

Santa Barbara City Fire Department - Standard Operating Procedures Emergency Operations	Code: E-VIII-5
Flammable Liquid/Gas/Oil Incidents	
Chpt: VIII Harbor Incidents	Revised: 6/20/03 Pages: 4

Gasoline

- a. Close and secure area.
- b. Obtain information as to the whereabouts of main switches and batteries.
- c. Disconnect all Shore Power at the Dock Box.
- d. Board vessel with fire extinguisher and/or charged line and battery kit. Spread a blanket of foam into the bilge, cabin, etc.
- e. Locate main switches:
 1. If they are explosion proof, switch to off position.
 2. If they are not labeled explosion proof or if they are of the knife type switch - DO NOT OPERATE.
 3. DO NOT OPERATE or manipulate any electrical switches, connections or wires.
- f. Locate Batteries:
 1. Several emergency systems bypass the main switches (bilge pumps, battery charger, burglar alarms) so it is necessary to disconnect the batteries.
- g. With extreme caution disconnect the battery by removing the GROUND (-) connection. Do not remove the POSITIVE (+) connection.
 1. Secure the ground cable away from any positive connection.
- h. Remove or open hatches.
- i. Shut off fuel systems.
- j. Locate and stop leak if possible (shutting off fuel might have accomplished this).
- k. In a small fuel spill, the fuel may be diluted with water and pumped out with a hand pump into appropriate safety containers. Bilges should then

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be flooded with water and pumped out again. Repeat this process until no hazard exists.

- l. On larger spills, vessels may be towed to the isolation area at the northeast corner of the Boat Launching Ramp. The same pumping out procedures will be followed.
- m. At completion of pumping, the vessel can be returned to its slip, left in quarantine, or hauled out.
- n. Owner must be advised to make immediate and permanent repair and provide for Hazardous Materials disposal. Failure to comply may mean impound, haul-out, and repair at owner's expense.

Liquid Petroleum Gas (LPG)

- a. USE EXTREME CAUTION!
- b. Immediate removal to safe and quarantined area may be necessary.
- c. Disconnect all shore power at the Dock Box.
- d. Shut off main valves. Open ventilators and hatches.
- e. WAIT UNTIL SAFE
- f. Follow gasoline electrical shut off procedures.

Hydrogen (Battery) Gas

- a. Usually caused from charging batteries without proper ventilation.
- b. Disconnect battery charger and all shore power at Dock Box.
- c. Open up hatches directly above batteries.
- d. Hydrogen gas is lighter than air, extremely explosive. All areas above batteries that might have trapped gas must be ventilated.
- e. Follow gasoline electrical shut off procedures.

FLAMMABLE LIQUID SPILLS IN HARBOR

Charge Hose Lines

Perform Size Up

Flammable Liquid/Gas/Oil Incidents

- a. Determine Type, Size and Source:
 1. Type - gasoline, fuel oil, paint thinner, pre-mix, etc.
 - (a) Smell, sight, are used to initially determined type.
 - (b) Rapid recognition will augment your decision as to the immediate hazard and danger. It will also be of aid in locating the source.
 2. Size - the area covered can rapidly change due to wind and weather conditions.
 3. Source:
 - (a) Knowledge of wind direction will aid in locating the source.
 - (b) Prompt action at the source will retard the problem.
 4. Establish Communications
 - (a) Notify the Coast Guard
 - (b) Request additional personnel and equipment.

Procedures

- a. Correct the problem at the source.
 1. It may be necessary to eliminate the source by removal to a safe quarantined area.
- b. Flammable liquid spills of a minor nature.
 1. Direct water streams into the contaminated area by breaking up and vaporizing the fuel. Care should be taken regarding the direction of hose streams. Work away from docks and slips and out of corners, etc.
- c. Flammable liquid spills of a MAJOR nature.
 1. Confinement:

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- (a) Spills may be confined to the smallest and safest areas by confinement techniques employed by the Harbor Patrol, Coast Guard, or commercial clean-up firms available on call.
- (b) In no wind conditions, foam may be applied by effectively surrounding the contaminated area. Unless necessary for safety, do not apply foam on contaminated area.

2. After Confinement:

- (a) Use state-of-the-art techniques to remove and dispose of spilled material.
- (b) **DO NOT USE WATER STREAMS:**
 - (1) Causes excessive vapors.
 - (2) May wash the spill over the confinement barriers.

d. During and after removal:

- 1. Re-check downwind areas and dead ends.