UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 28 1999

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Ms. Tracy Mattson
Director Of Environmental Compliance
Institute of Scrap Recycling Industries, Inc.
1325 G Street NW
Suite 1000
Washington, DC 20005-3104

Dear Ms. Mattson:

This letter is in response to your inquiry of May 13, 1999 to Dr. John Smith concerning the decontamination of shredder residue and its future beneficial reuse. We have also received an inquiry on this subject from Argonne National Laboratory. Argonne National Laboratory has developed a process for recovering plastics and foam products from shredder residue to produce new products for use in the automobile industry. We are sending a copy of this letter to Argonne National Laboratory, since they have an interest in the response as well. Our response to your questions follows.

Question 1: Are there any decontamination standards for PCB bulk product waste, in particular, shredder residue? I understand from the rule that §761.79 is not applicable. If a facility wanted to utilize shredder residue in a beneficial application (i.e., remove the plastics to use as a feedstock in making a new product), are there any options for decontamination in the PCB Disposal Amendments, or must the facility apply for a TSCA exemption under 6(e)(3)(B)? Since the application is for a new product and not necessarily disposal, it doesn't appear that a risk-based approval under §761.62(c) would be applicable. Is this correct?

Response 1: Section 761.79 does not specifically provide decontamination standards for shredder residue. A large portion of shredder residue is composed of porous materials (e.g., plastics, rubbers, foam products) which cannot be decontaminated unless an alternative decontamination approval in accordance with §761.79(h) is granted. In addition, most of the PCB containing materials in shredder residue have been manufactured with PCBs, so it would be very difficult to decontaminate them without destroying the integrity of the material.

There is no provision in TSCA which encourages the recycling of PCBs (i.e., pursuing ways to make PCB waste into commercially useful products). In order to authorize the use of PCB containing materials in shredder residue, EPA would have to propose the use through

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

rulemaking and make a finding that the processing, use and distribution in commerce posed no unreasonable risk of injury to health and the environment. At this point in time, it is unlikely that EPA will propose such a rule that would allow PCBs that are destined for disposal to be reintroduced into commerce. However, the Agency is willing to conduct a review of the scenario that you propose, if you are willing to develop and provide data that can be used to better inform the Agency about the recycling process. This data should, at the minimum, include information regarding the PCB concentrations in the incoming waste stream and the recycled product. A risk-based approval under §761.62(c) would not be applicable since the application is for a new product and doesn't involve disposal.

Question 2: This issue has come up in regard to a company's concern about reusing shredder residue in future beneficial applications. From our conversations with the Agency, we have inferred that even if a facility tests the automobile shredder residue (ASR) for PCBs and the results show PCBs <50ppm, the facility would still need to prove that no sources of PCBs were introduced (i.e., anti-dilution) in the process. As a result of this unofficial interpretation, many shredders are concerned that they are precluded from pursuing research, development and introduction of beneficial applications for shredder residue without an exemption --- even when their ASR tests below 50 ppm.

Response 2: The anti-dilution provision at §761.1(b)(5) applies to PCB bulk product waste. The process of shredding automobiles and white goods tends to dilute the total PCB concentration since you are simultaneously shredding non-PCB products with PCB bulk product waste. So, just because a facility tests their shredder residue and obtains results that are <50 ppm PCBs does not mean that the original source of the shredder material was <50 ppm PCBs. Furthermore, this type of result does not necessarily indicate that the shredder residue is "unregulated" for use. The PCB regulations at §761.20(a) prohibit the use of PCBs at any concentration unless authorized by rule.

Aside from all of these issues, in order for the Agency to have a better understanding of the situation, ISRI would need to provide us with data. At our meeting with Argonne National Laboratory we requested that they provide us with data on the source of the incoming waste stream; PCB data on the incoming waste stream, the shredder residue and the recycled products; and information regarding the sampling plan and analytical methods used to analyze the waste stream, the shredder residue and the recycled products. Once the Agency has data to review, we will be able to provide more guidance on these situations.

If you have any further questions on this matter or our request for data, please contact Laura Casey at (202) 260-1346 or Sara McGurk at (202) 260-1107.

Sincerely,

John W. Melone, Director
National Program Chemicals Division

cc: Edward Daniels, Argonne National Laboratory
Bassam Jody, Argonne National Laboratory
Beverly Whitehead, DOE
Simon Friedrich, DOE