## **RISK MANAGEMENT PLAN DATA ELEMENTS**

The owner or operator of a stationary source subject to the risk management program rule shall submit a single Risk Management Plan (RMP) that includes the information required in §§ 68.155 through 68.185 for all covered processes. A covered process is defined as a process that has a regulated substance present in more than a threshold quantity as determined under § 68.115 of the rule. The following elements should be submitted to EPA as specified in § 68.150.

**EXECUTIVE SUMMARY**: As specified in §68.155, the owner or operator must provide an executive summary in the RMP. The executive summary should be brief and concise, no more than four pages in length for sources with one or two regulated substances. Your executive summary should include descriptions of:

- 1. The accidental release prevention and emergency response policies at the stationary source.
- 2. The stationary source and regulated substances handled. This information may be presented in a paragraph or as bullets. The information should include the following:
  - Primary activities (e.g., manufacturer of polyethylene, pulp mill, chlorine wholesaler);
  - Use of regulated substances (e.g., chlorine used to produce bleach, treat wastewater, repackage for sale);
  - Quantities handled or stored.
- 3. The worst-case release scenario(s) and the alternative release scenario(s), including administrative controls and mitigation measures to limit the distances for each reported scenario. The information should include the following:
  - The scenario (e.g., failure of the storage tank containing 40,000 pounds of chlorine, storage quantity limited to 60 percent of tank's capacity by company procedures; 10 minute release);
  - Distance to endpoint (e.g., under worst-case weather, the substance could travel x miles before dispersing enough to no longer pose a hazard to the public).
- 4. The general accidental release prevention program and chemical-specific prevention steps. For example, you may state that you are in compliance with the OSHA PSM rule and this rule. You may want to highlight general or specific steps that you believe are key to your prevention program. These steps may be either technological (e.g., backup systems) or procedural/managerial (e.g., improved maintenance or training).
- 5. The five-year accident history. This should be a summary (e.g., we have had five accidental releases of chlorine in the past five years; the largest release was 1500 pounds. No one offsite was injured, but several houses were evacuated as a precautionary measure during the 10/25/95 and 5/1/96 releases). Do not present the information in a table format.

- 6. The emergency response program (e.g., source has an emergency response plan, which has been coordinated with the community plan. The source hazmat team has conducted joint training and drills with the local fire department. Mention any public notification and alert systems).
- 7. Planned changes to improve safety.
- 1. **REGISTRATION:** The owner or operator should complete a single registration for the entire source. The registration should cover all regulated substances handled in covered processes.
- **1.1 Source identification:** These fields indicate the location of the source and should be completed using street or local road designation. Do NOT use post office box numbers or rural box numbers.
  - **a. Name:** This is the name of the source, which may include the name of any parent company. The name should be specific to the site.
  - **b-f.** Address (Street, City, County, State, Zip): This is the location of the source using local street and road designations. Do not use post office box numbers or rural box numbers. This is **not** a mailing address.
  - **g-h.** Latitude and Longitude: Latitude is the distance north or south of the equator. Longitude is the distance east or west of the prime meridian. Latitude and longitude are measured in degrees, minutes, and seconds. The best tool for determining your latitude and longitude measurements are U.S. Geological Survey (USGS) topographic quadrangle maps.
- **1.2 Source Dun and Bradstreet number:** This is an identification number that allows your business to be cross referenced to various business information. Dun & Bradstreet is a service mark for an agency furnishing subscribers with information as to the financial standing and credit rating of a business. You may be able to obtain this number from your finance department. Not all sources will have a Dun & Bradstreet number.
- **1.3** Name and Dun and Bradstreet Number of corporate parent company (if applicable): These fields provide information about the source's parent company.
  - **a.** Name of corporate parent company (if applicable): The parent company is the corporation or other business entity that owns at least 50 percent of the voting stock of another company.
  - **b. Dun and Bradstreet number of corporate parent company (if applicable):** This is an identification number that allows the parent company to be cross referenced to various business information. Not all sources will have a Dun & Bradstreet number.
- **1.4 Owner/operator:** This section contains information about the person who owns or operates the source. The owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source.

- **a. Name:** This is the name of the person who owns or operates the source. This owner/operator is the highest ranking company executive on-site. Unmanned sources should supply the name of the executive responsible for the source.
- **b. Phone:** This is the business phone number for the owner or operator.
- c. Mail Address: This is the business mailing address for the owner or operator of the source. Please use post office box numbers or rural box numbers, as appropriate, and the proper zip code to correctly identify the owner's or operator's mailing address.
- **1.5** Name and title of person responsible for part 68 implementation: This is the person designated under § 68.15. This item is not applicable to a source with only Program 1 processes.

## **1.6 Emergency contact:**

- **a. Name:** This is the name of the person who has been designated as the emergency contact for the source. This person should be knowledgeable about the site and any emergency plans and be able to mitigate a release, fight a fire, or direct response personnel conducting such tasks. This person should be an employee (or a contract employee) of the source. The emergency contact may be the owner or operator of the source.
- **b.** Title: The title or job classification of the emergency contact..
- **c. Phone:** This is the phone number where the emergency contact can be reached during normal working hours. It is probably the phone number of the source. If the source does not have a phone number, you may either use the business phone number of the emergency contact, the phone number of the dispatcher, or the phone number of customer service.
- **d. 24-hour Phone:** This is the phone number where the emergency contact can be reached during non-working hours. It is probably the home phone number of the emergency contact or a 24-hour emergency notification "beeper" service.
- **1.7** For each covered process: Provide the chemical name, CAS number, quantity, SIC code, and program level for each covered process at the source.
  - 1. Chemical Name: The name of the regulated chemical. Space is provided to list all regulated chemicals present about the threshold quantity in a process at the source. *Note: See 40 CFR Part 68 "List of Regulated Substances and Thresholds for Accidental Release Prevention and Risk Management Programs."*
  - 2. CAS number: The Chemical Abstract Service registry number for the chemical.
  - **3. Quantity:** The maximum inventory quantity of each regulated substance or mixture in the process in pounds to two significant digits.

