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Mr. Steve Zappe, WIPP Project Leader
Hazardous Waste Bureau
New Mexico Environment Department
2509 East Rodeo Park Drive, Bldg. 1
Santa Fe, NM 87505

Subject: Response to NMED Inquiry for RFETS Ash at Hanford

Dear Mr. Zappe:

This letter transmits the Carlsbad Field Office (CBFO) response to the Observer Inquiry, dated June 16, 2003, raised by New Mexico Environment Department (NMED) observers during Audit A-03-14 of the Hanford Recertification Audit. The audit was conducted March 3-7, 2003.

In the first paragraph of the inquiry, it appears there is some confusion as to what Hanford was proposing. The ash generated at the Hanford incinerator would be similar to the Rocky Flats Environmental Technology Site (RFETS) ash; however, Hanford is not proposing to characterize this ash based on RFETS ash results. The ash generated at Hanford will be sampled and analyzed for both total RCRA solids and headspace gas constituents. The RFETS ash at Hanford will be sampled for headspace gas, but the RCRA solids analytical results performed at RFETS will be used as preliminary data.

If the RFETS ash at Hanford had not been shipped to Hanford, it would have been included in the RFETS ash waste stream. The origin of the two waste streams are identical, they are only two distinct waste streams because they will be characterized by two distinct organizations. Because they are in fact waste produced from a single process, the analytical data obtained by RFETS can be directly applied to the ash at Hanford, but only as preliminary data.

While it is true that the containers of RFETS ash at Hanford were not part of the population of containers that was used for random selection at RFETS, random selection is not required for preliminary samples (B2-2a). It is also true that the RFETS results provide an unbiased representation of the ash that was shipped to Hanford, making those results excellent preliminary data.

The subsequent re-burning of the ash at Hanford did not alter the hazardous waste characterization of the waste. Obviously F-listed codes still applied. Toxicity Characteristic metals would not have increased in concentration significantly since the re-burn only drove off residual organic material.



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Hanford used the RFETS evaluation of variability in the RFETS sample results to show that the incinerator was not intended to control the variability in the ash and therefore, the retrievably stored characterization scheme is required for this waste stream. This meets the WAP criteria in B2-4 which requires that for control charting of newly generated waste streams, the constituents must be independent and normally distributed with a constant mean and constant variance. The WAP does not specify how that requirement must be verified; only that it must be true for control charting. Since RFETS had proven that the waste stream hazardous constituents are not normally distributed, Hanford was able to use this as acceptable knowledge and defer to the sampling protocols for retrievably stored waste and the requirements of B2-2a apply.

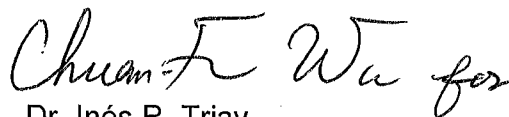
The 26 homogeneous solids samples collected during confirmation for the RFETS incinerator ash waste stream (WSPF RF118.01) confirmed the AK assignment of EPA hazardous waste codes at RFETS. The RFETS AK is a source of Hanford AK and is the basis for the Hanford hazardous waste determinations made for the RFETS ash stored at Hanford. The data confirm the original RFETS characterization conclusions drawn from AK that metals would be concentrated in the ash during incineration, and that VOCs and SVOCs would be volatilized and driven off. The required number of samples of homogeneous solids and headspace gas have been met for WSPF RF118.01. The data also confirm the Hanford AK derived from the RFETS AK. (The analytical data confirm both AK determinations since they are essentially the same waste stream.)

The WAP requirements to use the RFETS homogeneous solids sampling data as preliminary sampling to satisfy the required sampling have also been met because the waste was generated from the same process. WAP B2-2a states "upon collection and analysis of the preliminary samples, or at any time after the preliminary samples have been analyzed, the generator/storage site may assign hazardous waste codes to a waste stream." This is what was done at Hanford. Using preliminary data, Hanford was able to confirm the assignment of hazardous waste codes.

There are no WAP requirements that mandate the collection of additional homogeneous solids samples at the Hanford site because Hanford is not attempting to establish that a constituent is below the regulatory threshold. The hazardous waste determinations as assigned in accordance with the AK process were confirmed.

The CBFO is not sure what characterization methods were discussed with NMED; however, the CBFO has made it clear to Hanford that RFETS headspace gas results are not to be used for any waste at Hanford.

Sincerely,



Dr. Inés R. Triay
Manager