

SPILL PREVENTION, CONTROL, AND COUNTER MEASURE PLAN

**NATIONAL WEATHER SERVICE
MIAMI WEATHER FORECAST OFFICE
NATIONAL HURRICANE CENTER
WFO/NHC - RDA
11691 SW 17th Street
Miami, Florida 33165-2149**

Original Date of Plan: January 1996
Date of Last Plan Review: February 11, 2005
**Date of Last Amendment
And P.E. Certification:** February 18, 2005

Designated Person Responsible for Spill Prevention:

Neal A. Lynch, Electronics Technician
Telephone: (305) 229-4507

CERTIFICATION

I hereby certify that I, or my agent, have examined the facility, and being familiar with the provisions of Title 40 of the Code of Federal Regulations Part 112, I attest that this Spill Prevention, Control, and Countermeasure (SPCC) plan has been prepared in accordance with good engineering practices.

Printed Name of Professional Registered Engineer

Date: _____
Signature of Registered Professional Engineer

Registration No. _____ State: _____

REVIEW DOCUMENTATION AND MANAGEMENT APPROVAL PAGE

REVIEW DOCUMENTATION

In accordance with Title 40 of the Code of Federal Regulations (40 CFR) Part 112.5(b), a review and evaluation of this SPCC plan will be conducted at least once every 5 years. As a result of this review and evaluation, the National Weather Service will amend the SPCC plan within 6 months of the review to include more effective prevention and control technology if the following both apply:

- Such Technology will significantly reduce the likelihood of a spill event from the facility
- If such technology has been field-proven at the time of review

In accordance with 40 CFR §112.1 and §112.3, any amendment to the SPCC plan will be certified by a Professional Engineer within 6 months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility’s potential for a discharge of oil “...in quantities that may be harmful... into or upon the navigable waters of the United States or adjoining shorelines or waters of the contiguous zone... or that may affect natural resources...”

Review Date	Signature of Designated Person	Amended (Yes or No)?

MANAGEMENT APPROVAL

The National Weather Service is committed to the prevention of discharges of oil to navigable waters and the environment. We maintain the highest standards for SPCC through regular review, updating and implementation of this SPCC plan for the National Weather Service Facility located at 11691 SW 17th Street in Miami, Florida.

Printed Name and Title of Title of Meteorologist in Charge

Signature and Date

Certification of the Applicability of the Substantial Harm Criteria

Facility Name

Facility Address

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes _____ No _____

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes _____ No _____

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula¹) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 13, for availability) and the applicable Area Contingency Plan.

Yes _____ No _____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula¹) such that a discharge from the facility would shut down a public drinking water intake²?

Yes _____ No _____

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No _____

Certification

I certify under penalty of law that I, or my agent, have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature

Name (please type or print)

Title

Date

¹If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

²For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

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ATTACHMENT 1 40 CFR 112

PART I - GENERAL INFORMATION

A. GENERAL

This section of the Spill Prevention, Control, and Countermeasure (SPCC) plan provides general information about the facility and a description of the site and its operations.

NOTE: A complete copy of this SPCC plan will be maintained and kept available at the offices of the Miami Weather Forecast Office and the National Hurricane Center.

1. Name

National Weather Service (NWS) - Miami Weather Forecast Office (WFO) and National Hurricane Center (NHC).

2. Type

This Weather Forecast Office (WFO) facility is an onshore (non-production) facility co-located with the National Hurricane Center (NHC) on the campus of Florida International University. The WFO has a remote Radar Data Acquisition (RDA) NEXRAD radar system located at 16801 SW 137 Avenue, Perrine, Florida 33177.

3. Date of Initial Operation

The WFO and NHC were relocated to this new facility in early 1995. The new installation included three emergency generators and associated fuel systems. In March 1999, the RDA was installed that is equipped with its own emergency generator and diesel fuel tanks.

4. Location

Weather Forecast Office	Latitude:	25.7541 N
National Hurricane Center	Longitude:	-80.3839 W
11691 SW 17 th Street	Elevation:	10 feet MSL
Miami, Florida 33165-2149		
(305) 589-4088		

RDA Facility	Latitude:	25.61104 N
16801 SW 137 Avenue	Longitude:	-80.412548 W
Perrine, Florida 33177	Elevation:	10 feet MSL

5. Name and Address of Operator

National Oceanic and Atmospheric Administration
National Weather Service - Southern Region Headquarters
819 Taylor Street
Room 10A06
Fort Worth, Texas 76102
(817) 978-2367

6. Facility Contacts

<u>Name</u>	<u>Title</u>	<u>Telephone Number</u>
Main Number/WFO		(305) 229-4522
Neal A. Lynch	ET	(305) 229-4507

B. SITE DESCRIPTION AND OPERATIONS

This section describes the site and its operations.

1. Facility Location, Layout, and Operations

The Miami WFO/NHC facility is located in Miami, Florida on the campus of Florida International University. The property is owned by Florida International University. The facility is situated at the northeast corner of the intersection of SW 17th Street and SW 117 Avenue. Figure 1 is a Topographical Vicinity Map showing the facility location and Figure 2 is the WFO/NHC Site Plan Map.

The facility has three separate emergency generators connected to a single 10,000-gallon above-ground #2 diesel fuel storage tank (AST). Each of the 300kW generators has a ~50 gallon day tank as an integral part of the generator equipment.

The RDA facility is located approximately 12.5 miles southwest of the Miami WFO in Perrine, Florida as shown on Figure 3, Topographical Vicinity Map. The RDA facility Site Plan Map is shown on Figure 4. The RDA facility has separate generator shelter building with a single emergency generator connected to two ASTs, each having a capacity of 229.8 gallons.

The Miami WFO/NHC generators have an estimated fuel usage of approximately 60 gallons per month. This estimate is based on extrapolation from recent fuel orders. The generators are tested once per week for 60-minutes. Per an agreement with Florida Power & Light Company (FPL), FPL can remotely start the generators during power service brownout conditions or in advance of potential power outages during severe weather conditions. FPL has exercised this option twice during the 2004 calendar year. Obviously, fuel consumption would increase based on the duration of any power outages.

The Miami WFO/NHC AST is not situated within a separate fenced-in area. The entire Miami WFO/NHC facility is fenced and manned 24-hours a day, 365 days a year. There are security cameras strategically placed around the facility. All buildings are kept locked. The exterior of the entire facility is lighted at night.

The RDA and associated buildings are situated within a fenced compound with locked controlled access.

2. Facility Fuel Storage

The WFO/NHC generators are located in the separate DDG building (approximately 760 square feet) just to the north of the northwest corner of the WFO/NHC building. The 10,000-gallon AST is situated adjacent to the east side of the DDG building. The AST is rectangular steel tank encased in a 6-inch concrete vault, which is then covered by a 3/16-inch outer steel tank. Figure 5 is the Generator Building Plan for the Miami WFO/NHC emergency generators and fuel tank. The AST's fill port is located on the top of the tank and is situated in an overfill well below the grade of the top of the tank. The well has a capacity of approximately 13 gallons. Piping from the AST leads into the generator building and into the day tank. The day tank has a capacity of 50 gallons (calculated) and feeds directly to the generator. The day tank is located directly below the generator. The tank is connected to the generator with 1 in. (outside diameter) black steel pipe. All of the joints are threaded. The piping is single-walled; however, the pipe outside the building that leads from the AST to the building is sheathed in a PVC pipe for added protection. Flexible hosing connects the steel pipe from the floor of the space to the engine as a safeguard against rupture from vibration when the generator is running.

The AST has a high level audible overfill alarm at the tank. The AST also has an audible alarm in the event of interstitial leakage (secondary containment) around the tank.

The RDA generator and fuel tanks are located in a pre-fabricated generator shelter building. The generator is located in the center of the 130-ft² building. The twin 229.8-gallon diesel tanks are rectangular in shape and mounted next to the west wall of the building. They are constructed of steel and are single-walled. The fueling port is located outside the west wall of the building. The building is designed to be the secondary containment for this system. The watertight containment measures 9 in. from the floor to the door sill. The secondary containment for the building is calculated to be in excess of 700 gallons.

The RDA ASTs are connected to each other via two lateral pipes (one high, one low), which allows for diesel fuel to move from one tank to the other. The tanks are connected to the generator with ½ in. black steel pipe and all joints are threaded. Flexible hosing connects the steel pipe to the engine, again, for protection against vibration. The ASTs are not fitted with any audible alarm systems.

Table 1. in Section 7 summarizes the diesel storage capacities at the Miami WFO/NHC.

3. Drainage Pathway and Distance to Navigable Waters

The topography of the Miami WFO/NHC facility is relatively flat. The paved areas adjacent to the eastern side of the facility are contoured to control storm water drainage. Storm water catch basins are situated in the eastern paved parking areas, which direct storm water to the west side of the facility property that is a dry storm water retention area. Within the dry storm water retention area is a T-shaped exfiltration trench, which provides a direct pathway to the underlying groundwater table. The exfiltration trench inlets are approximately one-half foot higher than the bottom of the dry storm water retention area. Figure 6 presents the Miami WFO/NHC Site Drainage Plan showing the location of utilities at the site including the storm water drainage system.

A large spill kit equipped with an absorbent boom, pads and pillows, and drain seals, is located inside of the DDG building. Extra absorbent pads are also stored with the spill kit.

A diesel fuel spill from the 10,000-gallon AST would flow eastward towards the paved parking areas and then north towards a storm water catch basin, which would be the primary point of spill containment. Absorbent materials at the storm water catch basin and along the spill flow path would prevent fuel impacts from entering the dry storm water retention area. If diesel fuel from a spill was able to flow into the dry storm water retention area, the bottom of the area consists of native sandy soil. Diesel fuel, being a light fuel, will easily penetrate the sandy soil down to the groundwater table, which can be encountered at a depth of approximately 4 feet below the existing ground surface. However, due the local flat groundwater gradient, diesel fuel will not travel far from the discharge point of the spill. A spill of more than 10,000-gallons would have to occur before diesel fuel in the dry storm water retention area would have the potential to overflow into the nearby surface waters. Cleanup options for any significant spill that discharged into the dry storm water retention area would most likely be to remove the diesel fuel impacted soil and groundwater and then replace the soil with clean soil. The trucks that typically supply fuel to the Miami WFO/NHC typically have a 1,600-gallon capacity and are constructed with 3 or 4 separate compartments. In most cases the trucks utilize automatic shutoff nozzles (similar to the types used at gas stations) to prevent overfilling.

Any diesel fuel spilled in the DDG building that exceeds the secondary containment of generator day tanks would spill onto the floor of the space and then out the doorway, which faces south. A large volume diesel fuel spill within DDG appears to be unlikely since the automatic leak detection system would shut down the fuel system.

The topography around the RDA facility is nearly flat and most of the area is covered with gravel. The gravel areas are slightly higher in elevation than the surrounding areas, which consist of undeveloped areas of native sandy soil. Diesel fuel, being a light fuel, will easily penetrate the gravel and sandy soil down to the groundwater table, which can

be encountered at a depth of approximately 4 feet below the existing ground surface. However, due the local flat groundwater gradient, diesel fuel will not travel far from the site of the spill, nor will it have the potential to impact any surface waters. There is basically no surface water in the immediate vicinity of the facility. Cleanup options for any significant spill that was not contained at this site would most likely be to remove the contaminated sediment and replace.

