

US EPA ARCHIVE DOCUMENT

## PREPUBLICATION COPY NOTICE:

The OCSPP Acting Assistant Administrator signed the following notice on **March 29, 2013**:

### **Polychlorinated Biphenyls (PCBs); Recycling Plastics from Shredder Residue; Notice [FRL-9382-9]**

This is a **prepublication** version of the notice that EPA is submitting for publication in the *Federal Register*. While the Agency has taken steps to ensure the accuracy of this Internet version of the notice it is not the official version of the notice for purposes of public comment. Please refer to the official version of the notice that will appear in a forthcoming *Federal Register* publication.

Once the official version of the notice publishes in the *Federal Register*, the prepublication version of the notice that appears on the Web site will be replaced with a link to the notice that appears in the *Federal Register* publication. At that time, you will also be able to access the on-line docket for this notice at <http://www.regulations.gov>. You can then use EPA's electronic docket and comment system at [www.regulations.gov](http://www.regulations.gov) to submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the docket that are available electronically. The docket number for this notice is **EPA-HQ-OPPT-2012-0902**. For further information about the docket and commenting, please consult the ADDRESSES section in the front of the notice.

**ENVIRONMENTAL PROTECTION AGENCY**

**[EPA-HQ-OPPT-2012-0902; FRL-9382-9]**

**Polychlorinated Biphenyls (PCBs); Recycling Plastics from Shredder Residue**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice.

**SUMMARY:** EPA is announcing an interpretation of its regulations that will generally allow for the recycling of plastic separated from shredder residue under the conditions described in the Voluntary Procedures for Recycling Plastics from Shredder Residue, relying principally on the regulatory provisions for excluded PCB products. The interpretation described in this notice responds to questions EPA has received about the applicability of the excluded PCB products regulations.

**ADDRESSES:** The docket for this action, identified by docket identification (ID) number EPA-HQ-OPPT-2012-0902, is available at <http://www.regulations.gov> or at the Office of Pollution Prevention and Toxics Docket (OPPT Docket), Environmental Protection Agency Docket Center (EPA/DC), EPA West Bldg., Rm. 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the OPPT Docket is (202) 566-0280. Please review the visitor instructions and additional information about the docket available at <http://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:** Peter Gimlin, National Program Chemicals Division, Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001; telephone number: (202) 566-0515; email address: *gimlin.peter@epa.gov*.

**SUPPLEMENTARY INFORMATION:**

**I. General Information**

This notice is directed to the public in general, and may be of interest to a wide range of stakeholders, including private citizens, Federal, tribal, state and local governments, environmental consulting firms, industry representatives, environmental organizations and other public interest groups. Since others may also be interested, the Agency has not attempted to describe all the specific entities that may have interest in this notice. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

EPA is interpreting its regulations to generally allow for recycling of plastic separated from shredder residue under the conditions described in the Voluntary Procedures for Recycling Plastics from Shredder Residue (Ref. 1), relying principally on the regulatory provision for excluded PCB products at 40 CFR part 761.

**II. Background**

EPA was approached by the Institute of Scrap Recycling Industries, Inc. (ISRI), regarding separation, recycling, use, and distribution of recycled plastics from shredder residue recovered from metals recycling facilities (referred to by ISRI as automobile shredder residue (ASR) aggregate). In a February 24, 2011 letter, ISRI requested “written confirmation that separating plastics from ASR aggregate for use and distribution in commerce, using processes

that reduce any PCBs that may be present to a level at or below which there is no unreasonable risk, is authorized” under regulations promulgated pursuant to the Toxic Substances Control Act (TSCA) (see 16 U.S.C. 2605(e)) (Ref. 2). ISRI stated that:

... analysis shows that the separation, recycling, distribution in commerce, and reuse of plastics from shredder aggregate is consistent with existing authorizations that allow the use and distribution in commerce of products that contain low levels of PCBs, including provisions for “excluded PCB products” and “excluded PCB manufacturing processes” (as defined in 40 CFR 761.3).

ISRI also stated that resolving regulatory uncertainty could lead to investments and further development in innovative methods to separate plastics from ASR aggregate that would produce broad environmental benefits and increase global competitiveness (Ref. 2).

ISRI developed a set of voluntary procedures designed to prevent the introduction of PCBs that are regulated for disposal into recycled plastics recovered from shredder residue generated by metal recycling facilities. The Voluntary Procedures for Recycling Plastics from Shredder Residue (Ref. 1) includes development and implementation of a documented materials management system through:

1. Documented source control programs aimed at preventing the introduction of PCBs regulated for disposal into the shredder feedstock materials that contribute to any shredder residue from which plastics will be recovered for recycling; and

2. Documented output control programs for facilities processing producing/recycling plastics from shredder residue. The Voluntary Procedures for Recycling Plastics from Shredder Residue and supporting materials are available in the docket at docket ID number EPA-HQ-OPPT-2012-0902.

