Contra Costa Health Services

HAZARDOUS MATERIALS INCIDENT NOTIFICATION POLICY

I. PURPOSE:

The purpose of this Policy is to promote prompt and accurate reporting to Contra Costa Health Services ("CCHS") of releases or threatened releases of hazardous materials that may result in injury or damage to the community and/or the environment.

The primary reason for prompt and accurate notification to CCHS is to enable CCHS to take measures to mitigate the impacts of a hazardous materials release, such as:

1. Dispatching emergency response teams quickly and with the appropriate equipment and personnel
2. Assessing the extent of the release or the potential extent of the release and whether neighboring communities are at risk of exposure
3. Determining whether the Community Warning System should be activated (if not already activated)\(^1\)
4. Responding to inquiries from the public and the media

II. BACKGROUND:

A. Origin of Policy

The Contra Costa County Board of Supervisors approved the original Hazardous Materials Incident Notification Policy on November 5, 1991. The policy was established in response to incidents, both in Contra Costa County and elsewhere, which demonstrated that preliminary assessments of hazardous materials releases often underestimate the extent and potential danger of such releases.

B. Policy Supplements Regulations

CCHS administers Article 1 of Chapter 6.95 of the California Health and Safety Code, often referred to as the “AB 2185” or “Business Plan” program, which requires immediate notification in the event of a hazardous materials release.\(^2\) The fines that can be assessed for not

\(^1\) Facilities capable of initiating the Community Warning System shall follow the Community Warning System Operating Protocols established for it in addition to this policy.
\(^2\) Health and Safety Code Division 20, Chapter 6.95, Section 25510(a) Except as provided in subdivision (b), the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency, and to the office, in accordance with the regulations adopted pursuant to this section. The handler or an employee, authorized representative, agent, or designee of the handler shall provide all state, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler’s facilities.
reporting can be up to $25,000 per day and up to one year in jail for the first conviction.\textsuperscript{3} Notification to CCHS does not absolve the facility of requisite notifications to other regulatory agencies.

CCHS also administers Article 2 of Chapter 6.95 of the California Health and Safety Code, referred to as the California Accidental Release Prevention (CalARP) Program. This policy assists facilities to meet their obligations under these and other laws.

C. Community Warning System

The CalARP Program requires facilities to determine the potential off-site consequences from accidental releases of a CalARP Program regulated substance. This information has been used in developing emergency response plans for such potential releases and was used to help design the Community Warning System (CWS).

The CWS is a computer-integrated alerting and notification system that incorporates safety sirens, emergency responder pagers, Emergency Digital Information System (EDIS), the Emergency Alerting System (EAS), and a telephone emergency notification system (TENS). EDIS, and EAS are different ways of getting messages to emergency responders, including law enforcement, the media, and the National Weather Service (which transmits information to NOAA Weather Radios). The TENS calls households and businesses and transmits short messages about the incident and recommended protective actions. In addition to these tools, the CWS delivers text messages, makes phone calls, sends e-mail alerts to individuals that register their phones. The CWS alert messages are broadcasted over Facebook and Twitter. Information about an incident can be found during an incident at cococws.us, including the area that is being requested to shelter-in-place.

The CWS was developed through the efforts of the Contra Costa County Community Awareness and Emergency Response (“CAER”) Group working cooperatively with CCHS, representatives from local industry, the community, and other regulatory agencies to provide local residents with timely notification of emergencies, including hazardous materials releases.

The success of the CWS is dependent upon industry’s prompt notification to CCHS. CCHS would like the public to be assured that the CWS will be activated in a timely manner to implement preventive measures, such as sheltering-in-place. The CWS may also be activated to

\textsuperscript{3} §25515.3 Any person or business that violates Section 25510 shall, upon conviction, be punished by a fine of not more than twenty-five thousand dollars ($25,000) for each day of violation, or by imprisonment in the county jail for not more than one year, or by both the fine and imprisonment. If the conviction is for a violation committed after a first conviction under this section, the person shall be punished by a fine of not less than two thousand dollars ($2,000) or more than fifty thousand dollars ($50,000) per day of violation, or by imprisonment in the state prison for 16, 20, or 24 months or in the county jail for not more than one year, or by both the fine and imprisonment. Furthermore, if the violation results in, or significantly contributes to, an emergency, including a fire, to which the county or city is required to respond, the person shall also be assessed the full cost of the county or city emergency response, as well as the cost of cleaning up and disposing of the hazardous materials.
allay community concerns when a visible incident occurs, such as an explosion that does not pose a health hazard. (In order to expedite notification, some facilities have CWS terminals on-site and may activate the CWS directly using pre-defined protocols and procedures.)

