

**ENGINEERING-SCIENCE, INC.**

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**MEETING NOTES**

**TO:** Distribution

**DATE:** October 28, 1993

**FROM:** Philip Nixon

**MEMO #:** SP307:102893:01

**PROJECT #:** Solar Pond IM/IRA

**ATTENDANCE:**

**DISTRIBUTION:**

Harlan Ainscough, CDH  
Arturo Duran, EPA  
Ernie O'Toole, DOE/MMES  
Randy Ogg, EG&G  
Mark Austin, EG&G  
Steve Paris, EG&G  
Phil Nixon, ES  
Richard Henry, ES  
Andy Ledford, EG&G  
Rich Stegen, ES  
Ted Kerns, DOE  
Dave Mulberry, CDH  
Bruce Peterman, EG&G

Attendees  
L. Benson  
A. Conklin  
P. Breen  
H. Heidkamp  
K. Cutter  
D. Myers  
S. Stenseng  
A. Fricke  
B. Snyder  
T. Kuykendall  
T. Evans  
B. Cropper  
C. Montes  
B. Wallace, EG&G (Admin.  
Record)  
K. Ruger, EG&G  
K. London, EG&G  
R. Wilkinson  
Steve Howard, DOD/SMS  
Frazer Lockhart, DOE  
Jim Hartman, DOE  
Helen Belencan, DOE

**SUBJECT:** Solar Pond IM/IRA Team Meeting

## 1) Original Process Waste Lines

It was agreed that OU4 should consider accepting portions of the OU9 process waste lines within the scope of the OU4 IM/IRA. The potential segments are as follows:

- Line 121 South of the OU4 SEPs
- Line 121 West of the OU4 Ponds from the elbow to the discharge point
- Line 149.2 on the south of C Pond
- Line 149.1 North of Pond C and A

It was pointed out that Line 149.2 and 149.1 are expected to have leaks. Steve Howard indicated that OU4 needed to study the process history surrounding these lines so that scope requirements and a budget can be determined. Arturo Duran indicated his belief that the OU9 lines should be removed regardless of being impacted by the OU4 closure activities. Harlan Ainscough stated that CDH would accept leaving the pipelines in place if they were rinsed/decontaminated and shown to be free of hazardous constituents. Harlan also indicated that this activity could be completed within a several year time frame so as to not hold up the IM/IRA schedule. Therefore, the closure of the OU9 process waste lines could be segregated from OU4. It was also mentioned that if the OPWLs were determined to be a hazardous waste, then they would have to be removed. ES was asked to review the OU9 workplan, the historical release report, and Technical Memorandum #1 to determine the baseline requirements for the transfer of the OU9 lines into OU4. Phil Nixon will investigate whether this is within the existing ES scope of work.

It was discussed whether these lines would require characterization. Harlan Ainscough and Arturo Duran were of the opinion that these lines would have to be characterized to determine what contaminants were present and to verify clean closure. Harlan Ainscough indicated that the existing OU4 characterization information may be adequate to determine whether any gross contamination had occurred, and that minor leaks may not be a problem. In order to gauge the potential extent of contamination, it was suggested that historical release records be reviewed and testing be performed to determine the integrity of the lines. Andy Ledford proposed that since the lines carried waste to and from the SEPs that process knowledge and the results of the OU4 RFI/RI should suffice for characterization of the OU9 lines. Therefore additional characterization information is not required to grout the lines in-place, decontaminate the lines, contain the lines under an engineered cover, or remove the lines.

Randy Ogg will prepare a letter for DOE to present to CDH/EPA for transferring the segments of OU9 lines to OU4. The due date for this letter is November 5, 1993.

## 2) Liner Issue

Richard Henry submitted liner characterization data for total metal and radionuclide analysis from Pond 207A. It is difficult to draw conclusions as to whether or not the liner is contaminated because since is no background or standards to compare the

concentrations to. Harlan Ainscough indicated that the lack of comparison data was not important since the liners are considered to be a listed hazardous waste contaminated based on the "mixture rule".

Rich Stegen presented the results of the regulatory analysis concerning liner removal. Rich indicated that he understood how the CDH has interpreted the regulations, and realizes that it would be likely to have to go to court to overturn the interpretation. However, the regulations are very vague with respect to whether closing the impoundments with waste in-place would trigger the requirements for siting a new landfill. The invocation of new facility siting and design requirements does not appear to be the intent of these regulations when they were promulgated by the EPA. It is unclear as to whether the phrase "...if waste is left in place...close as a landfill..." was intended to mean that the closed surface impoundment becomes a new landfill (active) and would require a Certificate of Designation with respect to the siting requirements. The CDH interpretation indicates that closing with waste in-place would enact these requirements. This is the key question that needs to be answered to resolve the liner issue. It was agreed that the issue would be tabled until the recommended alternative was proposed. However, EG&G will continue formalizing a position on this issue for submittal to DOE.

Phil Nixon presented the results of a calculation to estimate the volume of the liner.

### 3) RCRA Closure Performance Standards

Phil Nixon presented the performance criteria that would be used to evaluate alternatives against in the detailed analysis of alternatives. These criteria will also be used during the design of the selected alternative. The team was asked to review the criteria and bring comments to the next team meeting.