- 4. SIC Code: The four-digit Standard Industrial Classification (SIC) Code is the federal government category of business activity. See Standard Industrial Classification Manual, Office of Management and Budget, U.S. Government Printing Office, Washington, D.C. The four-digit SIC code should be applicable to the process, not the source as a whole.
- 5. **Program level:** Enter either Program 1, 2, or 3 to identify with which program the process complies.
- **1.8 EPA Identifier:** This will be the key identifier number [reserved pending key identifier rule]
- **1.9** Number of full-time employees: This is the number of full-time equivalent workers. Part-time or seasonal workers can be added together to approximate an equivalent full-time worker. Part-time and seasonal workers should be weighted against a full-time work schedule. For example, a part-time worker who works 30 hours per week is 3/4 of a full-time worker, and a seasonal worker who works 3 months per year is 1/4 of a full-time worker.
- **1.10 Covered by:** Indicate with a check mark whether the source is covered by the following regulatory programs.
  - **a. OSHA PSM:** The OSHA Process Safety Management Standard, codified at 29 CFR 1910.119, is similar to the Program 3 prevention program, and is designed to protect workers from the effects of accidental releases of hazardous substances. Note that this question covers all processes at your source; if any process at your source is subject to OSHA PSM, you must answer yes even if the PSM process is not covered by this rule.
  - b. EPCRA section 302: This question refers to the Emergency Planning and Community Right-to-Know-Act, which requires notification of local authorities of the presence of certain Extremely Hazardous Substances listed in 40 CFR 302. If you have a toxic regulated substance about the threshold quantity in a process, you are subject to EPCRA section 302. If you are covered for only flammable regulated substances, you are not subject to 40 CFR 355 for those substances, although you may be for toxic substances not affected by this rule.
  - **c. CAA Title V operating permit:** State and local operating permit programs are required under Title V of the Clean Air Act (40 CFR Part 70). Title V requires major sources of air pollution to receive permits, pay fees to cover costs of administering the program, and sign a binding certification of compliance on all permit applications and documents.
- **1.11** Last safety inspection: Record the date of the last safety inspection of your source and check the appropriate agency (OSHA, State OSHA, EPA, State EPA, Fire department, Other, or not applicable) that performed the inspection.
- 2. TOXICS: WORST CASE: Complete once for each Program 1 process containing a regulated toxic, and once to represent all regulated toxic substances held above the threshold quantity in Program 2 and Program 3 processes. In addition, you may need to complete additional worst-case release scenario(s) for a hazard class if a worst case release from another process within the

source potentially affects public receptors different from those potentially affected by the worstcase release reported. See the RMP Offsite Consequence Analysis (OCA) Guidance for more information on determining your worst-case release scenarios.

- 2.1 Chemical name: The name of the regulated chemical evaluated in the worst-case scenario.
- **2.2 Physical state:** Indicate with a check mark the physical state of the chemical as it is released in the scenario.
  - **a. Gas:** Indicate with a check if the chemical is a gas.
  - **b.** Liquid: Indicate with a check if the chemical is a liquid.
- **2.3 Results based on:** Indicate with a check mark whether you used the reference tables provided in the RMP OCA guidance or conducted modelling to calculate your worst-case release. If you performed modelling, you must also indicate which model was used.
- **2.4** Scenario: Indicate with a check mark which of the following release scenarios describes your worst-case release scenario.
  - **a. Explosion:** A rapid chemical reaction with the production of noise, heat, and violent expansion of gasses.
  - **b.** Fire: A product (e.g., fuel) in a state of combustion.
  - c. Toxic gas release: A release of the substance in a vapor state.
  - **d.** Liquid spill and vaporization: A release of the substance in a liquid state with subsequent vaporization.
- **2.5 Quantity released:** Indicate the quantity of the chemical released during the worst-case release in pounds.
- **2.6 Release rate:** Indicate the rate of release in pounds per minute.
- **2.7 Release duration (if modeled):** Indicate the length of time in minutes for the vessel, pipeline, or other location of the regulated substance to release all of its contents. For gasses, the duration is 10 minutes.
- **2.8** Wind speed: This is 1.5 meters per second unless you can demonstrate that local meteorological data applicable to the source show a higher minimum wind speed at all times during the last three years. If you can demonstrate higher minimums existed at all times, these minimums may be used. Provide wind speed in meters per second.
- **2.9 Stability class:** This is an "F" stability class unless you can demonstrate that local meteorological data applicable to the source show a less stable atmosphere at all times. If you can demonstrate less stable conditions existed at all times, these minimums may be used.

- **2.10 Topography (check one):** Indicate with a check mark whether the local topography is urban or rural. Urban means that there are many obstacles in the immediate area; obstacles include buildings or trees. Rural means that there are few buildings or other obstacles in the immediate area.
- **2.11 Distance to endpoint:** Indicate the distance to the endpoint in miles for the chemical, using the endpoint specified for the chemical in Appendix A of the risk management program rule.
- **2.12 Residential population within distance:** Indicate the population within the distance to the endpoint as specified in question 11 of this section. Populations should be estimated within a circle with a center at the point of the release and a radius determined by the distance to the endpoint. Populations estimated need only include residential populations and may be rounded to two significant digits (e.g., 5,500, 11,000).
- **2.13 Public receptors:** These are the public receptors within the distance to the endpoint specified in the worst-case release. Public receptor means locations offsite where members of the public may be exposed to toxic concentrations, radiant heat, or overpressure as a result of an accidental release. Residences, institutions, industrial, office, and commercial buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the source are public receptors. You do not need to list specific locations or estimate populations at these locations. The presence of these receptors may be determined by using local street maps. Check all that apply.
  - **a. Schools:** Public and private elementary, secondary, or higher education schools.
  - b. Residences
  - c. Hospitals
  - d. Prisons
  - e. Public recreational areas or arenas: These include stadiums, parks, and public pools.
  - **f. Major commercial, office or industrial areas:** Industrial parks, office buildings, shopping malls, commercial areas.
- 2.14 Environmental receptors within distance: Environmental receptors should be identified within a circle with a center at the point of the release and a radius determined by the distance to the endpoint. Environmental receptor means natural areas, such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and federal wilderness areas that could be exposed at any time to toxic concentrations, radiant hear, or overpressure as a result of an accidental release and that can be identified on local U.S. Geological Survey maps. Check all that apply.
  - a. National or state parks, forests, or monuments
  - b. Officially designated wildlife sanctuaries, preserves, or refuges

