

US EPA ARCHIVE DOCUMENT



EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

Final Rule for Extremely Hazardous Substances (EHS) and Threshold Planning Quantities (TPQs) for Solids in Solutions

Introduction

EPA is taking final action to revise the way in which regulated facilities apply the threshold planning quantities (TPQs) for Extremely Hazardous Substances (EHSs) that are non-reactive solid chemicals in solution form. Facilities with a non-reactive EHS solid in solution are subject to the Emergency Planning requirements of section 302 of the Emergency Planning and Community Right-to-Know Act (EPCRA) if the on-site amount of a non-reactive EHS solid in solution, when multiplied by 0.2, equals or exceeds the lower published TPQ. This modification of the application of TPQs for non-reactive EHS solids in solution is based on currently available data that show less potential for the solid in solution to remain airborne in the event of an accidental release. EPA is also clarifying that the use of the reducing factor of 0.2 for EHS solids in solution used for emergency planning notification under 40 CFR part 355 should not be used for compliance with hazardous chemical reporting requirements under 40 CFR 370.10.

Who is Affected by This Rule?

Organizations and facilities subject to section 302 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and its implementing regulations found in 40 CFR 355 subpart B may be affected by this rule. To determine whether your facility is affected by this action, you should carefully examine the applicability provisions of 40 CFR part 355. This final action will neither increase nor decrease requirements for State Emergency Response Commissions (SERCs), Tribal Emergency Response Commissions and Local Emergency Planning Committees (LEPCs).

There are 157 EHS chemicals that are non-reactive solids at ambient temperature, which could potentially be affected by this change, if they are handled by facilities in a solution form (the affected chemicals are identified in Appendix C of the Technical Support Document, which is in the docket to this rule). These 157 chemicals also appear with two TPQs (the higher TPQ is 10,000 pounds) in Appendices A and B of 40 CFR part 355. Additionally, this rule will not apply for the 12 solid EHS chemicals that are reactive solids (denoted with "a" in the "Notes" column of Appendices A and B of 40 CFR part 355).

Why is EPA Proposing These Changes?

On October 11, 2000, Syngenta (formerly Zeneca, formerly ICI Americas) filed a lawsuit requesting EPA to either delete paraquat dichloride from the Extremely Hazardous Substances (EHS) list or raise its Threshold Planning Quantity (TPQ). In 1994, EPA had previously denied their petition to delete the chemical. Syngenta claimed:

- The inhalation toxicity tests using very small particles are not relevant data to use for listing the chemical as an EHS.

- It is highly unlikely that inhalable particles or vapors of paraquat dichloride could be become airborne during an accidental release. Paraquat dichloride is only manufactured, processed, and used in solution form and it has a very low vapor pressure.
- EPA did not explain why a greater potential for airborne dispersion for solids in solution exists as opposed to liquid chemicals when setting the TPQs.

On January 31, 2003, the court granted EPA's motion for voluntary remand to reconsider the petition and dismissed Syngenta's complaint. In a letter to Syngenta on November 21, 2003, EPA reaffirmed its denial to delete paraquat dichloride from the EHS list based on its inhalation toxicity. However, the Agency agreed to consider a revision to the TPQ for paraquat dichloride in the context of a proposed rule to amend the TPQ for all EHS chemicals handled as solids in solution.

On April 15, 2011, EPA published a proposed rule that would allow facilities who have a non-reactive solid EHS in solution to multiply the on-site amount of the solid in solution form by 0.2 and then determine if this reduced quantity equals or exceeds its lower published TPQ.

What is EPA's Rationale for the TPQ Changes?

While compiling the new TPQ changes, EPA took several factors into account. Such factors included:

- Rationale for development of existing TPQs;
- Syngenta's petition for changing paraquat dichloride's TPQ and the claims against EPA;
- The basis for the existing TPQs for solids in solutions; and
- Data on airborne dispersion of solids in solution.

What Are the Economic Impacts of the TPQ Changes?

For facilities with a non-reactive EHS that exists as a solid in solution, the emergency planning notification was required if the amount of solid by weight meets or exceeds the lower published TPQ for that chemical. Non-reactive solid EHSs have another higher TPQ of 10,000 pounds that applies only if the EHS is not in solution, has a particle size equal to or greater than 100 microns, is not molten, and does not have a National Fire Protection Association reactivity rating of 2, 3, or 4.

The final rule would subject facilities with a solid EHS in solution to the emergency planning requirements if the on-site amount of non-reactive EHS solid in solution, when multiplied by 0.2, equals or exceeds the lower published TPQ. The effect would be to allow facilities to have up to a five times larger amount on-site of a non-reactive EHS solid in solution than before, without being subject to the above emergency planning requirements.

Facilities that have already complied with emergency planning notification are required to notify their LEPC if the amount of a non-reactive EHS solid in solution no longer equals or exceeds its lower TPQ when using the new application. EPA expects that this final rule will neither increase nor decrease the burden for facilities who have already complied.

Where Do I Go For More Information?

For more information on the final rule, please visit the EPCRA page located on the OEM Web site:
<http://www.epa.gov/emergencies/lawsregs.htm>