D. Benefits of Prompt Notification and Cooperation

CCHS is aware that information provided during the initial notification may be preliminary and that facilities may not be able to provide completely accurate information. CCHS also does not intend for the need to provide notification to CCHS to impede other emergency response activities related to the release. However, CCHS’s ability to make quick and informed decisions to mitigate the impacts of a release is dependent upon receiving prompt notification and accurate information about the release.

Since its adoption in 1991, this policy has improved cooperation and communication between industry, CCHS, and the public during hazardous materials emergency events. CCHS remains committed to ongoing improvement of this policy as industry, CCHS, and the public gain additional experience.

III. POLICY:

A. When Immediate Notification Required. Responsible businesses\(^4\) are required to provide immediate notification to CCHS of a release or threatened release in the following situations.

1. General. Immediate notification is required upon discovery of any release or threatened release of a hazardous material that may have or did have the potential for an adverse health effect from exposure to the chemicals release. This can be on-site, or during transport, handling, storage, or loading of such material, via vehicle, rail, pipeline, marine vessel, or aircraft.

2. Specific Situations. Immediate notification is required in the following situations:

   a. The release or threatened release of a hazardous material that results in a substantial probability of harm to nearby workers or the general public. This includes all hazardous materials incidents in which medical attention beyond first aid is sought. (Do not delay reporting if the level of treatment is uncertain.)

   b. The release or threatened release of hazardous materials that may affect the surrounding population including odor, eye or respiratory irritation.

\(^4\)The term “responsible business” or “business” includes facilities and other entities that have custody of the hazardous material at the time that it is accidentally released, or the facility where the release occurs. For example, a transportation company is the responsible business if the material is released in transit. If there is a release from a transport vehicle when the vehicle is at a fixed facility, the fixed facility is primarily responsible for notifying CCHS under this policy.
c. The event may cause general public concern, such as in cases of fire, explosion, smoke, or excessive flaring. This does not include a non-process fire, such as a grass fire, as long as the non-process fire will not impact a process.

d. The release or threatened release may contaminate surface water, groundwater or soil, either on-site (unless the spill is entirely contained and the clean-up is initiated immediately and completed expeditiously) or off-site.

e. The release or threatened release may cause off-site environmental damage.

f. The facility’s Safety Supervisor or equivalent personnel is placed on alert due to a release or threatened release in the likelihood of an emergency situation, including, but not limited to, emergency shutdowns or major unit start-ups.

B. Who to Notify. Immediately notify the CCHS Incident Response Team (on-call 24 hours a day) by any of the following methods:

1. Through a CWS communication terminal (this is the preferred method if your facility has a CWS terminal)
2. Directly via emergency response pagers (To receive the pager number, please contact the CCHS Incident Response Team in advance at (925) 335-3200 during normal business hours.)
3. Any time by phone at (925) 335-3232

C. Required Information. Provide the information required by the Facility Incident Checklist (Attachment A). Do not delay the notification due to inability to provide any of the information called for in the Facility Incident Checklist.

D. Notification under this policy does not relieve the responsible business from having to comply with any legal requirement to notify other local, state or federal agencies.

E. When Notification Not Required. This policy does not require reporting of a release of a hazardous material that clearly does not meet any of the criteria described in Subsection A, above. Examples of such situations are:

1. Ambulance calls not associated with hazardous materials incidents (e.g., falling off of a ladder).
2. Incidental release.
3. Small spills where the spill is contained, and where it is clear that none of the situations described in Subsection A apply. Spill containment means:
   a. The spilled material is caught in a fixed berm or dike or other impermeable surface, or is contained by using effective spill control measures (NOTE: Petroleum refineries (only) the petroleum spill is less than 150 gallons.);
   b. All of the spilled material is prevented from contaminating surface or
groundwater; and

c. The spill does not pose a substantial probability of adverse health effects to the general public

4. Non-process fires or incidents, such as a grass fire, where a process is not expected to be impacted.


1. For all Level 2 and Level 3 incidents (as defined in Attachment A-1), or upon request of CCHS, a written follow-up report of the incident shall be submitted within 72-hours. (If the due date falls on a weekend or holiday, the Director of Hazardous Materials Programs may allow the report to be submitted on the next business day.) The report shall confirm, modify and/or update the information provided in the initial notification (Facility Incident Checklist). The report shall be submitted on the 72-Hour Follow-Up Report Form (Attachment B). A hard copy and electronic copy of the report should be submitted.

