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CORROSIVITY CHARACTERISTIC AS IT APPLIES TO SOLIDS

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

March 9, 1992

Charles A. Licht, President
CLEA, Inc., P.O. Box 315
Olympia Fields, Illinois 60461

Dear Mr. Licht:

I am writing in response to your letter of February 13, 1992 to Sylvia Lowrance concerning clarification of the corrosivity characteristic as it applies to solids.

The current characteristic defines a corrosive waste as a solid waste that: a) is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5 b) or is a liquid and corrodes steel at a rate greater than 6.35 mm per year. We have two methods in SW-846 for measuring the corrosivity of these liquids. One method is for aqueous liquids (Method 9040, pH electrometric measurement) and the other method is for non-aqueous liquids (Method 1110, corrosivity of steel).

We realize that the existing corrosivity characteristic has two problems: 1) it applies only to liquid wastes, thus corrosive solids such as lye, solid acids, or in your case, baghouse dusts, are not covered and 2) the term "aqueous" (as in aqueous liquid) has not yet been defined, thus, there is a chance that some users of our method for pH determination will incorrectly apply the method to certain non-aqueous wastes.

With respect to solids, the Office of Solid Waste has developed a method that appears to be suitable for determining their corrosivity. This method, Method 9045 - Soil and Waste pH (copy attached), mixes a waste sample with water in a 1:1 ratio and determines the pH of the solution with a pH meter. Method 9045 will be included in the proposal for the second update to the third edition of sW-846, "Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods." We anticipate the proposal appearing in the Federal Register sometime this spring, with promulgation sometime in 1993.

Promulgation of Method 9045 would not by itself expand the scope of the corrosivity characteristic. This requires that the Environmental Protection Agency (EPA) draft regulatory language to include corrosive solids and to employ Method 9045 for their determination. We are not sure at this time when that will happen. ln the interim, we recommend the use of Method 9045 for the determination of corrosive solids.

If you have any additional questions, please call Ollie Fordham of my staff at (202) 260-4778 or call the Methods Information Communications Exchange (MICE) at (703) 821-4789. MICE calls are recorded on an answering machine and, for the majority of questions, responses are provided within 24 hours. I hope this information has sufficiently addressed your questions.

Sincerely yours,
Gail Hansen
Chief,
Methods Section (OS-331)

Enclosure

cc: Alec McBride, Ollie Fordham, Kim Kirkland, Rafael DeLeon (OGC)