



START 773540, 0350

0044820

034754

28

Department of Energy  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

JUL 25 1996

Mr. Steve M. Alexander  
Perimeter Areas Section Manager  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
1315 W. 4th Avenue  
Kennewick, Washington 99336-6018



Dear Mr. Alexander:

STATUS OF LIQUID EFFLUENT DISCHARGE AT THE 1325-N LIQUID EFFLUENT DISPOSAL FACILITY

- References: (1) Letter, Mr. K. L. Christensen to Mr. P. M. Pak and Mr. M. E. Greenidge, "Dangerous Waste Compliance Inspection at 1325-N, 1301-N, and 105-N," dated July 10, 1996.
- (2) Letter, Mr. S. H. Wisness to Mr. D. R. Sherwood and Mr. R. F. Stanley, "Early Completion of Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Interim Milestone M-17-15," dated September 27, 1993. 31377
- (3) Letter, Mr. T. K. Teynor to Mr. D. R. Sherwood and Mr. R. F. Stanley, "Completion of Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Interim Milestone M-17-00A and Washington State Department of Ecology (Ecology) Consent Order No. DE 91NM-177 Milestone," dated July 24, 1995.

This letter documents the status of effluent discharges at the 1325-N Liquid Effluent Disposal Facility (1325-N Crib) and is provided by the U.S. Department of Energy, Richland Operations Office (RL) and Bechtel Hanford, Inc. (BHI) as requested in Reference 1.

The 1325-N Crib received liquid effluent from 100-N Area operations until April 1991, when discharges ceased under administrative controls. Physical actions to permanently prevent discharge were completed in September 1993. Physical isolation satisfied Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Interim Milestone M-17-00A and State of Washington Department of Ecology (Ecology) Consent Order No. DE 91NM-177 Milestone which required that RL cease discharge to the crib by June 30, 1995. Completion of these milestones was documented in references 2 and 3. RL believes that any liquid observed in the crib structure during subsequent inspections is a result of residual effluent and natural sources (rainwater and snow melt) rather than new discharges. The specific information below is provided in response to your letter and supports this conclusion.

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1. In 1994 and 1995, inspections were conducted which revealed approximately 23 inches of effluent in the interior trench works of the crib. During the June 17, 1996, inspection Ecology observed approximately three inches of effluent. Other effluent bearing structures at the 1325-N crib remained at consistent levels compared to previous years. Please provide responses to the following questions:

- What was the original point of generation of the effluent?

Response: The origin of the water in the main distribution trough in the 1325-N Crib is not certain. It is likely a combination of residual effluent discharged to the crib during N-Reactor operations (pre-1991) and rainwater or snow and ice melt leaking into the main distribution trough through cracks in the cover panels, cracks in the grouted joints, and through the unsealed observation hatches.

- What contaminants, both hazardous and radioactive, were in the effluent?

Response: The water standing in the distribution trough has not been sampled, however, it is anticipated that any contaminants would be similar to the constituents in the original effluent discharged to the crib. Concentrations would be expected to be at levels observed in the original effluent or lower due to the dilution effect of rainwater or snow melt.

- What is the cause of the discrepancy between the previous level readings and the recent reading?

Response: The cause of the discrepancy is unknown. The most likely explanation is that the water has leaked out of the trough, either through cracks in the concrete structure or through deteriorating joints. The only activity of any significance in this area during the last year was the Limited Field Investigation work done during the fall of 1995. This work consisted of one borehole outside the crib (approximately 130 ft from the main trough at its closest point) that was drilled using a cable tool rig. There is no evidence that this activity caused excessive vibrations on the trough.

- If the effluent went to the underlying soil column what is the impact to the 1325-N facility cleanup?

Response: If the water was lost to the soil column through a leak there would be no impact to the remediation of the 1325-N Crib for the following reasons:

- a. The volume of water in question is insignificant compared to the total volume discharged to the crib throughout its operating life. This means a significant increase in contaminant volumes or concentrations could not have occurred.

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- b. The discharge rate of this water is unknown and cannot be determined, however, the volume and rate would not be sufficient to drive contaminants significantly deeper into the soil column.
  - c. The additional soil moisture will not present any physical constraints to remediation.
2. The Crib Isolation Plan dated August 4, 1993, states that all valves leading from the 105-N lift station to the 1301-N and 1325-N crib will be locked out and tagged. During our June 17, 1996, inspection, several valve handles were noted which were not locked and tagged. Please provide a report on the status of all associated valve workings required to be locked out and tagged.

