COMMENTS ON THE TREATABILITY STUDY PLAN

TREATABILITY STUDY PLAN VOLUME I

This five volume document should be consolidated into fewer separate volumes

The document should contain an Executive Summary and a list of acronyms We prefer the font used in Volume V as it will save paper

Page 2 1 Section 2.0 Augment the use of the term SWMU with IHSS (Individual Hazardous Substance Site) as per the wording in the InterAgency Agreement.

Reference the InterAgency Agreement in discussions

Replace 'DOE wishes to pursue with "DOE IS pursuing Also use new wording consistent with the September 26 version of the OU2 Surface Water IM/IRAP

Page 2 3 Section 2.0 Replace "DOE is implementing an IM/IRA Plan because " with DOE is implementing an IM/IRA Plan at the request of EPA and CDH Also a factor is the length of time it typically takes to finalize

Page 2 5 Section 2.1.3 Elaborate on frequent interaction of surface water and groundwater Also note that the areas downslope and north of the Mound Area are not seeps

Figure 2 2 The location of the Surface Water Stations 59 60 and 61 are not accurate Suggest using the figures from the September 26 1990 Surface Water IM/IRAP

Page 2 7, Section 2.1.3.1 Figure 2 1 does not illustrate the location of Woman Creek.

Page 2 9, Section 2.1.3.2 Figure 2 3 does not locate the subdrainages as stated

Note that the corrugated metal pipe is SW-60 Also mention SW 59

Page 2 11 Section 2.1.3.2 Runoff and seeps from the southern part of the Plant.

Page 2 12 Section 2.3 Reference the September 26 1990 IM/IRAP Proposed Decision Document and use IHSS rather than SWMU

In situ and soil sampling data from the May 1990 EG&G EM (Las Vegas) Aerial Radiological survey should be referenced and expounded upon

Pages 2 18 through 2 24 Section 2.5 Use consistent outline format for surface water contamination as was done for ground water contamination. Also the surface water discussion should be expanded so that it has more information than the section on ground water (since this a surface water treatability action)

Rather than just background make the discussion deal with ARARs

Reference the December 21 1989 draft IM/IRAP for ground water for the discussion on ground water contamination and the September 26 1990 surface water IM/IRAP for the surface water discussion

On page 2 20 the discussion on radionuclides should distinguish between total and dissolved.

For discussions on surface water monitoring stations use Figure 4-1 from the September 26 surface water IM/IRAP as an example

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Include some discussion on the colloidal size fraction study being done by Pete Folger Some preliminary data in available

Page 2 24 Section 2.6 Discussion on meeting ARARs to the extent practicable is warranted as per the InterAgency Agreement and the National Contingency Plan

SAMPLING AND ANALYSIS PLAN APPENDIX A VOLUME II

Pages A 1 1 Section 1 This section is repetitive of Volume I. As noted earlier this document can be better consolidated and repetitive sections eliminated

Page A 1 25 Section 3.1 Add the concrete culvert between SW-60 and SW-61 as a sampling location

Page A 1 32 Section 5.4 This section on waste management should be expanded after consultation with waste management groups Particularly with respect to what proper disposal is and where wastes would be disposed of

APPENDIX A 2 LABORATORY ANALYSIS PLAN

Consistent page number would be beneficial (A 2 _____)

Page 1 Section 1.1 See earlier comments on background discussion

Table 3 1 A more detailed description under the 'Treatment heading would be in order as there is plenty of room in this block. For example CWC as a treatment could be spelled out (composited water characterization) so the table could stand alone

TREATABILITY STUDY WORK PLANS APPENDIX B VOLUME III

Page B 1 Spell out CMS/FS

In the second paragraph what does variability in waste contaminant have to do with sampling? This section should be clarified do to the sensitivity to waste onsite

Page B.1 1 Objectives Granular Activated Carbon (GAC) will not remove methylene chloride to any great extent.

Page B.1 2 Section C Will the water flow through the GAC be upflow or downflow?

Page B.1 2 Section D On what basis were the five carbons chosen?

Page B.1-4 Table B.1 1 Specify that the valves are to be nonlubricated Sometimes the lubrication material can be soluble in water and add constituents

Page B.1 5 Secondary Testing Will analysis of radionuclides also be included?

Page B.1 6 Section E Item 2 Why is the moisture content of the carbon determined? Is this data not available from the vendor?

Page B.1 7 Item 5 Why are the water flow rates different between the initial screening and secondary testing? This will change the loading and make comparison of data difficult.

Page B.1 7 Item 6 At what frequency will the samples be taken for the capacity evaluation tests?

Page B.1 9 Section G How will one determine if the two GACs selected are more effective if removing VOCs? It could be that the GACs chosen are more effective in removing semi volatiles and humics if only total organic carbon analysis is used.

Page B.2 5 Section E Why is this procedure different from that given on page B 1 6?

Page B.2 9 First Paragraph What is to be done with the laboratory equipment that becomes contaminated?

Page B.2 9 Section I What is the reason behind separating the evaluation of the GAC into two parts (organics and radionuclides)? Can t this be done from one set of experiments since the same waste water is to be used as the influent?

Page B.3 3 Table B.3 1 This table does not coincide with the text.

Page B.3-4 Section D What was the reason behind choosing these nine ion exchange resins?

Page B.3 5 Paragraph 3 Why is Ph of between nine and ten used?

Page B.3 6 Item 7 How were these operating conditions chosen?

Page B.4-1 Section B Why is this study split into two parts? Why couldn t one perform the experiments once and then do detailed radionuclide analysis if there is significant removal of alpha and beta activities?

Page B.5-4 Figure B.5 2 Why is the 0 45 micron filter used when the microfiltration process proposed in the Interim Measure can remove particles down to 0 1 micron?

Page B.5 5 Paragraph 1 The word CAN should not be in capitals

Page B.5 8 Section H The Figure should be B 5 3

Page B.5 9 Will percent removal of individual radionuclides be calculated also?

Page B.6-8 Equation The quantity 'Initial SS Final SS needs parenthesis

Page B.7 1 Section B Paragraph 1 What constitute uncontaminated residuals and where will these come from?

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