2. A written final report of the incident shall be made to CCHS as soon as practicable, but no later than 30 calendar days from the date of the release, for all Level 2 and Level 3 incidents and for any incident for which CCHS requests such a report. If the investigation has not been completed within 30 calendar days, an interim report shall be submitted and a final report submitted when the investigation is completed. The facility shall give written monthly status reports of the incident investigation, which is submitted the last business day of the month following the 30-day report, until the incident investigation is complete and the final report has been issued to CCHS. Refer to Attachment C for the 30-Day Final Incident Report format. A hard and an electronic copy of the 30-day and subsequent reports should be submitted.

3. All “Major Chemical Accidents or Releases” (defined at County Ordinance Code section 450-8.014(h)) should be investigated using root cause investigation methodology. CCHS will either participate in or closely monitor the investigation. (County Ordinance Code, §450.8.016(c)(1).)

4. If the release requires a written emergency release follow-up report to be submitted to the Chemical Emergency Planning and Response Commission pursuant to section 2705(b) of Title 19 of the California Code of Regulations, a copy of such report shall be sent to CCHS within 15 calendar days.

5. A facility may elect to include with the 30-Day Incident Report Form (Attachment C) a brief narrative of how this incident relates to any of the prevention programs required by CalARP Program regulations and described in the CCHS CalARP Program guidance document.

6. Reports should be sent to the following address:

Contra Costa Hazardous Materials Programs
ATTENTION: Randall L. Sawyer

January 22, 2016 Page 5
Chief Environmental Health and Hazardous Materials Officer
4585 Pacheco Boulevard, Suite 100
Martinez, CA 94553

IV. REFERENCES: California Health and Safety Code Chapter 6.95 (§25500 et seq.); Title 19 Cal. Code Regs §2703 et seq.; County Ordinance Code Chapter 450.8. (Californian Public Utilities Commission Decision 91-08-019/R.88-07-039 requires similar notification for rail accidents.)

Bd approved 11/5/91
Revised Bd Approved 1/93
Revised Bd Approved 6/19/01
Revised Bd Approval 12/14/04
Revised Bd Approved
DISCOVERY OF HAZARDOUS MATERIALS RELEASE

DOES Event MEET NOTIFICATION REQMNTS?

IMMEDIATE NOTIFICATION TO CCHS by TELEPHONE, PAGER, AND/OR CWS

PROVIDE INFORMATION IN ATTACHMENT ‘A’

IS RELEASE EITHER LEVEL 0 OR 1 LEVEL 1?

CCHS REQUEST FOLLOWUP REPORT?

WRITTEN FOLLOWUP REPORT TO CCHS WITHIN 72-HOURS

INVESTIGATION BEEN COMPLETED WITHIN 30

SUBMIT INTERIM REPORT(S)

SUBMIT FINAL REPORT (ATTACHMENT ‘C’)

NO FURTHER ACTION REQUIRED

APPLICABLE TO 30-DAY REPORT

FOR INITIAL RESPONSE ONLY

APPLICABLE TO 72-HOUR REPORT

Y
N
Y
N
Y
N
Y
(cont.)
IS FOLLOWUP REPORT TO STATE OES REQUIRED? \(^1\)

- Y: SUBMIT APPROPRIATE REPORT TO CCHS WITHIN 15 DAYS
- N: NO FURTHER ACTION REQUIRED

IS INCIDENT MAJOR CHEMICAL ACCIDENT OR RELEASE?

