

03.01-09/16/98-61



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September 16, 1998

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Attn.: Mr. T. A. Reisch, IRP
Code 1822

RE: St. Juliens Creek Annex, Chesapeake, VA
Supplemental Field Investigation Plan, Landfill B (Site 2) and The Burning
Grounds (Site 5) Dated July, 1998

Dear Mr. Reisch:

Thank you for the opportunity to review and comment on the above referenced document.

The comments below relate only to the referenced supplemental document and not to the previously reviewed RI/FS workplan document dated May, 1997, except where specifically noted. The comments are more or less organized in order of appearance in the plan and apply to the plan as a whole unless a specific section is referenced.

1. It is my understanding that this plan is to collect and analyze background samples to be used in the risk assessment process as a basis for comparison for the entire St. Julien's creek facility and not for any specific unit / AOC.

Please be advised that soil, surface water and sediment samples that reveal detectable levels of non naturally occurring contaminants will not be acceptable for use in any risk assessment comparison or calculation. Contamination by non-naturally occurring compounds in groundwater may not eliminate a sample from use provided that it can be demonstrated that the contamination is arising from conditions off-site.

2. The sample depth, compositing, preservation, storage, sampling time relative to the tides and in the case of surface water and sediments seasonal rainfalls should correspond exactly (or as close as is reasonably possible) to those for the comparison (potentially contaminated) samples.

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For example, soil samples taken at 0 to 6 inch depths must have background samples obtained at 0 to 6 inch depths instead of 0 to 3 inch. Compositing 6 to 24 in depth samples must have corresponding composited background samples. Note that in most cases discrete samples are favored over composite. As there may be changes in the sampling plans for Landfills B, C, and D, and the Burning Grounds, corresponding changes must be made to the background sampling plan.

3. All samples, soil, sediment, surface water, and groundwater must be analyzed for all of the parameters that will be used to analyze the potentially contaminated samples. Testing only for those contaminants which could be naturally occurring or occurring as a result of routine usage (pesticides) will not allow for any screening of the sample to verify that it was in fact obtained from a "clean" site and is suitable for use as background for risk assessment or other comparison purposes.

3. I visited the proposed soil and groundwater sampling sites with Tim Reisch on 9-10-98. As the sites cannot be easily identified I will not provide written comments as to the suitability of the sites beyond those comments which were presented during the site visit.

I do, however, have concerns about using wells SJS02-GW1 for background. The area in which these wells are located appears to have been disturbed and there appear to be a significant potential for site source contamination in this well. A more suitable site was identified during the site visit. It is located approximately 900 feet N-NW of the proposed wells, in the vicinity of building 365.

I am also concerned that the plan proposed using either SJS03-GW1 or SJS02-GW1 and not both as potential background wells. It is suggested that both SJS03-GW1 and the proposed new location well (see previous paragraph) be sampled along with the other "new" wells proposed to be sampled in the plan.

4. Groundwater, surface water and sediment samples shall be obtained during the same tidal phase as the comparison samples. Field measurement parameters shall be the same as for the comparison samples and should include salinity.

5. Section 2.2. Field duplicate samples shall be collected at a frequency of 1 per 10 field samples per matrix as stated in the May 1997 work plan. The sample shall be a split sample. Field blanks shall be collected at a rate of 1 per week per matrix **per water source**.

6. Section 2.3. Matrix spike / matrix spike duplicates shall be collected at a frequency of **1 per group of up to 20** field samples per matrix **per laboratory** as stated in the May 1997 workplan. The number of samples in Table 2-1 appears to be correct with the

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exception of the Aqueous Total column for Soil, TAL and TOC and the above notes corrections to the footnotes.

6. Why are nitramines and dioxins not being tested for in the background and burning ground site samples?

If you have any questions or to set up a conference, please contact me at the numbers below.

Very truly,



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CC: Rob Thompson, Region III, EPA
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