4. Spill History

Reportable Spill events from 1994 to present (date on cover of this plan):

None.

5. Spill Potential, Volumes, and Rates

The most likely cause of spills from the ASTs are from overfilling or a ruptured hose during refueling, a failure of one of the compartments of the fuel truck, failure of the structural integrity of the AST, or a ruptured fuel line.

If conducted according to plan and with good management practices, large spills from fueling operations are not likely.

For the WFO/NHC AST, a large spill caused by loss of tank structural integrity or vehicle collisions are low probability events owing to alarm systems, weekly testing of the generators and daily observations by NWS personnel.

Table 2 summarizes the potential type of spills, volumes and rates.

6. Discussion of Facility Conformance with 40 CFR 112

Every effort has been made, by the NWS, to assure that this facility fully conforms to the applicable provisions of 40 CFR 112. The following is a brief summary of the applicable characteristics of the facility:

- a. The facility is manned 24-hours a day, 365 days a year. The generators are tested weekly and on a daily basis NWS personnel are working near and around both generator systems decreasing the likelihood of a large spill incident. The facility is located on the campus of Florida International University, where rapid response is available in the event of a fuel spill.
- b. The WFO/NHC AST has an overflow alarm as well as an interstitial alarm. The diesel fuel day tanks for the main generators are contained in an overflow catch basin. The ASTs for the RDA generator are in a building, which has been designed to provide ample secondary containment.

- c. The SPCC Plan:
- i. Has the full approval of the appropriate NWS managers.
 - ii. Has been prepared and certified by a professional engineer.
 - iii. Provides for prevention efforts to assure that fuel oil discharges will not occur.
 - iv. Provides a vehicle to assure that personnel training is accomplished.
 - v. Provides for appropriate reporting of oil discharges.
 - vi. Provides for appropriate mitigating actions to be taken if an oil discharge should occur.

7. Type of Oil and Storage Capacity

Table 1 Descriptive Inventory of Facility Storage

Tank	Nominal Capacity (Gallons)	Product Stored	Type	Double Walled?
WFO/NHC AST	10,000	#2 Diesel	Rectangular Steel	Yes
Generator Day Tanks	~50 each	#2 Diesel	Rectangular Steel	No*
RDA ASTs (2)	229.8 each	#2 Diesel	Rectangular Steel	No*

* These ASTs have been provided with external secondary containment.

PART II - DESIGN COMPONENTS AND OPERATIONAL PROCEDURES FOR SPILL PREVENTION AND CONTROL

This section discusses spill prevention and control measures that have been or will be implemented at the facility to prevent oil spills.

A. TANK AND SYSTEM DESIGN FOR SPILL PREVENTION

This section describes the design components and operating procedures that have been or will be implemented at the facility to prevent oil spills. The facility will review the design and operational procedures contained in this section and implement those that are not currently in place.

1. Aboveground Storage Tanks (AST)

WFO/NHC AST: The AST construction will be compatible with the #2 diesel fuel held by the tank. The AST shall have secondary containment around the primary tank shell. A level gauge or dip-stick shall indicate the fuel level (from empty to full).

An automatic shut-off valve on the fill spout will be set to close at 90 percent of capacity (9,000 gallons). The AST also shall have an audible high-level alarm set at 85 percent of capacity (8,500 gallons) and interstitial monitoring device between the primary and secondary tanks that is connected to the audible alarm system. A 13-gallon capacity spill container shall surround the fill spout.

Day Tank: This tank shall have an open top spill pan (rupture basin) designed to hold 110 percent of the tank volume. It shall have a liquid level gauge to indicate the amount of fuel in the tank (empty to full) and a high-level float switch connected to the audible alarm to warn of overfilling. The rupture basin shall have a float switch designed to detect fuel that has spilled or leaked. The float switch will be connected to an audible alarm system in the office.

Piping: An anti siphoning valve will be located between the AST and the pump to prevent unwanted fuel from being siphoned from the AST.

2. Tank Refueling and Truck Unloading Operations

All delivery drivers shall have U.S. Department of Transportation hazardous material transportation training as required by Federal law.

The remainder of this section discusses the procedures that will be used during unloading of fuel from the tank truck into the AST to prevent spills. This procedure will be documented every time refueling occurs using the form (See Appendix A). Copies of this form will be kept for 5-years.

- a. The following procedure will be used **before** fuel delivery and unloading:

(See Appendix A-2)

- i. If applicable, place a magnetic or urethane spill cover over the storm drain catch basin inlet.
 - ii. The Designated Person or his designated representative should determine the available capacity (ullage) of the AST by converting the reading on the fuel gauge to gallons (See Appendix A). This ullage is communicated to the fuel supply contractor and marked in the fueling log.
 - iii. Move spill containment equipment such as booms, spill barriers or spill kits into the unloading area.
 - iv. Block the tank truck wheels.
 - iv. Place drip pans under all pump hose fittings (if applicable) before unloading.
 - vi. The Designated Person or his designated representative and the delivery driver shall ensure the fill nozzle is placed in the appropriate AST filling port.
- b. The following procedure will be used **during** the fuel unloading period:
(Appendix A-2)
- i. The Designated Person or his/her designated representative and the delivery driver shall remain with or near the vehicle and the fuel tanks at all times during unloading. Gauges on the AST and the truck, as well as the fueling nozzle, will be continuously monitored to ensure the ullage is not exceeded. If the audible high-level alarm sounds, stop the unloading procedure immediately to ensure fuel ullage is not exceeded.
- c. The following procedure will be used **after** fuel unloading is completed:
(Appendix A-2)
- i. Record the amount of fuel transferred to the AST in the log (Appendix A-1).
 - ii. Drain the fill hose and then ensure that all drain valves are closed (if applicable) before removal of the hose from the tank.
 - iii. Pour any uncontaminated fuel in the drip pans, tank truck containment pool, or spill pipe spill bucket container into the AST (if it has the capacity) or dispose of appropriately.
 - iv. Inspect the tank truck before removing the blocks to ensure the lines have been disconnected from the tank.
 - v. Remove the blocks from truck wheels.
 - vi. Place a copy of the completed fuel-unloading checklist in the SPCC.

3. Inspections and Records

Inspection and Maintenance of Tanks: The AST and day tank will be inspected, each time a maintenance technician visits the site, as well as the regularly scheduled monthly inspections, for any fuel leaks, especially at seams (including the tank underside). The outside of exposed piping shall also be inspected. Monthly and annual inspections shall follow the checklists shown in Appendix B-1 and B-2. Monthly and annual inspection forms will be completed by staff.

Integrity Testing: Integrity testing of the ASTs is required under the new regulations put forth by the EPA. However manufacturers of shop-built tanks have stated that integrity testing of their tanks is not necessary and that best management practices should be employed instead. The EPA has stated, “*for certain smaller, shop-built containers in which internal corrosion poses minimal risk of failure; which are inspected at least monthly; and, for which all sides are visible (i.e., the container has no contact with the ground), visual inspection alone might suffice, subject to good engineering practice.*”

To comply with §112.8.c.6, the WFO/NHC will continue to make inspections during generator tests, conduct regular monthly and annual inspections and recommend integrity testing only when it is warranted, e.g. noticeable leakage or corrosion. Testing will also be conducted if the structural integrity comes into question as a result of a fire, earthquake or other similar event.

Record Keeping: The Environmental/Safety Focal Point or Maintenance Technician, (person responsible for spill prevention at the facility) will be responsible for completing (i) the Ullage Logs and documentation of Fuel Unloading Procedures, (ii) the Records of Inspections (iii) the Training Record, and (iv) the Spill Response Record. These records will be maintained for at least 5-years from the time of the recorded action.

4. Site Security

The WFO/NHC AST is not enclosed in fenced area; however the facility is manned 24-hours a day, 365 days a year and there are security cameras strategically placed around the facility. All buildings are kept locked and the exterior of the entire facility is lighted at night. The RDA and associated buildings are in a fenced compound, which is also kept locked.

Signs are posted on and around the ASTs warning of the presence of a combustible liquid, the combustible liquid is diesel fuel, and that smoking is prohibited near the AST. Fire extinguishers are located in the generator buildings. There is no vehicular traffic near the ASTs.

5. Training

As a minimum, the Environmental/Safety Focal Point, an alternate, and the responsible manager (MIC, HIC, or OIC) will be trained in the intent of applicable oil spill regulations and how to implement the inspection and maintenance procedures outlined in the previous paragraph. Spill control and countermeasure shall also be included in the training. An outline for the training is found in Appendix C.

Training is repeated once per year. All new personnel responsible for implementing this SPCC plan are properly trained before beginning work at the new position. A record of who is trained when, and by whom, (Appendix C) will be filed with this SPCC plan and kept for a period of 5 years.

B. SPILL CONTROL

This section describes control measures that have been implemented to prevent any spilled oil from entering navigable waters or adjoining shorelines.

1. Secondary Containment Designs, Construction Material, and Volume

The secondary containment tank on the Vault-Type AST will be sized to contain 110 percent of the tank volume. An interstitial monitoring system that can detect fuel of 1-inch or more in the secondary shell of the AST will be included in the tank design.

The secondary containment for the steel day tank is a steel catch basin mounted under the day tank. The catch basin contains a liquid level monitor and alarm.

The secondary containment for the RDA ASTs is the pre-fabricated housing itself and provides for approximately 150 percent of the volume of the storage tanks.

2. Spill Kits Type and Location

A Pig 202 spill kit or equivalent will be located in the generator room or in the Generator Building near the respective ASTs. The spill kits are designed to absorb up to 60-gallons each of diesel fuel and to divert a spill from navigable waters. The kits include oil absorbent socks and mats in a polyethylene container that doubles as a disposal container

3. Drain Inlet Cover

If applicable, magnetic or urethane spill covers will be placed over the storm drain catch basin inlet prior to any fuel transfer.

4. Personal Protective Equipment (PPE)

If a leak or spill were to occur, it might be necessary for NWS personnel to conduct initial emergency procedures to minimize the impact of the spill, control the spill, or

secure the area. In order for them to employ the SWIMS procedure (see Part III.A of this plan) it may be necessary for them to come into contact with the diesel fuel. If this were to occur, NWS personnel must use proper PPE. Proper PPE for diesel fuel is specified in the MSDS (Appendix F).

- Eye protection is accomplished by the use of **Chemical Goggles** or a **Full Face Shield**. A portable **Eyewash Station** is situated within the DDG.
- Hand protection is accomplished by the use of **Nitril Gloves** and should be worn at all times when handling this material. If there is a likelihood of skin exposure then impervious clothing such as **Tyvex** should be worn.
- Other clothing & equipment - if contaminated, must be removed and laundered before reuse. Items which cannot be laundered should be discarded.

PART III - SPILL COUNTERMEASURES AND REPORTING SPILL COUNTERMEASURES

A. SPILL COUNTERMEASURES

This section presents countermeasures to contain, clean up, and mitigate the effects of any oil spills at this site.

1. SWIMS

A spill containment and cleanup activity will never take precedence over the safety of personnel. No countermeasures will be undertaken until conditions are safe for workers. The SWIMS procedure should be implemented as countermeasures:

S - Stop the leak and eliminate ignition sources.

