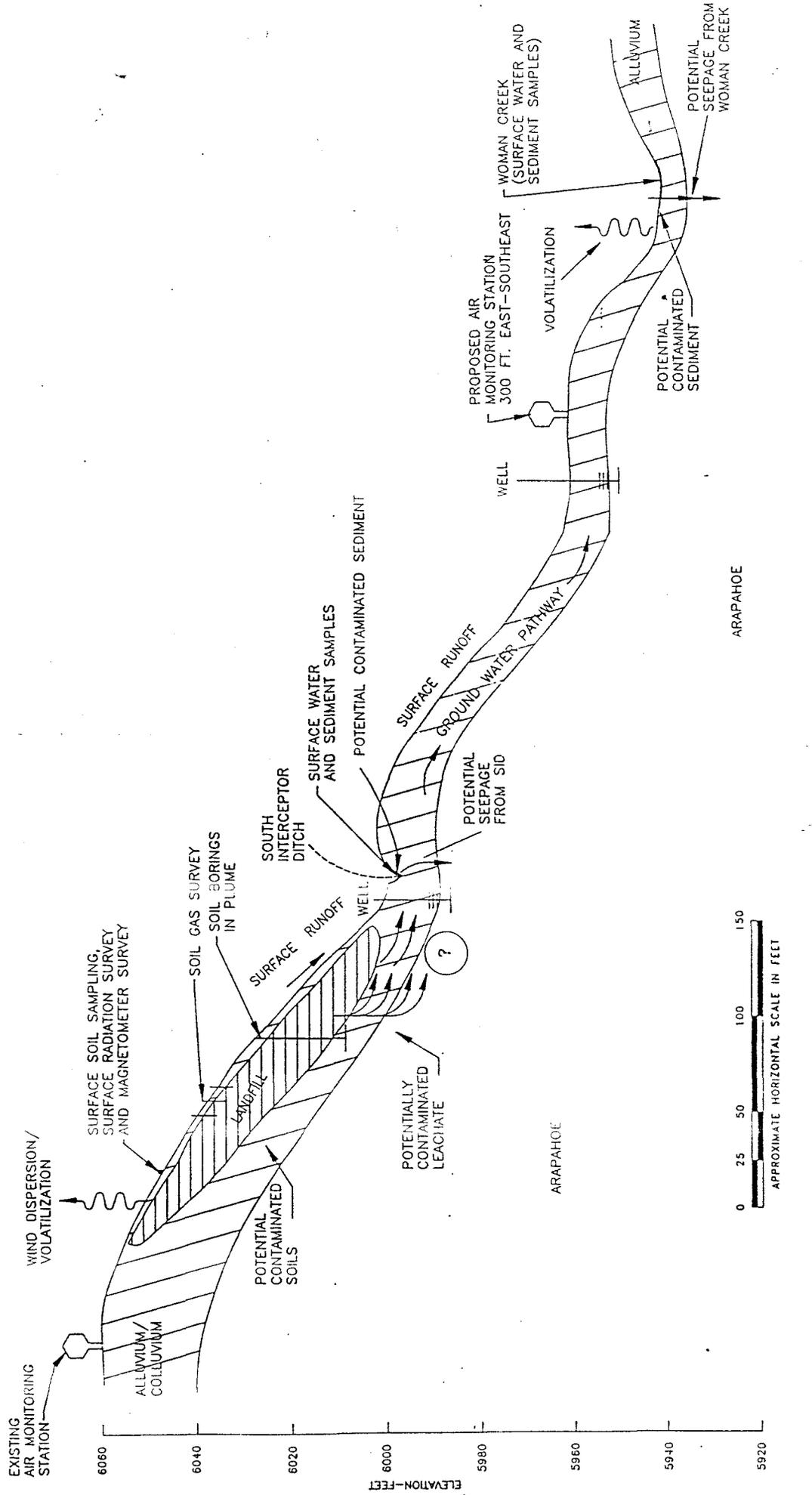


U.S. ENVIRONMENTAL PROTECTION AGENCY
COMMENTS ON THE TECHNICAL MEMORANDUM 1
OPERABLE UNIT 5, ROCKY FLATS PLANT

1. Page 7-5, item #4: Explain the rationale for adding TCL pesticides/PCBs to the analytical program for groundwater in order to support the environmental evaluation. What exposure pathway will be characterized by this sampling? Also, this is inconsistent with Table 7-7 which indicates only sediment samples in ponds C-1 and C-2 will be analyzed for TCL pesticides. In order to characterize nature and extent and possible transport of contaminants, sediments along Woman Creek, the SID, and the ponds need to have consistent analytical programs.
2. Page 7-9, Stage 3: We believe the proposed surface soil sampling program of four grab samples in the landfill area is inadequate. In light of recent developments in the OU 1 soil sampling program, DOE must redesign this program and focus on the exposure pathways (both human health and environmental) which will be characterized by this data and the required number of samples and sampling technique. Given that DOE already has some preliminary information from the radiation survey of the landfill, EPA suggests that DOE consider establishing a separate grid over the hot spots to provide a biased sampling for radionuclides and establishing another grid over the entire area for random sampling for other contaminants. DOE's program must be justified statistically in accordance with EPA's Guidance for Data Useability in Risk Assessment (EPA/540/G-90/008).
3. Page 7-15, Stage 3: We believe the proposed surface soil sampling program of four grab samples in the ash pit area is also inadequate. Please see our comment #2.
4. Page 7-13, first full paragraph: Given the disposal history of the landfill, pesticides must be added to the soil boring analytical program.
5. Page 7-21, second full paragraph: Provide additional explanation for the two foot composite sediment sampling protocol. EPA is concerned that a large composite interval may dilute the contamination present in the sediment.
6. Page 7-35 and 7-36, Table 7-7, Phase I Analytical Program:
 - a. IHSS 115:
 1. Add TCL pesticides to the soil borings
 2. Add TCL pesticides to the effluent program
 3. Add the specific isotopes of uranium to the groundwater program
 - b. IHSS 133:
 1. Delete TCL pesticides and semi-volatiles from the surface soil samples
 2. Add the specific isotopes of uranium to the groundwater program



Job No. :	22506E
Prepared by :	W.S.T.
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**SAMPLING PROGRAM AND
PATHWAY ANALYSES
ORIGINAL LANDFILL**

FIG. 1

TECHNICAL MEMORANDUMS TO BE SUBMITTED BY DOE

1. Surface Soil Sampling Program for IHSS 115 and IHSS 133
 - Include sampling locations, sampling protocol, and statistical justification
 - Addresses EPA comments #2 and #3
2. EM Geophysical and Magnetometer Survey for IHSS 115 and IHSS 133
 - Include instrument details, grid spacing, and field procedures
 - Addresses CDH's comments
3. Soil Gas Survey Grid for IHSS 115
 - Include the number of soil cores (depends on the grid spacing)
 - Addresses CDH's comments
4. Cone Penetrometer Program
 - Include instrument details, location, spacing, analytical program, and field procedures if not covered in existing SOPs
 - Addresses CDH's comments
5. Monitoring Well Program for IHSS 115 and 133
 - Include well locations and analytical program
 - Addresses CDH's comments