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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION I  
ONE CONGRESS STREET SUITE 1100  
BOSTON, MASSACHUSETTS 02114-2023

September 24, 2007

Stephen J. Kmiotek, Ph.D., PE  
EBI Consulting  
Four A Street  
Burlington, MA 01803

Re: RCRA Subpart AA/BB/CC Applicability to Class A Recycling Operation In  
Massachusetts

Dear Mr. Kmiotek:

This is in response to your request for a regulatory interpretation under the Resource Conservation and Recovery Act ("RCRA"), made by email on September 29, 2006. This initial document was supplemented with additional information provided by you in a December 8, 2006 e-mail. I apologize for our delay in answering this inquiry.

In your September 29 email, you state that a characteristically hazardous solvent is generated by a client company in a manufacturing operation at a facility in Massachusetts. This hazardous solvent is then stored in containers prior to being transferred to an on-site distillation unit for purification. The purified material is then reused in the manufacturing operation on site. The recycling process produces a hazardous residue that is stored in containers and sent as a hazardous waste for disposal. You state that the recovery (distillation) system is completely hard-piped, from the vessel, through the condenser, to the final connection to the (post-distillation) collection system. However, the solvent is initially stored in containers prior to distillation and the transfer of the solvents from the containers to the distillation system does not involve hard-piping.

According to your December 8 email, the manufacturing process involves the blending of raw materials including solvents, with the final product being the blend of dissolved and suspended solids in the solvent. You state that no reactions occur during the blending process. As you further explain, in addition to producing product solvents, this manufacturing process produces solvents needing to be purified before reuse in two ways. First, when the manufacturing process vessels and ancillary equipment are cleaned with the solvents mixture, the resulting solvent needs to be purified. Second, periodically when a batch containing the solvents does not meet product specifications, the batch needs to be purified. You ask whether the operation, involving storage of the solvents needing purification in containers, adding the solvents to the distillation unit, and then sending the purified solvents back to the manufacturing process, is subject to the

requirements at 40 C.F.R. Part 265, subparts AA, BB and CC (the “AA, BB and CC requirements”).

The answer to your question is affected by the special RCRA rules which apply in Massachusetts. Massachusetts regulates on-site recycling by generators differently from the federal regulations. The federal regulations distinguish between certain types of recyclable materials which are subject to full RCRA regulation (e.g., spent materials being reclaimed) and other types of recyclable materials that are exempt from regulation (e.g., characteristic byproducts being reclaimed). Also, for the recyclable materials that are regulated, the federal regulations impose storage requirements but do not regulate the recycling process itself. In contrast, Massachusetts comprehensively regulates virtually all recyclable materials which are recycled on site – and regulates the recycling units as well as the storage units - but under the State’s Class A recycling regulations which are different from the federal regulations.<sup>1</sup> In a special rulemaking promulgated pursuant to the Agreement to Pursue Regulatory Innovation between the EPA and the Council of States (ECOS), EPA authorized Massachusetts to utilize its different approach. See 69 Fed. Reg. 11801 (March 12, 2004).

The result of the EPA rulemaking is that the State Class A regulations “now apply in lieu of the EPA program with respect to the recyclable materials and matters covered by the authorization.” 69 Fed. Reg. at 11809. Thus assuming that the company you mention is in fact conducting recycling on site in accordance with the Massachusetts Class A regulations, then this generally will meet federal as well as State law requirements. In particular, the State Class A regulations authorized by EPA include a special counting rule under which Class A recyclable materials recycled in compliance with the Class A regulations are not counted in determining generator status. See 310 CMR 30.221(4). Thus a generator that might otherwise be a large quantity generator sometimes may avoid that status by increasing the amount of recycling it does on site. In addition, Massachusetts utilizes a “dual status concept” under which there are separate regulations covering the parts of generator operations involving hazardous wastes being sent for disposal and the parts involving hazardous recyclable materials being recycled on site. In its special authorization rulemaking, the EPA generally accepted these different Massachusetts approaches.

However, in the special rulemaking the EPA also specified that “generators still need to comply with other applicable RCRA requirements in addition to the Class A requirements.” 69 Fed. Reg. at 11809. As the EPA noted, while Massachusetts has been authorized to administer some elements of the RCRA program, it has not yet applied for or been authorized to administer other elements. Thus the EPA is continuing to administer these other RCRA program elements within Massachusetts, and generators operating under the Class A program may be subject to additional RCRA requirements resulting from these additional program elements. In particular, because

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<sup>1</sup> Massachusetts does exempt from RCRA regulation (including Class A regulation) on-site recycling when the recyclable materials are stored in tanks and managed in a completely enclosed recycling system that is directly connected via pipes or the equivalent to an industrial process. 310 CMR 30.202(4). This Massachusetts exemption is equivalent to the federal exemption at 40 C.F.R. 261.4(a)(8). However, the entire storage-recycling process described in your emails does not meet the terms of this exemption since it does not involve only tank storage and since the connection between the initial storage containers and the distillation unit is not completely enclosed. Thus the operation is not totally exempt from all RCRA regulation.