- Y: INVESTIGATE INCIDENT USING ROOT CAUSE METHOD, IN CONJUNCTION WITH CCHS \(^2\)
- N: NO FURTHER ACTION REQUIRED

\(^1\) as per Section 2705(b) of Title 19 CCR.
\(^2\) Contra Costa County Ordinance Code Chapter 450-8.016(c)(1) (where applicable)
ATTACHMENT A
FACILITY INCIDENT CHECKLIST (Questions asked by the HazMat Response Team)

Date: ____________________  Time: ____________________  Initial: ___________

☐ A. Call/Page CCC Hazardous Materials Programs Division [Phone: (925) 335-3232, Pager: ____________]

INFORMATION NEEDED IMMEDIATELY (IF KNOWN)

☐ B. State your name and identify your facility and its address.

☐ C. State your phone number or a number with immediate access to an individual who can answer further questions from CCHS. (No voice mail phone numbers.)

☐ D. State the Community Warning System (CWS) Plant Reporting Classification Level (0, 1, 2 or 3): (See Attachment A-1).

☐ E. Has the material gone off-site? Yes/No/Unknown. If yes, what area is being impacted? What is the direction of flow? Is there any impact to storm drains or surface waters?

☐ F. Have TENS Zones been activated? Yes/No? If yes, which TENS Zones have been activated? If no, which TENS Zones should be activated, if any?

☐ G. State, if known, the chemical or material released and describe the physical state (solid, liquid, gas and/or vapor). Has this been verified? Yes/No/Unknown _____________________________

☐ H. Have you received any public complaints? Yes/No/Unknown. ______________________

☐ I. State wind direction out of (from) the ______ to the ______ and degrees if known. [e.g., “Wind is blowing from the Northwest (300°) to the Southeast (120°)].

☐ J. State wind speed. ________ (If wind speed is unknown, inform CCHS whether the wind is blowing significantly or not.)

INFORMATION NEEDED AS SOON AS PRACTICABLE

☐ K. Are there any injuries on-site or off-site? Yes/No/Unknown_______

☐ L. State the on-site contact person and gate number or address to which the CCHS Incident Response (IR) Team should respond.____________________________________________________

☐ M. Are any sensitive receptors or subdivisions nearby? (e.g., School/Day Care facilities/Hospitals/Nursing Homes)____________________________________________________

☐ N. Has the facility’s “Emergency Operations Center” or emergency response staff been activated? Yes/No/Unknown _____________________________

☐ O. State estimated quantity of chemical released (over-estimate rather than under-estimate release) _________

☐ P. Have other agencies been notified? Yes/No. _____________ If yes, state list.

☐ Q. Is there potential for involvement of other hazardous materials due to the proximity to the incident?
## ATTACHMENT A-1

<table>
<thead>
<tr>
<th>Scope</th>
<th>On-Site Only</th>
<th>On/Off Site</th>
<th>On/Off Site</th>
<th>On/Off Site</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hazardous Materials releases, or potential releases, that are limited to</td>
<td>Hazardous Materials releases, or potential releases, that are limited to</td>
<td>Hazardous Materials releases, or potential releases, that are limited to</td>
<td>Hazardous Materials releases, or potential releases, that are limited to</td>
</tr>
<tr>
<td></td>
<td>- On-Site, and</td>
<td>- On-Site, and</td>
<td>- has been or expected to go Off-Site, and</td>
<td>- has been or expected to go Off-Site, and</td>
</tr>
<tr>
<td></td>
<td>- no Off-Site consequences.</td>
<td>- Possible Off-Site consequences.</td>
<td>- may have adverse health consequences for those with sensitivities.</td>
<td>- may have adverse health consequences for the general public.</td>
</tr>
<tr>
<td>Guidelines</td>
<td>- A release not expected to pose an immediate threat to the health and safety of people in the affected area onsite (release is more than an instantaneous release or a puff)</td>
<td>- Spill or release that may meet an RQ requirement that does not meet requirements of L2 or L3,</td>
<td>- Fire/explosion/pressure wave/smoke/plume that may cause off-site adverse health consequences for those with sensitivities</td>
<td>- Fire/explosion/smoke/plume that may cause off-site adverse health consequences for the general public,</td>
</tr>
<tr>
<td></td>
<td>- A potential release due to process unit startups and shut downs,</td>
<td>- Fire/smoke/plume visible from offsite (does not include fire training exercises)</td>
<td></td>
<td>* Hazardous material or fire incident where the Incident Commander or Unified Command through consultation with Contra Costa Health Services HAZMAT Incident Response Team requires the sirens to be sounded</td>
</tr>
<tr>
<td></td>
<td>- Three or more unconfirmed offsite odor complaints within an hour.</td>
<td>- A fire beyond the incipient stage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** When in doubt of Level of Activation, always default to the higher level of activation.
ATTACHMENT B
72 HOUR FOLLOW-UP NOTIFICATION REPORT FORM
CONTRA COSTA HEALTH SERVICES