Response: The Crib Isolation Plan focused on the 1325-N Crib and stated that future discharges to the crib could be precluded by closing one specific valve (FLV-808-1). As shown in Figure 1, this valve is located in the line directly between the 1301-N Weir Box and the 1325-N Crib. A second line goes from the weir box to the liquid effluent retention facility inlet structure. Because effluent could be diverted from the inlet structure to the 1325-N Crib, it is also necessary to close the second line. This is accomplished by closing valve FLV-8058-2 (closure of this valve was not identified in the plan). Closure of both these valves and removal of the handwheels is documented in the task worksheet and lockout form (Attachments 1 and 2) and a message from Mr. R. J. Gimera to Mr. J. P. Collins (Attachment 3). Although not required by the plan, RL also identified the last valve in each line discharging to the weir box as candidates to be closed and tagged (Attachment 4). The weir box served as the collection point for effluent going to the 1301-N and 1325-N Cribs. Closing these valves supported isolation of the 1301-N Crib. The valves associated with the 1301-N and 1325-N Cribs that were closed and tagged consist of the following:

Building 1315-N	Valve	FLV-808-1*
	Valve	FLV-808-2*
Building 1322-N	Valve	FLV-802-1*
	Valve	DSV-802-1*
		4" valve on north side of 1322-N (no valve number)*

\*Valve no longer tagged, building containing valve is in Interim Facility Storage and Maintenance

Building 1310-N	Valve	FLV-882
	Valve	WV-2
	Valve	WTV-1905-3

3. The Crib Isolation Plan states that all pumps used to pump effluent from the 105-N lift station to the 1325-N crib will have associated fuses removed. Please provide a report on the status of all associated fuses.

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Response: The Crib Isolation Plan stated that closing valve FLV-808-1 would by itself prevent discharge to the 1325-N Crib. The plan also identified additional actions to preclude future discharges to the 1301-N Weir Box and potentially to the 1301-N Crib. These actions focused on the pumps discharging to the weir box, including pumps at the 105-N Lift Station. The plan required that the power (not necessarily the fuses) for the pumps had to be removed at the main control panel. This was accomplished in September 1993 by opening the breaker associated with each pump and installing a lock and tag on the breaker (Attachments 1 and 2). Subsequent to this action, a work instruction (Attachment 5) was issued that required physically removing fuses and lifting leads off the motor contractor or lifting leads off the bottom of the breaker and off the motor contractor. Lift Station Pump #2 had the power removed before the work instruction was issued. This was documented on the lockout form (Attachment 2). The breakers formerly used for many of these pumps are now used for other purposes.

4. Please provide a report on the current status of compliance with Milestone M-17-15.

Response: Milestone M-17-15 required that RL "Cease discharge to the 1325-N Liquid Effluent Disposal Facility (LWDF) System" by June 30, 1995. As reported in references 2 and 3, that milestone was met in 1993. It is RL's position that any effluent observed in the crib since then resulted from a combination of residual effluent from prior discharges and infiltration of rainwater and snow melt. The physical evidence related to isolation of the discharge system between the 100-N facilities and the 1325-N crib supports this conclusion. There have been no discharges to the 1325-N crib since September 1993.

If you should have any further questions, please contact Mr. David Olson on 376-7326.

Sincerely,



Paul M. Pak, Sr. Project Manager  
N Area Project

NAP:PMP

Attachments

cc w/attach:

K. L. Christensen, Ecology  
P. R. Staats, Ecology

cc w/o attach:

