



TO Distribution DATE March 25, 1993
FROM B. P. Bourgeois SUBJECT HAZWOPER

As a follow-up to our recent meeting, attached for your review are the following:

1. Emergency Response Procedure for chemical spill/releases.
2. Spill Response Team description and procedures.

As you can see, both are still undergoing revisions for the updated version of the Emergency Control Manual. If you have any ideas for improvement, I'd like to get them incorporated prior to distribution of the new manuals.

Thanks.

dth

Attachments

Distribution:

Clyde Dennis
Dick Holliday
Brad Kline
Allen Pride

SL 087833

C. CHEMICAL SPILL/RELEASE

EMERGENCY RESPONSE PROCEDURES

The following procedure has been developed to establish a basic, organized action plan in response to a chemical spill or gas release occurring within the Lake Charles Complex. It is intended to serve as a guide to the Emergency Control Team and is not necessarily all inclusive or outlined in the exact sequence in which it is to be executed. Thorough and timely evaluation of the emergency as information is accumulated is key to initiating and executing the proper response activities.

- **Notification to the Shift Superintendent**

As soon as the spill/release is discovered, the Shift Superintendent is to be notified. Normally this communication is made through the Shift Supervisor but, where circumstances dictate, direct communication to the Shift Superintendent is appropriate.

- **Evacuation of Non-Critical Operations Personnel**

First and foremost is the safety of personnel impacted by the spill/release. If a unit or plant evacuation has not already been activated by operating personnel, determining the need for such and whether it should be a unit, plant, multiple plants, or total complex evacuation.

- **Location and Shutoff of the Spill Source**

Operating personnel should be directed to locate the spill source as soon as possible and to take the appropriate action to stop the spill/release. This includes the authority to shut down any and all production units as required to protect personnel and the environment.

- **Activation of Emergency Response Teams**

Following evacuation and unit shut down considerations, determine the need to activate other emergency response teams such as the Fire Brigade, Spill Response Team, etc.

Bear in mind the Spill Response Team is trained to conduct spill containment activities that go beyond the expertise and resources of the general site worker. Limited offensive action to isolate the spill can be executed by the SRT depending

upon the chemical involved. Isolation of a spill within a production unit is the responsibility of operating personnel within a unit.

● Activation of CAER

Should the chemical spill/release result in the potential for escape beyond plant boundaries or has in fact done so, have the guards issue a CAER warning. An "alert" notification is issued when there exist the potential for outside impact; "release" notification is issued when the spill/release travels beyond the fence line.

When a "release" notification is made, recommendation on actions to take (i.e., evacuation, shelter in place, stand by, etc.) should be communicated. If this includes blocking local streets and highways, place a follow-up call to the local State Police Office.

If there is uncertainty as to the travel of the spill/release beyond the plant fence line, dispatch a qualified person in proper respiratory protection and with appropriate monitoring equipment to the fence line for verification.

Incident Assessment

Once initial response activities have been initiated and information begins to flow back to the Emergency Control Center, conduct preliminary assessment of the incident including consideration of the following factors:

- **Injured Personnel and Fatalities** - to determine the need for medical assistance.
- **Release of Flammable Vapors** - to determine the need for the shutdown of potential ignition sources, including adjacent production units.
- **Chemical Releases to Sewers and Storm Waterways** - due to ruptured piping, leaks, and/or contaminated surface runoff from agents used to prevent fire and vapor cloud ignition.
- **Operational Adjustments** - due to interruptions in utility services, feed streams, waste treatment capabilities, unit shutdowns, etc.

Handwritten notes:
Add to
2/1/93
1's Response - who
Emergency
SWU for spill
Plasma, environment
Come with ORK
Be responsible

- **Notification to State/Federal Agencies**

The reporting requirements for chemical spills and releases depend upon the chemical involved, quantity release, and its escape from the plant site. Providing the above criteria is satisfied, the Shift superintendent is to notify the State Police in Baton Rouge within 15 minutes of the spill/release. If the release quantity is unknown, notification should state that the release quantity is in the process of being estimated and a follow-up call will be made with the completed estimate.

Should the incident result in a spill to any of the state waterways, an additional call to the Coast Guard is required.

Should the incident involve one of PPG's out-of-plant pipelines, it may be necessary to inform the U.S. Department of Transportation and the Louisiana Department of Natural Resources. Refer to the individual pipeline manuals for details.

- **Notification to Lake Charles Management**

Depending upon the magnitude of the spill/release and its overall impact, key management personnel should be informed. First notify supervisory personnel assigned to the affected area. Second, notify management including the Production Superintendent, Plant Manager, and the Works Manager.

(A list of supervisory personnel and their phone numbers in the sequence in which they are to be called is included in the Emergency Control Manual.)

All chemical spills/releases exceeding the reportable quantity (RQ) limit also requires notification to the appropriate environmental department representative who in turn contacts the Louisiana DEQ.

- **Incident update**

It's important to provide frequent and accurate updates to all affected parties. This includes local emergency officials and surrounding businesses and residential areas via the CAER system, and administrative personnel within the plant that are under a shelter in place evacuation via the PA system.