- a. Attempt to seal or some how stop leak if it can be done safely.
- b. Attempt to divert flow away from any drainage ditch, storm sewer or sanitary sewer with a spill barrier or the contents of spill kit. The spill kit is located in the Generator Building.
- c. Eliminate all ignition sources in the immediate area.

W - Warn others.

- a. Yell out "SPILL". Inform the person in-charge at your facility.
- b. Account for all personnel and ensure their safety.
- c. Notify contacts and emergency response contractor as described in the following section for assistance in control and cleanup.

I - Isolate the area.

- a. Rope off the area

M - Minimize your exposure to the spilled material by use of appropriate clothing and protective equipment. If possible, remain upwind of the spilled material.

S - Standby to assist the emergency response contractor.

B. SPILL REPORTING

This section discusses the reporting procedures for spills of diesel fuel at the facility. The people and organizations that are notified vary, based on the quantity of the spill, whether it reaches navigable waters or adjoining shorelines, the frequency and history of spills and the potential impacts which the spill may have on people, property or the environment.

A spill report form that requests the information to be reported to all agencies in writing (to the extent known) is included in Appendix D. Copies of the completed form should be sent to the NWS Environmental Compliance Officer and the National Oceanic and Atmospheric Administration (NOAA) Mountain Regional Compliance Officer (see next section).

1. General Notification Procedures for All Spills

- First, call 911 (or the local emergency agency) if there is an immediate emergency.
- Next, notify the appropriate persons within the NWS & NOAA:
 - **Terry Brisbin, Env/Safety Coord.** **817-978-2644 x139**
 - **Mark George, RECO for the Mountain Region** **303-497-3064**
 - **Mike Jacob, NWS Env. Compl. Officer** **301-713-1838 x165**
 - **Olga Kebis, NWS Safety Officer** **301-713-1838 x173**

2. Federal Notifications

The Federal Clean Water Act as described in 40 Part 110.6, requires notifying the U.S. Environmental Protection Agency (EPA) National Response Center (or the U.S. Coast Guard (USCG) as soon as anyone has knowledge of any discharge of oil in quantities that “may be harmful,” 40 CFR 110.3 defines “may be harmful” as a discharge if either of the following applies:

- Violates applicable water quality standards.
- Or
- Causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

If either of these criteria is met, contact the following:

- **The National Response Center** **800-424-8802**
- **USEPA Emergency Response & Removal Branch** **404-562-8700**

Additionally, under the SPCC regulations under 40 CFR 112.4(a), if either of the two spill criteria (listed below) occurs, a report must be submitted to the EPA Regional Administrator within 60-days:

- A discharge of more than 1,000 gallons of oil into or upon navigable waters or adjoining shore lines in a single event.
- Two spill events that cause discharge of more than 42 gallons in each event, within any 12 month period.

Please refer to 40 CRR 112.4(a) for instructions on the required contents of the report and proper reporting procedures.

Diesel fuel is not listed as a hazardous substance under the Comprehensive Environmental Response Compensation, and Liability Act (CERCLA); therefore, no other notification to the EPA is required for discharges of diesel fuel other than those listed previously.

3. State Notifications

The Miami WFO/NHC AST is regulated by the State of Florida's Department of Environmental Protection pursuant to Chapter 62-761 of the Florida Administrative Code, which regulates nonresidential stationary ASTs with individual tank capacities greater than 550 gallons that contain or contained pollutants (petroleum products). The State of Florida also requires that prompt notification be made when there is a spill, release or overfill event of a regulated substance to soil equal to or exceeding 25 gallons, unless the regulated substance has a more stringent reporting requirement specified in CFR Title 40, Part 302.

In this instance notification should be made to the Florida Department of Environmental Protection Spill Response Office, 800-320-0519

4. Local Contacts and Notifications:

- **Miami-Dade County - Fire Dept.** **911**
- **Miami-Dade County Emergency Management** **786-331-5000**

5. Cleanup Contractor Notification

The following cleanup and environmental consulting contractors have been identified in the Miami area that would be able to assist Miami WFO/NHC in the event of a spill emergency:

Cliff Berry Inc.
3033 Northwest North River Drive
Miami, Florida 33142
(305) 638 – 2030

SWS Environmental First Response
3133 NW 25th Avenue
Fort Lauderdale, Florida
(305) 957-7271

PART IV - RECOMMENDED IMPROVEMENTS

In accordance with 40 CFR 112.7, this section presents physical upgrades or procedural changes that are not yet fully operational but are called for in the plan.

A. PHYSICAL UPGRADES

The ASTs, piping system, alarm system, and spill response equipment satisfy all current Federal and State of Florida requirements and are in good operating condition. However, the following changes and upgrades are recommended:

- Provide secondary containment for the refueling truck when practicable. Until that time, employ best management practices (see below). There are a number of secondary containment options available to the agency. There are several types of temporary drive-on berm systems commercially available. Another simple option might include installing asphalt berms at the fueling site with properly engineered, and controllable, drainage systems. Obviously, any engineered system would require the approval of a licensed engineer.
Note: Currently industry has requested that EPA redefine the term 'loading/unloading rack' (§112.7 (h)). It is possible that a change in this definition could exempt a facility from providing secondary containment for fuel trucks during fuel delivery for on-site consumption.
- Have the float switch for the WFO/NHC AST tested regularly. Repair if necessary.
- Install secure fencing around WFO/NHC AST when practicable. Until such time, continue to employ good security practices such as maintain lighting and security cameras.
- The day tank catch basin did not have a level indicator nor an alarm. In accordance with 40CFR §112.8(c).8 installing such a system for the day tank and/or the catch basin is recommended.
- It is not clear as to the purpose of the PVC sheathing on the black pipe leading from the WFO AST into the generator building. The PVC sheathing is

problematic in that it does not allow for routine inspections, and more than likely provides an environment around the black pipe that promotes corrosion. If the sheathing was meant as secondary containment, then it should be removed and a more appropriate form of secondary containment installed, such as a lined catch basin. If the sheathing was meant as a form of physical protection, then the solid PVC piping should be exchanged for a sheathing that provides physical protection and allows for visual inspection and drainage to reduce the risk of corrosion (e.g. PVC drainage piping).

B. PROCEDURAL CHANGES

The following procedures and/or procedural changes are recommended:

- Owing to the lack of secondary containment for the fuel truck it is strongly recommended that proper procedures be diligently followed during refueling operations as prescribed in Part II, A, 2 and Appendix A of this plan.
- Perform all inspections as outlined in Part II, A, 3 and Appendix B of this plan.
- Maintain an annual training program for all relevant personnel and when new personnel report to the facility as prescribed in Part II, A, 5 and Appendix C of this plan.
- Conduct spill exercises annually as prescribed in Part II, A, 5 and Appendix D of this plan.

1. Inspections and Preventative Maintenance

The inspection checklists found in Appendix B should be followed. The interstitial monitoring device in the AST is designed to monitor the integrity of the primary tank. Visual inspections of the outside of the secondary wall of the AST and the primary wall of the day tank will serve to signal a potential problem with the tank integrity.

Table 2. Potential Spill Sources and Volumes.

Source	Event	Potential Spill Volume (gallons)	Estimated Rate (gallons per minute)	Direction of Spill Flow	Remarks
WFO/NHC AST And Generator Day Tank	Overfilling or a ruptured hose during fueling.	0 to 40 ^a	80 ^b	East then north to storm drain catch basin then through storm drain system to western dry retention area	Spills of this nature would largely be contained on the paved area.

	Failure of fuel supply line to pump	* 0 - 10,000 ** 0 to ~50	Variable depending on the nature of the failure.	Same as above; except in the case of failure of Day Tank inside the generator room. A spill from Day Tank would go onto the floor of the generator building.	Can be minimized through routine inspections especially during operations.
	Structural Failure	* 0 - 10,000 ** 0 to ~50	Variable depending on the nature of the failure.	Same as above.	Low probability event that both primary and secondary containment would have to fail.
	Vehicle Collision	* 0 - 10,000 ** 0 to ~50	Variable depending on the damage.	Same as above.	Very low probability. There is no vehicular traffic near the AST.
	Overturn or puncture in an earthquake	* 0 - 10,000 ** 0 to ~50	Variable depending on the nature of the damage.	Same as above.	Low probability. Miami is in a low-risk earthquake zone.
	Failure of the pump to shut down after filling the day-tank or failure of the line from pump to day tank.	0 - 10,000	Variable depending on the nature of the failure.	Same as above.	Can be minimized through routine inspections and maintenance. A fuel return line is installed to allow fuel to return to the AST in the event that the transfer pump does not shut down.
	Structural Failure or Vandalism	* 0 - 10,000 ** 0 to ~50	Variable, depending on the extent of damage.	Same as above.	Can be minimized through routine inspections, maintenance and by the adherence to good security practices.

Notes: a Based on a maximum pumping rate of 80 gallons per minute from the fill truck and a maximum of 30 seconds to turn off the pump.
b Approximate maximum pumping rate of fill truck.
* 10,000-gallon AST mounted outside on a concrete pad.
** One steel day tank mounted under the generator

Table 2. Potential Spill Sources and Volumes (cont.).

Source	Event	Potential Spill Volume (gallons)	Estimated Rate (gallons per minute)	Direction of Spill Flow	Remarks
RDA ASTs (2), 229.8 gal. each for a total of 459.6 gallons	Overfilling or a ruptured hose during fueling.	0 to 40 ^a	80 ^b	Into the surrounding gravel/sand substrate. Very little grade in this area.	Spills of this nature would largely remain in the gravel and sand around the tank area.
	Structural Failure	0-459.6	Variable depending on the nature of the failure.	Into the secondary containment of the building.	Low probability event that both primary and secondary tank shells would fail. Can be minimized by routine inspections.
	Earthquake damage.	0-459.6	Variable depending on the nature of the damage.	Into the secondary containment of the building.	Low probability. Miami is in a moderate-risk earthquake zone.
	Structural Failure or Vandalism	0-459.6	Variable, depending on the extent of damage.	Into the secondary containment of the building.	Can be minimized through routine inspections, maintenance and by the adherence to good security practices.

Notes: a Based on a maximum pumping rate of 80 gallons per minute from the fill truck and a maximum of 30 seconds to turn off the pump.
b Approximate maximum pumping rate of fill truck.