On December 12, 2012, EPA published a notice of request for public comments in the **Federal Register**, entitled Polychlorinated Biphenyls (PCBs); Recycling Plastics From

Shredder Residue (77 FR 74006). Additional background information on recycling activities that would be affected by this interpretation, including potential environmental and economic benefits, is provided in the December 12, 2012 notice and supporting materials are available in the docket at docket ID number EPA-HQ-OPPT-2012-0902. In response to this notice, 27 unique public comment submissions were received by the Agency. Of these, some 23 were supportive of the interpretation the Agency explained in the notice. In general, these commenters emphasized the environmental and economic benefits that recycling of plastic from shredder residue would provide, and concurred with EPA's assessment of the facts and interpretation of the PCB regulations as they applied to shredder residue and the use of plastics recovered from that residue. Two submissions, including a consolidated submission submitted on behalf of nine environmental organizations, objected to the Agency's adoption of this interpretation on a number of points, such as environmental justice, the adequacy of the underlying data and analysis, as well as the legal basis for the Agency's interpretation. Finally, one commenter suggested changes to the Voluntary Procedures for Recycling Plastics from Shredder Residue and another commenter submitted an administrative request regarding the comment period. All public comments received in response to the notice are available in the docket, as is a Response to Comments Document developed by EPA (Ref. 3). After review and consideration of the comments received, EPA has decided to adopt the interpretation discussed in the December 12, 2012 notice and summarized in Unit III. of this notice.

### **III. Summary of Interpretation**

The interpretation will generally allow for the recycling of plastic separated from shredder residue under the conditions described in the Voluntary Procedures for Recycling Plastics from Shredder Residue (Ref. 1), relying principally on the regulatory provisions for

excluded PCB products.

TSCA section 6(e) generally prohibits the manufacture, processing, distribution in commerce and use of PCBs. However, EPA has by regulation excluded certain materials, including excluded PCB products, from these prohibitions. Excluded PCB products are defined as follows:

*Excluded PCB products* means PCB materials which appear at concentrations less than 50 ppm, including but not limited to:

- (1) Non-Aroclor inadvertently generated PCBs as a byproduct or impurity resulting from a chemical manufacturing process.
- (2) Products contaminated with Aroclor or other PCB materials from historic PCB uses (investment casting waxes are one example).
- (3) Recycled fluids and/or equipment contaminated during use involving the products described in paragraphs (1) and (2) of this definition (heat transfer and hydraulic fluids and equipment and other electrical equipment components and fluids are examples).
- (4) Used oils, provided that in the cases of paragraphs (1) through (4) of this definition:
  - (i) The products or source of the products containing < 50 ppm concentration PCBs were legally manufactured, processed, distributed in commerce, or used before October 1, 1984.
  - (ii) The products or source of the products containing < 50 ppm concentrations PCBs were legally manufactured, processed, distributed in commerce, or used, i.e., pursuant to authority granted by EPA regulation, by exemption petition, by settlement agreement, or pursuant to other Agency-approved programs;
  - (iii) The resulting PCB concentration (i.e. below 50 ppm) is not a result of dilution, or leaks and spills of PCBs in concentrations over 50 ppm.

40 CFR 761.3.

EPA regulations allow the use, processing, and distribution in commerce of excluded PCB products. 40 CFR 761.20(a) and (c). Except as otherwise provided, the regulations do not restrict the forms of use, processing and distribution that are allowed. EPA specifically identified, as one likely source of PCBs in excluded PCB products, “contamination during recycling activities involving” historic PCBs. 52 FR 25838, 25844 (July 8, 1987). EPA believes that it is reasonable to interpret the regulations as generally allowing the recycling of excluded

PCB products. Accordingly, under the interpretation, to the extent that the feedstock (scrap materials) to a shredder consists of these kinds of materials, the plastics separated from the resulting residue can be recycled (and the resulting recycled product is also an excluded PCB product that can be processed, used and distributed in commerce, including being further recycled), provided the PCB concentration in any resulting product is below 50 parts per million (ppm).

