



USAG-HI Spill Prevention, Control and Countermeasures (SPCC) Plan

22 July 2014

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DPW-Environmental SPCC Program Management**

Our mission is to provide sustainable installation support and services for Soldiers, Families, and the military community that meets current and future mission requirements, promotes community well-being and enhances the natural environment



USAG-HI SPCC Plan



AGENDA

- SPCC Plan Overview
- Spill Prevention
 - Secondary Containment
 - Drum Storage
 - Filling/Handling
 - Mobile Refuelers
- Spill Response
- Fueling Operations Request
- Lessons Learned



USAG-HI SPCC Plan



WHY DO WE NEED A SPCC PLAN?



USAG-HI is required to prepare a SPCC Plan because we meet the EPA threshold for quantity of stored petroleum products.

(Reference: 40 CFR 112 and AR 200-1)

- Total aboveground storage capacity >1,320 gallons, counting containers and equipment (mobile or fixed) 55 gallons and greater;
- Total underground storage tank capacity > 42,000 gallons; and
- Oil can be reasonably expected to enter navigable waters via drainage channels, streams and storm drains.



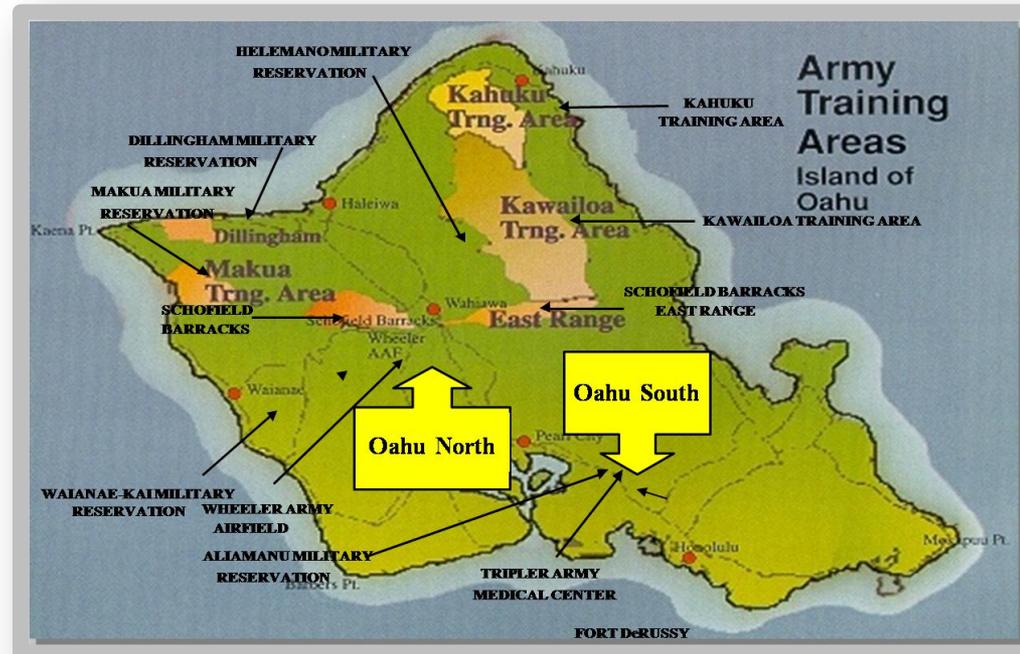
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SCOPE

- Regulated SPCC facilities and activities include permanent facilities with fixed storage and equipment and temporary storage on all Oahu Army Installations and Training Areas.
- Regulated Activities Include:
 - Maintenance of tactical vehicles and aircrafts
 - Dining facilities & eateries
 - Fueling operations
 - Construction sites
 - Maintenance and refueling of tactical equipment during field training and exercises