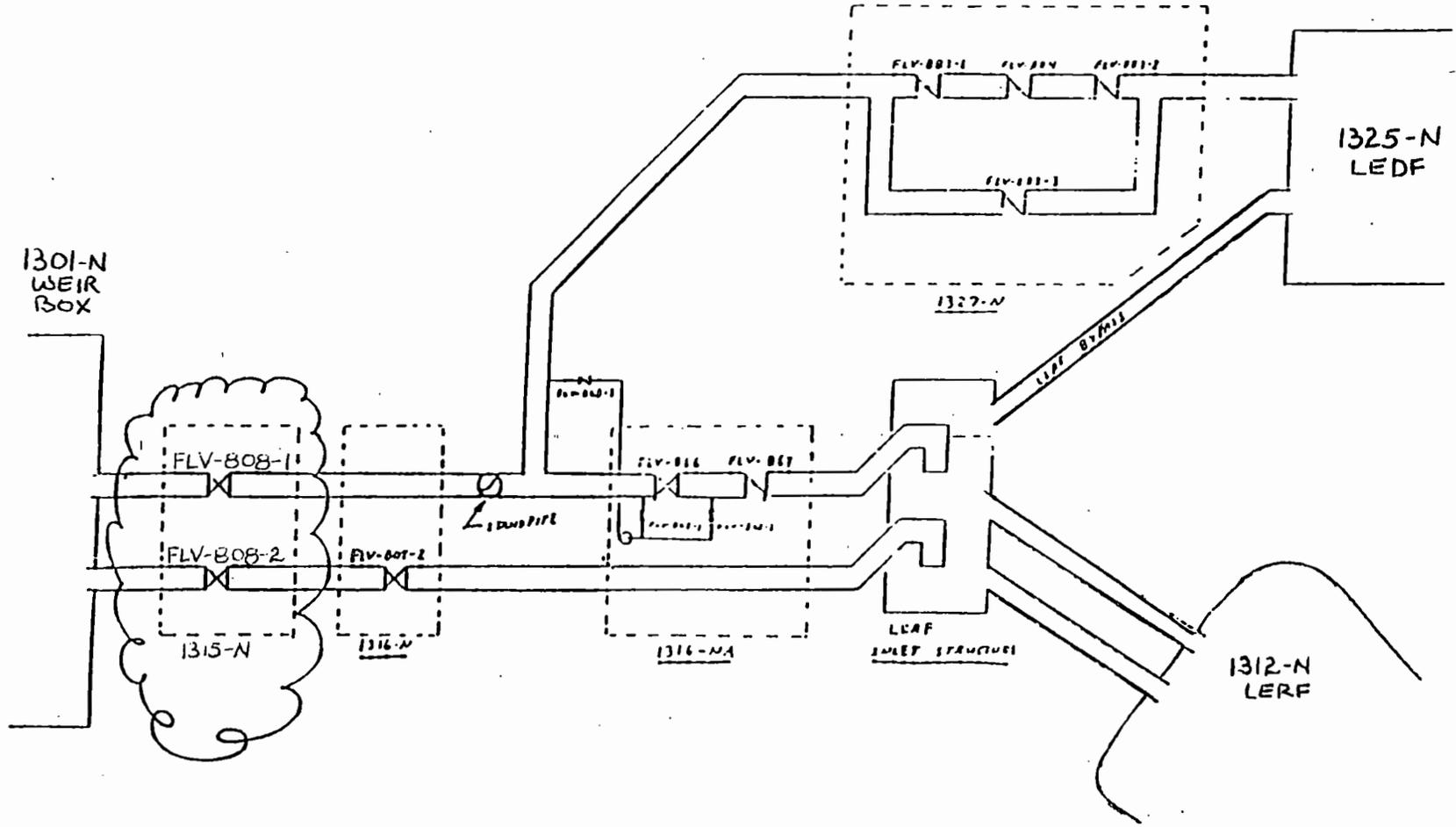
M. E. Greenidge, BHI

9713540.0354

Figure 1

1325-N Liquid Effluent Disposal Facility (1325-N Crib) Piping Configuration

034710



TASK COMPLETED

1325-N CRIB ISOLATION

8-6-93

PHOTOS

BEFORE	AFTER	
X	X	
X	X	

A. DOWNSTREAM OF 1301-N WEIR (HORSE TROUGH)

1315-N

1. FLY-808-1 CLOSE 36" CD(FL) VALVE. REMOVE HANDWHEEL. L/U TAG.
2. FLY-808-2 VERIFY CLOSED 36" CD(FL) VALVE. REMOVE HANDWHEEL. L/U TAG

B. UPSTREAM OF 1301-N WEIR (HORSE TROUGH)

1322-N

- |   |   |              |   |
|---|---|--------------|---|
| X | X | 1. FLY-802-1 | a. OPEN BREAKER. L/U LOCK & TAG.                      |
| X | X |              | b. CLOSE 36" FL(LP) VALVE. REMOVE HANDWHEEL. L/U TAG. |
| X | X | 2. DSV-802-1 | a. OPEN BREAKER. L/U LOCK & TAG.                      |
| X | X |              | b. CLOSE 12" RDR VALVE. REMOVE HANDWHEEL. L/U TAG.    |

3. WASTE RECEIVER PUMP - OPEN BREAKER .. L/U LOCK & TAG.

4. 1723-N FLOOR DRAIN LINE - CLOSE 4" DR VALVE LOCATED IN YARD NORTH SIDE OF 1322-N. REMOVE HANDWHEEL. L/U TAG.

1310-N AND YARD

- |   |   |               |  |
|---|---|---------------|--|
| X | X | 1. FLY-882    | CLOSE 24" BYPASS VALVE. REMOVE HANDWHEEL. L/U TAG. |
| X | X | 2. WV-2       | CLOSE 6" RDR VALVE. REMOVE HANDWHEEL. L/U TAG.     |
| X | X | 3. WTV-1905-3 | CLOSE 4" WASTE VALVE. REMOVE HANDWHEEL. L/U TAG.   |

N SPRINGS SAMPLE PUMP

- |   |   |
|---|---|
| X | 1. DISCONNECT AND CAP PIPE THAT IS ROUTED TO 1322-NA. |
| X | 2. CLOSE VALVE (TO 1322-N) REMOVE HANDWHEEL. L/U TAG. |

SUMP PUMPS TO BE DEENERGIZED

THE FOLLOWING SUMP PUMPS WILL INITIALLY HAVE THEIR BREAKERS OPENED AND L/U LOCK & TAGS INSTALLED. AFTER WORK PACKAGES ARE PROVIDED, THE POWER SUPPLIES WILL BE DISCONNECTED AND ALL LOCKOUTS REMOVED.

