UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
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BOSTON, MA 02114-2023

August 1, 2002

Patricia H. Duft
Staff Vice President, Legal Dept.
Mallinckrodt, Inc.
675 McDonnell Blvd.
St. Louis, MO 63134

Re: Regulatory Interpretation Regarding Mercury From the HoltraChem Manufacturing Company Facility in Orrington, Maine

Dear Ms. Duft:

This is in response to your request for a regulatory interpretation dated May 10, 2002 regarding mercury from the HoltraChem Manufacturing Company facility in Orrington, Maine.

SUMMARY OF REQUEST

You report that there is approximately 84 tons of free-flowing elemental mercury currently being stored in Orrington. The mercury previously was used in mercury cells at the HoltraChem chlor-alkali facility during the production process to manufacture chlorine. For economic reasons, the HoltraChem Manufacturing Company ceased operations at the Orrington facility in September 2000, and the mercury has been stored on site since that time.

According to your letter and a materials Profile submitted with your letter, the mercury is more than 99% pure. Subsequent to your letter, this purity level has been confirmed by having a sample of the mercury analyzed by an independent laboratory, showing a purity level of 99.994%. You note that in the chlor-akali facility process, the mercury did not chemically react with any of the other materials. It thus did not become contaminated with other materials, and also was not used up or depleted. But for the closure of the plant, it could have continued to be used, as is, in the manufacturing process.

As a prior site owner, Mallinckrodt, Inc. currently is carrying out certain RCRA corrective action remediation activities at the HoltraChem facility. The continued storage of the mercury on site is impeding Mallinckrodt's ability to continue these activities.

The mercury has been offered for sale to Mercury Waste Solutions, Inc. ("MWS"). MWS is in the business of reselling mercury in commerce. You report, however, that pursuant to

Agreements planned to be signed by MWS and the Natural Resources Council of Maine ("NRCM"), the mercury temporarily will be stored at MWS's facility in Union Grove, Wisconsin rather than immediately being resold as a product. According to drafts of the Agreements submitted to the EPA on August 1, 2002, the mercury will be stored for at least four years. At the end of the four-year period, MWS and NRCM may continue the storage on an annual basis, not to exceed a total storage period of eight years. At the request of the NRCM, MWS has agreed that if during the period of storage, there is a change in current law, regulations and/or policy, and a mercury retirement policy is established, MWS will sell the mercury to the United States government or another entity in accordance with the retirement policy. However, MWS has reserved the right to sell the mercury in commerce at the end of the first four year storage period, if MWS determines that it could be adversely impacted by major changes in cost structure or regulations by continuing to store the mercury. In any event, unless there is a change in law, regulations and/or policy, MWS has the right, and intends, to sell the mercury in commerce by no later than the end of the eight year storage period. The mercury does not need to be reclaimed by MWS prior to reselling it as a product since it is already greater than 99% purity. MWS has no plans to refine the mercury to further increase the purity, at this time.

You request a regulatory interpretation as to whether the mercury may be handled as a product, rather than as a hazardous waste under the federal regulations promulgated pursuant to the Resource Conservation and Recovery Act ("RCRA"). Although you believe that the mercury is a product, you note that MWS is a licensed hazardous waste storage facility, and has agreed to store the mercury in accordance with safe handling requirements. According to the draft Agreements submitted to the EPA, the mercury will be stored in containers which will be inspected daily to ensure their integrity, inspected weekly with full documentation, and monitored by mercury vapor analyzers to ensure proper containment. You further note that the mercury will be transported from Maine to Wisconsin by a licensed hazardous waste transporter.

RESPONSE

Maine and Wisconsin both have been authorized by the EPA to administer State hazardous waste programs. Thus whether the mercury is a product or hazardous waste must be determined in accordance with Maine law which applies until the mercury leaves Maine and in accordance with Wisconsin law which will apply once the mercury reaches Wisconsin. However, the EPA is responding to your regulatory interpretation request in order to provide you with guidance regarding the federal hazardous waste regulations, since the federal regulations set the requirements which all States must follow at a minimum.

EPA Region I is responding to your request because whether a material is a hazardous waste must initially be determined by the generator where the material is generated, and the mercury has been generated in this Region. However, since the plan is to ship the mercury to a facility within EPA Region V, we have consulted with that EPA Region and with the Office of Solid Waste at EPA Headquarters prior to sending you this response.

In response to your request, we agree, first, that mercury which is at least 99% pure is of product quality. The EPA consistently has stated that 99% pure mercury is of product quality because

it is reusable as is, or requires only further refining (e.g., to 99.99% purity), rather than more substantial reclamation, to be reusable. See Letter from Matthew A. Straus, EPA Office of Solid Waste, to D.F. Goldsmith Chemical and Metal Corp. dated January 21, 1986; Letter from Matthew A. Straus, EPA Office of Solid Waste, to Bethlehem Apparatus Company, Inc., dated May 30, 1986; Letter from David Bussard, EPA Office of Solid Waste, to Appropriate Technologies, II, Inc., dated March 19, 1991. Thus the HoltraChem mercury appears to be of product quality.

Although the HoltraChem mercury was used in an industrial process, we agree that it has retained its status as a commercial chemical product rather than becoming a spent material. Under the federal regulations, a spent material is "any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing." 40 C.F.R. § 261.1(c)(1). While the HoltraChem mercury has been used, neither contamination with impurities nor any other factor or circumstance has caused this mercury to become unsuitable for commercial purposes or to need reprocessing. Thus the mercury has not become "spent."