APPENDIX A

A-1 TANK ULLAGE AND FUELING LOG

A-2 FUEL UNLOADING PROCEDURE CHECKLIST

APPENDIX A-2

FUEL UNLOADING PROCEDURE CHECKLIST

Station Name: _____

Date: _____ Tank: _____

NWS Rep: _____ Supplier: _____

X	Item	Description	Comments
The following six items must be completed BEFORE fuel unloading.			
	1	Ensure the audible high-level alarm system and automatic shutoff valve are functioning properly.	
	2	Determine the available capacity (ullage) of the above ground storage tanks (AST) by converting the reading on the fuel gauge to gallons (See Appendix A, Page A-1). This ullage should then be marked in the fueling log and communicated to the tank truck unloading contractor.	
	3	Move spill containment equipment such as booms or spill barriers into the unloading area.	
	4	Block the wheels of the tank truck.	
	5	Place drip pans under all pump hose fittings (if applicable) after the hose is hooked up to the AST and before unloading.	
	6	Ensure the fill nozzle is in place in the appropriate AST appurtenance. In this case, the fill nozzle is placed in the fill pipe connected to the round spill container.	
The following two items must be completed DURING fuel unloading.			
	7	Ensure that the NWS representative and the tank truck operator remain with the vehicle at all times during unloading.	
	8	Monitor the gauges on the AST and the truck continuously to ensure the ullage is not exceeded. If the audible high-level alarm sounds, stop the unloading of fuel immediately.	
The following six items must be completed AFTER fuel unloading.			
	9	Record the amount of fuel unloaded in the log (Appendix 1, page A-1).	
	10	Before removing the fill hose from the AST, ensure that it is drained and that all drain valves are closed (if applicable).	
	11	Pour any fuel in the drip pans, tank truck containment pool, or spill container on the fill pipe into the AST (if it has the capacity) or dispose of appropriately (describe how it was disposed of, if applicable).	
	12	Inspect the tank truck before removing the blocks to ensure the lines have been disconnected from the AST.	
	13	Remove the blocks from the tank truck wheels.	
	14	Place a copy of this fuel-unloading checklist in the SPCC Plan folder.	

Additional Comments Below:

APPENDIX B

B-1 MONTHLY INSPECTION CHECKLIST

B-2 ANNUAL INSPECTION CHECKLIST

APPENDIX B-1

MONTHLY INSPECTION CHECKLIST

Site Name:		Tank Name or Number:		
Date of Inspection:		Inspected by:		
Date of Last Inspection:		Signature:		
A. TANKS	YES	NO	NOTES	
Are there any oil stains on the outside of the tank, including the underside?				
Is there any oil on the ground, concrete, or asphalt around the tank?				
Are there any visible cracks or indications of corrosion on the tank, at fittings, joints, or seals? (Such as paint peeling or rust spots)				
Are there any raised spots, dents, or cracks on the tank?				
Does it appear that the foundation has shifted or settled?				
Is the fuel gauge working properly?				
Are all vents clear so they may operate properly?				
If rainwater is present in secondary containment area, does sufficient volume remain for spill control? (if applicable)				
B. PIPING	YES	NO	NOTES	
Is there any oil on the outside of or under any aboveground piping, hoses, fittings, or valves?				
Are aboveground piping, hoses, fittings, or valves in good working condition?				
C. SECURITY/SAFETY/SPILL COUNTERMEASURES	YES	NO	NOTES	
Are lights working properly to detect a spill at night?				
Are all locks in the "lock" position?				
Are all warning signs properly posted and readable?				
Are vehicle guard posts in place and properly secured? (if applicable)				
Are spill kits easily accessible, protected from the weather, and complete?				

CORRECTIVE ACTIONS REQUIRED (explain below):

APPENDIX B-2

ANNUAL INSPECTION CHECKLIST

Site Name:		Tank Name or Number:	
Date of Inspection:		Inspected by:	
Date of Last Inspection:		Signature:	
A. MONTHLY CHECKLIST	YES	NO	NOTES
Have Monthly Inspection checklists been completed?			
B. TANKS			
Are all alarms and automatic shutoff devices working properly?			
Is interstitial monitor functioning properly? (if applicable)			
C. OTHER			

CORRECTIVE ACTIONS REQUIRED (explain below):

APPENDIX C

C-1 TRAINING OUTLINE

C-2 TRAINING RECORD

APPENDIX C-1

TRAINING OUTLINE: SPILL PREVENTION, CONTROL AND COUNTERMEASURES

Training will be provided for facility personnel at the following times:

1. System startup or whenever new equipment is installed
2. Within the first week of employment for new personnel
3. Annually

The training will include complete instruction in the elements of the facility's Spill Prevention, Control, and Countermeasure Plan and will include the following:

1. Pollution control laws, rules, and regulations including a summary of Title 40 of the Code of Federal Regulations Part 112 "Oil Pollution Prevention" (see Attachment)
2. Fuel Storage System
 - A. Purpose and application of the following system elements:
 - Tanks
 - Piping
 - Pumps
 - Accessory equipment
 - Electronic monitors
 - B. Operation, maintenance, and inspection of system elements
3. Spill Prevention
 - A. Potential spill sources
 - B. Spill flow direction and impact on navigable waters
 - C. Procedures to prevent spills, especially during fuel unloading
4. Spill Control
 - A. Secondary containment
 - B. Safety valves
 - C. Pump and equipment shutoff switches
 - D. Use of catch basin inlet covers or other diversionary devices
5. Spill Countermeasures
 - A. Location and use of emergency phone numbers
 - B. Location and use of fire extinguishers
 - C. Location and use of spill cleanup kit
 - D. Implementing the SWIMS procedure

APPENDIX D

D-1 SPILL RESPONSE EXERCISE RECORD

D-2 SPILL REPORTING FORM

APPENDIX D-2

SPILL REPORTING FORM (Form Dated 12/04)

1. GENERAL		
Name of Facility:	Address:	
Completed by:	Organization: National Weather Service	
Position:	Phone:	
2. SPILL INFORMATION		
Date:	Time:	
Location at Facility:	Quantity:	
Substance Spilled:	Other:	
3. OUTSIDE NOTIFICATIONS		
Agencies	Recorder at Outside Agency	Date and Time
Call 911 (or the local emergency agency), if there is an immediate emergency.		
NWS/NOAA: Mike Jacob, (301) 713-1838 ext. 165 Olga Kebis, (301) 713-1838 ext. 173 Terry Brisbin, (817) 978-2644 x139 Mark George, (303) 497-3064		
EPA National Response Center, or U.S. Coast Guard: (800) 424-8802		
<u>List Additional State and Local Agencies below:</u>		
4. INFORMATION ON SOURCE AND CAUSE:		
5. DESCRIPTION OF ENVIRONMENTAL DAMAGE:		
6. CLEANUP ACTION(S) TAKEN:		
7. CORRECTIVE ACTION(S) TO PREVENT FUTURE SPILLS:		

Note: - All information must be filled in. If something is unknown, write "unknown."
 - Copies must be sent to the NWS/NOAA personnel listed above.

APPENDIX E

**CROSS REFERENCE OF THE REQUIREMENTS OF TITLE 40 OF THE CODE
OF FEDERAL REGULATIONS, SECTION 112 WITH THIS PLAN**

APPENDIX E

CROSS REFERENCE OF THE REQUIREMENTS OF 40 CFR 112 AND THIS PLAN

CFR Citation	Item	Plan Location
112.1(d)(2)(ii)	Criteria for need of an SPCC Plan	Table 1
112.4(a)	Reporting of Spills – Federal Notifications	Part III, B
112.4(c)	Reporting of Spills – State Notifications	Part III, B
112.5(b)	SPCC Plan review and amendment requirements – 5 year max.	Page ii
112.5(c)	PE Certification of Technical Amendments	Page i
112.7	SPCC Plan – full approval by management	Page i; Appendix E
112.7(a)(1)	Discussion of Facility Conformance	Part I, B.6
112.7 (a) (3)	Facility Description and Diagrams	Part I, A and B; Appendix K
112.7 (a) (3) (i)	Type of Oil and Storage Capacity	Part I, B.7; Table 1
112.7 (a) (3)(ii)	Discharge Prevention Measures	Part II
112.7(a)(3)(iii)	Discharge and Drainage Controls	Parts II and III
112.7 (a)(3)(iv)	Countermeasures for Discovery, Response and Cleanup	Part III
112.7 (a)(3) (v)	Methods of Disposal	Part III, B.5
112.7 (a) (3)(vi)	Contact List and Phone Numbers	Part III, B; Appendix D-2
112.7 (a)(4)	Spill Reporting Form	Appendix D-2
112.7 (a)(5)	Procedures In Event of Discharge	Part III, A; Appendix D-2
112.7 (b)	Flow Prediction Information	Table 2 and Appendix K
112.7 (c)	Secondary Containment	Part II, A.1 & and A.2
112.7(c)(1)(vii)	Sorbent Materials	Part III, B.2; Appendix G
112.7(d)	Commitment of Manpower and Equipment	Part III, B
112.7 (e)	Inspections, Tests and Records	Part II, A.2; Appendix B
112.7(f)	Training	Part II, A.5; Appendix C
112.7 (g)(5)	Lighting	Part III, A.4
112.7(j)	State Rules, Regulations and Guidelines	Part III, B
112.8(c)(6)	Container Testing	Part II, A; Appendix B

APPENDIX F
MATERIAL SAFETY DATA SHEET (MSDS)

CONOCO INC -- DIESEL FUEL NO. 2, LOW/HIGH SULFUR; 3502;3504

=====
MSDS Safety Information
=====

FSC: 9140
NIIN: 00-286-5297
MSDS Date: 01/10/1994
MSDS Num: BRLXK
Product ID: DIESEL FUEL NO. 2, LOW/HIGH SULFUR; 3502;3504;3510;4152.
MFN: 03
Responsible Party
Cage: 5R396
Name: CONOCO INC
Address: 5 GREENWAY PLAZA E
Box: 2197
City: HOUSTON TX 77252
Info Phone Number: 713-293-5550
Emergency Phone Number: 800-441-3637/800-424-9300 (CHEMTREC)
Preparer's Name: MSDS ADMINISTRATOR
Review Ind: Y
Published: Y

=====
Preparer Co. when other than Responsible Party Co.
=====

Cage: 5R396
Name: CONOCO INC
Address: 5 GREENWAY PLAZA E
Box: 2197
City: HOUSTON TX 77252

=====
Contractor Summary
=====

Cage: 5R396
Name: CONOCO INC
Address: 5 GREENWAY PLAZA E
Box: 2197
City: HOUSTON TX 77252
Phone: 713-293-5550PRODUCT/ 800-4413637MED

=====
Item Description Information
=====

Item Name: DIESEL FUEL
Specification Number: VV-F-800
Type/Grade/Class: GRADE DF-2
Unit of Issue: DR
Quantitative Expression: 00000000055GL
UI Container Qty: 0

=====
Ingredients
=====

Cas: 68476-34-6
Name: PETROLEUM MID-DISTILLATE (DIESEL FUEL, NO 2).
% Wt: 100
Other REC Limits: NONE RECOMMENDED
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED

=====
Health Hazards Data
=====

LD50 LC50 Mixture: LD50 ORAL RAT = 9ML/KG

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: MAY CAUSE IRRIT TO EYES/LUNGS/SKIN AFT PROLONG/REPEAT EXPOSURE. ASPIRATION INTO LUNGS MAY CAUSE LUNG DAMAGE & DEATH.

Explanation Of Carcinogenicity: THERE ARE NO INGREDIENTS ABOVE 0.1% WHICH ARE IDENTIFIED AS CARCINOGENS BY NTP, IARC OR OSHA.

Signs And Symptions Of Overexposure: OVEREXPOSURE MAY CAUSE WEAKNESS, HEADACHE, NAUSEA, CONFUSION, BLURRED VISION, DROWSINESS, UNSPECIFIED CNS EFFECTS. LARGE EXPOSURE MAY CAUSE DIZZINESS, SLURRED SPEECH, FLUSHED FACE, UNCONSCIOUSNESS, CONVULSIONS .STUDIES IN MICE/RATS W/CHRONIC EXPOUSRE HAVE SHOWN DIESEL EXHAUST MAY PRODUCE LUNG TUMORS AND LYMPHOMAS.

