9441.1986(25)

SMALL QUANTITY GENERATOR WASTE STREAMS - TANK RISK ANALYSIS

March 26, 1986

Kevin Bromberg
Small Business Administration
Office of Advocacy
1725 I Street, N.W.
Washington, D.C. 20416

Dear Kevin:

Enclosed for your information is a table (see Enclosure 1) that summarizes the dominant risk constituents associated with small quantity generators (SQG) waste streams in the hazardous waste tank risk analysis. This table, title Dominant Risk Constituents for SOG Waste Streams, presents the constituent that dominates the risk for each SQG waste stream that is listed in Exhibit 4-14 (see Enclosure 2).

For comparative purposes, this table presents a relative ranking of the magnitude of risk each constituent poses in relation to the other constituents. This summary table presents the information necessary to evaluate Exhibit 5-27 (see Enclosure 3), by providing the relative levels of risk associated with the SQG waste stream constituents.

As explained in the risk analysis report, we summarize the risk associated with each waste stream by using the dominant risk constituent as the measure of relative risk. The computer printout that you specifically requested examining includes all the risk estimates for each of the constituents associated with all of the SQG waste streams. Because it is difficult to interpret these printouts straightforwardly, we have provided you with the enclosed summary table. However, if you would still prefer to examine the computer printout I will send you a copy immediately.

In addition, I apologize for the confusion that resulted from Exhibit 4-15 (see Enclosure 4) regarding the number of SQG tanks represented in this analysis. Exhibit 4-15 is inadequately labeled, understandably leading to misconceptions of what we

assume about the number of SQG tanks affected by the hazardous waste tank regulations. I hope to clarify this problem by making the following points.

First, the purpose of Exhibit 4-15 is to present the SQG survey data results indicating the waste streams associated with SQG tank facilities. Thus, the data does not represent the estimated number of SQG tanks, since SQG facilities may have more than one tank apiece. Second, this data is not weighted to represent the secondary standard industrial classification industries. Thus, the number of SQG facilities with tanks presented only represents the primary SIC industries.

Finally, the waste streams listed in this exhibit are those that we chose to represent waste streams contained in SQG tanks. The enclosed computer printout (see Enclosure 5) provides the complete list of waste streams associated with SQG tank facilities according to the SQG Survey. As you can see form this printout, the representative SQG tank waste streams used in the risk analysis do not include all of the waste streams that the survey data associates with SQG tanks. The risk analysis has excluded such SQG tank waste streams as empty pesticide containers and heavy metal solutions due to their low frequency of occurrency.

For the final draft of the risk analysis report, we will clarify the headings for exhibit 4-15 to ensure that readers understand that this data was used to choose representative SQG tank waste streams, not to determine the number of SQG tanks or SQG tank facilities.

Sincerely,

Betsy Tam
Economic Analysis Branch (WH-565)

Enclosures

cc: Hazardous Waste Tank Risk Analysis Docket File

Enclosure 1

Dominant Risk Constituents for SQG Waste Streams

Waste Stream	Dominant Risk Constituent	Contribution* to Risk
Spent Solvents/Ignitable Paint Wastes/Ignitable Wastes		
- halogenated	Carbontetrachloride	High
- non-halogenated	Benzene	High
Strong Acid or Alkaline Wastes	Lead	Low
Waste Ink with Solvents or Heavy Metals/Ink Sludge with Chromium or Lead	Toluene	Low
Filtration Residues from Dry Cleaning	Tetrachloroethylene	Low
Photographic Wastes/Solutions or Sludges with Photo Silver	Methanol	High
Waste Pesticides/Pesticide Washing and Rinsing Solutions		
-persistent, halogenated low mobility pesticides	Lindane	High
-non-persistent, "modern" high mobility pesticides	Aldicarb	High
Wood Preserving Wastewaters	Acenapthene	High

Heavy Metal Wastewater Sludges/Spent Plating Wastes/Cyanide Wastes/ Other Reactive Wastes	Cadmium/ Nickel/ Chromium	Medium**

As illustrated in Exhibit 5-27, risks are either relatively high (10-4) or very low for this tank technology. Thus, waste stream contribution to risk is designated as "high" or "low".

** This waste stream is not included in Exhibit 5-27, but for the above ground SQG tank, it represents moderate (i.e., "medium") risk (on the order of 10-6).