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APPLICABILITY

Regulated Equipment	Storage Capacity	Inspections
36 USTs (<i>Count towards the storage capacity threshold but regulated under 40 CFR 280</i>)	243,000 Gal	<ul style="list-style-type: none"> • Tank Owners/Operators • DPW Env
191 ASTs	186,492 Gal	<ul style="list-style-type: none"> • Tank Owners/Operators • DPW Env
Drum Storage (≥55 Gal) at industrial operations (<i>New and used oil, antifreeze, brake fluid, gasoline, JP8, etc.</i>)	> 27,000 Gal (Over 100 maintenance shops, motorpools and aircraft hangars)	<ul style="list-style-type: none"> • Process Owners • DPW Env
Drum Storage (≥55 Gal) at dining facilities and eateries (<i>Cooking oil</i>)	> 1,800 Gal	<ul style="list-style-type: none"> • Process Owners • DPW Env
Drum Storage (≥55 Gal) at construction sites	> 1,300 Gal	<ul style="list-style-type: none"> • Process Owners • DPW Env
Transformers (<i>include family housing</i>)	> 1,000 Transformers (pad and pole mounted)	<ul style="list-style-type: none"> • DPW Env
M978- Mobile Refuelers (<i>Heavy Expanded Mobility Tactical Truck (HEMTT)</i>)	217,500 Gal (87 HEMTTs @ 2,500 gal)	<ul style="list-style-type: none"> • Process Owners • DPW Env approves all fueling waiver requests
Tank & Pumps Units (TPUs)	15,000 Gal (15 TPUs @ 2x500 gal)	<ul style="list-style-type: none"> • Process Owners • DPW Env approves all fueling waiver requests
Total POL Storage Capacity: ~ 700,000 Gal		



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SPCC PLAN OVERVIEW

- Current SPCC Plan (2009) includes the following:
 - Locations and activities that have potential to discharge petroleum, oil and lubricants (POL) to the environment
 - General spill prevention program and guidelines
 - Spill response procedures
- Download the Plan at:
<http://www.garrison.hawaii.army.mil/sustainability/SpillPreventionResponse.aspx>



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WHAT KINDS OF OILS ARE INCLUDED?

- Under the SPCC regulations, oil is defined as "oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes and transformers mineral oil ."
- It also includes non-petroleum oils, animal and vegetable oils.





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SPCC PROGRAM GOALS

- **Spill Prevention:** Achieved through installation of required equipment, timely repair of malfunctioning systems, **regular inspections, good material handling & fueling practices.**
- **Spill Control:** Achieved through monitoring of leak detection systems, **proper reporting & ensuring containment systems are functional.**
- **Spill Countermeasures:** Achieved through **quick spill response.**



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SPILL PREVENTION

- Unit Environmental Compliance Officer (ECO) is responsible for ensuring assigned personnel are familiar with SPCC Plan.
- Ensure secondary containment and spill provisions are maintained at facilities.
 - Drip pans under tactical vehicles and tank filling connection points



SECONDARY CONTAINMENT

- Secondary containment for mobile refuelers/fuel pods shall be capable of containing 110% of storage tank capacity.
- **Berms must be maintained in good operating condition.**
- Trained personnel shall drain accumulated rainwater from secondary containment only after inspecting and removing any oily sheen and complete “Secondary Containment Drainage Log” (ECO Binder).



↑
Good



↑
Not Good



↑
Not Good



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DRUM STORAGE

- Drums should be properly labeled and in good condition.
- Regularly inspect drums/storage containers for leaks, damage and corrosion.
 - ECO shall inspect drum storage areas at least monthly.
- Store POL containers on secondary containment (capable of containing 100% of the largest container or 10% of the combined containers, whichever is larger).
- Empty fuel cans can be returned to motor pool complex. Filled cans shall be stored in secure, marked storage point on secondary containment.



FILLING/HANDLING

- Only trained personnel are authorized to handle POL.
- When single or multiple transfers of POL (> 55 gallons), block all down gradient storm sewer inlets/drains within a 50' radius prior to fuel transfer and remove prior to rain and after operation is completed.
- Have adequate spill supplies/equipment readily available on-site.



○ ***ONLY RAINWATER SHALL BE RELEASED INTO THE ENVIRONMENT***

Hydrophobic sorbents absorb petroleum-based hydrocarbon liquids while repelling water.



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MOBILE REFUELERS **In Garrison**

What:

- HEMTTs must be stored **empty (< 300 gallons)** on secondary containments.