Medical Cond Aggravated By Exposure: NONE SPECIFIED BY MFG.

First Aid: INHAL:REMOVE TO FRESH AIR.GIVE OXYGEN IF BREATH DIFFI OR ARTI RESP IF NOT BRETH.CALL PHYSICIAN.SKIN:WASH W/SOAP & WATER.IF IRRIT DEVELOP/PERSIST,CALL PHYSICIAN.EYES:IMMED FLUSH W/PLENTHY OF WATER FOR @ 15MINS.CALL PHYSICIAN.INGEST:DO NOT INDUCE VOMITING.IF CONSCIOUS GIVE 2 GLASSES OF WATER.PHYSICIAN:GIVE 5ML/KG (OR 350ML) OF CHARCOAL SOLUTION (50GMS CHARCOAL IN 400ML WATER) .

=====
 Handling and Disposal
 =====

Spill Release Procedures: REMOVE IGNITION SOURCES.USE EXPLOSION-PROOF EQPMT & APPROPRIATE PPE.DIKE & PREVENT FROM ENTERING SEWERS/WATERWAYS.SOAK UP W/ABSORBENT MATL.(SAWDUST,SAND,OIL DRY).IF SPILLED INTO NAVIGABLE WATERS REPOR T TO NAT RESP CNTR 800-424-8802.READ MSDS.

Neutralizing Agent: NONE

Waste Disposal Methods: TREATMENT/STORAGE/TRANSP/DISPOSAL MUST BE IAW APPLICABLE FED/STATE/PROVINCIAL/LOC REGS.DO NOT FLUSH TO SURFACE WATER/SANITARY SEWER SYS.BY ITSELF LIQ IS EXPECTED TO BE RCRA IGNITABLE HAZ WASTE.CONTAIN S PETRO HYDROCARBONS-RQ(FILM/SHEEN/DISCOLO WATER.

Handling And Storage Precautions: STORE IN WELL-VENTILATED AREA.KEEP CONTAINER TIGHTLY CLOSED.STORE IAW NAT FIRE PROTECTION ASSOC RECOMMENDATIONS.STORE AWAY FROM HEAT/SPARKS/FLAME/OXID

Other Precautions: DO NOT BREATH VAPORS/MISTS.GROUND CONTAINERS WHEN TRANSFERRING LIQUID (FLOWING FUEL GENERATES STATIC ELECTRICITY) .

=====
 Fire and Explosion Hazard Information
 =====

Flash Point Method: TCC

Flash Point Text: 130F,54C

Lower Limits: 0.4

Upper Limits: 6

Extinguishing Media: WATER SPRAY, FOAM, DRY CHEMICAL, CARBON DIOXIDE. NFPA CLASSIFICATION:CLASS II COMBUSTIBLE LIQUID.

Fire Fighting Procedures: DON'T ENTER ENCLOSE/CONFINE SPACE W/O PROPER PROT EQPMT INCLUDING RESP PROT.W/WATER SPRAY COOL FIRE EXPOSED CNTNRS & DISPERSE/FLUSH VAP/PROTECT FROM SPILL/LEAK.

Unusual Fire/Explosion Hazard: PRODUCTS OF COMBUSTION MAY CONTAIN CARBON MONOXIDE, CARBON DIOXIDE & OTHER TOXIC MATERIALS.

=====
 Control Measures
 =====

Respiratory Protection: SELECT APPROPRIATE NIOSH-APPROVED RESP PROTECTION WHEN NEEDED TO AVOID INHAL OF MIST/VAPORS AND TO MAINTAIN EXPOSURES BELOW ACCEPTABLE LIMITS.

Ventilation: USE ONLY WITH ADEQUATE VENTILATION. MECHANICAL (GENERAL)

VENTILATION TO MAINTAIN TLV/PEL.
 Protective Gloves: NEOPRENE, NBR GLOVES.
 Eye Protection: SAFETY GLASSES W/SIDE SHIELDS, CHEM GOGG
 Other Protective Equipment: COVERALLS IF SPLASHING IS PROBABLE.
 Work Hygienic Practices: WASH HANDS AFTER HANDLING. LAUNDER CONTAMIN CLOTHES
 PRIOR TO REUSE.
 Supplemental Safety and Health: NOT SUBJECT TO CA PROP 65. CONTAINS DIESEL FUEL
 OIL SUBJECT TO PEN WORKER/COMM RIGHT TO KNOW.

=====
 Physical/Chemical Properties
 =====

HCC: F4
 B.P. Text: 350F,177C
 Vapor Pres: 1MM@68F
 Vapor Density: >1
 Spec Gravity: 0.84-0.88 @60C
 Viscosity: 1.9CAT@40C
 Solubility in Water: INSOLUBLE
 Appearance and Odor: AROMATIC ODOR;LIQUID;HIGH SULFUR-GREEN;LOW SULFUR-RED OR
 UNDYED(CLEAR OR STRAW)
 Percent Volatiles by Volume: NIL

=====
 Reactivity Data
 =====

Stability Indicator: YES
 Stability Condition To Avoid: AVOID HEAT, SPARKS, FLAME.
 Materials To Avoid: INCOMPATIBLE OR CAN REAC WITH STRONG OXIDIZERS.
 Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE, AND OTHER
 TOXIC MATERIALS.
 Hazardous Polymerization Indicator: NO
 Conditions To Avoid Polymerization: NOT RELEVANT.

=====
 Toxicological Information
 =====

=====
 Ecological Information
 =====

=====
 MSDS Transport Information
 =====

=====
 Regulatory Information
 =====

=====
 Other Information
 =====

=====
 Transportation Information
 =====

Responsible Party Cage: 5R396
 Trans ID NO: 67144
 Product ID: DIESEL FUEL NO. 2, LOW/HIGH SULFUR; 3502;3504;3510;4152.
 MSDS Prepared Date: 01/10/1994
 Review Date: 09/02/1994
 MFN: 3
 Net Unit Weight: 384.7 LBS
 AF MMAC Code: NR
 Multiple KIT Number: 0
 Review IND: Y
 Unit Of Issue: DR

Container QTY: 0

Additional Data: PER MSDS DOMESTIC PROPER SHIPPING NAME DIESEL FUEL, UN 1993,
HAZ CLASS COMBUST LIQ. IF SHIPPED BY VE SSEL/AIR USE INTERNATIONAL
DESCRIPTION WHICH IS GAS OIL, UN 1202, PACK GR III, FLAMM LIQ.

=====
Detail DOT Information
=====

DOT PSN Code: EXF
Symbols: D
DOT Proper Shipping Name: DIESEL FUEL
Hazard Class: 3
UN ID Num: NA1993
DOT Packaging Group: III
Label: NONE
Special Provision: B1
Non Bulk Pack: 203
Bulk Pack: 242
Max Qty Pass: 60 L
Max Qty Cargo: 220 L
Vessel Stow Req: A

=====
Detail IMO Information
=====

IMO PSN Code: HRR
IMO Proper Shipping Name: GAS OIL
IMDG Page Number: 3375
UN Number: 1202
UN Hazard Class: 3.3
IMO Packaging Group: III
Subsidiary Risk Label: -
EMS Number: 3-07
MED First Aid Guide NUM: 311

=====
Detail IATA Information
=====

IATA PSN TX
IATA UN ID Num: 1202
IATA Proper Shipping Name: GAS OIL
IATA UN Class: 3
IATA Label: FLAMMABLE LIQUID
UN Packing Group: III
Packing Note Passenger: 309
Max Quant Pass: 60L
Max Quant Cargo: 220L
Packaging Note Cargo: 310
Exceptions: A3

=====
Detail AFI Information
=====

AFI PSN Code: JEV
AFI Proper Shipping Name: DIESEL FUEL
AFI PSN Modifier: ,ALSO SEE GAS OIL
AFI Hazard Class: 3
AFI UN ID NUM: UN1202
AFI Packing Group: III
Special Provisions: P5
Back Pack Reference: A7.3

=====
HAZCOM Label
=====

Product ID: DIESEL FUEL NO. 2, LOW/HIGH SULFUR; 3502;3504;3510;4152.

Cage: 5R396

Company Name: CONOCO INC

Street: 5 GREENWAY PLAZA E

PO Box: 2197

City: HOUSTON TX

Zipcode: 77252

Health Emergency Phone: 800-441-3637/800-424-9300 (CHEMTREC)

Label Required IND: Y

Date Of Label Review: 09/02/1994

Status Code: C

Label Date: 09/02/1994

Origination Code: F

Eye Protection IND: YES

Skin Protection IND: YES

Signal Word: WARNING

Respiratory Protection IND: YES

Health Hazard: Moderate

Contact Hazard: Moderate

Fire Hazard: Moderate

Reactivity Hazard: None

Hazard And Precautions: MAY CAUSE IRRIT TO EYES/LUNGS/SKIN AFT PROLONG/REPEAT EXPOSURE. ASPIRATION INTO LUNGS MAY CAUSE LUNG DAMAGE & DEATH. TARGET ORGANS:EYE/LUNGS/SKIN. FIRST AID: INHAL:REMOVE TO FRESH AIR.GIVE OXYGEN IF BREATH DIFFI OR ARTI RESP IF NOT BRETH.CALL PHYSICIAN.SKIN:WASH W/SOAP & WATER.IF IRRIT DEVELOP/PERSIST,CALL PHYSICIAN.EYES:IMMED FLUSH W/PLENTY OF WATER FOR @ 15MINS.CALL PHYSICIAN.INGEST:DO NOT INDUCE VOMITING.IF CONSCIOUS GIVE 2 GLASSES OF WATER.PHYSICIAN:GIVE 5ML/KG (OR 350ML) OF CHARCOAL SOLUTION (50GMS CHARCOAL IN 400ML WATER).

=====
Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever expressly or implied warrants, states, or intends said information to have any application, use or viability by or to any person or persons outside the Department of Defense nor any person or persons contracting with any instrumentality of the United States of America and disclaims all liability for such use. Any person utilizing this instruction who is not a military or civilian employee of the United States of America should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation regardless of similarity to a corresponding Department of Defense or other government situation.

APPENDIX G
SPILL CLEANUP KIT INFORMATION

Product Data Sheet

Item Number: KITR202

Item Name: PIG® Spill Kit in a 95-gallon Overpak Salvage Drum - MRO refill

Absorbency

•61 gal./each (230.9 L/each)

Options Available											
Item #	Size	Color	Misc. Features	Amount	Length	Width	Height	Depth	Int. Dia.	Ext. Dia.	Weight
KITR202	—	—	—	1 each	—	—	—	—	—	—	89lbs. (40.4kg)

Description

Replacement contents for a container with a variety of absorbents for responding to spills of oils, coolants, solvents, and water.