- |   |                      |   |            |   |                   |
|---|----------------------|---|------------|---|-------------------|
| X | 1. 117-N EAST SUMP   | X | 6. CELL-1  | X | 11. CELL-6        |
| X | 2. 117-N WEST SUMP   | X | 7. CELL-2  | X | 12. HWGL-A        |
| X | 3. LIFT STATION #1   | X | 8. CELL-3  | X | 13. HWGL-B        |
| X | 4. LIFT STATION #3   | X | 9. CELL-4  | X | 14. 109-N NUCLEAR |
| X | 5. 1360-N DUMP BASIN | X | 10. CELL-5 | X | 15. DECON CELL    |

WESTINGHOUSE HANFORD

LOCKOUT/PROCEDURE NO: LN-93-01543

100-N DRY STANDBY  
LOC INFORMATION

Attach to Dry Standby Lockout Form

System Name: DRAINS

System No: 18

Equipment Name: CONTAMINATED DRAINS  
(if not within boundary of an isolated system)

Equipment No: N/A

Isolation Procedure Title: ISOLATION OF 1325N

Procedure Location: DRY STANDBY FILES, ISOLATION PACKAGES - ROOM 137B/105-N

Date of tagout Authorization: 9/8/93 Authorization Signature: [Signature]

Date removal Authorization: \_\_\_\_\_ Authorization Signature: \_\_\_\_\_

Remarks: \*  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Deviations: \*  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Special Instructions: \*  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*DATE AND INITIAL ALL ENTRIES

WESTINGHOUSE HANFORD

100-N DRY STANDBY  
LOCKOUT FORM

PAGE 1 OF 3

Lockout/Procedure No: IN-93-01543 System No: 18 Issue Date: 9-8-93

Lockout Reason: ISOLATION OF 1325-N (CRIB)

Custodian Authorize Lockout: [Signature] Date/Time: 9/8/93 0900  
 Custodian Verify Lockout Installed: [Signature] Date/Time: 9/8/93 1600  
 Custodian Verify System To Normal: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Remarks: ALL EMSs/PMs MUST BE PERFORMED PRIOR TO RETURNING THIS SYSTEM/EQUIPMENT TO SERVICE.  
 SEE OUT OF SERVICE SYSTEMS/EQUIPMENT DEFERRED EMS/PM LIST IN THE DRY STANDBY FILES  
 IN ROOM 137-B/105-N.

Special Instructions: \_\_\_\_\_

Bi-annual Lockout Audit	Month	Year/Init.	Year/Init.	Year/Init.	Year/Init.	Year/Init.	Year/Init.
Installed/Audit		/	/	/	/	/	/
Bi-annual Audit		/	/	/	/	/	/

Tag No.	Tag Location	Component Position	Component Locked	Tag Hung	Custodian Authorize Tag Remove Init/Date	Tag Type	Account for Tag	Tag Comment
1	FLV-808-1 VALVE STEM, 1315-N	CLOSED	NO	✓		Tag-UP		
2	FLV-808-2 VALVE STEM, 1315-N	CLOSED	NO	✓				
3	FLV-802-1 BREAKER, 1322-N	OFF	YES	✓				
4	FLV-802-1 REMOTE OPER REACH ROD, 1322-N	CLOSED	NO	✓				
5	DSV-802-1 BREAKER, 1322-N	OFF	YES	✓				
6	DSV-802-1 REMOTE OPER REACH ROD, 1322-N	CLOSED	NO	✓				
7	WASTE RECEIVER PUMP BREAKER, 1322-N	OPEN	YES	✓				NO P 5/11/93
8	1723-N FLOOR DRAIN VALVE STEM, (YARD) 1322-N	CLOSED	NO	✓				
9	FLV-882 VALVE STEM, (YARD) 1310-N	Shut CLOSED	NO	✓				
10	WV-2 VALVE STEM, 1310-N	CLOSED	NO	✓				
11	WTV-1905-3 VALVE STEM, 1310-N	CLOSED	NO	✓				
12	117-N EAST SHAMP PUMP BREAKER, #2 117-N	OFF	YES	✓			yes	37 work

All information on the Dry Standby LOC is mandatory, and must be filled out properly.

