



NAVFAC EUROPE AFRICA & SOUTHWEST ASIA
NSA BAHRAIN/ COMNAVREGEURAFSWA DET BAHRAIN
ENVIRONMENTAL DEPARTMENT



FUEL DELIVERY

STANDARD OPERATING PROCEDURE (SOP)

Purpose: The purpose of this Standard Operating Procedure is to minimize the potential for release of POL during a fuel delivery and to track the delivery of POL. This SOP is to be employed for all bulk fuel deliveries at NSA Bahrain. This procedure applies to fuel transfers on land only.

Procedure:

Fuel delivery driver checks in at Security who in turn contacts Public Works (PW) / ENV. A PWD/ENV/Contractor representative meets the driver at the gate.

1. The delivery is checked to verify that the proper fuel is being delivered and the truck is inspected for leaks.
2. The representative follows the truck to the filling point, making sure that no product is leaking
3. The representative directs the delivery truck to park in a manner that minimizes exposure to traffic.
4. The representative ensures that all storm drain inlets are covered and that the secondary containment drain valve is closed and locked.
5. The representative Perform visual site inspection on arrival at Fuel Point (Tank to be filled):
 - a. Inspect work area prior to transfer. Keep free of loose tools, lumber, and other objects that may cause accidents.
 - b. Water in containment
 - c. Evidence of spills
 - d. Cracks in containment
 - e. Obvious signs of damage – Rust / Leakage
 - f. Are high level alarms working? (Note: If not installed visually inspect tank, pipelines and valves. Enter the condition in fuel transfer inspection record.)
 - g. Is corrosion protection working? (Note: If not installed visually inspect tank, pipelines and valves. Enter the condition in fuel transfer inspection record.)
 - h. Is leak detection working? Note: (If not installed visually inspect tank, pipelines and valves. Enter the condition in fuel inspection record.)

6. For all petroleum operations, always bond and ground equipment.
7. Strictly enforce **NO SMOKING** rules.
8. Ensure vehicle engines are switched off prior to fuel transfer.
9. Wear fuel-resistant or rubber gloves and eye protection when conducting fuel transfer operations.
10. The tank is gauged to determine the amount of fuel that can be safely loaded, allowing a minimum of 10% of capacity for expansion.
11. The driver and the representative inspect the hoses to be used for fuel transfer and check that all of the connections are tight before transferring fuel.
12. Following transfer the tank is again gauged and the amount of product transferred is verified.
13. After the transfer and when all hoses are secured on the delivery truck, the representative surveys the transfer area to identify and manage any leaks or spills.
14. The delivery truck is escorted off-site.
15. Use drip pans during fueling operations.
16. Install drips pans under each hose coupling.
17. **Any employee has authority to close down the site for safety reasons.**
18. **Stop fueling operations (as, applicable), when there are lightning discharges within 5 miles.** Monitor communications channels for weather warnings whenever the potential exists. If no warnings are received, but lightning is observed, one option is to use the “flash to bang” method to determine distance to the lightning. Count the number of seconds between the flash and the bang and divide by five to get the rough distance to the lightning. Twenty-five seconds or less from flash to bang will be cause for site closure.



FUEL DISPENSING PROCEDURE

- **Turn-off the Engine.**
- **Extinguish your cigarette and cell phones.**
- **Ensure fuel is available in storage Tank.**
- **Remove the fuel cap on the fill port of the vehicle.**
- **Unlock the dispenser.**
- **Pull out the nozzle.**
- **Insert nozzle into fill port.**
- **Depress the nozzle**
- **Operator must remain at the site during refueling (Hold-Open Latch mechanism).**
- **Watch the dispenser and refueling operations.**
- **Release the handle when you are done.**
- **Make sure no more drips from the nozzle.**
- **Return nozzle to cradle.**
- **Put the cap back.**
- **Secure the dispenser.**
- **Return the key back to dispatch.**
- **Report spill to the Supervisor and Environmental Dept at 1785-4602; DSN: 439-4602. Env Duty: 3944-1681**
- **Clean up spill and dispose off cleanup waste properly thru Env Dept.**
- **Discontinue operations during electrical storms.**





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FUEL TANK MAINTENANCE PLAN

This plan covers seven (7) Above Ground fuel storage Tanks and fourteen (14) day tanks located at NSA Bahrain facilities.

1.1 Monitoring and Inspections

EV conducts monthly visual inspection to ensure tanks and containment system is free from leaks, clean and no accumulated release.