Application

To be used to replace components used in KIT202 and KIT224

Features and Benefits

- Prepackaged/Easy to replace the contents of the original 95 gallon (360 L) spill kit (KIT202)
- Variety of absorbents/An assortment of absorbent products to handle non-aggressive spills up to 61 gallons (231 L)

Composition

- PIG® BLUE Socks: polypropylene and magnesium aluminosilicate
- PIG® Pillows: polypropylene and cellulose fibers
- PIG® Mats: polypropylene

This product helps you comply with:	
--	--

Regulatory Citation	Summary
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Kit Components		
-----------------------	--	--

Qty.	Description	Component Refill Item Number
16	48" PIG® BLUE Socks	4048
10	10' PIG® BLUE Socks	PIG202
60	PIG® Universal Mat Pads	MAT203
8	PIG® Pillows	PIL201
50	PIG® Wipers	WIP310
10	Temporary Disposal Bags and Ties	BAG201-L
1	Emergency Response Guidebook	N/A
1	Instructions	N/A
6	Tamperproof Seals	N/A

40 CFR 112.7(c)(1)(vii)	Spill Prevention Control and Countermeasures (SPCC) plans require facilities that have the potential to pollute waterways to have, "appropriate containment and / or diversionary structures or equipment to prevent discharge oil from reaching a navigable water course."
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APPENDIX H
PHOTOGRAHS AND PHOTOGRAPHIC LOG

Facility: NATIONAL WEATHER SERVICE
WEATHER FORECAST OFFICE
NATIONAL HURRICANE CENTER

Site Location:
11691 SW 17th Street
Miami, Florida 33165-2149

Project No:

Photo No. 1

View Direction of Photo:

Northwest

Description:

View of south end of 10,000 gallon AST showing fill port.

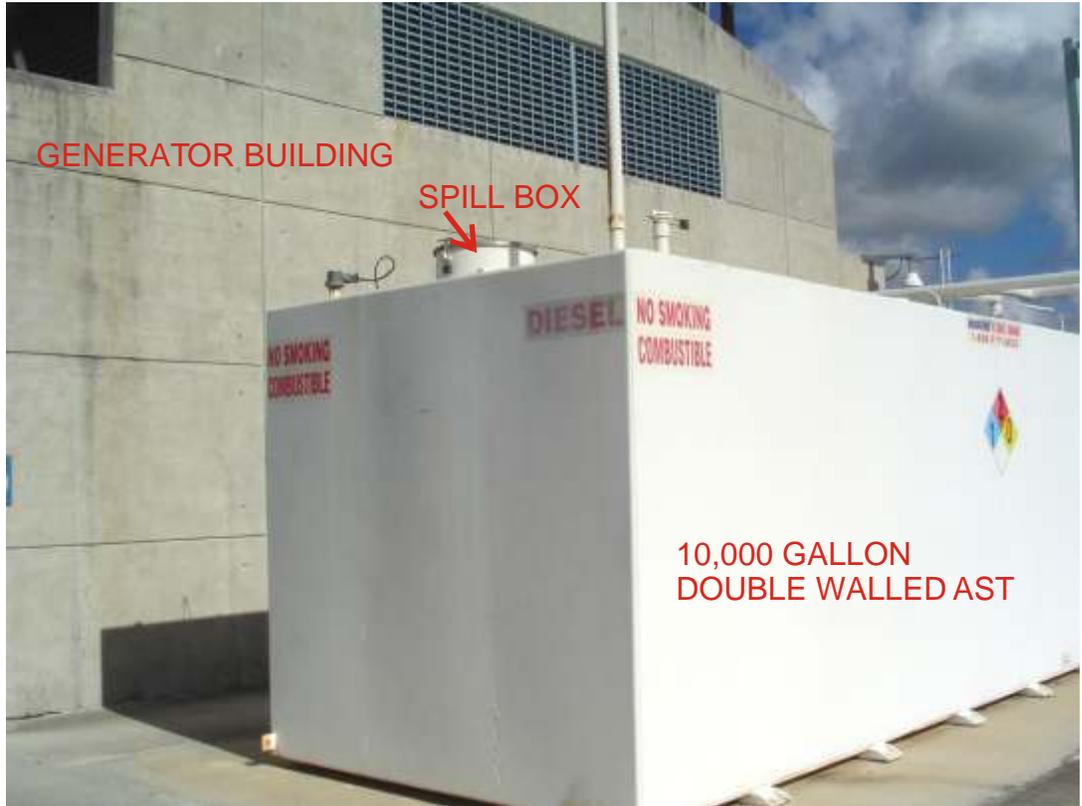


Photo No. 2

View Direction of Photo:

West

Description:

View of north end of 10,000 gallon AST showing fuel system piping.



Facility: NATIONAL WEATHER SERVICE
WEATHER FORECAST OFFICE
NATIONAL HURRICANE CENTER

Site Location:
11691 SW 17th Street
Miami, Florida 33165-2149

Project No:

Photo No. 3

View Direction of
Photo:

West

Description:

View of south end of 10,000 gallon AST.



Photo No. 4

View Direction of
Photo:

North

Description:

View of from south end of 10,000 gallon AST looking north, generator building on left.



Facility: NATIONAL WEATHER SERVICE
WEATHER FORECAST OFFICE
NATIONAL HURRICANE CENTER

Site Location:
11691 SW 17th Street
Miami, Florida 33165-2149

Project No:

Photo No. 5

View Direction of
Photo:

North

Description:

View from parking area adjacent to south end of 10,000 gallon AST looking north at direction of storm water flow.



Photo No. 6

View Direction of
Photo:

South

Description:

View of typical 300 kW generator fuel day tank.



Facility: NATIONAL WEATHER SERVICE
WEATHER FORECAST OFFICE
NATIONAL HURRICANE CENTER

Site Location:
11691 SW 17th Street
Miami, Florida 33165-2149

Project No:

Photo No. 7

View Direction of
Photo:

East

Description:

View of fuel
piping from
10,000 gallon
AST through east
wall of generator
building.



Photo No. 8

View Direction of
Photo:

East

Description:

View of spill kit
located in
generator room.



Facility: WEATHER FORECAST OFFICE REMOTE DATA ACQUISITION RADAR	Site Location: 16801 SW 137 Avenue Perrine, Florida 33177	Project No:
--	--	--------------------

Photo No. 9

View Direction of Photo:

South

Description:

View of RDAS generator building



Photo No. 10

View Direction of Photo:

North

Description:

View of AST fuel tank fill port on west side of RDAS generator building.



Facility: WEATHER FORECAST OFFICE REMOTE DATA ACQUISITION RADAR	Site Location: 16801 SW 137 Avenue Perrine, Florida 33177	Project No:
--	--	--------------------

Photo No. 11

View Direction of Photo:

Southwest

Description:

View of generator diesel fuel ASTs along west wall of building.



Photo No. 12

View Direction of Photo:

Southwest

Description:

View of generator diesel fuel ASTs along west wall of building.



Facility: WEATHER FORECAST OFFICE REMOTE DATA ACQUISITION RADAR	Site Location: 16801 SW 137 Avenue Perrine, Florida 33177	Project No:
--	--	--------------------

Photo No. 13

View Direction of Photo:

South

Description:

View of RDAS generator.



Photo No. 14

View Direction of Photo:

South

Description:

View of spill kit in RDAS generator building.



APPENDIX I
FIGURES

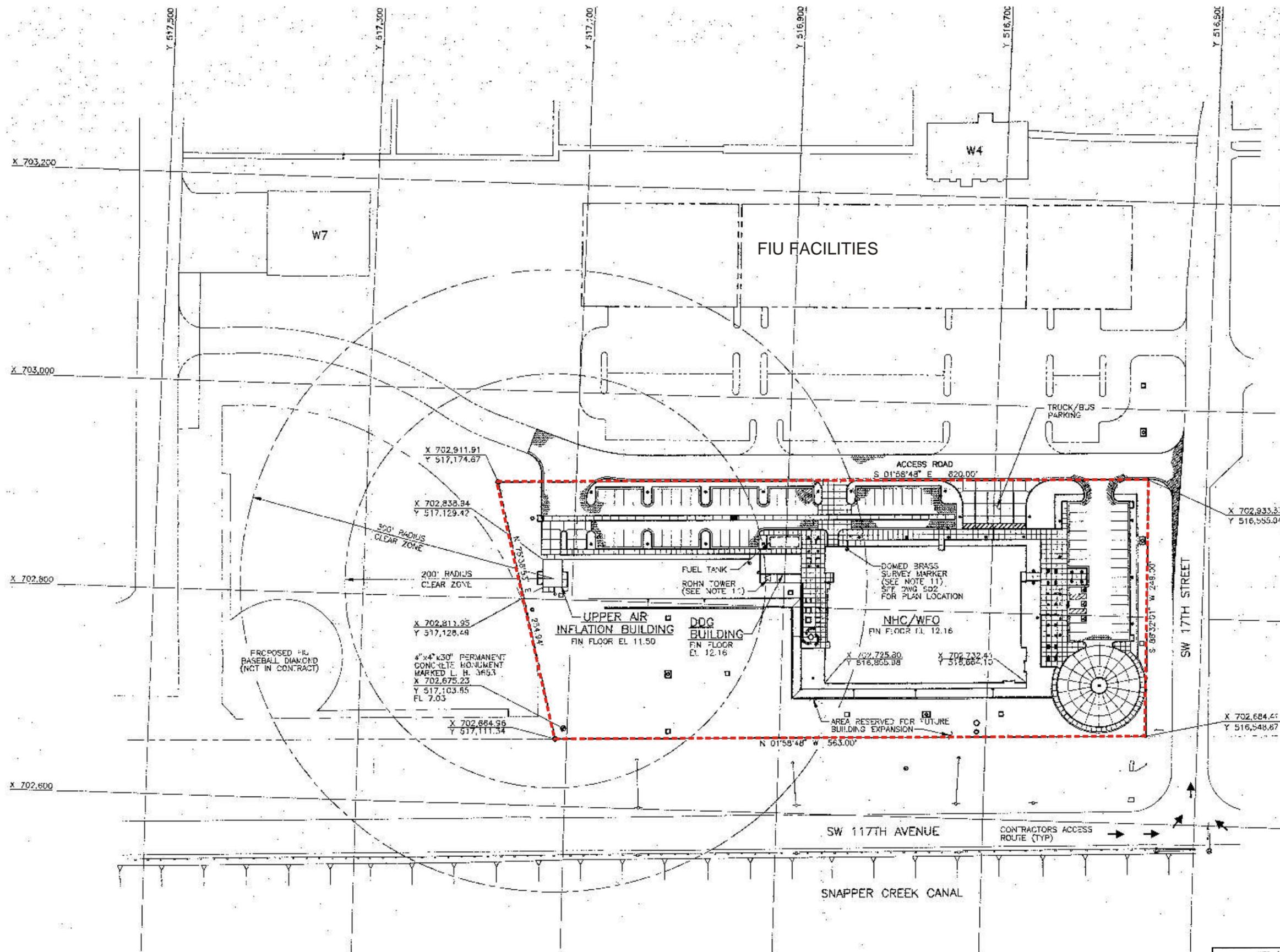
**SPILL PREVENTION,
CONTROL, AND COUNTER
MEASURE PLAN**

**NATIONAL WEATHER SERVICE
WEATHER FORECAST OFFICE
NATIONAL HURRICANE CENTER
11691 SW 17th Street
Miami, Florida 33165-2149**