Addendum Used: YES

WESTINGHOUSE HANFORD

100-N DRY STANDBY  
LOCKOUT FORM

PAGE 2 OF 2

ADDENDUM

Lockout/Procedure No: IN-93-01543 System No: 18 Issue Date: 9-8-93

Tag No.	Tag Location	Component Position	Component Locked	Tag Hung	Custodian Authorize Tag Remove Init/Date	Tag Type	Account for Tag	Tag Comment
13	117-N WEST SUMP PUMP #2 BREAKER. 117-N	OFF	YES	✓	10/3/27/94	lay-up	YES	J-1 WORK
17	LIFT STATION PUMP #1 BREAKER. ROOM 144	OPEN	YES	✓	10/3/27/94		✓	Replaced with Tag #39
15	LIFT STATION PUMP #3 BREAKER. ROOM 193	OFF	YES	✓	10/3/24/94		✓	J-1 WORK
16	DUMP BASIN (1300N) PUMP BREAKER. ROOM 173	OFF	YES	✓	10/7/24/94		✓	J-1 WORK
17	CELL-1 SUMP PUMP BREAKER. MCC-13	OFF	YES	✓				
18	CELL-2 SUMP PUMP BREAKER. MCC-14	OFF	YES	✓				
19	CELL-3 SUMP PUMP BREAKER. MCC-16	OFF	YES	✓				
20	CELL-4 SUMP PUMP BREAKER. MCC-18	OFF	YES	✓				
21	CELL-5 SUMP PUMP BREAKER. MCC-17	OFF	YES	✓				
22	CELL-6 SUMP PUMP BREAKER. MCC-37	OFF	YES	✓				
23	HWOGL SUMP PUMP "A" BREAKER. MCC-15	OFF	YES	✓				
24	HWOGL SUMP PUMP "B" BREAKER. MCC-16	OFF	YES	✓				
25	NUCLEAR SUMP PUMP BREAKER. MCC-17	OFF	YES	✓				
26	NUCLEAR SUMP PUMP BREAKER. MCC-18	OFF	YES	✓				
27	DECON CELL SUMP PUMP BREAKER. MCC-35	OFF	YES	✓				
28	DWV-700 Valve Stem -16109N	Closed	YES	✓				
29	DWV-700 Vent Valve Stem -16109N	Closed	YES	✓				
30	Sump Tank Pump Breaker 1322N	OFF OPEN	YES	✓				
31	N-Springs Pump Discharge Valve N-Springs Cistern	Closed	NO	✓				
32	Sump Pump West Pt #1 MCC 10 Cistern #2 117N	OFF	YES	✓	10/3/27/94		YES	J-1 WORK
33	LIFT STATION Pump #1 BREAKER Room #144	Cistern Empty	YES	✓	10/3/27/94		✓	J-1 WORK
34	Panel AAA Lighting Panel Waste Catch Tank Bldg	OFF	NO	✓	10/16/93		YES	TW 1322 B Bldg.
35	Panel AAA Lighting Panel Pump #1 & 2 Bldg	OFF	NO	✓				TW 1322 B Bldg.



TO: E.M. MYOTT

100N DRY LAYUP

ELECTRICAL LOCKOUT ORDER - 076

SYSTEM # 20

EQUIPMENT OR ID # SEE BELOW FOR EQUIP. AND BREAKER CUBICLE

BREAKER # NA

MCC # NA CUBICLE # NA

ECH(L)'(S) /PROCEDURE:

LOCK AND TAG OUT THE FOLLOWING ENERGY SOURCES TO THE FOLLOWING LISTED EQUIPMENT:

	<u>EQUIP</u>	<u>BLDG #</u>	<u>MCC #</u>	<u>CUB #</u>	<u>ESSENTIAL DWG #</u>
1.	117N EAST SUMP PUMP #2	117N	MCC #10	B4	H-1-52004,SH 12
2.	117N WEST SUMP PUMP #2	117N	MCC #10	B3	H-1-52004,SH 12
3.	117N SUMP PUMP WEST PIT #1	117N	MCC #10	A2	H-1-52001,SH 12
4.	LIFT STATION #1 PUMP	105N	E. SUBSTA	A3	H-1-52003,SH 1
5.	LIFT STATION #3 PUMP	105N	MCC #2C2	D5	H-1-52004,SH 5
6.	1300N DUMP BASIN PUMP	105N	MCC #2C2	A1	H-1-52004,SH 5
7.	109N CELL 1 PUMP	109N	MCC #13	Q1	H-1-52002,SH 7
8.	109N CELL 2 PUMP	109N	MCC #14	D4	H-1-52002,SH 24
9.	109N CELL 3 PUMP	109N	MCC #16	D1	H-1-52002,SH 23
10.	109N CELL 4 PUMP	109N	MCC #18	C6	H-1-52002,SH 11
11.	109N CELL 5 PUMP	109N	MCC #17	Q1	H-1-52002,SH 6
12.	109N CELL 6 PUMP	109N	MCC #37	A3	H-1-52002,SH 25
13.	HOT WATER QUAL LAB PUMP A	109N	MCC #15	A4	H-1-52002,SH 9
14.	HOT WATER QUAL LAB PUMP B	109N	MCC #16	A6	H-1-52002,SH 23
15.	109N NUCLEAR SUMP PUMP ALTERNATE FDR FOR ITEM #15	109N	MCC #17	D3	H-1-52002,SH 6
16.	SOLUTION PREP SUMP PUMP	109N	MCC #18	A2	H-1-52002,SH 11
			MCC #35	E2	H-1-52002,SH 21

REMARKS:

THE INTENT OF THIS ELO IS TO LOCK & TAG IMMEDIATELY LISTED EQUIPMENT BREAKERS TO ISOLATE ANY POSSIBILITY OF WATER TO THE 1325N CRIB, WITH THE INTENTION OF REMOVING WIRES AND FUSES ASAP. AN ECH WILL FOLLOW COMPLETION OF WORK TO UPDATE THE ELECTRICAL ONE LINE DRAWING.

