

The objectives of the IM/IRA are: (1) to cease the addition of water from the Interceptor Trench System (ITS) to the Solar Ponds and (2) to remove excess pond water as expeditiously as possible in order to proceed with the assessment and closure of OU-4.

To accomplish the first objective it is our current intention to divert ITS water from the pond as rapidly as practicable by temporarily separating the linkage between the modular tanks and the Building 910 evaporators, placing the modular tanks into full operation, and using the Building 374 evaporator to treat the ITS water. This assumes, of course, that the amendment to IM/IRA we are concurrently discussing with you is approved, (A revised letter requesting the IM/IRA will be forwarded to you within a few days). DOE will not, therefore, need the Building 910 evaporators to be operational to support the initial ITS diversion. Over the intermediate term we plan to use Building 374 as a major element in the treatment of ITS water, as long as total plant requirements allow sufficient capacity in Building 374

The schedule for diverting the Interceptor Trench Water to the surge tanks can be compressed if we modify the modular tank design to delete the 020" ultraviolet protection internal liners. We must remove these liners to repair leaks in all 3 tanks. According to the material manufacturer, the underlying 080" liners are warranted for a 20 year life without any uv protective liner. By not replacing the 020 liners, we will save nine days of time from the critical path. Furthermore, this will improve our ability in the future to conclusively determine the integrity of the primary 080" liners. When present, the 020" liners act as a bladder, which can mask defects in the underlying 080" liners. We strongly recommend that you support our position in this matter and support this modification to the IM/IRA. We are eager to discuss this matter further with you.

The second IM/IRA objective involves the removal of "excess water" from the ponds. Excess water is the amount of water in excess of that which is needed to suppress airborne suspension of sludge (approximately 2 inches) and to allow for pond sludges to be transferred efficiently into the cementation treatment unit (when that unit becomes operational). Currently, pond 207 C has no excess water since its contents are saturated brine and crystalline salts (which will require the addition of water for effective pumping and cementation). Precipitation additions to the C pond are balanced by evaporative losses. The 207 B series ponds currently contain roughly 230,000 gallons of sludge and 1.7 million gallons of water. After the contents are consolidated into one pond, which is our current intention, about 1.4 million gallons of this water will be considered excess.

Water is currently added to the B ponds from the Interceptor Trench System and from precipitation into the A and B ponds, which is then consolidated into pond B north. We have been pumping this water from the A and B ponds to the Building 374 evaporator for a number of years. We plan to divert the ITS water from the B ponds in April, following which we would remove all "excess water" and accumulated precipitation from the ponds by the end of February 1994. This water will be removed by transfer through existing pipeage.

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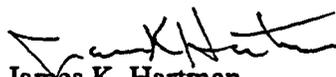
from the ponds to the Building 374 evaporator. The Building 910 evaporator will be used primarily to process ITS water and will process pond water only as a contingency. Because precipitation will result in addition of water to the ponds, the consolidation and removal of additional excess water to pond B south will be a continuing intermittent task until the final OU-4 remedy is implemented. My staff will be happy to discuss excess water management with you further.

In response to your request for technical justification for the dates in Attachment 2, a number of factors have contributed to the schedule technical difficulties with the Building 910 generators, the application of appropriately tailored disciplined operations to the entire system, leaks in all three of the modular tanks which must be repaired, and the anticipated effects of freezing weather on tank repair and startup operations, both of which involve water. I believe it would be best for my staff to meet with yours to further explain the revised schedule and answer your questions interactively.

With regard to your concern that we have not reported on the IM/IRA activity in sufficient detail in the Environmental Restoration Program Monthly Report, we agree that better communication on the Solar Ponds Remediation Program is needed. In the past we have included only summary information concerning the IM/IRA, because the report focused primarily in IAG activities. Despite the lack of formal connection to the IAG, we agree that as a matter of administrative efficiency, it would be better to report in detail on the entire Solar Ponds Remediation Program in the Environmental Restoration Program Monthly Report, and we will do so in the future.

DOE appreciates the time your staff has spent discussing the restructuring of the Solar Ponds Program with Rocky Flats personnel. We would like to meet with you and your staff on Wednesday morning, January 27, 1993, to discuss the details of the above items. Please contact Frazer Lockhart on 966-7846 to confirm if this meeting would be convenient or to make other arrangements.

Sincerely,


James K. Hartman
Assistant Manager
for Environmental Management

Enclosures (3)

G Baughman & M Hestmark
92-DOE-00985

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cc w/Enclosures
R Greenberg, EM-453
R Harris, EM-453
R Nelson, DOE, RFO
R. Schassberger, ERD, RFO
R Craun, CED, RFO
R. Benedetti, EG&G
E Lee, EG&G
R Boyle, EG&G
F Dowsett, CDH
H Ainscough, CDH

Attachment 1

**MILESTONE SCHEDULE
INTERIM MEASURE/INTERIM REMEDIAL ACTION
SOLAR EVAPORATION PONDS
OPERABLE UNIT NO. 4**

	<u>Original Date</u>	<u>Revised Date</u>	<u>Status</u>
Begin Construction of Treatment and Storage System	March 1, 1992	April 6, 1992	Completed
Complete Construction of Treatment and Storage System	June 1, 1992	July 7, 1993	In Progress
Conduct Trial Run of Treatment System	June 8, 1992	June 28, 1993	Pending
Begin Full-Scale Operations	June 15, 1992	Sept. 9, 1993	Pending

Attachment 2

Solar Ponds IM/IRA Revised Schedule

	<u>Date</u>
Complete Building 910 Construction	July 7, 1993
Complete Cold Tests With Plant Raw Water	May 10, 1993
Complete Hot Test with ITS Water	June 28, 1993
Building 910 Evaporators Fully Operational	Sept. 9, 1993
Interceptor Trench Water Diverted to Surge Tanks	April 16, 1993
Excess Liquids Removed From Ponds	Feb 1994

Attachment 3

Assumptions Accompanying Schedule Commitments

1. Product water acceptance testing will demonstrate that the Building 910 evaporative system and support equipment will function as described in the IM/IRA to produce distillate which meets commercial water standards and is reusable in the plant raw water system
2. The ITS water diversion schedule assumes that EPA/CDH will approve DOE's request to amend the IM/IRA Decision Document as has been discussed in separate communications to allow use of the modular tanks before the startup of the Building 910 evaporators
3. The B910 schedule assumes EPA/CDH approval of compensatory measures (primarily visual inspections) for the pipeline from B910 to B374. This pipeline passes through several concrete and/or masonry walls in Buildings 774, 776 and 778 where it does not have secondary containment.
4. Building 910 startup can occur on the basis of test results obtained in accordance with the Contract Lab Protocol (CLP) without waiting for validation and reporting of sample data (validation and reporting adds 4 weeks)
5. In the near term the Building 910 evaporators will not be used to process pond water. Before Building 910 is used to process pond water, it will require requalification of the evaporation process and procedures, along with possible modifications to the building operations (e.g. designating it as a Radiation Contamination Area). These activities are not included in the schedule presented.
6. The schedule does not include any final review by the Defense Nuclear Facilities Safety Board. It is our intention to brief the board on our approach to determining the readiness of this low hazard, non-nuclear facility, and it is our assumption that the board will agree with our approach an on-site review.
7. The estimated date for removal of excess pond water is based on average precipitation over a five year period. Since precipitation affects the amount of ITS water which Building 374 must treat, precipitation substantially in excess of the five year average will reduce the capacity of Building 374 to remove pond water and will extend the target date.