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## INTEROFFICE CORRESPONDENCE

DATE: January 7, 1994 *bef*  
TO: N. M. Hutchins, ES&E, Bldg. 080, X8579  
FROM: S. R. Keith, Solar Pond Projects, Bldg. 080, X8541 *SRK*  
SUBJECT: PATS ITEM 285 "IDEARS" ITEMS #148 AND #149 - SRK-005-94

Attached are the action plans responding to referenced DOE "IDEARS" program.

Item #148 was answered by R.V. Morgan in T. G. Hedahl's organization. M. Morgan and I coordinated and concur on the action plan.

Please contact me for any additional information.

bep

Attachments:  
As Stated

cc:  
K. M. Beggane  
ERM Records

DOCUMENT CLASSIFICATION  
REVIEW WAIVER PER  
CLASSIFICATION OFFICE

## RESPONSE/ACTION PLAN

Issue Number: REQ ERD EGG 93 0148 Responsible AGM: J. G. Hedahl

WBS Number: \_\_\_\_\_

## STATEMENT OF ISSUE:

RFO ERD EGG 93 0148: Utilize Building 374 for processing of Modular Storage Tank (MST) water and excess Solar pond water, in preference to Building 910.

Building 910 has a higher operational cost than Building 374. To lower overall costs, Building 374 should be operated to full capacity before Building 910 is started. This should lower the net cost per gallon of water treated (evaporated). Although this effort has begun informally for Solar Ponds, a plant-wide water balance analysis should be used to optimize the use of various evaporation equipment plantwide in a planned, scheduled manner.

## STATEMENT OF ACCEPTANCE OF ISSUE:

The idea is accepted and is currently implemented (see attached memo). EG&G ERM and E&WM are currently formalizing a philosophy of operation for the modular storage tanks. A process improvement regarding the operation of Building 910 evaporators is also actively underway. Several iterations of Rocky Flats Plant (RFP) water balance calculations have been made which indicate that the Building 374 evaporator can accommodate historic Interceptor Trench System (ITS) collection loads after the planned modifications and repairs (January-February 1994) to heat exchanger, instrumentation, and clogged piping are completed. Likewise, studies have been initiated to determine the required Building 910 readiness posture to support a serious outage of the Building 374 evaporator.

## CAUSE ANALYSIS:

Plant liquid waste collection requirements necessitate Building 374 manning around the clock regardless of evaporator operations. Therefore, processing MST/ITS water is effectively an included event as long as the evaporator is operational.

## GENERIC IMPLICATIONS:

Yes - layup of Building 910

## RECURRENCE CONTROL:

N/A

## TECHNICAL RATIONALE FOR CORRECTIVE ACTION:

N/A

## CORRECTIVE ACTIONS:

	<u>Tasks</u>	<u>Completion Date</u>	<u>Task Manager</u>
1.	Formalize Modular Storage Tank philosophy of operations between EG&G ERM-E&WM	January 31, 1994	R. V. Morgan

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- |    |  |   |              |
|----|--|---|--------------|
| 2. | Complete Building 374 Reliability Upgrades and repairs and establish new processing capacity | February 28,1994                            | N. P. Cypher |
| 3. | Complete Building 910 layup plan   | March 31, 1994                              | R. P. Dunn   |
| 4. | Fund Building 910 layup plan   | TBD pending fund availability and task size | R. W. Boyle  |
| 5. | Complete Building 910 layup  | TBD pending authorization                   | R. P. Dunn   |

**COMPLETION CRITERIA:**

Explanation in corrective actions

**REFERENCES:**

TBD

**APPROVALS:**

Primary AGM: T. G. Hedahl, E&WM

Supporting AGM(s): S. G. Stiger, ERM

Director: R. V. Morgan. WO

Operations Manager: R. P. Dunn

Operations Manager: N. P. Cypher

Project Manager: R. W. Boyle

JAN- 5-94 WED 18:23

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Attachment I  
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Page 3 of 5**INTEROFFICE CORRESPONDENCE**

**DATE:** August 31, 1993

**TO:** R. V. Morgan, Waste Ops, Bldg. 750, X8019

**FROM:** B. R. Keith, <sup>SRK</sup>Solar Ponds Projects, Bldg. 080, X8541

**SUBJECT:** OPERATIONAL PHILOSOPHY FOR 904/750 PAD OPERATIONS AND #10 EVAPORATORS/ITS WATER - SRK-188-93

The purpose of this memo is to codify the phone conversation we had approximately two weeks ago regarding the operational philosophy for 904/750 pad ops, and #10 evaporators/ITS water.