### c. Federal wilderness areas

- **2.15 Passive mitigation considered:** Mitigation means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Check all that were considered in defining the release quantity or rate to the worst-case scenario.
  - **a. Dikes:** A low wall that acts as a barrier to prevent a spill from spreading.
  - **b. Enclosures:** Physical containment of the release within a structure (e.g., a building).
  - **c. Berms:** A mound or wall of earth at the top or bottom of a slope that prevents a spill from spreading.
  - d. **Drains:** A channel that carries off surface water.
  - e. Sumps: A pit or tank that catches liquid runoff for drainage or disposal.
  - f. Other (specify)
- **3. TOXICS: ALTERNATIVE RELEASES:** Complete for each toxic regulated substance held above the threshold quantity in a Program 2 or Program 3 process.
- **3.1** Chemical: The name of the regulated chemical evaluated in the alternative release scenario.
- **3.2 Physical state:** Indicate with a check mark the physical state of the chemical as it is released in the scenario. See question 2.2 of this guidance for an explanation of each physical state.
- **3.3 Results based on:** Indicate with a check mark whether you used the reference tables provided in the OCA guidance or conducted modelling to calculate your worst-case release. If you performed modelling, you must also indicate which model was used.
- **3.4** Scenario (check one): Indicate with a check mark which of the following scenarios describes your alternative release scenario.
  - **a. Transfer Hose Failure:** Failure of the connection between two or more vessels.
  - **b. Pipe Leak:** Release through a rupture in a pipe.
  - c. Vessel Leak: Release through a rupture in a vessel.
  - **d. Overfilling:** Release due to filling a pipe, vessel, or other container past its capacity.

- e. **Rupture Disk/Relief Valve:** Release due to failure of a rupture disk/relief valve to function properly. A rupture disk/relieve valve is a valve that relieves pressure beyond a specified limit and recloses upon return to normal operating conditions.
- **f. Excess Flow Valve Failure:** Release caused by the failure of excess flow device to function properly and prevent surges from reaching downstream equipment.
- g. Other (specify)
- **3.5 Quantity released:** Indicate the quantity of the chemical released during the alternative release scenario in pounds.
- **3.6 Release rate:** Indicate the rate of release in pounds per minute.
- **3.7 Release duration:** Indicate the length of time in minutes for the vessel, pipeline, or other location of the regulated substance to release the quantity indicated in question 3.5.
- **3.8** Wind speed: If you use the RMP OCA guidance, list 3 m/s. If you modeled your scenario indicate the wind speed used. This wind speed should be the average daily wind speed based on annual data collected at your site or at a local meteorological station.
- **3.9 Stability class:** If you use the RMP OCA guidance, list "D" stability. If you modeled your scenario indicate the stability used. The stability should be the average daily stability based on annual data collected at your site or at a local meteorological station.
- **3.10** Topography (check one): Indicate with a check mark whether the local topography is urban or rural. Urban means that there are many obstacles in the immediate area; obstacles include buildings or trees. Rural means that there are few buildings or other obstacles in the immediate area.
- **3.11 Distance to endpoint:** Indicate the distance to the endpoint in miles for the chemical, using the endpoint specified for the chemical in Appendix A of the risk management program rule.
- **3.12 Residential population within distance:** Indicate the population within the distance to the endpoint as specified in question 11 of this section. Populations should be estimated within a circle with a center at the point of the release and a radius determined by the distance to the endpoint. Populations estimated need only include residential populations and may be rounded to two significant digits (e.g., 5,500, 11,000).
- **3.13 Public receptors:** These are the public receptors within the distance to the endpoint specified in the alternative release. Check all that apply. See question 2.13 of this guidance.
- **3.14** Environmental receptors within distance: Environmental receptors should be identified within a circle with a center at the point of the release and a radius determined by the distance to the endpoint. Check all that apply. See question 2.14 of this guidance.

- **3.15 Passive mitigation considered:** Mitigation means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Check all that were considered in defining the release quantity or rate of the alternative release scenario. See question 2.15 of this guidance.
- **3.16** Active mitigation considered: Mitigation means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Active mitigation means equipment, devices, or technologies that need human, mechanical, or other energy input to function. Check all that were considered in defining the release quantity or rate of the alternative release scenario.
  - **a. Sprinkler Systems:** A system for protecting a building against fire by means of overhead pipes which convey an extinguishing fluid through heat activated outlets.
  - **b. Deluge Systems:** A system to overflow an area of a release with water or other extinguishing fluid.
  - **c. Water Curtain:** A spray of water from a horizontal pipe through nozzles, the curtain may be activated manually or automatically.
  - d. Neutralization: Making a toxic chemical harmless through chemical reaction.
  - e. Excess Flow Valve: A system for diverting overflow.
  - **f. Flares:** A device for disposing of combustible gases from a chemical process by burning them in the open.
  - **g. Scrubbers:** A pre-release protection measure that uses water or aqueous mixtures containing scrubbing reagents to remove discharging liquids and possibly also treating the discharging chemical.
  - **h. Emergency Shutdown Systems:** Controls that are triggered when process limits are exceeded and that shut down that process.
  - i. Other (specify)
- 4. FLAMMABLES: WORST CASE: Complete once for each Program 1 process, and once to cover all flammables held above the threshold quantity in Program 2 or Program 3 processes. See the RMP Offsite Consequence Analysis (OCA) Guidance for more information on determining your worst-case release scenarios.
- 4.1 Chemical: The name of the regulated chemical evaluated in the worst-case scenario.

- **4.2 Results based on (check one):** Indicate with a check mark whether you used the reference tables provided in the OCA guidance or conducted modelling to calculate your worst-case release. If you performed modelling, you must also indicate which model was used.
- **4.3** Scenario (check one): Indicate with a check mark which of the following release scenarios is appropriate to describe your worst-case release scenario. Generally the worst-case release scenario is a vapor cloud explosion.
  - **a. Vapor Cloud Explosion:** An explosion of a cloud made of a mixture of a flammable vapor or gas with air.
  - **b. Fireball:** The atmospheric burning of a fuel-air cloud in which the energy is mostly emitted in the form of radiant heat. As buoyancy forces of the hot gases begin to dominate, the burning cloud rises and becomes spherical in shape. Often caused by the ignition of a vapor cloud of a flammable substance.
- **4.4 Quantity released:** Indicate the quantity of the chemical released during the worst-case release in pounds.
- **4.5** Endpoint used: For vapor cloud explosions, the endpoint is 1 PSI overpressure; for a fireball the endpoint is 5 kw/m<sup>2</sup> for 40 seconds.
- **4.6 Distance to endpoint:** Indicate the distance in miles to the endpoint for the chemical specified.
- **4.7 Residential population within distance:** Indicate the population within the distance to the endpoint as specified in question 6 of this section. Populations should be estimated within a circle with a center at the point of the release and a radius determined by the distance to the endpoint. Populations estimated need only include residential populations and may be rounded to two significant digits (e.g., 5,500, 11,000).
- **4.8 Public receptors:** These are the public receptors within the distance to the endpoint specified in the worst-case release. Check all that apply. See question 2.13 of this guidance.
- **4.9** Environmental receptors within distance: Environmental receptors should be identified within a circle with a center at the point of the release and a radius determined by the distance to the endpoint. Check all that apply. See question 2.14 of this guidance.
- **4.10 Passive mitigation considered:** Mitigation means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Check all that were considered in defining the release quantity or rate to the worst-case scenario.
  - **a. Dikes:** A low wall that acts as a barrier to prevent a spill from spreading.
  - **b.** Fire Walls: A wall constructed to prevent the spread of fire.