As the spill/release is brought under control, further assessment of the emergency should include the following:

- **Further Operational Adjustments** - necessitated by utility supply limitations rising tank levels, and further unit shutdowns.
- **Property Damage Survey** - conducted from a safe distance to determine the need for additional spill containment and remediation resources.
- **Cleanup Requirements** - acquisition of the necessary internal and external resources as timely initiation of cleanup activities to minimize the environmental impact.
- **Personnel Headcount** - to insure all personnel have been accounted for following the evacuation.

● **Notification to PPG Corporate Management**

Depending on the seriousness of the spill/release, it may be necessary to notify the PPG Crisis Response Unit (CRU) in Pittsburgh. Refer to the discussion of the CRU in the Emergency Control Manual to determine if CRU notification is necessary.

If the CRU is notified, insure that the General Manger of the Chlor/Alkali Business Unit is also notified. Normally this is done through the Works or Plant Manger, but in their absence, contact should be made by a member of the Emergency Control Team within a reasonable time.

● **Notification to Loss Prevention**

Should the spill/release result in any property or equipment damage, notify a member of the Loss Prevention Group so that the appropriate insurance carriers are contacted.

● **Issuance of All-Clear, Start-Up Activities**

When the spill/release has been shutoff and isolated and it's safe for personnel to reenter their work ares, issue an "All-Clear" signal. Within the Plant this is done via the evacuation horns and PA system and outside the plant via the CAER system. Follow-up calls should also be made to:

1. Works Manger (or designated staff member in his absence)
2. Chlor/Alkali Business Unit General Manger.

- **Emergency Response Critique**

As soon as practical following the incident, the Emergency Coordinator should contact the Emergency Response Planning Committee to discuss response activities. If necessary, a follow-up meeting will be scheduled to discuss specific problem areas.

C. SPILL RESPONSE TEAM (SRT)

I. Purpose and Responsibility

The Lake Charles Complex has established the "Spill Response Team" for emergency response to hazardous chemical spills occurring on-site in an effort to minimize any environmental damage resulting from an unauthorized spill and per the requirement of state and federal SPCC guidelines. Emergency response to off-site spills involving PPG products is handled by personnel trained in those specific products.

The Complex Spill Response Team is trained as emergency responders primarily to initiate control and containment activities. Depending upon the incident and chemicals involved, more aggressive activities to stop the spill is permissible. Subsequent cleanup operations are the responsibility of supervision assigned to the area in coordination with the Environmental Department.

Although the Spill Response Team is primarily intended for response to liquid or solid hazardous chemical spills outside of defined production areas (i.e., roadways, canal, docks, etc.), the team is available to assist production areas with containment efforts if so needed. In such cases, location and isolation of the spill source are the responsibility of area supervision and operators.

II. Organization

The basic organization of the Spill Response Team is as follows:

• Coordinator

The Relief Shift Superintendent serves as overall coordinator for the Spill Response Team. He also serves as a member of the Complex Spill Control Committee and updates the committee as to the status of the team. The Coordinator's duties include:

1. Organizes training for SRT members.
2. Insures training records are maintained and updated.
3. Inventories spill response equipment and restocks as necessary.
4. Establishes and communicates budget expense plans for the SRT with approval from the SCC.
5. Makes recommendations to the SCC to improve SRT effectiveness.
6. Report quarterly to the SCC on SRT activities.

SL 087839

• **Leader**

The Shift Supervisor from the plant in which the spill occurs serves as the Team Leader. If for any reason he is unable to assume that role, the acting Shift Superintendent will appoint one of the other Shift Supervisors as the Team Leader. The duties of the Leader include:

1. Takes command of the SRT at the spill site.
2. Conducts assessment of the spill with the assistance of the other SRT members.
3. Develops and directs the implementation of a spill response plan.
4. Determines the need for air monitoring in identifying respiratory protection.
5. Limits the number of personnel at the spill site to those actually performing emergency operations.
6. Designates a safety official, if necessary, to identify and evaluate hazards and provide safety direction.
7. Keeps the Shift Superintendent informed of the spill status and offers recommendations on evacuation, other emergency response action, cleanup, etc.
8. Accounts for all SRT members and reports any missing personnel to the Shift Superintendent following response activities.
9. Transfers ownership of the spill site to the appropriate supervisor for necessary cleanup activities.
10. Files written report to the SRT coordinator critiquing response activities.

• **Members**

The SRT consist of the following members:

1. Plant A Shift Supervisor
2. Plant B Shift Supervisor
3. Plant C Shift Supervisor
4. Shipping Shift Supervisor
5. Shipping Lead Loader
6. PELS Lead Operator
7. VC II Transfer Operator
8. Shift Mechanics (2)

SRT members are responsible for executing the ~~spill~~ ^{SPILL RESPONSE} "containment" plan as directed by the Team Leader.