The first operational point agreed to is that ITS water will be taken to Building 374 evaporators as first choice. Should Building 374 have inadequate capacity to process ITS water and other plant waste flows, Building #10 evaporators will be operated.

The second operational point agreed to is that Building #10 chemical operators will also work in Solar Ponds, Building 788, and 750/904 pad operations (Joe Robert's group). When Building #10 operations are required, the operating personnel will report to P. J. Larsen. In that way, the intermittent operations of Building #10 will be phased with pad, Solar Ponds, Building 788 operations, subject to provisions of the labor contract.

A response is only required if you disagree with the above. If you have any questions, please contact me.

bep

cc:  
R. W. Boyle  
N. P. Cypher  
R. P. Dunn  
R. E. James  
P. J. Larsen  
J. D. Roberts  
ERM Records



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OCT 23 1992

## INTEROFFICE CORRESPONDENCE

DATE: October 19, 1992

TO: E. M. Lee, Solar Ponds Remediation Program, Bldg 080

FROM: R. P. Dunn, Liquid Waste Treatment Operations, Bldg 374, X7729 

SUBJECT: INSTALLATION OF MODULAR TANKS TO BUILDING 374 TRANSFER CAPABILITY - RPD-238-92

The objectives of the Building 910/Modular Tank project are to cease addition of liquids (intercepted or trench water) to Pond 207-B North, and to remove excess liquids from the Solar Evaporation Ponds (SEPs) as expeditiously as possible in order to proceed with closure activities for the ponds. Once the new system discharge piping from the Interceptor trench (ITS) to the Modular Tanks is connected it is desirable (and required by the Interim Measure/Interim Remedial Action [IM/IRS]) that water is not pumped ever again to Pond 207-B North, in order to allow for further remediation of the SEPs.

The design basis for the modular tanks required a 1.5 million gallon (total) capacity. Although the modular tanks as built meet this criteria, the IM/IRA requires that one of the three tanks remain empty to allow for the contents of a leaking tank to be transferred to the empty tank. The current amount of intercepted seepage collected by the ITS is estimated to be approximately 4 million gallons per year. Historical data indicates that as much as 700,000 gallons (June 1987) has been collected in one week.

Therefore, in order to prevent overflowing the modular tanks it is desirable to have a contingency capability for processing water from the modular tanks to Building 374. This capability would allow processing ITS water in the event Building 910 is not operable or additional processing capability is needed due to an exceedingly wet year. Furthermore, installation of this capability may allow EG&G to cease pumping ITS water to Pond 207-B North at an earlier date.

The Solar Ponds Remediation Program Office should investigate options and the necessity of installing the capability to pump water from the modular tanks to Building 374. There already exists a double contained, above ground transfer line that is currently being used to pump 207-B North water into the valve vault system and ultimately to Building 374. It would be a relatively simple design change to allow the modular tanks to be pumped into this line.

