TCPA 2009 Rule Readoption and Amendments
Frequently Asked Questions

January 4, 2010

Threshold Quantity/Applicability

Q.1. Should a facility exceeding the threshold quantity for the overall facility, and having a very small amount of an EHS in one area of the facility, register the area as a separate process?
A. Normally, each process that has an EHS must be registered regardless of the quantity of EHS present at the process. The owner or operator should determine the number of processes to be registered using the process definition. Process is defined at 40 CFR 68.3 incorporated at N.J.A.C. 7:31-1.1(a) as "*any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process."* The U.S.E.P.A. provides guidance on determining a process and co-location of separate vessels in "General Guidance on Risk Management Programs for Chemical Accident Prevention 40 CFR Part 68)," March 2009, Section 1.4. However, the owner or operator may include the areas containing very small amounts of EHS into the registration of another larger process located nearby. All registered processes must have risk management programs with appropriate detail commensurate with the complexity of the process.

Q.2. Does the facility have to implement all the risk management program requirements for a very small amount of an EHS handled at an area of the facility?
A. Facilities that have an EHS above a threshold quantity at the facility must have a risk management program for each process that contains an EHS regardless of the quantity of EHS at the process. However, the depth and complexity of the elements of the risk management program will vary depending on the complexity of the individual process. For example, the level of detail of risk management program documentation for elements such as process safety information, standard operating procedures, process hazard analysis/risk assessment, maintenance requirements, and training will be less complex for a storage area than for a complex reaction process.

Q.3. A facility uses pentane in its process. It also has pentane that is in a cleaning product/degreaser that the facility uses to maintain equipment. Would this be regulated?
A: Unless the substance meets the exemption criteria stated at 40 CFR 68.115 (incorporated by reference with specified changes at N.J.A.C. 7:31-6.1(c)2 through 4), it would be regulated. The exemptions are based on the concentration of the regulated substance in the mixture, the National Fire Protection Association (NFPA) flammability hazard rating of the mixture, or the purpose for which the substance is used. For a flammable mixture with a regulated substance in it, the owner or operator must determine whether it meets the criteria of 40 CFR 68.115(a)(2)(i): if the concentration of pentane is greater than 1% by weight of the mixture and the mixture has an NFPA flammability hazard rating of 4, the entire weight of the substance must be included in the

threshold quantity determination. The uses that are exempted are listed at 40 CFR 68.115(a)(4): use as a structural component, use for routine janitorial maintenance, and use by employees of foods, drugs, cosmetics, or other personal items. These exemptions would not apply in this case because the product is used to maintain equipment.

Process Hazard Analysis with Risk Assessment (PHA/RA)

Q.4. When do existing Program 3 facilities have to update their PHA/RA using the amended rule requirements of N.J.A.C. 7:31-4.2?
A: Pursuant to N.J.A.C. 7:31-7.5(g), as of March 16, 2009, the facility must comply with the amended PHA/RA rule requirements of N.JA.C. 7:31-4.2 when the next PHA/RA is normally due for the 5-year revalidation or for a modification requiring an updated PHA/RA pursuant to N.J.A.C. 7:31-4.6(b) and (c).

Q.5. Suppose a facility is currently regulated with an approved risk management program for a Table I, Part A EHS (such as chlorine), and it has a newly regulated substance (such as propane) or handles another EHS (such as ammonia) for which it is becoming regulated because of the facility threshold quantity/applicability amendment. Next, suppose the 5-year PHA/RA for chlorine was due in June 2008. Does this PHA/RA have to include the newly regulated EHS?
A: No, the PHA/RA for the newly regulated EHS does not have to be completed until March 16, 2010. The PHA/RA 5-year revalidation for the chlorine must be completed by its June 2008 due date. However, the owner or operator may choose to conduct the PHA/RA for the newly regulated EHS earlier, at the same time as the chlorine PHA/RA, so that they are on the same schedule.

Q.6. At N.JA.C. 7:31-4.2(b)2 and 3, the rule has been amended to require that toxicity, flammability, explosion, and reactivity hazards applicable to the EHS be considered in the risk assessment. Also, the owner or operator must determine if there is an offsite impact using a consequence analysis consisting of dispersion analysis, thermal analysis, and overpressure analysis applicable to the EHS and scenario. How should the owner or operator determine whether an EHS is flammable?
A: The Department recommends utilizing the definition of flammable as specified in the OSHA Process Safety Management Standard (29 CFR 1910.119(a)(1)(ii), which regulates flammable liquid or gas as defined in 1910.1200(c):
"Gas, flammable" means: (A) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less; or (B) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit;
"Liquid, flammable" means any liquid having a flashpoint below 100 deg. F (37.8 deg. C), except any mixture having components with flashpoints of 100 deg. F (37.8 deg. C) or higher, the total of which make up 99 percent or more of the total volume of the mixture.

This corresponds to substances that have NFPA 3 and 4 flammability ratings.

Q.7. Instead of performing the likelihood analysis required at N.J.A.C. 7:31-4.2(c)1, can the owner or operator assume that the likelihood is greater than 10^{-6} releases per year and implement risk reduction directly?
A: The facility would not have to perform the likelihood analysis only if owner or operator implements risk reduction measure(s) that eliminate any offsite impact.