### 4) Phase I RFI/RI Drilling

Steve Paris informed the team that the Drillers were mobilizing for coring within Ponds 207B North and 207B South. It was agreed that liner samples will be collected and analyzed. Randy Ogg indicated that the drilling should be completed by November 12, 1993.

### 5) COCs and PRGs

Leigh Benson provided the list of COCs that were identified through the use of the Gilbert Methodology. The COCs were developed with both new OU4 RFI/RI data and historical data. ES will try to identify whether the maximum concentration of a PRG occurred in the historical or recent data set, particularly for chemicals that will drive cleanup.

A PRG will not be calculated for those organic contaminants that do not have toxicity data. Harlan Ainscough provided a copy of the new risk assessment policy for use in the risk

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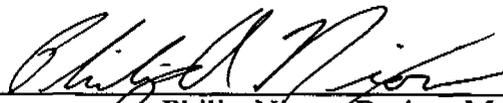
analysis. Amy Conklin indicated that the CDH policy requires the assessment of dermal and crop ingestion exposure pathways. PRGs for these pathways would be very difficult to calculate, and would cause a significant schedule delay. It was suggested that inclusion of these pathways should be deferred to Phase II when they would be addressed in the baseline risk assessment. The PRG approach was originally intended to provide a focus for determining the order of magnitude for the IM/IRA alternative selection. Recognizing the delays and disputes associated with developing baseline risk assessments at the RFP, the PRG approach was developed to allow the OU4 IM/IRA to proceed independent of the baseline risk assessment. **ES will review the CDH policy and strategize an approach to resolving this issue for discussion with the CDH.**

Harlan Ainscough requested that ES put together an example of why certain pathways cannot be incorporated into PRG calculations.

Subsequent to the meeting, <sup>it was</sup> [REDACTED] agreed that the dermal exposure pathway will be incorporated into the PRGs, the crop ingestion pathway will not be addressed in the PRGs (this will be addressed by the future baseline risk assessment), and a forward cumulative risk assessment will not be required since the PRGs will be modified to account for the cumulative risk. ES will calculate the onsite resident scenario for both adults and children. In addition, target organs may be addressed individually while modifying the PRGs. For example, if 5 carcinogens affect the liver, and 4 carcinogens affect the kidney, then the PRG for the liver carcinogens will be modified by dividing the target risk by 5, and the kidney carcinogens will be divided by 4.

Alexis Fricke indicated that no chemical specific ARARs had been identified for soil. Harlan Ainscough agreed that specific soil contamination clean-up standards had not been developed. Therefore, it was agreed that the PRGs would likely drive the clean-up goals. There will be some ecological TBCs that will be considered. **A preliminary list of ecological chemical-specific TBCs will be distributed prior to next weeks meeting. The chemical-specific ARARs and ecological TBCs will be an agenda topic for next weeks meeting.**

- 6) Comments were provided on the IM/IRA and RFI/RI outlines. The comments will be incorporated.
- 7) Rich Stegen provided a revised Issue Identification and Resolution process, and discussed the changes that were made. Arturo Duran provided comments on the document. **The team was asked to review and comment on this document. Comments are due on October 28, 1993 so that Rich can revise and re-issue the document at the next meeting.**

  
Philip Nixon, Project Manager

*Attachment/  
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**OPERABLE UNIT 4/SOLAR EVAPORATION PONDS**

**PHASE I RFI/RI AND IM/IRA PROGRAM**

**OCTOBER 26, 1993**

**AGENDA**

**ORIGINAL PROCESS WASTE LINES (8:00-9:30)**

**IHSS's/AREAS OF INTEREST  
REGULATORY/ADMINISTRATIVE TRANSFER PROCESS  
SCHEDULE FOR TRANSFERRING IHSS's**

**BREAK (9:30-9:45)**

**SEP LINERS (9:45-11:30)**

**207 A LINER DATA (R. HENRY)  
REGULATORY ANALYSIS (R. STEGEN)  
VOLUME OF LINER MATERIAL-SYNTHETIC ONLY (R. STEGEN)**

**LUNCH (11:30-12:30)**

**RCRA CLOSURE PERFORMANCE STANDARDS/OBJECTIVES  
(12:30-1:30) R. STEGEN**

**NEPA STATUS (1:30-1:45) LEIGH BENSON**

**PHASE I RFI/RI DRILLING STATUS (1:45-2:00) S. PARIS**

**BREAK (2:00-2:15)**

**GRAPHICS CAPABILITIES (2:15-3:00) PARSONS**

**GIS-ARC INFO  
ERMA**

**PRELIMINARY CHEMICALS OF CONCERN (3:00-3:30) L. BENSON**

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**COMMENTS ON PHASE I IM/IRA OUTLINE (3:30-3:45)**

**COMMENTS ON EXPOSURE METHODOLOGY (3:45-4:00)**

**COMMENTS ON ISSUE RESOLUTION METHODOLOGY (4:00-4:15)**

**COMMENTS ON LAST WEEKS MEETING MINUTES (4:15-4:30)**

**NEXT WEEKS AGENDA (4:30-5:00)**

**NEW ISSUES (5:00-5:30)**