SL 087840

III. Training

All experienced Spill Response Team members are trained to the "Hazardous Material Technician" level as described by OSHA 1910.120, Paragraph (q), Part 3iii. Members newly assigned to the team that have not completed training necessary to reach the "technician" level operate on the SRT team under the "first responder AWARENESS" level" designation as described by OSHA 1910.120, Paragraph (q), Part 3i.

In addition to the specialized training received in reaching the "Hazardous Material Technical Level", all SRT members undergo the following training:

- A. Annual refresher training on emergency response to hazardous material spills.
- B. SRT specific training on a quarterly basis (topics vary).
- C. Safety and health training on an annual basis.
- D. Hazardous waste handling training on an annual basis.
- E. Other safety and health training specific to their normal job assignment on the required basis.

IV. Team Activation

The Spill Response Team is activated through the use of the complex pager system or radio system. All team members carry either a pager or radio for immediate notification as indicated below:

- | | | |
|------------------------------|---|------------------|
| A. Plant A Shift Supervisor | - | Radio Unit 2 |
| B. Plant B Shift Supervisor | - | Radio Unit 3 |
| C. Plant C Shift Supervisor | - | Radio Unit 5 |
| D. Shipping Shift Supervisor | - | Radio Unit 7 |
| E. Shipping Lead Loader | - | Pager No. 52-747 |
| F. PELS Lead Operator | - | Pager No. 52-747 |
| G. VCII Transfer Operator | - | Pager No. 52-747 |
| H. Shift Mechanic No. 1 | - | Pager No. 51-882 |
| I. Shift Mechanic No. 2 | - | Pager No. 51-892 |

The Group Pager (52-747) set up for the SRT members is tested every day at 7:30 PM; the callback verified by the Main Guard Office. Shift Supervisors' radio units are used continuously throughout the day negating the need for routine testing. Shift Mechanics are contacted on their individual pager number and can be reached by phone in most situations.

V. Response Procedure

The following guidelines are intended to help train and guide personnel assigned to the Spill Response Team (SRT) in response to a chemical spill occurring within the Lake Charles Complex. It is not all inclusive. Each spill incident should first be evaluated thoroughly prior to initiating response activities.

The following procedures assumes the following:

- The Shift Superintendent is aware of the spill and has elected to activate the SRT.
- Necessary evacuation and shutdown procedures are in progress.
- 1. ✕. The SRT assembles at the spill site upwind of the spill and safe from any harmful exposure. The Shift Supervisor of the affected plant takes command of the SRT.
- 2. ✕. An assessment of the spill is completed by determining the following:
 - The chemical involved and its associated hazards, properties, etc.
 - Personal protective equipment required to participate in containment activities
 - Flow direction of the spill if it's a liquid
 - Appropriate container if it's a solid
 - Potential cutoff points for spill containment
 - Need for additional unit shutdown and/or evacuations
 - Impact of weather conditions
 - Need for overpack drums
 - Need for "external" spill response resources
 - Impact for other emergency response activities
 - Site security and control
 - Decontamination requirements
- 3. A response plan is developed deciding on:
 - Team member assignments
 - Personal protective equipment basis individual assignments
 - Containment devices and location (dike, boom, drum, etc.)
 - Equipment needed to construct dikes, lay out booms, etc.

- Use of absorbent material
 - "Spill" site security and control
 - Decontamination procedure
4. The containment plan is executed under the following constraints:
 - a. Where Level A, B, or C suitout is required to conduct containment activities, a two-man response team and two-man backup team (fully suited) are to be utilized.
 - b. If the respiratory protection requirement cannot be determined, response personnel will utilize self-contained breathing equipment until such time through air monitoring it is determined that a decreased level of protection will not result in overexposure.
 5. Surveillance and maintenance of the spill are maintained until relieved by area supervision. The SRT leader may elect to release some of the team members prior to this if the situation is under control.
 6. Within a reasonable time following the incident, the SRT leader files a written follow-up report to the SRT coordinator critiquing response activities. (See attached)

VI. Decontamination Procedure

When conducting spill response procedures that result in personnel and equipment exposure to hazardous substances, decontamination is critical to prevent the spread of these hazardous materials to clean sites.

Personnel are to be transported to an appropriate production unit where the washing of protective clothing is contained and directed to treatment facilities. Clothing is to be disposed of consistent with plant procedures on hazardous waste disposal. Polyethylene sheeting is to be used to provide a containment barrier while in transit.

Should it be impractical to transport equipment in the same manner, decontamination will need to be conducted on-site. In such cases, wash water will need to be contained and disposed of for plant procedures on hazardous waste disposal.

VII TERMINATION PROCEDURES
Need to be developed

SL 087844

SPILL RESPONSE TEAM RESPONSE CRITIQUE REPORT

Date of Spill: _____

Location: _____

SRT Leader: _____

SRT Members Responding: _____

Description of the Spill: _____

SRT Action (Containment Plan, PPE, etc.): _____

Spill Equipment Requiring Replacement (Item, Source): _____

Recommendations for Improvement: _____

Report Filed By: _____ **Date:** _____

Forward to the Spill Release Team Coordinator (Relief Shift Superintendent)

SL 087845