- **c. Blast Walls:** A heavy wall used to isolate buildings or areas that contain highly combustible or explosive materials.
- **d. Enclosures:** Physical containment of the release within a structure (e.g., a building).
- e. Other (specify)

**5. FLAMMABLES: ALTERNATIVE RELEASES:** Complete once for all flammable regulated substances held above the threshold quantity in a Program 2 or Program 3 process.

- 5.1 Chemical: The name of the regulated chemical evaluated in the alternative release scenario.
- **5.2 Results based on (check one):** Indicate with a check mark whether you used the reference tables provided in the OCA guidance or conducted modelling to calculate your alternative release scenario. If you performed modelling, you must also indicate which model was used.
- **5.3** Scenario (check one): Indicate with a check mark which of the following release scenarios describes your alternative release scenario.
  - **a. Vapor Cloud Explosion:** An explosion of a cloud made of a mixture of a flammable vapor or gas with air.
  - **b. Fireball:** The atmospheric burning of a fuel-air cloud in which the energy is mostly emitted in the form of radiant heat. As buoyancy forces of the hot gases begin to dominate, the burning cloud rises and becomes spherical in shape. Often caused by the ignition of a vapor cloud of a flammable substance.
  - c. **BLEVE:** Boiling Liquid Expanding Vapor Explosion: used to describe the sudden rupture of a vessel/system containing liquefied flammable gas under pressure due to radiant heat flux. The pressure burst and the flashing of the liquid to vapor creates a blast wall and potential missile damage, and immediate ignition of the expanding fuel-air mixture leads to an intense combustion creating a fireball.
  - **d. Pool Fire:** The combustion of material evaporating from a layer of liquid at the base of the fire.
  - e. Jet Fire: Gas discharging or venting from a rupture will form a gas jet that "blows" into the atmosphere in the direction the whole is facing, all the while entraining and mixing with air. If the gas is flammable and encounters an ignition source, a flame jet may form.
  - **f. Vapor Cloud Fire:** A flash fire results from the ignition of a released flammable cloud in which there is essentially no increase in the combustion rate.
- 5.4 **Quantity released:** Indicate the quantity of the chemical released during the release in pounds.

- **5.5** Endpoint used: For vapor cloud explosions, the endpoint is 1 PSI overpressure; for a fireball the endpoint is 5 kw/m<sup>2</sup> for 40 seconds. A lower flammability limit may be listed as specified in NFPA documents or other generally recognized sources.
- 5.6 **Distance to endpoint:** This is the distance in miles to the endpoint in miles for the chemical.
- **5.7 Residential population within distance:** Indicate the population within the distance to the endpoint as specified in question 6 of this section. Populations should be estimated within a circle with a center at the point of the release and a radius determined by the distance to the endpoint. Populations estimated need only include residential populations and may be rounded to two significant digits (e.g., 5,500, 11,000).
- **5.8 Public receptors:** These are the public receptors within the distance to the endpoint specified in the alternative release. Check all that apply. See question 2.13 of this guidance.
- **5.9** Environmental receptors within distance: Environmental receptors should be identified within a circle with a center at the point of the release and a radius determined by the distance to the endpoint. Check all that apply. See question 2.14 of this guidance.
- **5.10 Passive mitigation considered:** Mitigation means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Check all that were considered in defining the release quantity or rate to the worst-case scenario. See question 4.10 of this guidance.
- **5.11** Active mitigation considered: Mitigation means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Active mitigation means equipment, devices, or technologies that need human, mechanical, or other energy input to function. Check all that were considered in defining the release quantity or rate of the alternative release scenario. See question 3.16 of this guidance.
- 6. FIVE-YEAR ACCIDENT HISTORY: Complete a separate record for each accidental release from covered processes that occurred within the last five years and that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.
- 6.1 **Date:** Indicate the date on which the accident occurred.
- **6.2 Time:** Indicate the time the release began.
- 6.3 **Release duration:** Indicate the approximate length of time of the release in minutes.
- **6.4** Chemical(s): Indicate the regulated substance(s) released.

- 6.5 **Quantity released:** Indicate the amount of each substance released in pounds.
- **6.6 Release event:** Indicate with a check mark which of the following release events best describes your accident.
  - a. Gas Release: A release of the substance in a vapor state.
  - **b.** Liquid Spill/Evaporation: A release of the substance in a liquid state with subsequent vaporization.
  - **c. Fire:** A product (e.g., fuel) in a state of combustion.
  - **d. Explosion:** A rapid chemical reaction with the production of noise, heat, and violent expansion of gasses.
- 6.7 **Release source:** Indicate which best describes the source of the release. Check all that apply.
  - a. Storage Vessel: A container for storing, holding, or transporting a liquid.
  - **b. Piping:** A system of pipes used to carry a fluid.
  - c. **Process Vessel:** A container in which regulated substances are blended to form a mixture or reacted to convert them into some other final product or form.
  - d. Transfer Hose: A connection between two or more vessels.
  - e. Valve: A structure that closes temporarily a passage or permits movement of fluid in one direction only.
  - **f. Pump:** A device that raises, transfers, or compresses fluids or that attenuates gases by suction or pressure or both.
- **6.8** Weather conditions at time of event (if known): This information is important to those concerned with predicting the effects of accidents. Reliable information from those involved in the incident is better information than can be obtained from a meteorological weather station located miles from the incident site. Complete as much of the following as possible.
  - a. Wind Speed/Direction: Wind speed is an estimate of how fast the wind is traveling. Indicate the speed in miles per hour, meters per second, or knots. Be sure to identify the units of measure. Wind direction is the direction from which the wind comes. For example, a wind that blows from west to east comes from the west. You may describe the direction that the wind blows from as a standard compass reading such as "*Northeast*" or "*South-southwest*." You may also describe the direction in degrees with North as zero degrees and East as 90 degrees. Thus northeast would represent 45 degrees, and south-southwest would represent 202.5 degrees. Abbreviations for the wind direction such as NE (for northeast) and SSW (for south-southwest) are also acceptable.

