportable Spills:** **Any AFFF** even if spilled on concrete/asphalt.  
**Any** sheen, discoloration, odor, or hazardous substance in storm drains/bays/ponds/grassy areas.  
**25 gallons** or more of oil or fuel on concrete/asphalt.

SPILL KIT LOCATION: \_\_\_\_\_

BUILDING/HANGAR NO: \_\_\_\_\_



# Naval Air Station Corpus Christi Spill Incident Response Checklist

In case of spill, call 911. Identify your location as NAS Corpus Christi.  
Complete this form and send to Navy Environmental, Bldg 19, Fax 961-3798.

DATE:  TIME:  LOCATION:   
REPORTING INDIVIDUAL:   
CONTACT INFORMATION:

- 1. Time of occurrence:
- 2. Type of emergency or chemical spilled:
- 3. Number and types of injuries:
- 4. Estimated quantity of spill:  gallons
- 5. Source of spill:

6. Behavior of spill;
- 1. Is fire or flammable chemicals involved?
  - 2. Is spill flowing into storm drain?
  - 3. Is spill flowing or on/toward soil?
  - 4. Is spill flowing towards bay system?
  - 5. Is the spill reactive?

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

RESPONDING AGENCY:   
ARRIVAL TIME OF RESPONDERS:  CONTACT NUMBER:

Site assessment:

PPE required:

Remedial action taken:

Incident completion time:

Incident report copied to:  Date:  Time:



# Emergency vs Shop Spill Response

## Emergency Spill

- Release resulted in personal injury or death
- Release immediately dangerous to life, health, and environment
- Release enters storm water conveyance system
- Release enters domestic drain system
- Release enters industrial drain system
- Release enters body of water (navigable body of water)
- Release a Reportable Quantity
- Release beyond the level of spill response training of shop personnel

## Incidental/Shop Spill

- Adequate / documented spill response training of shop personnel
- Adequate number of trained spill response personnel
- Adequate / documented training for the proper use of personal protection equipment
- Adequate quantities of applicable spill response equipment



# Security



**Regulated containers are to be located inside access controlled areas, or gated and locked areas accessible to authorized personnel.**

**Lighting must be sufficient to enable the visualization of spills or leaks during hours of darkness and to deter releases from occurring through acts of vandalism**



# Potential Failure Types



1. Overfill by delivery truck.
2. Spillage during delivery hose retrieval.
3. Transfer out of tank.  
(Dispenser)
4. Transfer out of tank.  
(Collection Suction Truck)
5. Transfer out of tank.  
(Small combustion source)
6. Overfill of aircraft from mobile refueler.
7. Hose Retrieval releases at aircraft from mobile refueler.
8. Overfill at truck loading station.
9. Hose retrieval releases at truck loading station.
10. Drum filling and emptying releases.
11. Pipeline failure due to leaking joint or corrosion.
12. Catastrophic.





# Common SPCC Violations

## Over Filling



## Inadequate Training



## Spills





# Common SPCC Violations



## Poor Housekeeping





# POLs BMPs



**RCRA “Empty”  
Containers  
at wash racks**







# Common SPCC Violations



## Lift Stations





# Common SPCC Violations



## Inadequate Operational Controls





# Common SPCC Violations



## Bldg. 89 Simulators

**Scope of work  
removal and disposal  
of simulators from Bldg. 89**

**Best management practices  
not implemented.  
Spill contingency plans not  
in place.**







# Common SPCC Violations



## Inadequate Operational Controls





# Internal Spill Notifications



## Contact Emergency Dispatch @ 911

Whenever there is a:

- Spill
- Threat of a spill
- Threat to public health or fire
- Threat for an explosion involving oil  
(or other hazardous material)

## Contact Navy Environmental Office @ 961-3776/5355/5353

Whenever there is a:

- Spill
- Threat of a spill
- Threat to enter, the environment, storm/floor drains, and coastal waters involving oil  
(or other hazardous material)





Questions, Comments, Concerns?

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**Please contact Navy Environmental  
@ 361-961-3776 / 5355 / 5353 or  
e-mail address: [tracy.l.faulkner@navy.mil](mailto:tracy.l.faulkner@navy.mil)**



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