Massachusetts has not yet been authorized to administer the AA, BB and CC requirements, generators operating under the Class A program sometimes must also comply with the AA, BB and CC requirements being directly administered by the EPA within Massachusetts. Whether the AA, BB and CC requirements apply to any particular operation is determined in accordance with federal rather than State law requirements.

Under the federal regulations, the AA, BB and CC requirements are applicable to large quantity generators but not to small quantity generators or conditionally exempt small quantity generators. See 40 C.F.R. 262.34(a)(1)(i) and (ii), 262.34(d) and 261.5. In adopting the special rule authorizing the Massachusetts Class A regulations, EPA announced that it would administer the CC regulations with respect to Class A operations as follows: “First, only generators which are classified as large quantity generators under the State regulations will be considered subject to the CC regulations. That is, the EPA will utilize the Massachusetts counting rules when administering the CC rule within Massachusetts. This will avoid generators needing to do two separate State and Federal status calculations. Second, however, any generators which are classified as large quantity generators under the State regulations with respect to any part of their site will be subject to the CC regulations throughout their sites. Large quantity generators storing solvents will need to comply with all applicable requirements imposed by the CC regulations, whether the solvents are being stored for disposal or recycling. That is, the EPA will not utilize the Massachusetts dual status concept when administering the CC rule within Massachusetts.” 69 Fed. Reg. at 11809. These same principles as announced with respect to the CC requirements, also apply with the respect to the AA and BB requirements.

You have advised us that the company in question is a large quantity generator, notwithstanding the special Massachusetts counting rules. Thus the AA, BB and CC rules are potentially applicable to the company’s facility. In line with the statement made by the EPA in our special rule, the AA, BB and CC rules potentially apply throughout the company’s facility – notwithstanding the Massachusetts dual status concept – since the EPA does not utilize the dual status concept in determining where the AA, BB and CC rules apply.

However, the AA, BB and CC rules apply only to portions of the facility that are federally regulated. As indicated above, federal regulation extends to the storage of spent materials awaiting reclamation. See 40 C.F.R. 261.2. However, federal regulation does not extend to the storage of commercial chemical products, or characteristic byproducts, awaiting reclamation. Id. Finally, the EPA generally does not regulate the recycling process itself. 40 C.F.R. 261.6(c)(1).2

In your September 29 email, you refer to the solvents needing purification as “byproducts” of the manufacturing process. This is not the correct classification for purposes of the federal RCRA regulations. While the solvents that are used for cleaning start out as byproducts when they come out of the manufacturing process to be used for cleaning, when they become contaminated as a result of their use for cleaning, they become spent materials. They then meet the definition

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2 The one exception to this is that recycling operations at RCRA permitted treatment, storage and disposal facilities are subject to the AA and BB requirements. But you have advised us the facility in question is not a permitted facility.

of spent material because they have become un-useable without processing, as a result of their contamination. See 40 C.F.R. 261.1(c)(1); Letter from OSW Director Shapiro to Region I-X Waste Directors, dated Mar. 24, 1994 (available from RCRA On-Line). The distillation process constitutes reclamation of these spent materials. Specifically, the solvents are being “regenerated.” See 40 C.F.R. 261.1(c)(1).

In contrast, the occasional batches of solvents which are off-specification are considered by the EPA to be commercial chemical products. See Letter from OSW Director Straus to Mr. Lataille, dated April 2, 1986 (available from RCRA On-Line). These commercial chemical products also are “reclaimed” through the distillation process.

While the EPA does not regulate the storage of commercial chemical products prior to reclamation, it does regulate the storage of spent materials prior to reclamation. Since the company is storing spent materials subject to regulation as well as the (federally) unregulated materials, the storage containers being used to store the solvents needing reclamation prior to distillation are subject to federal regulation. The relevant federal regulations governing container storage are set forth in the subpart CC regulations. (There are no AA and BB requirements applicable to container storage).

Since the EPA does not regulate the recycling process itself, the AA, BB and CC requirements do not apply to the distillation unit itself or associated piping. Also, the AA, BB and CC requirements do not apply to any storage units used to store solvents after they have been reclaimed, since the solvents are considered to be products not regulated by RCRA at that point. However, all applicable RCRA requirements, including the CC requirements, apply to any containers used to store any hazardous waste residues generated by the recycling process that are being sent for disposal.

Please note that the company is subject to other requirements that are designed to control hazardous air emissions, notwithstanding any absence of coverage of some of its operations under the AA, BB or CC rules. First, the company is subject to all applicable requirements under the federal and State Clean Air Acts. Second, under the State’s Class A program, hazardous solvents awaiting on-site recycling must be stored in containers which must remain closed except when the solvents are being added to or removed from the containers. See 310 CMR 30.205(19).

If you have any further questions, please contact me at (617) 918-1369 or [waterman.ernest@epa.gov](mailto:waterman.ernest@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "E. Waterman", with a horizontal line underneath.

Ernest Waterman, Chief  
Hazardous Waste Unit  
Office of Ecosystem Protection

cc: Jeffrey Fowley, EPA Office of Regional Counsel  
Catherine Smith and Andrea Simspon, EPA - RCRA Enforcement  
William Sirull, MADEP