- **b. Temperature:** The ambient temperature at the scene of the accident in degrees Fahrenheit.
- c. Stability Class: This is a general indication of the degree of mixing present in the atmosphere accounting for windspeed and sunlight. The designation ranges from "A to F," where "A" represents extremely unstable conditions (high mixing) and "F" represents extremely stable or clam (little mixing) conditions. "F" conditions occur on overcast nights with low wind speeds and "A" conditions occur on clear days at high wind speeds. See the RMP OCA guidance for more information.
- **d. Precipitation Present:** Check yes or no based on whether there was precipitation at the time of the accident.
- e. Unknown: If you have no record of weather conditions check this.
- 6.9 On site impacts: Complete as much of the following as possible about on-site effects.
  - **a. Deaths:** Indicate the number of on-site deaths that are attributed to the accident or mitigation activities. On-site deaths means the number of employees or contract employees who were killed during the accident of performing any mitigation activities. What about offsite response contractors?
  - **b. Injuries:** Indicate the number of employees or contract personnel who were injured as a result of the accident or mitigation activities. An injury may or may not involve lost work time. An injury means any effect that results either from direct exposure to toxic concentrations, radiant heat, or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion from an accidental release that requires medical treatment or hospitalization. Medical treatment means treatment, other than first aid, administered by a physician or registered professional personnel under standing orders from a physician.
  - c. **Property Damage:** Estimate the value of the equipment or business structures (for your business alone) that were damaged by the accident or mitigation activities. Record the value in American dollars. Do not include any losses that you may have incurred by business interruption.
- **6.10 Known offsite impacts:** These are impacts that you are aware of or that were reported to the source. You are not required to conduct additional investigation to determine offsite impacts. Offsite means areas beyond the property boundary of the source or areas within the property boundary to which the public has routine and unrestricted access during or outside business hours.
  - **a. Deaths:** Indicate the number of offsite deaths that are attributable to the accident or mitigation activities. Offsite deaths means the number of community members and members of public response agencies who were killed during the accident or performing any mitigation activities.

- **b. Hospitalizations:** Indicate the number of injuries that are attributable to the accident or mitigation activities where community members or members of response agencies required hospitalization due to the injury.
- **c. Other Medical Treatment:** Indicate the number of injuries that are attributable to the accident or mitigation activities where community members or members of response agencies required medical treatment, not including first aid, due to the injury.
- **d. Evacuated:** Indicate the number of members of the community who were evacuated as a result of the accident. A total count of the number of people evacuated is preferable to the number of houses evacuated.
- e. Sheltered: Indicate the number of members of the community who were sheltered-inplace during the accident. Sheltering-in-place is the official designation when the incident commander orders community members to remain inside their residence or place of work until the emergency is over to prevent exposure to the substance. Usually these are associated with an emergency broadcast or similar method of mass notification by response agencies.
- **f. Property Damage:** Estimate the value of any property (not belonging to the source) that may have been damaged as a result of the accident. Record the value in American dollars. Include the value of damages to any response equipment.
- **g. Environmental Damage:** Indicate whether any environmental damage occurred and specify the type. The damage is not limited to environmental receptors listed in the rule. Any damage to the environment (e.g., defoliation, water contamination) should be considered. You are not, however, required to conduct surveys to determine whether such impact occurred.
- **6.11 Initiating event:** Indicate with a check mark the initiating event that best describes the cause of the accident, if known.
  - **a.** Equipment Failure: A device or piece of equipment did not function as designed.
  - **b. Human Error:** An operator performs an operation improperly.
  - **c.** Weather Condition: Weather conditions, such as lightning, hail, ice storms, tornados, hurricanes, floods, or high winds caused the accident.
- **6.12 Contributing factors:** These are factors that contributed to the accident occurring but were not the initiating event, if known. Check all that apply.
  - **a. Equipment Failure:** A device or piece of equipment did not function as designed thereby allowing a substance to be released.
  - **b. Human Error:** An operator performs an operation improperly or makes a mistake resulting in a release.

- **c. Improper Procedures:** The procedure did not reflect the current method of operation, the procedure omitted steps that affected the accident, or the procedure was written in a manner that allowed for mis-interpretation of the instructions.
- **d. Overpressurization:** The process was operated at pressures exceeding the design working pressure.
- e. Upset Condition: Release caused by incorrect process conditions (e.g., increased temperature or pressure).
- **f. By-pass Condition:** A pipe or channel that provides an alternate pathway that detours the main pathway fails releasing a substance.
- **g. Maintenance Activity/Inactivity:** This is any failure that occurs because of maintenance activity or inactivity. For example, the pipes remain unpainted for so long that corrosion caused the pipe to fail, or the maintenance mechanic began to repair the wrong pump.
- **h. Process Design:** Any failure that may be design related.
- i. Unsuitable Equipment: The equipment used was incorrect for the process.
- **j. Unusual Weather Condition:** Weather conditions, such as lightning, hail, ice storms, tornados, hurricanes, floods, or high winds caused the accident.
- **k. Management Error:** This may be used to describe failures that occur because management did not exercise its managerial control to prevent the situation from occurring. This is usually used to describe faulty procedures, inadequate training, or failure to follow existing administrative procedures.
- 6.13 Offsite responders notified: Indicate with a check mark whether agencies were contacted.
- **6.14** Changes introduced as a result of the accident: Indicate with a check mark any measures that you have taken at the source to prevent recurrence of the accident.
  - **a. Improved/Upgraded Equipment:** A device or piece of equipment that did not function as designed was repaired or replaced.
  - **b. Revised Maintenance:** Maintenance processes were clarified or changed to ensure safe operation and timely maintenance.
  - c. **Revised Training:** Training programs were clarified or changed to ensure that employees and contract employees are aware of and are practicing correct safety, process, and administrative procedures.