The burden of demonstrating that a regulatory exclusion applies rests with the party seeking that exclusion. EPA believes that, for shredders and their suppliers that follow the Voluntary Procedures for Recycling Plastics from Shredder Residue, it is appropriate to generally treat the feedstock as consisting of excluded PCB products unless there is information specifically indicating that the feedstock does not qualify. If shredders and suppliers do not follow the Voluntary Procedures for Recycling Plastics from Shredder Residue, they will need to be able to otherwise demonstrate that the feedstock and residue meet the exclusion. Clearly if the feedstock materials or residue contain PCBs at concentrations  $\geq 50$  ppm, the materials cannot qualify as excluded PCB products.

EPA acknowledges uncertainty as to the source of the PCBs in shredder residue. However, EPA believes the procedures, as explained in the Voluntary Procedures for Recycling Plastics from Shredder Residue, can prevent the introduction of PCBs at levels  $\geq 50$  ppm. EPA may periodically evaluate the processes and procedures involved in recycling plastics recovered from shredder residue. In addition, EPA believes it is likely that the number of potential sources of PCBs at levels  $\geq 50$  ppm has declined since the TSCA section 6(e) prohibitions went into effect. If PCBs in the feedstock material are  $< 50$  ppm, it is plausible that the sources of PCBs in the residue are excluded PCB products. The information available to EPA indicates that the

PCBs found associated with plastics separated from residue are Aroclor PCBs. Aroclors were intentionally manufactured PCB mixtures, not inadvertently generated PCBs. Since PCBs in general and Aroclors more specifically have not been intentionally produced in the United States since the prohibitions in TSCA section 6(e) became effective, the Aroclor identity of the PCBs found associated with plastics separated from shredder residue suggests that they were manufactured prior to 1984.

In promulgating the excluded PCB product rule, EPA described the provision as follows: EPA is adopting the generic 50 ppm exclusion for the processing, distribution in commerce, and use, based on the Agency's determination that the use, processing, and distribution in commerce of products with less than 50 ppm PCB concentration will not generally present an unreasonable risk of injury to health or the environment. EPA could not possibly identify and assess the potential exposures from all the products which may be contaminated with PCBs at less than 50 ppm. . . . EPA has concluded that the costs associated with the strict prohibition on PCB activities are large and outweigh the risks posed by these activities. 53 FR 24210 (June 27, 1988).

EPA has further stated, with respect to the excluded PCB products rule: "These amendments have excluded the majority of low-level PCB activities (less than 50 ppm) from regulation" (Ref. 4). Given the difficulty of determining the precise source of PCBs, EPA believes the purpose of excluding "old" PCBs under the excluded products rule is best effectuated in these circumstances by treating < 50 ppm materials entering a shredder as excluded PCB products unless there is information specifically indicating that the materials do not qualify.

After reviewing the comments received, EPA has weighed the competing considerations and decided to adopt, through this notice, the interpretation discussed in the December 12, 2012 notice. 77 FR 74006 (December 12, 2012). This interpretation is not a legislative rule because it does not impose any binding requirements on either EPA or the regulated community.

#### **IV. References**

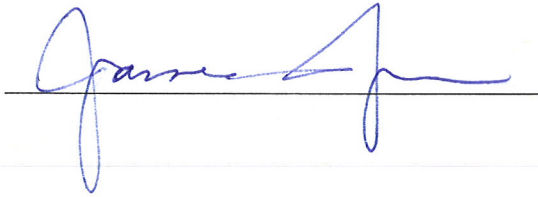
As indicated under **ADDRESSES**, a docket has been established for this notice under docket ID number EPA-HQ-OPPT-2012-0902. The following is a listing of the documents that are specifically referenced in this notice. The docket includes these documents and other information considered by EPA, including documents that are referenced within the documents that are included in the docket, even if the referenced document is not physically located in the docket. For assistance in locating these other documents, please consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

1. ISRI. Voluntary Procedures for Recycling Plastics from Shredder Residue, October 24, 2012.
2. ISRI. Letter from Robin K. Weiner to Steve Owens, February 24, 2011.
3. EPA. Agency Response to Comments – Polychlorinated Biphenyls (PCBs); Recycling Plastics from Shredder Residue, March 2013.
4. EPA. PCB Q & A Manual: An EPA TSCA assistance document designed to provide the regulated community with Agency interpretations to frequently posed questions, 1994, available at <http://www.epa.gov/osw/hazard/tsd/pCBS/pubs/manual.pdf>.

**List of Subjects**

Environmental protection, Hazardous substance, PCBs, Plastic, Polychlorinated biphenyls, Recycling, Shredder residue.

Dated: 3/29/13



*Assistant Administrator, Office of Chemical Safety and Pollution Prevention.*