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LABORATORY EQUIPMENT USED TO RUN THE TOXICITY CHARACTERISTIC
LEACHING PROCEDURE (TCLP)

MAY -5 1986

Mr. Dave Alff
Analytical Testing and
Consulting Services
1947 Brook Lane
Jamison, Pennsylvania 18929

Dear Mr. Alff:

This letter is to confirm our conversations regarding your intent to market equipment used to run the Toxicity Characteristic Leaching Procedure (TCLP). As we discussed, your designs for the rotary apparatus indicate that the device meets the requirement for end-over-end agitation at approximately 30 rpm. I will adding your device to the list of suitable rotary agitation equipment.

You also presented designs for a zero-headspace extractor (ZHE). Unfortunately, it is not possible to make a decision regarding suitability without data comparing the performance of your device to the other equipment. To reduce potential variability, it is necessary to insure that all devices are capable of producing similar results.

As I suggested, you should consider evaluating your device for comparability in two steps. First, to insure that you are in the right ballpark, you should initiate experimental work to determine recoveries of spiked volatiles from water (or from TCLP extraction fluid) that has been run through the ZHE. We have done this work through one of our contractors with the other two ZHE devices, and comparable results would provide evidence that your ZHE should be suitable. Please call Dr. David Taylor of S-Cubed at (619) 587-8369 for information the spiking method, and the expected recoveries. I have alerted Dr. Taylor to expect your call.

Assuming that your recoveries are acceptable, testing of actual wastes, and comparison to results obtained with the other ZHE devices, would be the next step. Since you understandably wish to avoid having to buy other devices in order to make these comparisons, participation in our collaborative study, also being managed by S-Cubed, would be

advisable. Please contact Dr. Taylor if you wish to participate.

Another alternative would be for you to initiate comparative work through a laboratory that has already obtained these devices. This alternative has several distinct advantages. For one, it would eliminate several variables that always exist in collaborative studies, such as analytical variability. A more distinct advantage to you would be time. You indicated that you wish for your ZHE to be listed with the other ZHE devices when the proposed TCLP becomes published in the third edition of SW-846 (our solid waste testing manual), even if it was listed with the caveat that it was still undergoing evaluation. I have talked this over with my management, and the decision was made that the manual should only indicate that equipment which has been shown to be acceptable. For time reasons then, you may wish to elect this other alternative. Of course if you choose this alternative you are still welcome to participate in our collaborative effort.

The time factor may be the deciding factor for you since we will have to make a decision on equivalency by the end of June to include your equipment in the 3rd edition of SW-846. I recognize that this leaves you with less than two months to initiate and complete the necessary comparative work. If you choose this route, however, I would be glad to provide you with more assistance.

I am sorry for having to present you with these hard choices. You have obviously put a lot of effort into your development work, and your design seems feasible. I wish you had contacted me much sooner with your talent. We could have probably avoided the time factor. Good luck and please call me at (202)382-4795 if I can be of more help.

Sincerely,

Todd A. Kimmell
Environmental Scientist
Studies and Methods Branch (WH-562B)

cc: David Friedman (OSW)
David Taylor (S-Cubed)