REF. JCS-1N-93-00183/W

Earl M. Myott 9/30/93  
Cognizant Engineer Date

J.M. Kuntz 9-30-93  
Cognizant Engineer's Manager Date

[Signature] 9-30-93  
Witnessed By Date

[22] From: Angelia D Keck at -WHC78 9/10/93 10:11AM (1499 bytes: 24 ln)  
To: Jack P Collins at -DOE6, Ralph J Gimera  
cc: Gregg R Frank, Michael C Hughes at -WHC106, Granville H Phillips,  
Ruben A Trevino at -WHC146, Heather R Trumble at -DOE6, John L Walsh at  
-WHC77, David J Watson at -WHC146  
Subject: Crib Isolation

----- Message Contents -----

To: J. P. Collins (DOE-RL)

From: R. J. Gimera

Subject: Crib Isolation

REF - Memo, H. L. Debban to R. D. Freeberg, "Ceasing Discharge to 1325N  
at N Reactor", August 12, 1993.

This message is to inform you that, as of COB on 9-9-93, N Reactor has isolated the 1301N and 1325N Cribs from all N Reactor operating systems. The isolation was accomplished in accordance with the plan transmitted with the referenced memo. The isolation was accomplished after DOE-RL comments on the plan were satisfactorily resolved. By virtue of this isolation, we can now state that TPA Milestone M-17-15, for elimination of discharge to the Cribs by June 1995 was achieved in April, 1991 since no discharge to the Cribs have occurred since then.

It is our intention to submit to DOE-RL: a) Further details on this isolation, and b) The N Reactor Deactivation schedule emphasizing basin cleanup by COB on 9-15-93. We will be prepared to meet with you for further discussions of these two activities at your convenience.

R. J. Gimera

CRIB ISOLATIONATTACHED

- ① DESCRIPTION OF ACTIVITY
- ② ② J-3 TO REMOVE VALVE HAND WHEELS
- ③ ② LIST OF VALVES
- ④ ③ DRY STANDBY LOOKOUT FORM - PARTIALLY COMPLETED

NOTE - WORK PACKAGE TO "DISCONNECT" PUMP BREAKERS NOT PROVIDED.

② N-SPRINGS "FUTURE SAMPLING" IS STILL NOT CLEAR - TO ME.

*SH Phillips*

8-31-93

1325-N CRIB ISOLATION

8-C-93

## A. DOWNSTREAM OF 1301-N WEIR (HORSE TROUGH)

1315-N

1. FLY-808-1 CLOSE 36" CD(FL) VALVE. REMOVE HANDWHEEL. L/U TAG.
2. FLY-808-2 VERIFY CLOSED 36" CD(FL) VALVE. REMOVE HANDWHEEL. L/U TAG.

## B. UPSTREAM OF 1301-N WEIR (HORSE TROUGH)

1322-N

1. FLY-802-1
  - a. OPEN BREAKER. L/U LOCK & TAG.
  - b. CLOSE 36" FL(LP) VALVE. REMOVE HANDWHEEL. L/U TAG.
2. DSV-802-1
  - a. OPEN BREAKER. L/U LOCK & TAG.
  - b. CLOSE 12" RDR VALVE. REMOVE HANDWHEEL. L/U TAG.

3. WASTE RECEIVER PUMP - OPEN BREAKER. L/U LOCK &amp; TAG.

4. 1723-N FLOOR DRAIN LINE - CLOSE 4" DR VALVE LOCATED IN YARD NORTH SIDE OF 1322-N. REMOVE HANDWHEEL. L/U TAG.

1310-N AND YARD

1. FLY-882 CLOSE 24" BYPASS VALVE. REMOVE HANDWHEEL. L/U TAG.
2. WV-2 CLOSE 6" RDR VALVE. REMOVE HANDWHEEL. L/U TAG.
3. WTV-1905-3 CLOSE 4" WASTE VALVE. REMOVE HANDWHEEL. L/U TAG.

N SPRINGS SAMPLE PUMP

DISCONNECT AND CAP PIPE THAT IS ROUTED TO 1322-NA.

SUMP PUMPS TO BE DEENERGIZED

THE FOLLOWING SUMP PUMPS WILL INITIALLY HAVE THEIR BREAKERS OPENED AND L/U LOCK & TAGS INSTALLED. AFTER WORK PACKAGES ARE PROVIDED, THE POWER SUPPLIES WILL BE DISCONNECTED AND ALL LOCKOUTS REMOVED.

