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**INTEROFFICE CORRESPONDENCE**

Date: April 5, 1991 RTO-91.7

To: D. R. Ferrier, Solar Pond Pondcrete Project, Bldg. 750, X6456

From: *R. T. Ogg* R. T. Ogg, Remediation Programs Division, Bldg. T130B, X7079

Subject: ENVIRONMENTAL RESTORATION CRITERIA FOR SOLAR  
EVAPORATION PONDS TRANSITION

Ref: D. R. Ferrier ltr to Distribution, Final Condition of Solar Ponds,  
March 12, 1991

In accordance with the above referenced letter dated March 12, 1991, I am providing criteria relative to source removal for the Solar Evaporation Ponds (SEP), and transfer of the SEP from Waste Operations to the Environmental Restoration Department (ER). Pursuant to the Interagency Agreement (IAG) signed by the Department of Energy (DOE), Environmental Protection Agency (EPA), and Colorado Department of Health (CDH) on January 22, 1991, the SEP are scheduled for RCRA Facility Investigation/Remedial Investigation (RFI/RI) field work for January 7, 1992. For DOE/EG&G to comply with the IAG schedule, the SEP must be transferred to the ER Department by December 31, 1991.

All construction activities associated with Solid Waste Management Unit (SWMU) 101 or the Pondcrete Project must comply with appropriate SWMU guidelines in accordance with the EPA. Attached is a letter from the EPA to DOE dated November 30, 1989 which references "SWMU Construction Guidelines". The contractor responsible for the Pondcrete Project must comply with applicable SWMU construction guidelines as outlined in the attached letter. Compliance with the SWMU construction guidelines is primarily a function of complying with various RCRA Land Disposal Restriction regulations. For additional information on SWMU criteria, please contact J. P. Koffer at extension 5949.

The ER Department assumes, at a minimum, that the contractor will perform the following activities:

- 1 ) De-water all five surface impoundments at the SEP,
- 2 ) Remove all visible sludge/sediment material within each impoundment, and
- 3 ) Remove all construction debris/contractor material within the boundaries of Operable Unit 4 (OU 4).

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After all visible sludge/sediment material has been removed from the SEP impoundments, an extensive cleaning of the liners is required utilizing potable water. A high pressure hydraulic spray/water system should be utilized or something comparable for cleaning/rinsing the surficial material from the liner components within the impoundments. The rationale for this requirement is primarily twofold:

- 1 ) To minimize the radioactive/hazardous waste exposure levels to ER/contractor personnel conducting field operations, and
- 2 ) To reduce the potential of re-suspension of contaminant material from the surface impoundments.

In addition, it is required to install appropriate sized pumps within each impoundment at the low point. Pond A will require two (2) pumps. Water from incident precipitation needs to be pumped out of the impoundments to a collection/treatment system as it accumulates. It is important to keep the impoundments dry after source removal and cleaning, so that characterization will not be adversely impacted.

Provided in attachment 2 is the list of chemical and radiological analytes for pond liquid and sludge/sediment samples. Analysis of pond liquids collected will be performed on both filtered and unfiltered samples for radionuclides and metals. Analysis of volatile organics, semi-volatile organics, and inorganics will only be performed on the unfiltered samples. The liquid will be filtered with a 0.45 micron filter in accordance with EG&G standard operating procedures (SOP's). EPA Contract Laboratory Program (CLP) laboratory protocol, or protocol as determined by EG&G, will be utilized for all chemical and radiological analysis.

All sample container sizes, material, preservation, and pre-cleaning requirements will be in accordance with the Rocky Flats ER Program SOPs and Quality Assurance/Quality Control (QA/QC) Plan for the type of sample and analysis to be performed. Offsite shipping of samples shall be in accordance with EG&G SOPs and applicable Department of Transportation (DOT) regulations. Referenced documentation and SOPs will be provided to the contractor upon request.

The field QA/QC criteria must follow procedures outlined in the Rocky Flats ER Program "Quality Assurance/Quality Control Plan" for the data to be usable. It includes two basic areas: documentation of field activities (i.e., decontamination procedures, sampling techniques, unusual occurrences, preservation of samples and order in which samples were collected) and the routine collection and analysis of trip blanks and field (equipment) blanks.

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Due to the complex nature of the SEP Pondcrete Project, it is suggested that appropriate ER personnel remain actively involved in all aspects of the project.

If you have any questions or comments regarding this matter, please contact R. T. Ogg on extension 7079.

APPROVED:

  
J. E. Evered

4/5/91  
Date

RTO:plf

Attachments:  
As Stated

cc:  
M. B. Arndt  
M. C. Brooks  
J. E. Evered  
T. C. Greengard  
J. M. Kersh  
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