As a commercial chemical product, the HoltraChem mercury is not subject to regulation as a hazardous waste under the federal regulations so long as it is not "discarded." Commercial chemical products being stored for the purpose of disposal are considered to have been "discarded" and thus are subject to regulation. See 40 C.F.R. § 261.2(b)(3). However, commercial chemical products being stored in order to be recycled as products are not considered to have been "discarded," unless they are burned for energy recovery or used in a manner constituting disposal. See id. § 261.2(c). See also 40 C.F.R. § 261.33.

Whether the HoltraChem mercury when shipped to MWS will become "discarded" depends upon the particular arrangement made with MWS. Based on your representations regarding the terms of agreement, and our review of the draft Agreements, it appears that the mercury will retain its product status under the federal regulations when being stored by MWS, unless and until a determination is made that the mercury will be "retired."

The key element of the arrangement (as represented by you and reflected in the draft Agreements), that will give this mercury continued product status, is that MWS has the right, and intends, to sell the mercury for commercial purposes at the end of the storage period, unless there is a law, regulatory and/or policy change. That the mercury might be retired if there is a law, regulatory and/or policy change simply means that the mercury may become "discarded" at a future point; it does not make the mercury a hazardous waste at this point. That the mercury may be stored for as long as eight years prior to being resold also does not remove its product status, in the particular circumstances of this case. In other circumstances, the EPA might question the legitimacy of a claim that commercial chemical products being stored long term without being sold are products. In this case, however, there is a commercial market for mercury such that the HoltraChem mercury could be immediately resold. It will be stored only in response to the concerns of environmental organizations, in order to help promote an environmental purpose. We do not think that RCRA should be interpreted to impose greater regulation on a company which plans to sell a product (absent a law, regulatory and/or policy change) after promoting an

environmental purpose than would be imposed in the absence of carrying out the environmental purpose.

In answering your inquiry, we have assumed that the HoltraChem mercury is a secondary "material" potentially subject to regulation under RCRA, since the mercury was used in an industrial process. However, so long as it is recycled back into commerce or stored in order to be recycled back into commerce, the mercury (even if a secondary material) will remain classified under the federal regulations as a non-regulated product. See 40 C.F.R. § 261.2(c). So long as the mercury retains its product status, it will not be subject to any RCRA regulatory requirements under the federal regulations. In particular, the limitations on storage time set by RCRA section 3004(j), 42 U.S.C. § 6924(j), and 40 C.F.R. § 268.50 will not apply. The speculative accumulation provisions in 40 C.F.R. § 261.2 also will not apply, since commercial chemical products are not subject to these speculative accumulation requirements. See id., Table 1.

We recognize that the Maine Department of Environmental Protection has determined that the HoltraChem mercury is a hazardous waste under Maine State law. The State acted pursuant to its authority under RCRA to impose requirements which go beyond the minimum federal hazardous waste requirements. However, Maine's interpretation does not set a precedent for interpreting the federal RCRA regulations. The federal and Maine RCRA regulations are worded quite differently. Maine generally regulates as a waste any substance or material which is "unwanted" by the generator of the material "whether or not such substance or material has any other or future use." Maine Hazardous Waste Management Rules, Chapter 850, section 3A. In contrast, as noted above, under the federal regulations, when a commercial chemical product is unwanted by the generator, it may nevertheless be handled as a product, providing that it is being recycled for another or future commercial use. There thus is no inconsistency between classifying the mercury as a hazardous waste under Maine law and classifying it as a product under the federal regulations.

As a result of the Maine classification, the HoltraChem mercury will need to be handled as a State-only hazardous waste until it leaves the State of Maine. It will need to be shipped to the State of Wisconsin under a hazardous waste manifest using a licensed hazardous waste carrier. As a licensed hazardous waste storage facility, MWS will need to sign on the manifest that it has received this hazardous waste. However, once MWS has received and signed for the mercury, it will then be able, according to the federal regulations, to convert the mercury back to product status.

Our determination that the HoltraChem mercury may be handled as a product is subject to the following important qualifications. First, it is of course based on all of the representations contained in your letter being accurate. Second, as indicated above, the actual determination of whether the mercury will be a product or a hazardous waste when stored in the State of Wisconsin needs to be made in accordance with Wisconsin law. We suggest that Wisconsin State authorities be contacted in advance of any shipment to that State, to obtain their interpretation. As noted above, a State has the right to impose requirements which go beyond the minimum federal hazardous waste requirements. Third, even if State hazardous waste regulatory requirements are determined not to apply to the storage of this mercury in Wisconsin, it is

imperative that the mercury be safely stored. Among other things, poor management of the mercury could suggest that the mercury was not being carefully handled as a valuable product and thus could call into question its classification as a product. For this reason as well as safety reasons, we support the plan to include, in the Agreements with MWS, specifications regarding how the mercury will be stored.

Finally, if and when a decision is made to retire the mercury (including if there is storage for the purpose of retirement), further guidance from the EPA and the relevant State authorities should be sought. As indicated above, under current federal RCRA regulations, mercury being retired or stored for the purpose of retirement would need to be handled as a hazardous waste.

I hope that this answers your questions and that the important task of removing this mercury from the HoltraChem facility now moves forward. Should you have any further questions or concerns, please feel free to contact me at tel: 617-918-1631 or Jeffry Fowley in our Office of Regional Counsel at tel: 617-918-1094.

Sincerely,

Marvin Rosenstein, Chief
Chemical Management Branch

cc: Robert Dellinger, EPA Office of Solid Waste
Robert Springer, EPA Region V
Michael Ellenbecker, Wisconsin DNR
Scott Whittier, Maine DEP