Inspection also include tank and associated pipe lines are free from rust, any structural defects such as cracks on containment system and vent check etc

An Inspection checklist is available.

1.2 Action:

EV will generate a work request to PWD in rectifying any structural defects that observed during inspection.

Discrepancies will be reported to PWD UEM, and PWD Requirements. PWD's - UT and CE shops will coordinate the work in fixing the discrepancies.

1.3 Yearly maintenance:

Above ground storage tanks and associated pipe lines will be cleaned and painted (as required) annually using qualified contractor.

Ensure proper markings and labels are legible.

Ensure Fire extinguishers and other emergency equipments (if necessary) are properly maintained.

Check o-ring/gasket of ventilation for damage or deterioration

PWD will conduct an X-ray test to ensure the integrity of the fuel tanks using a specialized contractor (If required).

Copy of Integrity test records will be provided to Env for documentation.

1.4 Fuel Test:

Fuel samples will be analyzed for the parameters specified and as requested by the customers. The samples can be examined at the site visually for evidence of haziness, sediment, darkening or sent to a laboratory for further testing as required by the customer.

Environmental Standard Operating Procedure

Approved By:	Awni Almasri / Environmental	Date of Last Revision:	14/04/2013
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Location for this SOP:	<i>NAVFAC EURSWA - PUBLIC WORKS / OTHER FUELING LOCATIONS</i>
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FUEL MANAGEMENT

With commitment to **C**ompliance, **A**wareness, **R**esource conservation and **E**nvironmental protection
through pollution prevention we **C.A.R.E.**

Follow your SPCC Plan, Tank Management Plan, and Emergency Response Plans

**Handle all materials carefully, avoid the use of hazardous chemicals and use supplies sparingly.
All wastes generated from an activity must be handled properly.
Return all supplies and chemicals to their proper storage location.**

General Best Management Practices (BMPs) for Fuel Management

Fueling and Fueling Points:

- Fueling areas should be covered and protected from exposure to precipitation.
- Spill response equipment needs to be adequate and readily available at all times and all spills must be addressed immediately regardless of size.
- Fuel points will be designed to minimize potential impacts to the storm drain. This includes but is not limited to bermed dispensing points, adequate secondary containment and proper location in respect to storm drains and the sanitary sewers.
- Equipment and vehicles should not be topped off or overfilled to allow for expansion of fuel.
- Dispensing hose cannot be leaking or cracked.
- Hang nozzles vertically when not in use to prevent fuel remaining in hose.
- Never leave the vehicle/equipment when fuel is dispensing
- Place portable cans in an oil absorbent-lined drip pan when filling
- A site Specific Spill Plan must be at the fuel point locations.
- An ABC rated fire extinguisher should be within the dispenser site.
- Operating and emergency instructions posted.
- Container contents must be clearly marked with a Flammable sign.
- Ensure the fuel can is properly secured to prevent from falling out on the truck bed and causing spill during transport.

AST Storage Tank Systems:

These basic requirements must be maintained:

- Collision protection (bollards)
- Proper venting
- Fencing or other security system
- Overfill alarm and automatic fuel flow shut off
- Containment/tanks in good condition.
- Secondary containment free of any stored material and valves closed.

UST Storage Tank Systems:

These basic requirements must be maintained:

- Corrosion protection
- Leak detection for tank and lines
- Spill and overfill protection
- Records maintained
- **No UST available at NSA**

FUEL MANAGEMENT, continued

Spills and Clean-up:

- Spill and overfill response supplies must be on site.
- Follow instructions in your site specific spill plan

Waste Generation:

- All waste created from Fuel Dispensing operations and clean up must be properly disposed of through NSA Env office.

Wastewater Management:

- Prevent any fuel from entering the drains and other water sources.

Stormwater Control:

- Identify methods and practices to minimize or eliminate storm water pollutants from all sources.
- All areas that have the potential to contribute pollutants to storm water discharges must be maintained in a clean and orderly manner.

Special Practice or Environmental Considerations:

- If you cause or observe a spill: **ALERT** personnel within immediate area, **ISOLATE** evacuate nonessential Personnel, **NOTIFY** the authorities, **CONFINE** and **CONTAIN THE RELEASE** if you are safe and train to do so, NOTIFY and REPORT spills to Env Department.
- Clean up spill if you are safe and trained to do so.

(If any permits are associated with this practice or location insert the operational requirements here, or include them above in the BMPs)