Introduction

There has been limited new regulatory activity over the last few years associated with the use and disposal of chlorinated paraffins. Two regulatory issues that are highlighted in this Update relate to the reporting and record keeping requirements associated with the inclusion of short-chain chlorinated paraffins on the Toxic Release Inventory and an update on the management and disposal of chlorinated paraffins in accordance with the U.S. federal hazardous waste regulations.

Toxic Release Inventory

On November 30, 1994, EPA expanded the list of chemicals subject to the Toxic Release Inventory (TRI) reporting requirements (59 Fed. Reg. 61432). Included on the expanded list was a category called "polychlorinated alkanes (C_{10}-C_{13})," which includes short-chain chlorinated paraffins and short-chain chlorinated alpha-olefins.

Formulators and users (in SIC codes 20 through 39) subject to this rule are required to file, with EPA, a Form R report (EPA Form 9350-1) describing environmental releases. The first report was due to be filed with EPA on July 1, however, EPA extended the deadline until August 1, 1996 due to a delay in issuing reporting guidance for the 1995 calendar year report.

Downstream formulators and users that process less than 25,000 pounds, or use less than 10,000 pounds, of a listed product are not subject to the requirements of this rule. To determine whether the rule applies, it is necessary to consider the aggregate quantity of all "polychlorinated alkanes (C_{10}-C_{13})" processed or used. For purposes of evaluating mixtures, only short-chain polychlorinated alkanes present at concentrations greater than 1%, need to be considered in the threshold calculation. The only exception to this rule is the 0.1% de minimis concentration that applies to the average C_{12} 60%, chlorinated paraffin product.

Chlorinated paraffins or chlorinated alpha-olefins with carbon chain lengths of C_{14} or greater do not need to be considered for purposes of TRI reporting. While EPA had originally proposed reporting requirements for all chlorinated paraffins, the Agency agreed with the CPIA that there was no justification for reporting on these intermediate and long
Management and Disposal of Chlorinated Paraffins

Chlorinated paraffins and chlorinated alpha-olefins are not classified as “hazardous” under the U.S. Resource Conservation and Recovery Act (RCRA) regulations. Therefore, the presence of chlorinated paraffins in a waste, such as in used metalworking oils, does not by itself make the waste oil hazardous.

In the mid-1980s, EPA adopted regulations designed to eliminate past practices of mixing hazardous chlorinated solvents with non-hazardous used oils. EPA incorporated into their regulations a “rebuttable presumption” that assumes used oils containing greater than 1,000 parts-per-million (ppm) total halogens have been mixed with hazardous halogenated solvents and therefore, must be treated as a hazardous waste.

Companies managing used metalworking oils containing chlorinated paraffins that have not been improperly mixed with halogenated solvents should readily be able to rebut the hazardous waste mixing presumption. There are two common methods used to rebut the presumption. The first involves analytical determinations that halogenated constituents that EPA has listed as “hazardous” are not present in the used oil in significant concentrations. “Significant” is generally considered to be more than 100 ppm. The other method relies on using Material Safety Data Sheets to document that the halogenated compounds present in the waste oil are the result of their being an ingredient in the unused metalworking fluid, i.e., showing that the source of the halogen in the used oil is a chlorinated paraffin.

In 1992, EPA incorporated new regulatory provisions that eliminate the need to rebut the presumption when a chlorinated paraffin containing metalworking fluid is processed under a tolling agreement. Regulations that can be found at 40 CFR 279.10(b)(1)(ii)(A) specify that used metalworking oils and fluids containing chlorinated paraffins are not subject to the rebuttable presumption, if the used oil is reclaimed and returned to the generator for use as a lubricant, cutting oil or coolant. Therefore, generators relying on a tolling agreement to manage their used metalworking fluids need not go through the rebuttable presumption process even if the waste oil contains greater, than 1000 ppm halogens.

For additional information, please contact: Mr. Robert J. Fensterheim
Executive Director
Chlorinated Paraffins Industry Association
1250 Connecticut Avenue, NW, Suite 700
Washington, DC 20036
Phone: (202) 637-9040
Fax: (202) 637-9178
E-mail: bobf@regnet.com