When/Where:

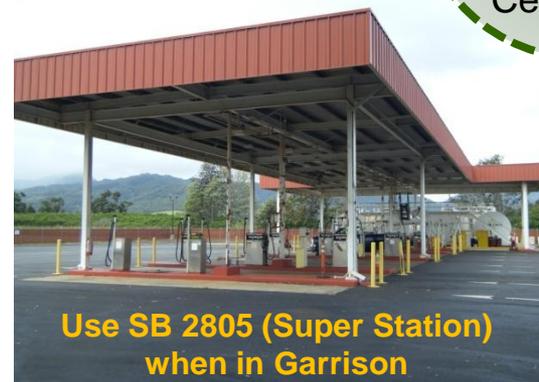
- When in garrison and not in active use.

Why:

- HEMTTs are **mobile and temporary** storage tanks that must be **attended and be under the direct supervision of the operator** who can respond to emergencies immediately.
- HEMTTs **DO NOT** meet the standards for stationary/fixed storage tanks *i.e. Not double walled, no leak detection alarm, etc.*

Who:

Drivers and operators required to have Fuel Handlers Certification



Use SB 2805 (Super Station) when in Garrison

During tank filling:

- Inspect truck compartment(s) and hose(s) for leaks
- Close secondary containment valve
- Place drip pans under connection points
- Place wheel chocks
- Observe by trained personnel



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MOBILE REFUELERS During Field Training Exercises

What:

- Submit fueling **waiver requests**, location map and spill prevention/response SOP to DPW Environmental. (*Templates on website*)

When/Where:

- For Field Training Exercises.

Why:

- IAW SPCC rules and for Emergency Preparedness, the Garrison must know where refueling operations are conducted and where fuel is stored.



- Position fueling points at a minimum **50 feet radius away** from any water bodies, streams, drainage ditches (even if dry).



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MOBILE REFUELERS

Secondary containment requirements:

- Compatible with material it will contain
 - Impervious cover placed inside soil berm
 - Collapsible containment berm
 - Secondary containment unit made of metal



Very Important!

- Re-stock spill kits with replacement items as necessary.
- Spill kits should include brooms and shovels.



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SPILL RESPONSE

- Minor spill (25 gallons or less)
 - Contain spill
 - Report **ALL SPILLS** to DPW Spill Line **656-1111**
 - Notify ECO
 - Clean up
 - Submit spill report (**fax 656-1039**)
 - Provide name, location of spill, substance (if known), amount, source, surface on which spill occurred, cause, action to stop/control



Contaminated soil must be dug up





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SPILL RESPONSE

- Major spill (>25 gallons, and/or potential to enter navigable water and/or over 72 hours)
 - Evacuate non-essential personnel
 - **Call 911** (Fire Department, Military Police)
 - Report to DPW Spill Line **656-1111**
 - Notify ECO
 - Remove potential ignition sources
 - Stop flow and contain if safe
 - Submit spill report (**fax 656-1039**)



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SPILL RESPONSE

- Minor spill cleaned up by personnel who caused spill with oversight of DPW-Environmental Division
 - Spill coordinator is typically ECO
- Major spill cleaned up by the Installation Response Team (DPW-Environmental Division)
- Clean up shall be accomplished in a timely manner
- Used spill response material can be picked up by contacting DPW-Environmental Division (479-4367)
- Tenants responsible for fines levied by regulatory agencies

SPILL RESPONSE

- Dry absorbent shall be used to remove POL from surfaces, **NO PRESSURE WASHING ALLOWED!**
- Spill response supplies include:
 - Granular absorbent (dry sweep)
 - Absorbent pillows, pads, socks, rags and booms
 - Drip pans
 - Straight-edge, non-sparking shovel
 - Brooms
 - Salvage drums





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FUEL OPERATIONS REQUEST

- USAG-HI Policy prohibits refueling from tanker trucks and/or fuel bladders when in Garrison. Submit waiver requests to the DPW Environmental SPCC Coordinator for training exercises.

- Request must include:
- Justification for the waiver signed by CO.
- Map of proposed fueling point.
- Dates fueling will be conducted.
- SOP including spill prevention measures.