INSTRUCTIONS: A hardcopy and an electronic copy of this report is to be submitted for all Level 2 and 3 incidents or when requested by CCHS. See Attachment B-I for suggestions regarding the type of information to be included in the report. Attach additional sheets as necessary. Forward the completed form to:

ATTENTION: Randall L. Sawyer
Chief Environmental Health and Hazardous Materials Officer
Contra Costa Hazardous Materials Programs
4585 Pacheco Boulevard, Suite 100
Martinez, CA 94553

INCIDENT DATE: _________________________________
INCIDENT TIME: _________________________________
FACILITY: ______________________________________

PERSON TO CONTACT FOR ADDITIONAL INFORMATION
______________________________________________ Phone number _____________

I. SUMMARY OF EVENT:

II. AGENCIES NOTIFIED, INCLUDING TIME OF NOTIFICATION:

III. AGENCIES RESPONDING, INCLUDING CONTACT NAMES AND PHONE NUMBERS:

IV. EMERGENCY RESPONSE ACTIONS:

V. IDENTITY OF MATERIAL RELEASED AND ESTIMATED OR KNOWN QUANTITIES:

For CCHS Use Only:

Received By: __________________
Date Received: _______________
Incident Number: _____________
Copied To: __________________
Event Classification Level: _______
VI. METEOROLOGICAL CONDITIONS AT TIME OF EVENT including wind speed, direction, and temperature:

VII. DESCRIPTION OF INJURIES:

VIII. COMMUNITY IMPACT including number of off-site complaints, air sampling data during event, etc.:

IX. INCIDENT INVESTIGATION RESULTS

Is the investigation of the incident complete at this time? _______ Yes ______ No
If the answer is no, submit a 30 day final or interim report.

If the answer is yes, complete the following:

X. SUMMARIZE INVESTIGATION RESULTS BELOW OR ATTACH COPY OF REPORT:

XI. SUMMARIZE PREVENTATIVE MEASURES TO BE TAKEN TO PREVENT RECURRENCE INCLUDING MILESTONE AND COMPLETION DATES FOR IMPLEMENTATION:
ATTACHMENT B-1
72-Hour Report Guidelines

The following list suggests items that may be included in the 72-Hour Report to CCHS following an accidental release of a hazardous material. Not all of the items below may be applicable or available at the time of submission.

I. Summary of the Event
   • Background Information/Events Preceding the Incident
   • Incident Summary, including timing of key events
   • Shift Logs, real-time computer/instrument logs, fenceline monitor data, etc.

II. Emergency Notifications (include names, phone numbers and times)
   • CCHS
   • Time/Level of CWS Activation
   • Other Agencies
   • Copy of State OES Emergency Release Follow-Up Notice Reporting Form

III. Agencies Responding
   • Agency
   • Person or people responding
   • Contact person with telephone number

IV. Emergency Response Actions
   • Mutual Aid Activated?
   • Fire Department Response?

V. Material Involved
   • Estimated Quantities
   • CalARP Regulated Substances?
   • Material Safety Data Sheets

VI. Meteorological Data (wind speed, direction, temperature, rain/sun, etc.)

VII. Injuries (including number, type and severity)

VIII. Community Impact
   • Community Complaints
   • Off-Site Consequence Impact Analysis (i.e., injury, property damage, etc.)
   • Sampling Data, including fenceline monitors, if applicable
   • Community Monitoring Results

IX. Incident Investigation
   • Procedure Summary
   • Will Root Cause Analysis Be Performed?
   • Investigation Team/Contact Person(s)
   • Findings/Conclusions
     - Root Causes
     - “Safety System” Flaws
   • Corrective Action/Preventative Measures
   • Description
   • Implementation Dates
ATTACHMENT C  
30-DAY FOLLOW-UP NOTIFICATION REPORT FORM  
CONTRA COSTA HEALTH SERVICES

