COMMENTS
SURFACE WATER INTERIM MEASURES/INTERIM ACTION PLAN/
ENVIRONMENTAL ASSESSMENT AND DECISION DOCUMENT
903 PAD, MOUND AND EAST TRENCHES AREAS.
OPERABLE UNIT NO. 2

General
The Surface Water Interim Measures/Interim Remedial Action Plan/Environmental Assessment and Decision Document 903 Pad, Mound, and East Trenches Areas OU2 contains major deficiencies which must be addressed. The collection system at Upper South Walnut Creek must be modified to collect the waters of SW-59 at the source, and the base flows of SW-60 and SW-61. The schedules for the plan must be revised to show field activities beginning no sooner than ten days after release of the responsiveness summary.

Section 2.3.2.2 (pg 2-28)
Explain what type of quarterly "multiple sampling" was used to conclude barium and strontium are the only trace metals which consistently exceeded background. Is "multiple sampling", several samples taken from the same location over an extended period of time or more than one aliquot analyzed from a single large sample?

Section 2.3.5.3 (pg 2-39)
The description of three of the stations, SW-59, SW-60 and SW-61 is inconsistent with field observations made by CDH and EPA during a site visit where EG&G and DOE staff members, Scott Grace, Tom Greengard, and Tom Olsen were also present.

Section 2.3.5.3 (pg 2-40)
There are three seeps listed in the first sentence which starts, "Of the two seeps at the East Trenches Areas..." SW-65 is south of the trenches, SW-103 is northeast of the trenches and SW-101 is north west of the trenches and west of the road. Which two seeps of the three listed are referred to?

Section 2.3.7 (pg 2-42)
The circumstantial evidence supporting an evaporative concentration hypothesis is not a substitution for a summary of the contamination present. A summary should consist of a brief description of the contaminants present and their sources. In any case, circumstantial evidence does not form an acceptable criteria for any decision regarding remediation.

Section 2.4 (pg 2-43)
Define the statistical criteria used to determine whether a particular datum is "A" or "R"? State the conditions under which a breach of quality assurance (QA) can occur.

ADMIN RECORD

Section 3.2 (pg 3-1)
The Task Description and Bench Scale Treatability Studies and Field Treatability System schedules need to be adjusted to reflect a schedule agreed upon by all parties to the IAG. The public comment period and system construction cannot overlap. "Field activities", cannot begin until the responsiveness summary has been available to the public for ten days.

Section 3.3 (pg 3-2)
The last sentence on the page lists the state and federal acts which guide the Environmental Restoration Program, the final phrase concludes, "..with emphasis on CERCLA and RCRA." As this is the case, NEPA scheduling should be assimilated into the RCRA/CERCLA process contained in the draft IAG without prolonging interim actions.

Section 4.3.1.1 (pg 4-7)
The collection system as described for SW-59, SW-60 and SW-61 misses the point of executing a surface water IM/IRA for OU-2, because these three surface water collection points produce the majority of the surface water to be treated. The collection system for this area should, collect SW-59 at the source and the collection point for SW-60 and SW-61 needs to be evaluated, in accordance with the design parameters discussed at the March 14 and 15, 1990 meetings at Roy F. Weston.

Section 4.4.3.2 (pg 4-45)
The implementability section of the UV/Peroxide discussion indicates that a low maintenance, highly effective ground-water treatment unit was visited locally. Where in Colorado is this UV/Peroxide unit located? A description of the local system and its applicability and variability from the selected remedy for the surface water IM/IRA should be presented.

Section 6.1.2.1 (pg 6-5) Main Reaction System
On what surface are Uranium and Plutonium expected to "adsorb"? What precipitation reactions are expected to occur between the radionuclides and the precipitating agents? Is the expected product of these reactions a metal salt precipitate or a radionuclide salt? The use of other precipitating agents such as Magnesium Hydroxide should be explored, to minimize waste solids generation.

Section 6.1.2.1. (pg 6-8) Solid Dewatering Section
Define "reprocessing" as it applies to the filtrate in the solid dewatering system.

Section 6.1.2.1 (pg 6-7) Neutralization System
This section is incomplete. The description is minimal. How is the neutralization acid added to the tank? What pH guidelines does the operator work under? What is the monitoring schedule for pH checks and acid addition? What acid is used?

Figure 6-1 (pg 6-4) Dewatering Equipment
The diagram shows solids from the filter press either disposed of or "recovered". Does recovery include plutonium recovery? The discussion of the process arrows around the Settling tank is inadequate. How are the return solids to and from the settling tank controlled?

Section 6.2.2 (pg 6-10)

The surface water treatment system must be maintained by the use of strict process control. The estimated two hours per shift of operator attention does not appear to cover all the tasks listed in Section 6.1.2. in addition to the four tasks listed in Section 6.2.2. The tasks listed in Section 6.1.2 in part are,

pg 6-6 ...powdered sulfate will be added manually in a prescribed amount.

pg 6-6 ...lime slurry will be prepared by filling a tank with water then adding a prescribed quantity of lime to the tank manually...

pg 6-7 ...The slurry removal rate will be adjusted manually, to maintain the the desired solids concentration...

pg 6-8 ...the press will be emptied once every five days.

Section 6.4 (pg 6-11)

Where is the existing advanced membrane filtration system in operation at the Rocky Flats Plant. Under what conditions does this unit operate? What are the existing unit system parameters? If this unit is to be used as part of a treatability study, where and when will the results of this study be available to the regulatory agencies? Will information from the treatability study be available within a time frame appropriate to allow fine tuning the operating parameters of the advanced membrane filtration system selected?

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