Q.8. If a facility performs a PHA/RA and identifies release scenarios that meet the offsite impact and likelihood criteria, how much risk reduction must be implemented pursuant to N.J.A.C. 7:31-4.2(c)?
A: If the release scenario meets the offsite impact criteria and the likelihood of the scenario is greater than 10^{-6} releases per year, the owner or operator must evaluate risk reduction measures which would reduce the likelihood or consequences of the EHS release. Identification of risk reduction measures to be evaluated is left to the facility. There is no requirement to evaluate all available or a specific number of risk reduction measures. Upon identifying one or more risk reduction measures, the facility would then determine which ones are feasible. If the facility determines that a risk reduction measure that they have selected to evaluate is feasible, the facility would be required to implement that measure on a schedule of their choosing.

Also, the rule does not require that the risk be reduced down to the offsite consequence or 10^{-6} releases per year likelihood. If the risk reduction implemented at this time does not reduce the risk to those criteria, the facility would have to go through the evaluation again at the next five-year PHA/RA revalidation.

Program 2

Q.9. When should owner/operators of Program 2 processes begin to submit annual reports instead of triennial reports? What if the next triennial report is not due for a few years from now?
A: All former Program 2 facilities must submit an annual/triennial report within the time period of March 16, 2010 through March 16, 2011. The contents of the report, particularly for the reporting time period, will vary depending on when the last triennial report was submitted. For example, if the next triennial report due date based on the three-year schedule is sometime between March 16, 2010 and March 16, 2011, the triennial report submitted in this time frame should report on risk management program implementation during the previous three year period.

If the next triennial report would have been due after March 16, 2011 based on the normal three-year schedule, a report must be submitted between March 16, 2010 and March 16, 2011. The due date for this report is 90 days from the anniversary date (month and day). The contents of this report should include information on risk management program implementation during the abbreviated time period (less than three years) from the submittal of the previous triennial report. For example, assume the last triennial report was submitted on the due date of June 1, 2008. The owner or operator must submit the next report by June 1, 2010.

Q.10. Does a former Program 2 facility, now required to be Program 3, have to register as Program 3 in their EPA Risk Management Plan?

A: The facility should report as Program 2 in their EPA Risk Management Plan. In their Risk Management Plan submitted to New Jersey DEP, the facility should report as Program 3.

Q.11. When should a former Program 2 facility submit an update of their Risk Management Plan (RMP) to indicate Program 3?
A: The former Program 2 facility, which is now required to be Program 3, must submit an update of their RMP to the Department to indicate that it is now Program 3 by March 16, 2010. This RMP submittal must be a complete update, and it must indicate completion of the Program 3 Prevention Program items in the RMP. At the time the facility submits this updated RMP indicating that it is Program 3, all the Program 3 requirements must be in effect and must be implemented at the facility.

Q.12. When do existing Program 2 facilities have to comply with the amended requirements of N.J.A.C. 7:31-4.2?
A: Facilities that were subject to Program 2 before the rule amendments were adopted are required to update their risk management program to address the Program 3 rule requirements by March 16, 2010. The former Program 2 facilities previously conducted hazard reviews in accordance with 40 CFR 68.50 incorporated by reference at N.J.A.C. 7:31-3.1(a) and 3.5. These facilities should conduct a PHA/RA in accordance with 40 CFR 68.67 incorporated with changes at N.J.A.C. 7:31-4.1(c)5, 6, and 7 and N.J.A.C. 7:31-4.2 when the hazard review is normally due for the 5-year revalidation or for a modification requiring an updated PHA/RA pursuant to N.J.A.C. 7:31-4.6(b) and (c).

Miscellaneous

Q.13. Do petroleum refineries have to reorganize their risk management program documentation to coincide with the petroleum refining process unit definition?
A: The petroleum refining process unit definition at 40 CFR 68.3 incorporated with changes at N.J.A.C. 7:31-1.1(c)2ii has been amended to specify that each petroleum refining process unit having an EHS present is a single covered process. The Department does not expect refineries to reorganize their risk management program documentation. However, refineries must revise their Risk Management Plan registration to identify the petroleum refining process units as individual covered processes.

Q.14. 40 CFR 68.200 with specified changes at N.J.A.C. 7:31-8.1(c)1 requires that mechanical integrity/preventive maintenance records be kept for the lifetime of the equipment. Does an owner or operator have to keep preventive maintenance records like oiling of a pump for the life of the pump? Should the owner operator keep records for equipment failures only? Should other records like thickness testing be kept for the life of the equipment?
A: The owner or operator must maintain records for all inspections, breakdowns, repairs and replacements of EHS equipment for the life of the equipment. The purpose of keeping these records is to provide a means of data retrieval and analysis to determine the frequency of inspections and tests and to evaluate equipment reliability. Therefore, records of equipment failures and other records like thickness testing must be kept for the life of the equipment, but records for the oiling of a pump are not required to be kept for the life of the pump.

Q.15. Do letters responding to the Department require the certification specified at N.J.A.C. 7:31-8.2(c)?

A: The certification specified at N.J.A.C. 7:31-8.2(c) must accompany any risk management program document developed pursuant to the rules that is required to be submitted in the rules or that the Department requests to be submitted. Examples of risk management documents include, but are not limited to, annual reports, process safety information documents, standard operating procedures, process hazard analysis and risk assessment reports, maintenance and training records, and accident investigation reports.

A correspondence letter to the Department does not require the certification. However, a risk management program document must have the certification if it is enclosed with the letter, or the certification should be included within the body of the letter.

Q.16. If a facility is currently regulated for a process with a toxic or flammable EHS and is covered with one of the newly regulated EHS (such as a Reactive Hazard Substance mixture that becomes covered due to the amended heat of reaction criteria), when would they have to update their process safety information and PHA/RA to address the newly regulated EHS?

A: The owner or operator must update all risk management program documentation to address the newly regulated EHS by March 16, 2010, including the process safety information and PHA/RA.