- Template available at:

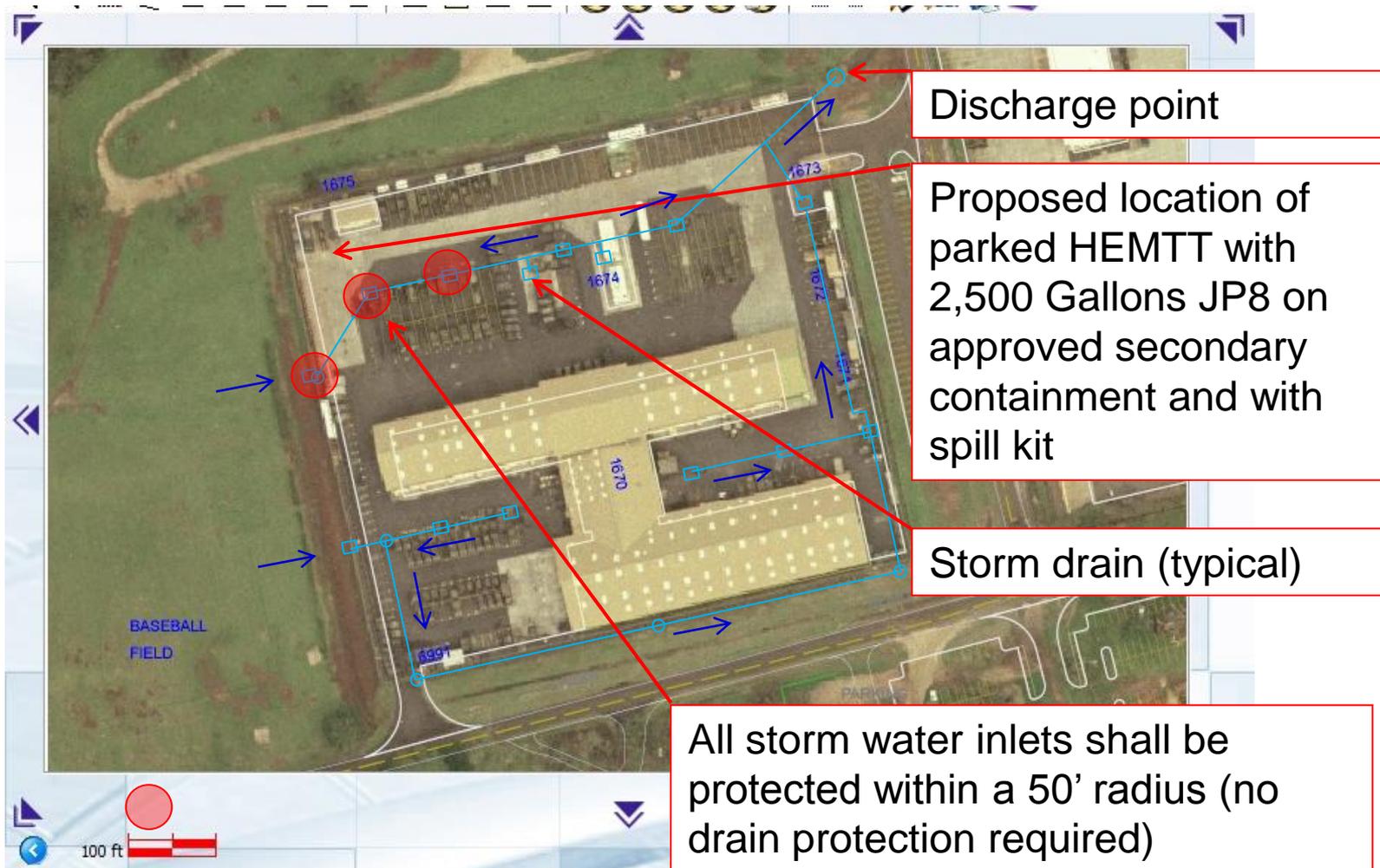
<http://www.garrison.hawaii.army.mil/sustainability/SpillPreventionResponse.aspx>



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SAMPLE MAP





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LESSONS LEARNED

- Never park vehicles over stormdrains or manholes.
- Report all spills & unusual observations to your supervisor or ECO and spill line 656-1111.



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LESSONS LEARNED



To minimize cleanup efforts, and avoid having to excavate soil:

- Park on concrete or asphalt if possible.
- Contain leak with drip pan or other containment device.
- Block/boom spill from entering soil areas.



