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TOLUENE AS A DILUENT CARRIER AND THE SCOPE OF THE F005 LISTING

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

AUG 17 1987

MEMORANDUM

SUBJECT: Listing Program's decision on Chevron Chemical Company's waste from tower 201 in their polystyrene production process in Marietta, Ohio.

FROM: Matthew A. Straus

TO: Steve Hirsch

On July 28, you met with Barry Millman (Dynamac), my staff, and me, to discuss Region V's request for assistance in determining whether Chevron Chemical Company generates an F005 waste in Tower 201 in their polystyrene production process in Marietta, Ohio. I assigned Chuck Lawhead with the task of gathering the information necessary to enable us to make a decision. On August 4, he submitted to me a summary of the arguments relevant to the issue, as we defined it in the meeting mentioned above. (See attached memo). The decision at which we arrived is outlined below. If you have any questions or comments, please submit them to me by August 26. We intend to write George Hamper (Region V) to inform him of our decision.

Listing Program's Decision on the Chevron Issue:

The Listing Program has decided that toluene is used as a solvent in Chevron Chemical Company's polystyrene production process and, therefore, that waste from Tower 201 is the listed hazardous waste, F005, still bottoms from the recovery of spent toluene. This decision was made, based on the following information:

1. In a document submitted by Squire, Sanders, and Dempsey on behalf of Chevron, it was stated that the toluene is "added as a diluent" in the process. The toluene is also used as a carrier, or diluent, for the additives which are used in the process.

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2. Both styrene and toluene are recovered in Tower 201; they are separated from the tars in this column. Therefore, the waste generated at this point in the process qualify as still bottoms from the recovery of spent toluene, an F005 waste.
3. The closed loop recycling process exemption does not apply to this process.
4. Chevron made several arguments that have not been addressed by this decision. We feel that the (3) determinations above resolve the issue by themselves.

Support for the decision:

1. Peter Oxenbol of Chevron Chemical Company commented that the term "diluent" had been used by them before they realized that this term carried such a weighty connotation (i.e., use as a diluent constitutes use as a solvent.) He suggested that a different word or description could be used which would not be as sensitive as the word "diluent". The definition of the word "diluent", however, is quite clear, and we feel that it was chosen previously as an accurate description of the role that toluene plays in the reaction. Chevron wishes to use a different word now, but toluene's function will not be changed by doing so.
2. Of the feed that enters Tower 201, roughly 83% is unreacted styrene and 4% is toluene and they are both separated, together, from the tars in the column. Toluene may not be the major component in the feed stream to the column, but it is nonetheless being recovered at this point in the separated from the styrene.
3. The Federal Register excerpt on the closed loop recycling process reads as follows: "It should be noted that, under today's rule, although secondary materials stored in closed-loop reclamation processes that fit within the exclusion of §261.4(a)(8) are not solid waste, wastes from their management are solid wastes. Thus, still bottoms from solvent reclamation in a no exclusion applies for another reason, and can be hazardous wastes if they are identified or listed. In this regard, the Agency notes

that many still bottoms from solvents reclamation are listed wastes, as are the residual spent solvents themselves (Hazardous Wastes F001-005)." (51 FR 25443)

4. Chevron's other arguments, that toluene is present in the waste in the in only de minimis quantities, that toluene "is an essential ingredient in the process from a kinetic standpoint", etc., became moot points because it was decided that the waste was the listed waste, F005.

Attachments: (1)