- |                      |            |                   |
|----------------------|------------|-------------------|
| 1. 117-N EAST SUMP   | 6. CELL-1  | 11. CELL-C        |
| 2. 117-N WEST SUMP   | 7. CELL-2  | 12. HWQL-A        |
| 3. LIFT STATION #1   | 8. CELL-3  | 13. HWQL-B        |
| 4. LIFT STATION #3   | 9. CELL-4  | 14. 109-N NUCLEAR |
| 5. 1360-N DUMP BASIN | 10. CELL-5 | 15. DECON CELL    |

J-3

PRE-APPROVED SUPPORT REQUEST

Requested By: G. H. PHILLIPS / NFS / 13-5437 / X8-29 2. Charge Code: \_\_\_\_\_  
Name Organization Telephone No. MSIN

Date of Request: \_\_\_\_\_ 4. Response Required:  ASAP  Routine

Type of Work:  Chart Recorder  Relamp:  Oil Addition  Other REMOVE MANUAL OPERATORS FROM VALVES  
 Equipment Move  Fluorescent  Incandescent  
 Gas Bottle Changeout

Impact Level 4

Location: 100-N \* \* \_\_\_\_\_  
Facility Building Room Panel/Equipment/Component Other Other

Description: REMOVE HANDWHEELS / CRANKS FROM VALVES AS NOTED ON ATTACHED VALVE LIST.

\* ATTACHED LIST DESCRIBES LOCATION AND VALVE IDENTIFICATION.

NEEDS  
② CHARGE CODE

Concurrence Signature \_\_\_\_\_  
③ DATE  
~~④~~

J. Field Work Complete Signature \_\_\_\_\_  
I. Resource/Hours  
Resource Code: \_\_\_\_\_  
Servicing Org.: \_\_\_\_\_  
Actual Hours: \_\_\_\_\_

REMOVE HANDWHEELS / CRANKS FROM VALVES

<u>BUILDING</u>	<u>VALVE NUMBER</u>	<u>DESCRIPTION / OTHER</u>
1315-N	FLV-808-1	36" VALVE
	FLV-808-2	36" VALVE
1322-N	FLV-802-1	36" VALVE. HANDWHEEL LOCATED ON END OF REMOTE OPERATOR REACH ROD.
	DSV-802-1	12" VALVE. HANDWHEEL LOCATED ON END OF REMOTE OPERATOR REACH ROD.
	NO VALVE I.D.	4" VALVE LOCATED IN PIT OUTSIDE ON NORTH SIDE OF 1322-N.
1310-N	FLV-882	24" VALVE LOCATED NORTH OF GOLF BALL.
	WV-2	6" RDR VALVE. INSIDE OF BLDG.
	WTV-1905-3	4" VALVE. INSIDE OF BLDG.

*SA Phillips*  
8-24-93

WESTINGHOUSE HANFORD

LOCKOUT/PROCEDURE NO: \_\_\_\_\_

**100-N DRY STANDBY  
LOC INFORMATION**

Attach to Dry Standby Lockout Form

System Name: DRAINS

System No: 18

Equipment Name: CONTAMINATED DRAINS  
(if not within boundary of an isolated system)

Equipment No: NA

Isolation Procedure Title: \_\_\_\_\_

Procedure Location: DRY STANDBY FILES, ISOLATION PACKAGES - ROOM 137-B/105-N

Date of tagout Authorization: \_\_\_\_\_ Authorization Signature: \_\_\_\_\_

Date removal Authorization: \_\_\_\_\_ Authorization Signature: \_\_\_\_\_

Remarks: \*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Deviations: \*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Special Instructions: \*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*DATE AND INITIAL ALL ENTRIES

**DRY STANDBY**

WESTINGHOUSE HANFORD

100-N DRY STANDBY  
LOCKOUT FORM

PAGE 1 OF

Lockout/Procedure No: \_\_\_\_\_ System No: 18 Issue Date: \_\_\_\_\_

Lockout Reason: ISOLATION OF 1325-N (CRIB)

Custodian Authorize Lockout: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Custodian Verify Lockout Installed: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Custodian Verify System To Normal: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Remarks: ALL EMSs/PMs MUST BE PERFORMED PRIOR TO RETURNING THIS SYSTEM/EQUIPMENT TO SERVICE.  
SEE OUT OF SERVICE SYSTEMS/EQUIPMENT DEFERRED EMS/PM LIST IN THE DRY STANDBY FILES  
IN ROOM 137-B/105-N.