LESSONS LEARNED

- Conduct daily preventive maintenance.
- Checks of vehicles and equipment.
- Use drip pans where leaks are likely to occur.
- **Check drip pans after rain** to prevent overflow and release of oil into the environment.





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LESSONS LEARNED

Apr-May 2014:

- **~ 1,530 gal (wasted fuel) = ~\$8K**
(~\$5K Procurement Cost + ~\$3K Disposal Cost)
- **Call ahead for assistance with reuse instead of disposal of excess fuel.**





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CHECKLIST

Mobile Fuel Operations Spill Prevention and Response Plan Checklist

	Yes	No	N/A
Above ground Storage Tanks and POL Containers:			
1. Has all ASTs, including their associated fittings, piping, transfer lines and valves inspected for corrosion, damage, overfill protection and tested to ensure they are functioning properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. If fuel is being dispensed is a secondary containment system in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the secondary containment valve in the closed position to ensure no leakage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the second containment capable of containing the entire contents of the largest container or 10% of the total volume of all containers, whichever is greater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobile Refuelers and Transportable Fuel Storage Tanks/Bladders:			
5. Is the secondary containment system in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the secondary containment system able to hold 110% of the storage capacity of the tank?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During Transfer/filling Operations POL:			
7. Are all loading/unloading connections securely capped or blank-flanged when not in service or when in standby service for an extended time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Have all loading/unloading vehicles been inspected prior to filling and departure in prevent discharges while in transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. If transferring more than 55 gallons of POL, are all down gradient storm or drainage openings within a 50-foot radius blocked before beginning transfer operations? Drains and openings may be blocked by attaching a cover or dikes of absorbent booms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are adequate supplies of absorbent materials such as socks, pillows, booms and pads readily available before beginning POL transfer operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Has tank truck compartments and hoses been inspected to ensure no potential for leaks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Is the tank secondary containment valve in the closed position?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Are drip pans placed under connection points and other points where leakage can occur?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Have wheel chocks or other system been put in place to prevent trucks from moving prior to disconnection of transfer line?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Is the entire tank filling operation being observed by a trained employee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

General Spill Prevention

16. Are drip pans available for spills caused by overfill?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Are drip pans emptied on a daily basis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Are drip pans containing used fuel (non-regulated diesel waste) emptied into the proper used fuel container?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Are drip pans containing used fuel (non-regulated mogas waste) emptied into the proper used fuel container?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Are containers of the new dry sweep or dry absorbent peat available for the clean-up of spills or leak?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Are containers holding new dry sweep or dry absorbent peat marked "NEW DRY SWEEP?"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Are new dry sweep/absorbent peat containers covered when not in use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Are containers of used dry sweep or dry absorbent peat available for the clean-up of spills or leaks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Are containers holding used dry sweep or dry absorbent peat marked "USED DRY SWEEP?"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Are used dry sweep/absorbent peat containers covered when not in use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Are all personnel aware of the proper procedure for disposing of contaminated (EPA listed or RCRA characteristic) dry sweep?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Are all personnel aware of the proper procedure for disposing of non-regulated waste contaminated dry sweep?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do spill kits contain the following items, compatible with the wastes stored in the facility (Quantities listed in parenthesis are minimums.)

28. a. Granular absorbent in new dry-sweep container with lid (50 lbs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. b. Straight edge, non-sparking shovel or dustpan (1 ea)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. c. Broom (1 ea)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. d. Used dry sweep container with lid (1 ea)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. e. Rubber gloves (2 pair)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. f. Rubber boots (2 pair)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:



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Contact:

- Shane Bourke (808) 656-3105 / shane.j.bourke.civ@mail.mil
- Chantal Leonard (808) 656-3103 / chantal.c.sauveleonard.ctr@mail.mil

Website:

<http://www.garrison.hawaii.army.mil/sustainability/SpillPreventionResponse.aspx>

Other Numbers:

- Report to DPW Spill Line **656-1111**
- Used spill response material can be picked up by contacting DPW-Environmental Division **(479-4367)**
- Submit spill report **(fax 656-1039)**
- Submit job requests to DPW for repair of permanent containment structures and POL storage facilities **(656-6741)**

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QUESTIONS ??





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END OF BRIEF

INSTALLATION MANAGEMENT COMMAND



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