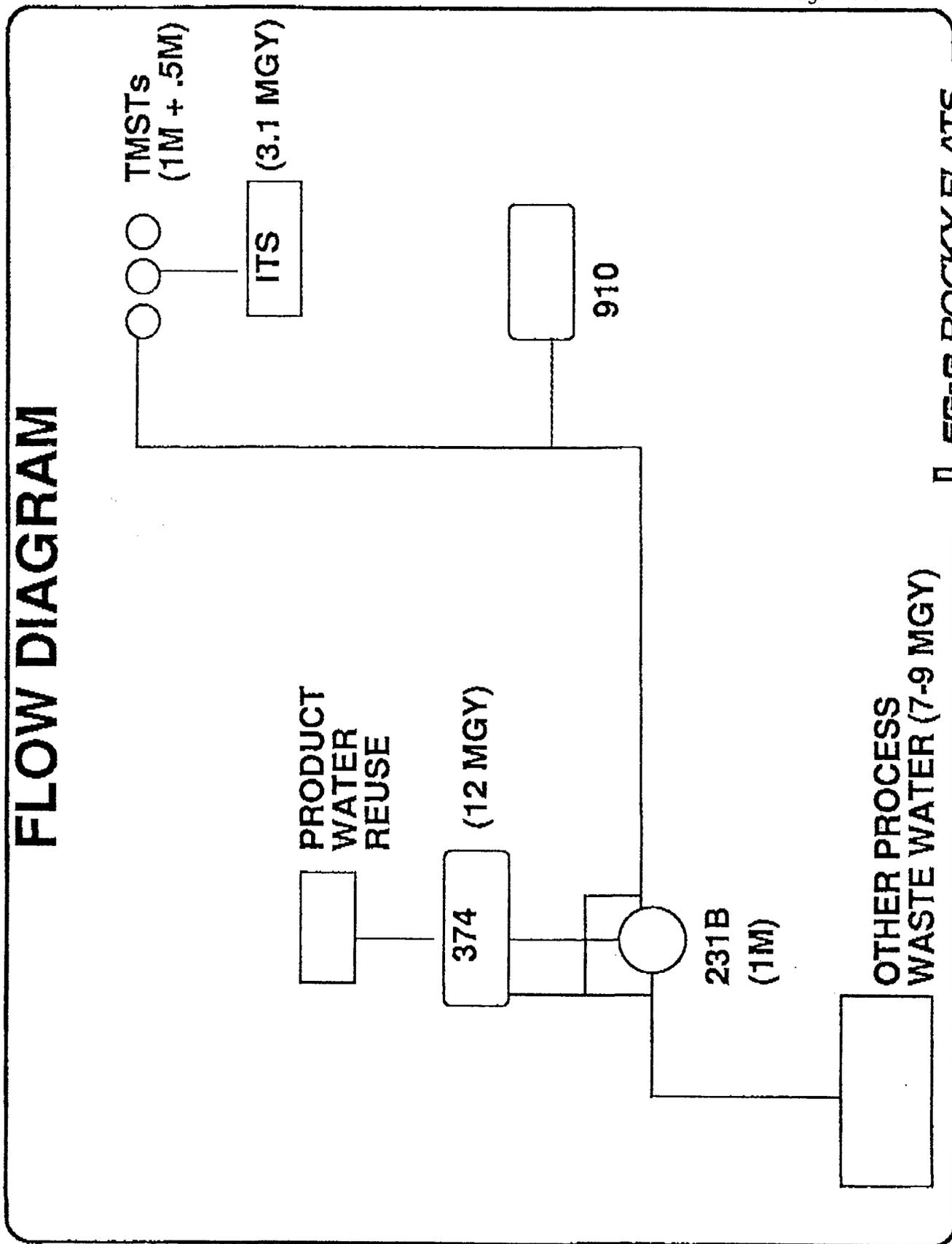
If you have any additional questions or would like to discuss this matter further, please contact Paul Larsen at extension 2996.

rpd

cc:

N. P. Cypher  
P. J. Larsen  
C. L. Mayberry  
R. V. Morgan  
G. A. Pickerel

# FLOW DIAGRAM



## RESPONSE/ACTION PLAN

Issue Number RFO-ERD-EGG-0149      Responsible AGM: Sue Steiger

WBS Number: \_\_\_\_\_

### STATEMENT OF ISSUE:

Extend culvert past Interceptor Trench System (ITS)

Currently a surface water (parking lot drain) culvert terminates in a manner which directs the rainwater runoff onto the hillside north of the solar ponds. This surface water is all collected in a central sump through a series of underground pipes and trenches. Ultimately this water is all evaporated in either the Building 374 or Building 910 evaporator. The cost of evaporating this water is approximately \$0.76 per gallon and the volume is estimated at about 1.5 MM gal per year.

### STATEMENT OF ACCEPTANCE OF ISSUE:

This issue is accepted and is currently being worked.

This issue was first raised in a report by EG&G SWD in April 93' during an analysis of ITS water volumes. The recommended solution was an extension of the drain to carry the water over the ITS area to the drainage ditch at the security patrol road. Volumes and the viability of the proposed solution were checked and confirmed and on 8-4-93 a Part 1 authorization was issued for the work to be completed using FY 93 funds.

To date the engineering design package has been completed, the construction estimate is complete and a Davis-Bacon determination has been made. The BCP for funding is being prepared.

### CAUSE ANALYSIS:

Other priorities caused this project to be delayed into FY94 which required new funding to be provided.

### GENERIC IMPLICATIONS:

NA

### RECURRENCE CONTROL:

NA

### TECHNICAL RATIONAL FOR CORRECTIVE ACTION:

The corrective action involves an above ground extension of the subject drain. The entire drain will be rerouted as a part of the solar pond closure activity and a temporary installation is considered appropriate.

## RESPONSE/ACTION PLAN

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### CORRECTIVE ACTION:

<u>Tasks</u>	<u>Completion Date</u>	<u>Task Manager</u>
#1 Submit BCP for funding	Jan. 28, 1994	R. W. Boyle
#2 Issue subcontract for work	Mar. 1, 1994	R. W. Boyle
#3 Complete construction	Apr. 15, 1994	R. W. Boyle

### COMPLETION CRITERIA:

Drain pipe extension installed and placed in service.

### REFERENCES:

None

### APPROVALS:

Primary AGM: Sue Steiger

Supporting AGM(s): R. D. Copp, T. G. Hedahl