

OSHA HAZARD COMMUNICATION RULE

**LABELING REQUIREMENTS
COMPLIANCE PLAN**

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PURPOSE AND SCOPE

This plan describes the means by which the Aberdeen plant will comply with the labeling requirements of the OSHA Hazard Communication rule.

LABELING REQUIREMENTS

The OSHA rule requires that employees be provided a method by which they may know the identity and hazards of materials with which they work. For more details, see the attached "OSHA HAZARD COMMUNICATIONS RULE - A SUMMARY OF EMPLOYER RESPONSIBILITIES," dated February 12, 1985.

CONTAINERS FROM HAZARDOUS MATERIAL SUPPLIERS

1. Insist that suppliers provide labeling on their containers which conforms to the requirements of the OSHA rule.
2. Keep hazardous materials in manufacturer-supplied containers whenever feasible.
3. Inspect all incoming shipments of chemicals at receiving to ensure supplier containers conform to the labeling requirements of the OSHA rule.

PROCESS VESSELS AND PIPING

1. Vinyl Reactor Areas

- a. Replace the twelve regulated area signs in the two vinyl reactor areas with customized signs (35 1/2 inch x 35 1/2 inch "LXSIGN" with red lettering on a white background) available from Stonehouse Signs, Inc. at \$57.46 each. These signs would preclude the need for labeling individual vessels within the units by referring to hazardous material reference books, wherein more explicit information may be found.

b. Legend:

**VINYL CHLORIDE MONOMER
USED IN MOST VESSELS AND PIPING IN
AREA BOUNDED BY YELLOW LINE**

**CANCER-SUSPECT AGENT AREA
AUTHORIZED PERSONNEL ONLY**

**OTHER HAZARDOUS MATERIALS IN USE
SEE HAZARDOUS MATERIALS REFERENCE BOOK
IN CONTROL ROOM FOR HAZARDS
AND HANDLING SAFETY**

2. VCM Tank Farm Area

- a. Install two customized signs (35 1/2 inch x 35 1/2 inch "LXSIGN" with red lettering on a white background) available from Stonehouse Signs, Inc. at \$57.46 each (est.).

b. Locations:

- (1). Twenty feet south of no. 1 water well.
- (2). Thirty-three feet east of the railroad tracks and three feet south of the walkway leading from Entrance Road to the tank farm.

c. Legend:

**VINYL CHLORIDE MONOMER
USED IN MOST VESSELS AND PIPING IN THIS AREA**

**CANCER-SUSPECT AGENT AREA
AUTHORIZED PERSONNEL ONLY**

**SEE HAZARDOUS MATERIALS REFERENCE BOOK
IN CONTROL ROOM FOR HAZARDS
AND HANDLING SAFETY**

3. Compound, Dry Blend, and Plasticizer Areas

- a. Leave existing lead compliance signs in place.
- b. Install customized signs (14 inch x 20 inch "LXSIGN" having red lettering on a white background) available from Stonehouse Signs, Inc. at \$18.16 each.

c. Locations:

- (1). Southeast door of Line I.
- (2). Outside main door between Lab and Line I.
- (3). Outside door just northeast of Line I blenders.
- (4). Outside door just west of Line III mill.
- (5). Outside first-floor door just south of Line III and east of Dry Blend.
- (6). Outside first-floor door northeast of Line III.
- (7). Outside first-floor fire door northwest of Line III.
- (8). Outside the four exterior doors of the Plasticizer Building.
- (9). Outside the color weigh room door.

c. Legend:

HAZARDOUS MATERIALS USED IN THIS AREA

**SEE HAZARDOUS MATERIALS REFERENCE BOOK
IN COMPOUND SUPERVISOR'S OFFICE FOR HAZARDS
AND HANDLING SAFETY**

INTERMEDIATE STORAGE CONTAINERS

1. Except for process vessels, small containers used for immediate transfers, and Color Weigh Room weighups, all intermediate storage containers of hazardous materials must be marked with the same identities (chemical or common names) and hazardous warnings that appear on the manufacturer-supplied containers. Any method of marking is acceptable, provided it is legible.

2. Add the following legend to the "Compound Ticket" used with Compound Color weighups:

CAUTION

**HAZARDOUS MATERIALS
SEE HAZARDOUS MATERIALS REFERENCE BOOK
IN COMPOUND SUPERVISOR'S OFFICE FOR HAZARDS
AND HANDLING SAFETY**

ISOLATED STORAGE VESSELS AND CONTAINERS

Because of their remoteness from the plant areas marked with boundary signs as detailed above, certain vessels and containers require their own labeling as follows:

1. Phthallic Anhydride Storage Tanks and Unloading Station
 - a. Install customized signs (14 inch x 20 inch "LXSIGN" having red lettering on a white background) available from Stonehouse Signs, Inc. at \$27.88 each
 - b. Locations:
 - (1). On column just west of storage tanks.
 - (2). On column just east of storage tanks.
 - (3). On southwest column of loading rack.
 - c. Legend:

CAUTION

PHTHALIC ANHYDRIDE

BURN HAZARD

TOXIC

2. Propane Tank Farm

- a. Use Carlton Industries, Inc. 10 inch x 14 inch propane gas warning sign (cat. no. 8414 - \$13.90 each).
- b. Locations:
 - (1). Post-mount west of propane tanks.
 - (2). Post-mount south of propane tanks.