FIGURE 2

**SITE PLAN
SEPTEMBER 2004**

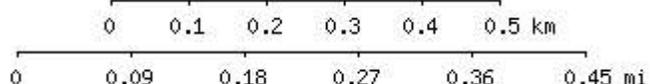
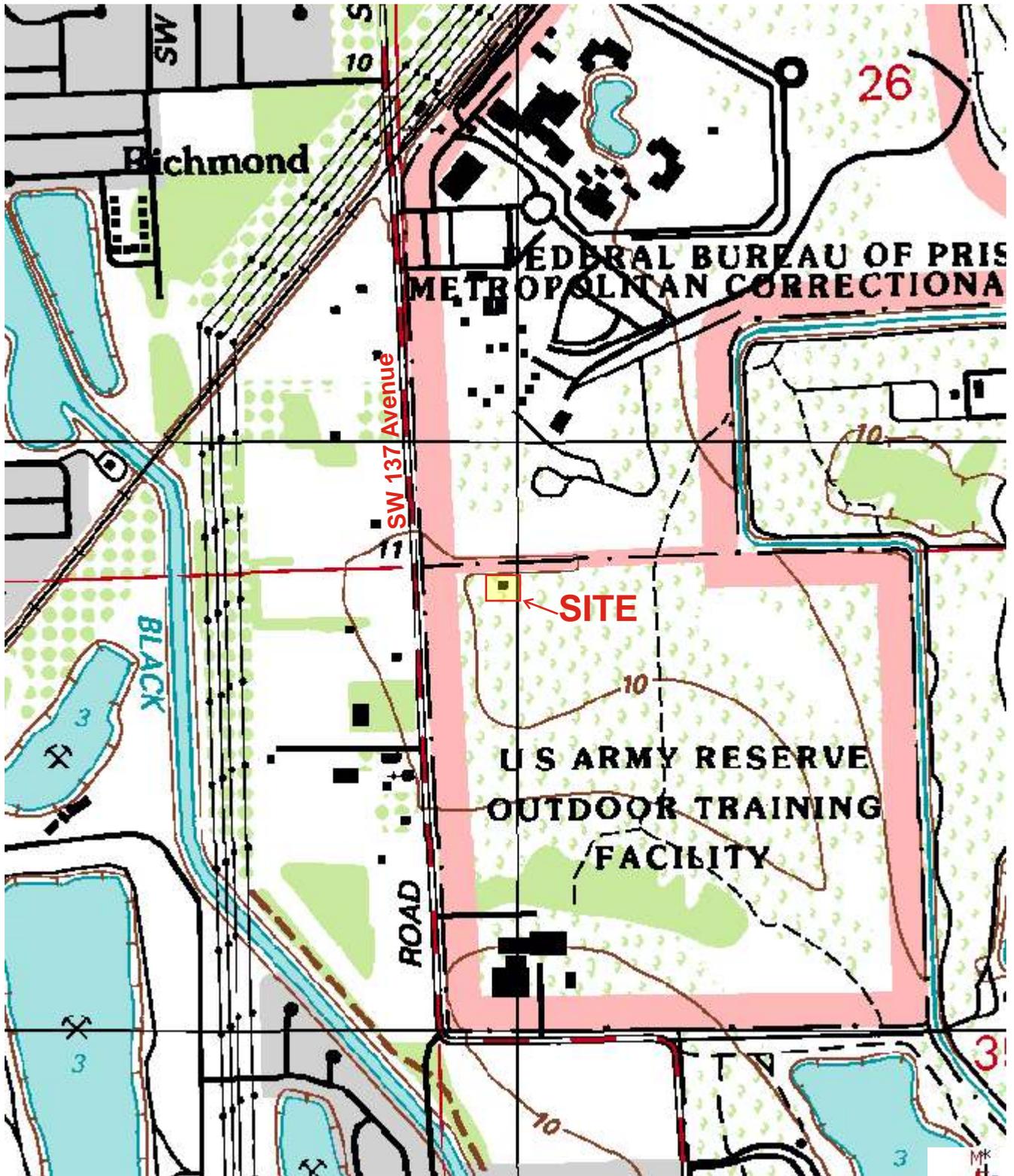
File: SitePlan_Fig2.cdr



OVERALL SITE PLAN
SCALE: 1" = 40'



WFO / NEXRAD PROGRAM PROJECT NO. 6801		SPECIAL ENGINEERING PROGRAM OFFICE (SEPO)
REGIONAL MANAGER SERVICES CONTRACTOR S FLUOR DANIEL GOULD EVANS ARCHITECTS, P.A. MIAMI, FLORIDA	CHECKED: <i>S. Mendez</i> DATE: 09/15/04 DRAWN BY: <i>DALE T. S.</i> DATE: 09/15/04	NATIONAL HURRICANE CENTER WEATHER FORECAST OFFICE MIAMI, FLORIDA OVERALL SITE PLAN
SAFETY SHOULD ALWAYS BE FIRST WITH EVERY TASK YOU DO	044131-	SHEET NO. 6 DRAWING NO. C01 DATE GB REV. 0



Lat: 25.6110°N - Long: 80.4125°W (WGS84/NAD83)

Mk
G
M=-5.418
G=0.254

Reference: U.S.G.S. 7.5 Min Quad: Goulds, Florida, 1994.

Topographical Vicinity Map

DRAWN: DS	NOTES	BY	DATE
CHECKED:			
DATE: Sept 2004	File: NHC-RDAS_topo.cdr		



**WEATHER FORECAST OFFICE
REMOTE DATA ACQUISITION SYSTEM
(RDAS Facility)
16801 SW 137 Avenue
Perrine, Florida 33177**

**FIGURE
3**

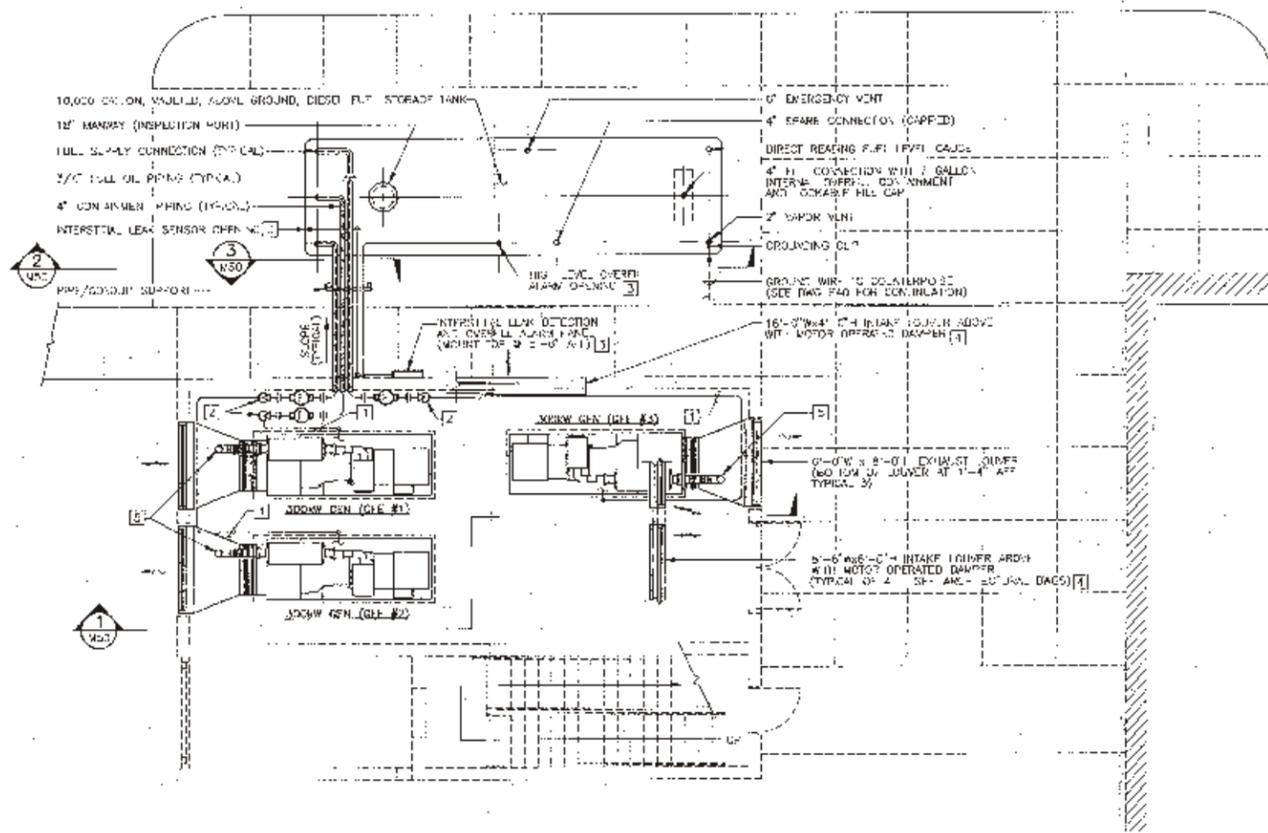
SPILL PREVENTION, CONTROL, AND COUNTER MEASURE PLAN

NATIONAL WEATHER SERVICE
WEATHER FORECAST OFFICE
NATIONAL HURRICANE CENTER
11691 SW 17th Street
Miami, Florida 33165-2149

