

## INTEROFFICE CORRESPONDENCE

DATE: October 20, 1993  
TO: D. S. Brown, Environmental Operations Management, Bldg. 080, X8745  
FROM: J. A. Ledford, Solar Pond Projects, Bldg. 080, X8673 JAL  
SUBJECT: APPROACH TO RESOLUTION OF POND 207B IDM HANDLING - JAL-162-93

This correspondence will serve to inform you of the general approach which will be used to resolve issues developed during the recent readiness assessment for the continuation of sub-surface drilling operations in the 207B ponds. This correspondence will be augmented by other documentation (described herein) to fully close your readiness assessment checklist.

### Packaging and Handling of Drill Cuttings

It is our intention to declare drill cuttings which result from drilling the upper four feet of each hole to be radioactive and cuttings from below four feet to be non-radioactive. This rationalization proceeds as follows:

- Process knowledge indicates that the ponds have contained radioactive materials
- Assertions have been made and confirmed that the ponds have leaked into the soils below
- Transport of radionuclides in soils is limited, with the result that most of the material remains close to the source
- Data obtained from previously drilled holes in the vicinity of the B ponds confirm that elevated levels of radionuclides exist primarily in the upper soil intervals

Further, because all of the cuttings will be produced from soils within an Individual Hazardous Substance Site (IHSS), they will be treated as hazardous material, the appropriate waste codes will be applied at the time and place of generation, and the drums containing the cuttings will be moved immediately to appropriate 90-day or interim storage facilities. These actions are fully compliant with procedure FO-23 (draft), specifically paragraphs 6.1.2 and 6.2.1.

In accordance with the foregoing information, cuttings resulting from drilling down to four feet in depth will be packaged and handled as mixed (radioactive and hazardous) waste in accordance with WO-1100, and cuttings resulting from deeper drilling will be packaged and handled in accordance with FO-8, FO-10, and FO-23. (Note that an assumption is made that FO-23, currently issued only in draft, will be approved prior to commencement of this evolution.)

**DOCUMENT CLASSIFICATION  
REVIEW WAIVER PER  
CLASSIFICATION OFFICE**

It is our interpretation that inclusion of the EG&G Waste Requirements Procedures Manual (5-23000-WRP) and the Waste Requirements Manual (1-1000-WRM) through DCN 5-21000-OPS-9301 (6/29/93) into FO-8 provides sufficient justification and specific direction for different treatment for wastes which differ in significant characteristics.

### **Authorization of Packaging and Handling Approach**

Given that more than one procedure applies to this evolution depending upon the depth of the hole from which drill cuttings result, it appears prudent to provide specific direction to personnel performing the work concerning transition from one procedure to another. To accomplish this goal, it is our intention to issue a Shift Order which will have as its primary purpose and content direction to performing personnel to follow procedure WO-1100 while generating cuttings from the upper four feet of each hole and to follow procedures FO-8, FO-10, and FO-23 while generating cuttings from drilling deeper than four feet. Additionally, the Shift Order will clarify actions to be taken to deal with cuttings from the lower intervals which are determined through field monitoring to actually be radioactive, and will specify the waste codes which have been determined through discussions with RCRA Regulatory Programs to be applicable to these wastes. This utilization of a Shift Order is fully compliant with the EG&G Conduct of Operations Manual, 1-31000-COOP-001, paragraph 5.3.5.1 and 1-31000-COOP-013, paragraph 5.3.1. The scope and duration of this Shift Order will be specifically limited to the single evolution of drilling in the 207B ponds for the purpose of data collection to support completion of the RFI/RI for OU4.

It should be noted that, in accordance with paragraph 5.3.1 of 1-31000-COOP-013, it is sufficient for the Operations Manager or Shift Manager to review Shift Orders prior to issuance. The policy does not require review by any other entities; however, the underlying philosophy concerning determination of the extent of radioactive contamination of soils beneath the ponds has been reviewed with Radiation Engineering. That organization's concurrence with the approach described above will be included on the Shift Order. A draft of the proposed Shift Order is Attachment 1.

### **Waste Generator Issues**

Waste Generator responsibilities will be performed by M. D. Bretz of SPP. Mr. Bretz has completed his classroom training for radioactive and hazardous waste generator and will complete the other certification requirements by October 22, 1993. Verification and management oversight of waste generation requirements will be performed by fully qualified personnel from 700-Area Construction Management.

### **Waste Storage**

Waste drums produced during this evolution will be initially transported to and retained in the local 90-Day Accumulation Area. As soon as practical, they will be transported to interim storage in Building 788 (RCRA Unit 21) or on the 750 pad. These facilities are currently authorized to store wastes with the waste codes that will apply to the cuttings; however, they are not authorized to store any wastes other than pondcrete or saltcrete. To address this issue, a Part A modification for change

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to interim status has been executed which seeks permission to store any material generated at the OU4 site. Since this process can require an undefined period of time, a simultaneous effort is underway to acquire Temporary Authorization, under part 100.63(e) of 6 CCR 1007-3 (Colorado Hazardous Waste Regulations), to modify the current status of the facility to accommodate early closure of OU4. Another approach currently being pursued involves shuffling drums currently in storage in RCRA Unit 19 (Building 374) to other appropriate units to allow acceptance of the drums to be produced from the drilling evolution.

Until Temporary Authorization or Change to Interim Status is received or until assurance acceptable to EG&G management is developed that such documentation will be received prior to the end of the 90-Day Accumulation period, generation of these wastes will not commence.

Rapid commencement and completion of this evolution is essential to achievement of our commitments to DOE and the regulators regarding remediation of OU4. In the event that you or others in your organization consider our approach, as outlined above, to resolving open issues to be in any way deficient, it is imperative that you notify me immediately so that modifications to the approach, if justified, can be developed. Our target to receive permission from FOM to commence this work is October 22, 1993. If you are unable to meet this target, please inform me immediately so that we may work together to remove the barriers you feel are present.

JAL:clh

cc:

M. D. Bretz  
S. R. Keith  
K. C. London  
R. T. Ogg  
S. M. Paris  
K. L. Ruger

*File*

*ERM Records*

Shift Order No.: OU4-93-01  
Revision: Rev.0  
Issue Date: 11/01/93  
Expiration Date: 01/28/94  
Page: 1 of 1

**SUBJECT:** SHIFT ORDER FOR PACKAGING/HANDLING IDM FOR OU 4

**Purpose:** The purpose of this shift order is to clarify the appropriate use of existing RFP procedures in packaging drill cuttings at Operable Unit (OU) 4.

**Scope:** This document is applicable to the sub-surface investigation of Pond 207B-North and 207B-Center.

**Action:** Drill cuttings from drilling operations will be packaged as follows:

- Cuttings from the upper 4 foot interval of each bore hole will be packaged and handled in accordance with WO-1100.
- Cuttings below the upper 4 foot interval will be packaged and handled in accordance with FO08 and FO10 (FO23 will apply when it is approved).
- Should any "hot spot" be found in a particular bore hole (below the 4' level), cuttings from the entire bore hole will be packaged and handled in accordance with WO-1100.
- All drums will be identified as IDC 374 and the following RCRA waste codes will be assigned: F001, F002, F003, F005, F006, F007, F009, D006 and D008.
- The drums will be moved to the 90-Day Accumulation Area at the end of each work day.

Approved by: \_\_\_\_\_ / \_\_\_\_\_  
Operations Manager Date Facility