- **d. Revised Operating Procedures:** Operating procedures were clarified or changed to ensure that employees and contract employees are trained on process operating procedures.
- e. New Process Controls: New process designs and controls were installed to correct problems and prevent recurrence of an accidental release.
- **f.** New Mitigation Systems: New mitigation systems were initiated to limit accidental releases.
- g. Revised Emergency Response Plan: The emergency response plan was revised.
- h. Changed process
- i. **Reduced Inventory:** Inventory was reduced at the source to prevent accidental release.
- j. Other
- k. None
- 7. **PREVENTION PROGRAM PROGRAM 3:** Complete the following information about each Program 3 process at your source. If the same information applies to more than once covered process, the owner or operator may provide the information only once, but shall indicate to which process the information applies.
- 7.1 SIC code for process: The four-digit Standard Industrial Classification (SIC) Code is the federal government category of business activity. See Standard Industrial Classification Manual, Office of Management and Budget, U.S. Government Printing Office, Washington, D.C. The four-digit SIC code should be applicable to the process, not the source as a whole.
- 7.2 Name of substance(s) covered: The name of the regulated substance(s) in the process.
- 7.3 Date on which the safety information was last reviewed or revised:
- 7.4 **PHA:** Answer the following questions about the status of your Process Hazard Analysis (PHA). The owner or operator must perform a PHA on processes covered by the risk management program rule.
  - a. The date of completion of the most recent PHA or update
  - **b.** The technique used: Indicate which of the following methodologies were used to evaluate the hazards of the process. Check all that apply.
    - 1. What If: A What If analysis considers the consequences associated with events that occur as a result of failures involving equipment, design, or procedures. All possible system failures may be collected in checklist form and evaluated.

Compiling a list of failures requires a basic understanding of what is intended and the ability to combine or synthesize possible deviations and reject incredible situations.

- 2. Checklist: This system involves developing a checklist of failure areas and reviewing each area to determine the possible effects of failure.
- **3.** What If/Checklist: This methodology combines the what if and checklist analysis methodologies to identify and evaluate process hazards.
- **4. HAZOP:** Hazard and Operability Studies (HAZOPs) are conducted by teams that brainstorm to systematically identify hazards or operability problems throughout a source through the use of certain guidewords such as "no flow" and "no cooling". The consequences of the deviation associated with the guidewords are assessed and credible deviations are identified and addressed.
- 5. Failure Mode and Effects Analysis: This is a methodology of tabulating the source's equipment, failure modes (how equipment fails), each failure mode's effect on the source, and a ranking of each failure mode.
- 6. Fault Tree Analysis: This is a deductive technique that focuses on one particular accident event and provides a method for determining causes of the event. The fault tree is a graphic model that displays the various combinations of equipment faults and failures that can result in a release.
- 7. Other (specify)
- c. The expected date of completion of any changes resulting from the PHA: Not all recommendations will have resulted in changes. Record the date of expected final implementation of any changes that are made as a result of PHA recommendations.
- **d. Major hazards:** Indicate with a check mark <u>all</u> major hazards that were identified for the Program 3 process at your source as a result of the PHA. Major hazards are defined as the potential for:
  - 1. **Toxic Release:** If an accidental release occurred a regulated toxic substance could be released.
  - 2. Fire: Process upsets, leaks, equipment failure, etc., could result in a fire. For listed flammables, fire will always be a major hazard. Fire, however, may also be a hazard in other processes and could lead to a toxic release.
  - **3. Explosion:** Confined or unconfined vapor cloud explosions, BLEVES; explosion will be a major hazard for listed flammables. It may also be a hazard for toxics, especially those handled at extreme conditions.

- 4. **Runaway Reaction:** An uncontrolled reaction that proceeds at an increasing rate.
- **5. Polymerization:** A chemical reaction that produces the bonding of two or more monomers.
- 6. **Overpressurization:** Instantaneous energy release or detonation.
- 7. **Corrosion:** The presence of the regulated substance could lead to destruction of equipment and a release. Corrosion may be a major hazard for substances identified as corrosives on MSDSs unless the equipment used limits the hazard.
- 8. **Overfilling:** Filling a tank or vessel beyond its maximum safe capacity.
- 9. Contamination: A release could occur if inappropriate substances are introduced into storage or process vessels. Contamination may be a major hazard if controlling inappropriate substances (e.g.,  $H_2O$ ) is difficult.
- **10.** Equipment Failure: Equipment failure is likely to be a major hazard for most processes because such failure could lead to a release. Equipment failure includes cracks, weld failures, disk failures, ruptures, pump/gauge/control system failures, etc.
- 11. Loss of Cooling, Heating, Electricity, Instrument Air: These losses could be major hazards if they would lead to releases. For example, loss of cooling could lead to an increase in pressure and failure of a vessel or pipe; a loss of heating or power could lead to unstable processes. These conditions are less likely to be major hazards for substances handles at atmospheric temperatures and pressures.
- 12. Earthquake: Report these only if they are frequent enough or likely enough to occur at your site so that you design and plan for them.
- **13.** Floods (Flood Plain): Report these only if they are frequent enough or likely enough to occur at your site so that you design and plan for them.
- 14. **Tornado:** Report these only if they are frequent enough or likely enough to occur at your site so that you design and plan for them.
- **15. Hurricanes:** Report these only if they are frequent enough or likely enough to occur at your site so that you design and plan for them.

# 16. Other (specify)

e. **Process controls:** Indicate all of the process controls used on this Program 3 process. Process controls are equipment and associated procedures used to prevent or limit releases. Check all that apply.

- 1. Vents: An opening provided for the discharge of pressure or release of pressure form tanks, vessels, processing equipment, etc.
- 2. **Relief Valves:** A relief valve is a valve that relieves pressure beyond a specified limit and recloses upon return to normal operating conditions.
- **3.** Check Valves: A device for automatically limiting flow in a piping system to a single direction,
- 4. Scrubbers: A pre-release protection measure that uses water or aqueous mixtures containing scrubbing reagents to remove discharging liquids and possibly also treating the discharging chemical.
- 5. Flares: A pre-release protection measure used for flammable gases and vapors to remove and possibly treat discharged liquids.
- 6. **Manual Shutoffs:** Controls the shutoff flow to a pipe or vessel and that must be operated manually.
- 7. Automatic Shutoffs: Controls the shutoff flow to a pipe or vessel and that are triggered automatically when process conditions are exceeded.
- 8. **Interlocks:** A switch or other device that prevents activation of a piece of equipment when a protective door is open or some other hazard exists.
- **9. Alarms and Procedures:** Systems that operate a warning device after the occurrence of a hazardous condition and procedures to activate the alarm system.
- **10.** Keyed Bypass: A bypass system that is activated by a control signal.
- **11. Emergency Air Supply:** A backup system to provide air to a process when the regular air supply fails.
- 12. Emergency Power: Backup power systems.
- **13. Backup Pump:** A secondary pump intended to serve the same function as the primary pump if the primary pump fails.
- **14. Grounding Equipment:** Devices that ground electrical equipment to avoid explosions.
- **15. Inhibitor Addition:** A substance that is added to a reaction that is capable of stopping or retarding a chemical reaction.
- **16. Rupture Disks:** A rupture disk is a device that relieves pressure beyond a specified limit and recloses upon return to normal operating conditions.