3. Small Propane Storage Tanks

- a. Use Carlton Industries, Inc. 10 inch x 14 inch (pressure-sensitive) propane gas warning sign (cat. no. 8415 - \$13.90 each).

b. Locations:

- (1). Side of tank east of no. three treatment lagoon.
- (2). End of tank at fire training ground.

4. Gasoline Tanks

a. Use Carlton Industries, Inc. 10 inch x 14 inch (pressure-sensitive) gasoline warning sign (cat. no. 8415 - \$13.90 each)

b. Locations:

- (1). Gasoline tank at fire training ground.
- (2). Gasoline tank at plasticizer tank farm.

5. Diesel Fuel Tanks

a. Use Carlton Industries, Inc. 10 inch x 14 inch (pressure-sensitive) diesel fuel oil warning sign (cat. no. 8415 - \$13.90 each)

b. Locations:

- (1). Fuel tank at fire training ground.
- (2). The four, fire pump engine fuel tanks.
- (3). Diesel tank next to plasticizer tank farm.
- (4). The emergency generator fuel tanks.

6. Sulphuric Acid Storage Tank

a. Use Carlton Industries, Inc. 10 inch x 14 inch (pressure-sensitive) sulfuric acid warning sign (cat. no. 8415 - \$13.90 each)

b. Locations:

- (1). East end of tank.
- (2). South side of tank.
- (3). West end of tank.

7. Ammonia Storage Tank

a. Use Carlton Industries, Inc. 10 inch x 14 inch (pressure-sensitive) anhydrous ammonia warning sign (cat. no. 8415 - \$13.90 each)

b. Locations:

- (1). East end of tank.
- (2). North side of tank.
- (3). West end of tank.
- (4). South side of tank.

8. Chlorine Storage Tanks

a. Use Carlton Industries, Inc. 10 inch x 14 inch chlorine warning sign (cat. no. 8414 - \$13.90 each).



b. Locations:

- (1). East side of chlorine shed
- (2). West side of chlorine shed.
- (3). South side of chlorine shed.

9. Caustic Storage Tank

a. Use Carlton Industries, Inc. 10 inch x 14 inch caustic warning sign (cat. no. 8414 - \$13.90 each).

b. Location: North side of Tank 101.

10. Caustic Unloading Station

a. Use Carlton Industries, Inc. 10 inch x 14 inch caustic warning sign (cat. no. 8414 - \$13.90 each).

b. Locations:

- (1). On column south of unloading spot.
- (2). On column north of unloading spot.

11. Acid Pump House

a. Use Carlton Industries, Inc. 10 inch x 14 inch phosphoric acid warning sign (cat. no 8414 - \$13.90 each) and Carlton Industries, Inc. 10 inch x 14 inch (pressure-sensitive) warning signs for sulphuric acid and anhydrous ammonia (cat. no. 8415 - \$13.90 each).

b. Location: Outside acid pump house door.

12. Water Treatment Chemicals

Betz Laboratories, Inc. has agreed to provide warning labels for in-plant bulk containers of their hazardous materials.

13. Alcohol Tank Farm

a. Stencil names of alcohols in tanks 102-105 and 107-112 on manway covers

b. Install two customized signs (14 inch x 20 inch "LXSIGN" having red lettering on a white background) available from Stonehouse Signs, Inc. at \$18.16 each

(1). Locations:

(a). On pipe rack support column just northwest of tank 102.

(b). On handrail at top of steps just southeast of tank 111.

(2). Legend:

FLAMMABLE ALCOHOL STORAGE AREA
SEE HAZARDOUS MATERIALS REFERENCE BOOK
IN COMPOUND SUPERVISOR'S OFFICE FOR HAZARDS
AND HANDLING SAFETY

14. Catalyst Coolers

a. Replace the existing "DANGER - FLAMMABLE LIQUID" signs in the catalyst cooler areas with nine customized signs (14 inch x 20 inch "LXSIGN" having red lettering on a white background) available from Stonehouse Signs, Inc. at \$18.16 each

b. Locations:

1. Main catalyst shed (5 signs, all on south side of building, facing south).
2. Reactor unit coolers (4 signs, one on front of each cooler).

c. Legend:

DANGER
ORGANIC PEROXIDE STORAGE
EXPLOSIVE DECOMPOSITION HAZARD
WHEN NOT KEPT REFRIGERATED

SUMMARY OF LABELING COSTS

	No. Req'd.	Unit Cost	Tot. Cost
1. Vinyl Reactor area signs	12	\$57.46	\$689.52
2. VCM Tank Farm area signs	2	57.46	114.92
3. Compound, Dry Blend, Plasticizer area boundary signs	11	18.16	199.76
4. Phthalic Anhydride warning signs	3	27.88	83.64
5. Propane gas warning signs	4	13.90	55.60
6. Gasoline warning signs	2	13.90	27.80
7. Diesel fuel oil warning signs	8	13.90	111.20
8. Sulfuric acid warning signs	4	13.90	55.60
9. Anhydrous ammonia warning signs	5	13.90	69.50
10. Chlorine warning signs	3	13.90	41.70
11. Caustic warning signs	3	13.90	41.70
12. Phosphoric acid warning sign	1	13.90	13.90
14. Signpost construction (Item 2 above)	2	50.00	100.00
15. Alcohol tank stencils	10	10.00	100.00
16. Alcohol tank farm area signs	2	18.16	36.32
17. Catalyst storage warning signs	9	18.16	163.44
	Total Cost:		\$1904.60