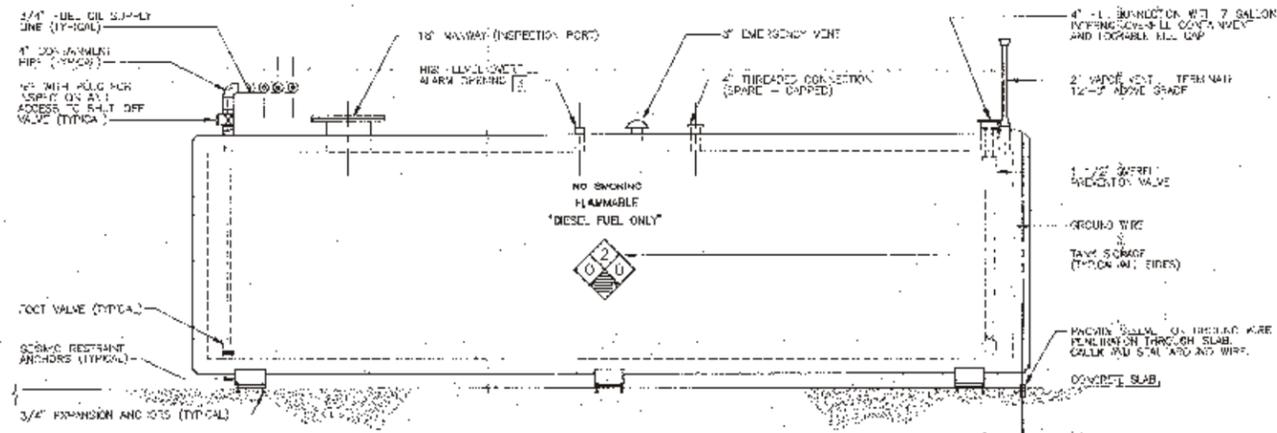
FIGURE 5

GENERATOR BUILDING PLAN SEPTEMBER 2004

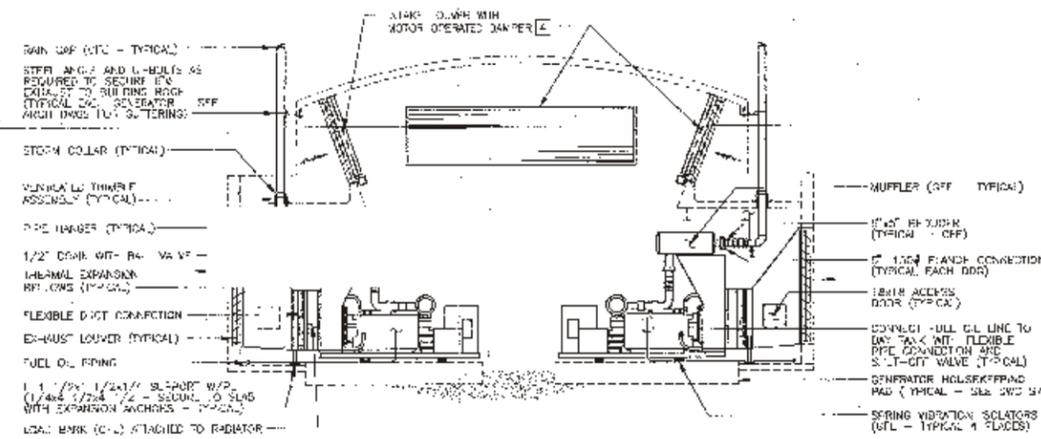
File: GenPlan_Fig5.cdr



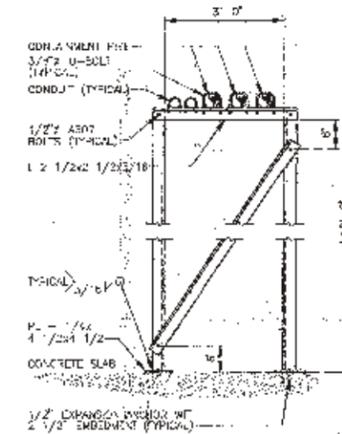
DIESEL-DRIVEN GENERATOR/FUEL TANK PLAN
SCALE: 1/4"=1'-0"



SECTION 2
SCALE: 1/2"=1'-0"

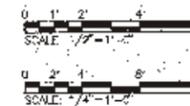


SECTION 1
SCALE: 1/4"=1'-0"



SECTION 3
SCALE: 3/4"=1'-0"

1. INSTALL FUEL FILTER WITH AN 8" HOSE VALVE IN FUEL OIL PIPING AFTER EXITING TO BUILDING WHEN PIPE TURNS DOWN TO FLOOR.
2. ROOF SENSOR WIRING & CONDUIT TO ALARM PANEL.
3. MOTOR OPERATED DAMPER (NORMALLY MOTOR CLOSED, SPRING OPEN), INTERLOCK DAMPER WITH AUTOMATIC INCHER SWITCH (AISI) LOCATED IN THE ELECTRICAL ROOM. ALL DAMPERS SHALL OPEN WHEN ANY OPERATOR IS STARTED.
4. RUN EXHAUST PIPE UP THROUGH ROOF SEAL PENETRATION WATER TIGHT AND INSULATE WORK UP (SITE) THROUGH EXHAUST PIPE 8" O.D. ABOVE TOP OF STACK COLLAR.



Installation of the generator, etc. verify location of all mechanical lines, pipe supports and fixtures of walls from other drawings. As Built. Craig Allen 7/1/05

WFO / NEHRAD PROGRAM PROJECT NO. 0000		SPILLER ENGINEERING PROGRAM OFFICE (SEPO)	
NATIONAL HURRICANE CENTER WEATHER FORECAST OFFICE MIAMI, FLORIDA		NATIONAL HURRICANE CENTER WEATHER FORECAST OFFICE MIAMI, FLORIDA	
DIESEL DRIVEN GENERATORS AND FUEL TANK		DIESEL DRIVEN GENERATORS AND FUEL TANK	
NO. 044131-6	M50	GB	0

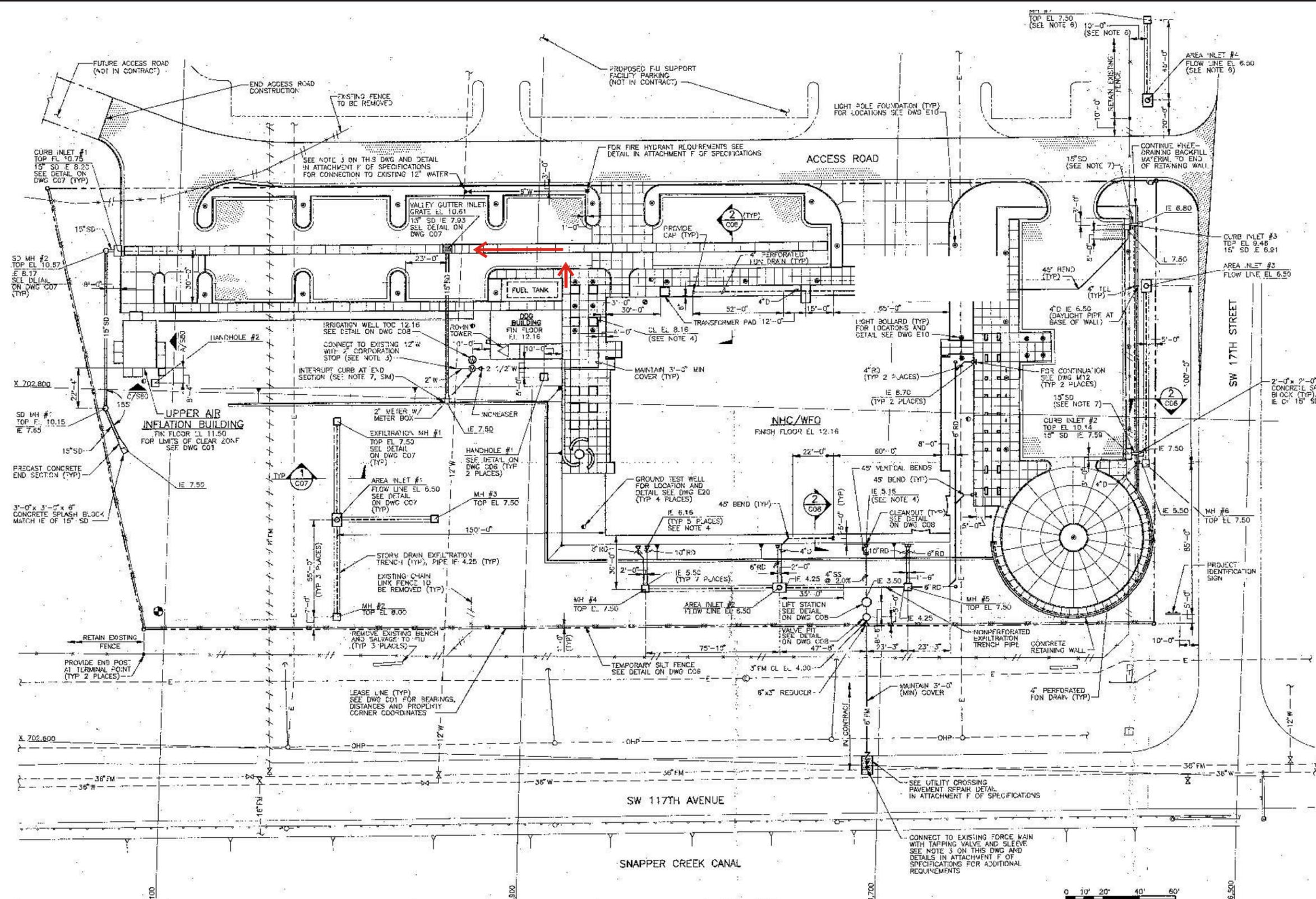
SPILL PREVENTION, CONTROL, AND COUNTER MEASURE PLAN

NATIONAL WEATHER SERVICE
 WEATHER FORECAST OFFICE
 NATIONAL HURRICANE CENTER
 11691 SW 17th Street
 Miami, Florida 33165-2149

FIGURE 6

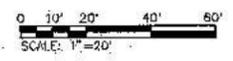
SITE UTILITY AND DRAINAGE PLAN SEPTEMBER 2004

File: DrainPlan_Fig6.cdr



- LEGEND**
- LEASE LINE / RIGHT OF WAY
 - - - - EXISTING GRADE CONTOUR
 - - - - FINISH GRADE CONTOUR
 - - - - TEMPORARY SILT FENCE
 - EXISTING FENCE (TO BE REMOVED)
 - EXISTING FENCE
 - 2 1/2" W WATER LINE
 - 36" W EXISTING WATER LINE
 - 4" SS SANITARY SEWER
 - 36" FM EXISTING FORCE MAIN
 - 3" FM SANITARY SEWER FORCE MAIN
 - 15" SD STORM DRAIN
 - 10" RD ROOF DRAIN
 - 4" D FOUNDATION DRAIN
 - E EXISTING UNDERGROUND ELECTRIC
 - OHP EXISTING OVERHEAD ELECTRIC
 - EXISTING VALVE
 - SHUT-OFF VALVE
 - CHECK VALVE
 - SLOPE
 - DITCH OR SWALE
 - RIDGE / VALLEY LINE
 - FINISH GRADE SPOT ELEVATION
 - LIGHT POLE FOUNDATION
 - LIGHT BOLLARD
 - GROUND TEST WELL
 - PERMANENT MONUMENT
 - EXISTING ELECTRICAL MANHOLE
 - EXISTING UTILITY POLE
 - WATER METER
 - IRRIGATION WELL
 - EXISTING GUARD RAIL
 - EXISTING TRAFFIC CONTROL/SIGNAL BOX
 - COMBINATION CURB INLET/ OIL SEPARATOR
 - VALLEY GUTTER INLET/ OIL SEPARATOR
 - AREA INLET AND STORM DRAIN EXFILTRATION TRENCH
 - EXISTING GUY WIRE AND ANCHOR
 - 3" ASPHALTIC CONCRETE PAVEMENT
 - CONCRETE SURFACE
 - EXISTING EMBANKMENT
 - EMBANKMENT
 - TYPE "A" CURB AND GUTTER
 - TYPE "B" CURB AND GUTTER
 - TYPE "C" CURB AND GUTTER
 - EXFILTRATION TRENCH MANHOLE
 - STORM DRAIN MANHOLE
 - PAVEMENT CENTERLINE JOINT

SITE AND UTILITIES PLAN
 SCALE: 1" = 20'



WFO / NEXRAD PROGRAM PROJECT NO. 044131		DATE: 9/15/04 BY: S. HARRIS	SPECIAL ENGINEERING PROGRAM OFFICE (SEPO) NATIONAL HURRICANE CENTER WEATHER FORECAST OFFICE MIAMI, FLORIDA	
SAFETY SHOULD ALWAYS BE FIRST WITH EVERY TASK YOU DO		SITE AND UTILITIES PLAN 044131-6-C02-GB		
		CONNECT TO EXISTING FORCE MAIN WITH TAPPING VALVE AND SLEEVE. SEE NOTE 3 ON THIS DWG AND DETAILS IN ATTACHMENT F OF SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.		

ATTACHMENTS

ATTACHMENT 1 40 CFR § 112

ELECTRONIC VERSION OF 40 CFR 112 TO BE INSERTED HERE