- 17. Excess Flow Device: Flow-limiting equipment that protects downstream equipment from surges.
- **18. Quench System:** A system that cools by removing excess heat or immersing liquid into a cooling medium.
- **19. Purge System:** A system that replaces the atmosphere in a container with an inert substance to prevent the formation of an explosive mixture.
- 20. Other (specify)
- **f. Mitigation systems:** Indicate with a check mark all of the mitigation systems in place to control a release should one occur from the process.
  - 1. **Sprinkler System:** A system for protecting a building against fire by means of overhead pipes which convey an extinguishing fluid through heat activated outlets.
  - 2. Dikes: A low wall that acts as a barrier to prevent a spill from spreading.
  - **3. Fire Walls:** A wall constructed to prevent the spread of fire.
  - 4. **Blast Walls:** A heavy wall used to isolate buildings or areas that contain highly combustible or explosive materials.
  - 5. **Deluge System:** A system to overflow an area of a release with water or other extinguishing fluid.
  - **6. Water Curtain:** A spray of water from a horizontal pipe through nozzles, the curtain may be activated manually or automatically.
  - 7. Enclosure: Physical containment of the release within a structure (e.g., a building).
  - 8. Neutralization: Controlling a release by neutralizing the released chemical.
  - 9. Other (specify)
- **g. Monitoring/detection systems:** Indicate with a check mark the monitoring and detection systems installed to detect a release of a regulated substance from the process.
  - 1. **Process Area Detectors:** Detection systems located on or close to process equipment. Detection systems include indicator tubes, and chromatographic, spectrometric, electrochemical, and colorimetric gas analysis.

- 2. **Perimeter Monitors:** Integrated detection networks at the source boundary. Detection systems can include fluorescent  $SO_2$  analyzers, photoelectric tape sensors, or electrolytic chlorine detectors.
- 3. Other (specify)
- **h.** Changes since last PHA update: Indicate with a check mark all of the changes made to the process since the last PHA. Check all that apply.
  - **1. Reduction in Chemical Inventory:** Decrease in the quantity of regulated substances stored on site.
  - **2. Increase in Chemical Inventory:** Increase in the quantity of regulated substances stored on site.
  - **3.** Change in Process Parameters: Increase or decrease in temperature, pressure, flow rates, etc.
  - **4. Installation of Process Controls:** Addition of controls such as those listed in question 5 above.
  - **5. Installation of Process Detection Systems:** Addition of systems such as those listed in question 7 above.
  - **6. Installation of Perimeter Monitoring Systems:** Addition of systems such as those listed in question 7 above.
  - 7. **Installation of Mitigation Systems:** Addition of systems such as those listed in question 6 above.
  - 8. Other (specify)
  - 9. None Required/Recommended: PHA team recommended no change.
- 7.5 The date of the most recent review or revision of operating procedures: You should have developed and implemented written operating procedures as defined in § 68.69 that provide clear instructions for safely conducting activities involved in each covered process that are consistent with the process safety information. Operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. Indicate the date of the most recent review or revision.
- **7.6 Training:** The training program, as specified in § 68.71, should cover initial training for each employee involved in operating a process that emphasizes specific safety and health hazards, emergency operations including shutdown, and safe work practices. You should also offer refresher training at least every three years and training documentation to show that each employee involved in operating a process has received and understood the required training.

## a. The date of the most recent review or revision of training programs

- **b.** The type of training provided: Indicate whether the training was held in a classroom, was a combination of classroom and on the job, on the job, or other.
- **c.** The type of competency testing used: Indicate with a check mark how employees were tested to determine and evaluate comprehension of the training materials.
- 7.7 **Maintenance:** The maintenance program, defined in § 68.73, ensures the mechanical integrity of process equipment. The maintenance program procedures should be written, training should be provided for employees involved in maintenance activities, inspection and testing should be performed in process equipment, equipment deficiencies should be corrected before further use or in a safe and timely manner, and the owner or operator should ensure that the equipment is installed properly and consistent with design specifications.
  - a. The date of the most recent review or revision of maintenance procedures
  - b. The date of the most recent equipment inspection or test
  - c. The equipment inspected or tested
- **7.8 Management of Change:** The owner or operator shall establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process as specified in § 68.75.
  - a. The date of the most recent change that triggered management of change procedures
  - b. The date of the most recent review or revision of management of change procedures
- **7.8** The date of the most recent pre-startup review: Pre-start up review, as specified in § 68.77, shall be performed for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information.
- **7.9** Compliance audits: Compliance audits, as specified in § 68.79, evaluate whether the source is in compliance with the risk management program provisions and should be conducted at least every three years by a person knowledgeable in the process.
  - a. The date of the most recent compliance audit
  - b. The expected date of completion of any changes resulting from the compliance audit
- **7.10 Incident investigation:** The owner or operator should have procedures, as specified in § 68.81, to investigate each incident that resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.

- a. The date of the most recent incident investigation
- b. The expected date of completion of any changes resulting from the investigation
- **7.11** The date of the most recent review or revision of employee participation plans: Employee participation is described in § 68.83.
- **7.12** The date of the most recent review or revision of hot work permit procedures: Hot work permits are described in § 68.85.
- 7.13 The date of the most recent review or revision of contractor safety procedures: Contractor safety procedures, as described in § 68.87, describe procedures to oversee contractors performing maintenance or repair work, turnaround, major renovation, or specialty work on or adjacent to a covered process. This section does not apply to contractors providing incidental services that do not influence process safety (e.g., trash removal, groundkeeping).
- **7.14** The date of the most recent evaluation of contractor safety performance: Contractor safety procedures are described in § 68.87.
- 8. **PREVENTION PROGRAM PROGRAM 2:** For each Program 2 process, the owner or operator must provide the following information. If the same information applies to more than once covered process, the owner or operator may provide the information only once, but shall indicate to which process the information applies.
- **8.1 SIC code for process:** The Standard Industrial Classification (SIC) Code is the federal government category of business activity. See Standard Industrial Classification Manual, Office of Management and Budget, U.S. Government Printing Office, Washington, D.C. The SIC code should be applicable to the process, not the source as a whole.
- **8.2.** Chemicals: The name of the regulated substances in the process.
- **8.3** Safety information: As described in § 68.48 the owner or operator shall compile and maintain up-to-date safety information related to regulated substances, processes, and equipment.
- a. The date of the most recent review or revision of the safety information:
- **b.** A list of Federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement: Indicate with a check mark whether you are using any of the following:
  - 1. NFPA 58 (or state law based on NFPA 58): National Fire Protection Association propane handling laws. Propane laws are based on NFPA 59 except in the states of California and texas.
  - 2. OSHA (29 CFR 1910.111): OSHA rule for handling anhydrous ammonia.