INSTRUCTIONS: A hardcopy and an electronic copy of this report is to be submitted for all Level 2 and 3 incidents or when requested by CCHS. See Attachment C-1 for suggestions regarding the type of information to be included in the report. Attach additional sheets as necessary. This form is to be used for update reports after the initial 30-day report has been submitted. Forward the completed form to:

ATTENTION: Randall L. Sawyer  
Chief Environmental Health and Hazardous Materials Officer  
Contra Costa Hazardous Materials Programs  
4585 Pacheco Boulevard, Suite 100  
Martinez, CA 94553

INCIDENT DATE: _________________________________  
INCIDENT TIME: _________________________________  
FACILITY: __________________________________________

PERSON TO CONTACT FOR ADDITIONAL INFORMATION  
______________________________________________ Phone number __________________

PROVIDE ANY ADDITIONAL INFORMATION THAT WAS NOT INCLUDED IN THE 72-HOUR REPORT WHEN THE 72-HOUR REPORT WAS SUBMITTED, INCLUDING MATERIAL RELEASED AND ESTIMATED OR KNOWN QUANTITIES, COMMUNITY IMPACT, INJURIES, ETC.:

I. INCIDENT INVESTIGATION RESULTS

Is the investigation of the incident complete at this time? _______ Yes _________ No
If the answer is no, when do you expect completion of the Investigation?

If the answer is yes, complete the following:

SUMMARIZE INVESTIGATION RESULTS BELOW OR ATTACH COPY OF REPORT:

SUMMARIZE PREVENTATIVE MEASURES TO BE TAKEN TO PREVENT RECURRENCE INCLUDING MILESTONE AND COMPLETION DATES FOR IMPLEMENTATION:

For CCHS Use Only:

Received By: __________________  
Date Received: ________________  
Incident Number: ________________  
Copied To: ___________________  
Event Classification Level: _______
30-DAY REPORT, PAGE 2
INCIDENT DATE: _______________________
FACILITY: _______________________

STATE AND DESCRIBE THE ROOT-CAUSE(S) OF THE INCIDENT:
ATTACHMENT C-1
30-Day Report Guidelines

The following outline suggests items in addition to those listed on the 72-Hour report guidelines (Attachments B and B-1) that may be included in the 30-Day Final Report to CCHS following the accidental release of a hazardous material.

(Some of the items listed below may not be applicable or available at the time of submission.)

I. ADDITIONAL INFORMATION
   • Detailed Event Timeline
   • Correspondence (if determined to be relevant)
   • Relevant History of Incidents with Similar Equipment or Procedures

II. INCIDENT INVESTIGATION
   • Findings/Conclusions, including causal factors, contributing factors, and root causes or their equivalent
   • Preliminary Corrective Action/ Preventative Measures
     – Immediate
     – Long-Term
     – Implementation Dates
HAZARDOUS MATERIALS INCIDENT NOTIFICATION POLICY

GLOSSARY AND ACRONYMS

• **CalARP** – California Accidental Release Prevention Program
• **CAER** - Community Awareness and Emergency Response
• **CCHS** – Contra Costa Health Services
• **CLERS** - California Law Enforcement Radio System
• **CWS** - Community Warning System
• **EAS** - Emergency Alerting System
• **EDIS** - Emergency Digital Information System
• **Environmental damage**: detrimental impact on surroundings beyond facility operations.

• **Incidental Release**: A release of a hazardous substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up, nor does it have the potential to become an emergency within a short time frame.

• **NOAA** - National Oceanic and Atmospheric Administration

• **Responsible Business**: The business that has the custody of the hazardous material when there is an accidental release or the business where the accidental release occurs. Examples are 1) transportation companies when they are off-site from a business is then the responsible business when there is a release from their transport vehicle, 2) if there is a release from a transport vehicle at a fixed facility, then the fixed facility is the responsible business.

• **Root cause investigation**: a method for investigating and categorizing the root causes of hazardous materials incidents with safety, health, AND environmental impacts. Root causes are the most basic causes that can reasonably be identified, that management has control to fix, and for which effective recommendations for preventing recurrence can be generated.

• **Safety supervisor**: facility employee(s) responsible for coordinating and/or implementing emergency response activities. Note: This position may be incident specific.

• **Telephone Emergency Notification System (TENS)**: The automated telephone calling system that notifies the community downwind during an incident.