- **3. ASTM Standards:** American Society of Testing Materials standards. Establishes standards for materials, products, systems, services, test methods, specifications, classifications, definitions, and recommended practices.
- 4. ANSI Standards: American National Standards Institute standards. Nationally coordinates voluntary standards. Gives status to standards in such areas as definitions, terminology, symbols, and abbreviations; materials, performance characteristics, procedure, and methods of rating; methods of testing and analysis; size, weight, and volume; safety, health, and building construction.
- 5. ASME Standards: American Society of Mechanical Engineers standards. Conducts research and develops boiler, pressure vessel, and power test codes. Also develops safety codes and standards for equipment.
- 6. Other (specify)
- 7. None
- **8.4 Hazard review:** Your hazard review, as specified in § 68.50, must identify the hazards associated with the process, opportunities for equipment malfunctions or human errors, safeguards needed to control the hazards or prevent equipment malfunction or human error, and any steps used or needed to detect or monitor releases.
  - a. The date of completion of the most recent hazard review or update
  - b. The expected date of completion of any changes resulting from the hazard review
  - **c. Major hazards:** Indicate with a check mark <u>all</u> major hazards that were identified for the Program 2 process at your source as a result of the hazard review. Major hazards are defined in 7.4(d) of this guidance.
  - **d. Process controls:** Indicate with a check mark all of the process controls used on this Program 2 process. Process controls are equipment and associated procedures used to prevent or limit releases. Process controls are described in 7.4(e) of this guidance.
  - e. **Mitigation systems:** Indicate with a check mark all of the mitigation systems in place to control a release should one occur from the process. Mitigation systems are defined in 7.4(f) of this guidance.
  - **f. Monitoring/detection systems:** Indicate with a check mark the monitoring and detection systems installed to detect a release of a regulated substance from the process. Monitoring/detection systems are described in 7.4(g) of this guidance.
  - **g.** Changes since last PHA update: Indicate with a check mark all of the changes made to the process since the last PHA. PHA changes are described in 7.4(h) of this guidance.

- **8.5** The date of the most recent review or revision of operating procedures: You should have developed and implemented written operating procedures as defined in § 68.52 that provide clear instructions for safely conducting activities involved in each covered process that are consistent with the process safety information. Operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. Indicate the date of the most recent review or revision.
- **8.6 Training:** The training program, as specified in § 68.54, should cover initial training for each employee involved in operating a process that emphasizes specific safety and health hazards, emergency operations including shutdown, and safe work practices. You should also offer refresher training at least every three years.
  - a. The date of the most recent review or revision of training programs
  - **b.** The type of training provided: Indicate whether the training was held in a classroom, was a combination of classroom and on the job, on the job, or other.
  - **c.** The type of competency testing used: Indicate with a check mark how employees were tested to determine and evaluate comprehension of the training materials.
- **8.7 Maintenance:** The maintenance program, as specified in § 68.56, ensures mechanical integrity of process equipment. The maintenance program procedures should be written, training should be provided for employees involved in maintenance activities, and inspection and testing should be performed in process equipment.
  - a. The date of the most recent review or revision of maintenance procedures
  - b. The date of the most recent equipment inspection or test
  - c. The equipment inspected or tested
- **8.8 Compliance audits:** Indicate the date of your last compliance audit, as specified in § 68.58. Compliance audits are important to evaluate whether the source is in compliance with the risk management program provisions and should be conducted at least every three years by a person knowledgeable in the process.
  - a. The date of the most recent compliance audit
  - b. The expected date of completion of any changes resulting from the compliance audit
- **8.9** Incident investigation: Indicate the date of your most recent incident investigation. As specified in § 68.60, you must investigate each incident that resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.
  - a. The date of the most recent incident investigation

- b. The expected date of completion of any changes resulting from the investigation
- 8.10 The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training:

#### 9. EMERGENCY RESPONSE

- **9.1 Do you have a written emergency response plan?** Indicate whether or not your source has a written emergency response plan. You are not required to have a plan if all response activities will be handled by public responders or other non-employees.
- **9.2** Does the plan include specific actions to be taken in response to an accidental releases of a regulated substance? Indicate whether or not whether your plan includes specific actions that should be taken in response to an accidental release of a regulated substance.
- **9.3** Does the plan include procedures for informing the public and local agencies responsible for responding to accidental releases? Indicate whether or not the plan includes procedures for public notification and notification of local agencies responsible for responding to accidental releases.
- **9.4 Does the plan include information on emergency health care?** Indicate whether or not the plan includes information on emergency health care.
- 9.5 The date of the most recent review or update of the emergency response plan
- **9.6** The date of the most recent emergency response training for employees: Enter the date of the last emergency response training. Drills involving your personnel with or without outside emergency response agencies and tabletop exercises of your emergency response plan are acceptable. Single purpose drills (e.g., alarm system drills) may be listed, but exercises that test more aspects of the plan are preferable.
- **9.7** The name and telephone number of the local agency with which the plan is coordinated: Indicate the name and phone number of the agency that reviewed your plan (e.g., fire department). If you do not have a plan, indicate the agency that will handle responses to releases at your source.
- **9.8 Subject to:** The following is a list of federal and state regulations dealing with emergency response plans. You may or may not be covered under these regulations. Check all that apply.
  - **a. OSHA 1910.38:** OSHA's Emergency Action Plan. All sources are subject to this rule except state and local governments in states without delegated OSHA programs.
  - b. OSHA 1910.120: OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) plan.

- c. Clean Water Act/SPCC (40 CFR 112): EPA's oil Spill Prevention Control and Countermeasures Plan requirements.
- d. RCRA (40 CFR 264, 265, 279.52): EPA's Resource Conservation and Recovery Act permitting requirements for solid waste.
- e. OPA 90 (40 CFR 112, 33 CFR 154, 49 CFR 194, 30 CFR 254): EPA, U.S. Coast Guard, Department of Transportation, and Department of the Interior facility response plan requirements. Currently these apply only to oil.
- **f. State EPCRA Rules/Law:** These are the state emergency planning and community right-to-know laws. Federal EPCRA does not require facility response plans, but some state laws may.
- g. Other (specify)