Special Instructions: \_\_\_\_\_

Bi-annual Lockout Audit	Month	Year/Init.	Year/Init.	Year/Init.	Year/Init.	Year/Init.	Year/Init.
Installed/Audit		/	/	/	/	/	/
Bi-annual Audit		/	/	/	/	/	/

Tag No.	Tag Location	Component Position	Component Locked	Tag Hung	Custodian Authorize Tag Remove Init/Date	Tag Type	Account for Tag	Tag Comment
1	FLV-808-1 VALVE STEM. 1315-N	CLOSED	NO					
2	FLV-808-2 VALVE STEM. 1315-N	CLOSED	NO					
3	FLV-802-1 BREAKER. 1322-N		YES					
4	FLV-802-1 REMOTE OPER REACH ROD. 1322-N	CLOSED	NO					
5	DSV-802-1 BREAKER. 1322-N		YES					
6	DSV-802-1 REMOTE OPER REACH ROD. 1322-N	CLOSED	NO					
7	WASTE RECEIVER PUMP BREAKER. 1322-N		YES					
8	1725-N FLOOR DRAIN VALVE STEM. (YARD) 1322-N	CLOSED	NO					
9	FLV-882 VALVE STEM. (YARD) 1310-N	CLOSED	NO					
10	WV-2 VALVE STEM. 1310-N	CLOSED	NO					
11	WTV-1905-3 VALVE STEM 1310-N	CLOSED	NO					
12	117-N EAST SHAMP PUMP BREAKER. 117-N		YES					

All information on the Dry Standby LOC is mandatory, and must be filled out properly.

Addendum Used: YES

DRY STANDBY



**WORK INSTRUCTION**

for J1 93-00183 Impact Level 4

**"Physical Isolation of Power to Pumps - 1325N Crib"**

Date: 1/7/94

Prepared by: Paul Jackson, Engineer

Phone: 373-5323, 105N RM161A

**Purpose:** To physically isolate power (TWO PLACES) to all pumps that could potentially pump low level waste to the 1325N Crib.

**NOTE:** VERIFY ZERO ENERGY BEFORE PULLING FUSES OR LIFTING MOTOR CONTACTOR LEADS OR BREAKER LEADS.

**NOTE:** For each set of wires lifted attach tag stating, "Wires Lifted per WA 93-0183."

**NOTE:** For each set of fuses removed attach tag stating, "Fuses removed per WA 93-0183."

**STEP 1.** Isolate the following energy sources to the following listed equipment.

<u>EQUIP</u>	<u>HOW TO ISOLATE</u>	<u>BLDG#</u>	<u>MCC#</u>	<u>CUB#</u>	<u>ESS. DWG#</u>
1. 117N East Sump Pump #2	*	117N	1D ✓	B4	H1-52004, sh 12
2. 117N West Sump Pump #2	*	117N	1D ✓	B3	H1-52004, sh 12
3. 117N Smp Pmp West Pit #1	*	117N	1D ✓	A2	H1-52004, sh 12
4. Lift Station #1 Pump	#	105N E. Subst.	A3		H1-52003, sh 1
5. Lift Station #3 Pump	#	105N	2C2	D5	H1-52004, sh 5
6. 1300N Dump Basin Pump	#	105N	2C2	A1	H1-52004, sh 5
7. 109N Cell 1 Pump	*	109N	13 ✓	Q1	H1-52002, sh 7
8. 109N Cell 2 Pump	*	109N	14 ✓	D4	H1-52002, sh 24
9. 109N Cell 3 Pump	*	109N	16 ✓	D1	H1-52002, sh 23
10. 109N Cell 4 Pump	*	109N	18 ✓	C4	H1-52002, sh 11
11. 109N Cell 5 Pump	*	109N	17 ✓	Q1	H1-52002, sh 6
12. 109N Cell 6 Pump	*	109N	37 ✓	A3	H1-52002, sh 25
13. Hot Water Qual Lab Pmp A	*	109N	15 ✓	A4	H1-52002, sh 9
14. Hot Water Qual Lab Pmp B	*	109N	16 ✓	A4	H1-52002, sh 23
15. 109N Nuclear Sump Pump	*	109N	17 ✓	D3	H1-52002, sh 6
Alternate FDR For Itm #15	*	109N	18	A2	H1-52002, sh 11
16. Solution Prep Sump Pump	*	109N	35 ✓	E2	H1-52002, sh 21

\* - Pull fuse, lift leads off of motor contactor and tag.

# - Lift leads off of Bottom of breaker, lift leads off of motor contactor, and tag.

## \*\*\* INFORMATION ONLY \*\*\*

-----J-1 WORK REQUEST (W110)-----

Page: 1

10:32:19 17 FEB 1994

1. Document Number IN-93-00183/W *GENERIC WORK ITEM*  
 2. Work Item Title DEACTIVATE VARIOUS 100N SUMP PUMPS

3. System 18 *VENT AND DRAIN SYSTEMS*

## 4. Components

Component Number  
N/A

Name

Temporary Number

Name

117N EAST SUMP PUMP #2  
 117N SUMP PUMP, WEST PIT  
 117N WEST SUMP PUMP #2  
 LIFT STATION #1 PUMP  
 LIFT STATION #3 PUMP  
 1300N DUMP BASIN PUMP  
 109N CELL 1,2,3,4,5,6 PUMPS  
 HOT WATER QUAL LAB A & B PUMPS  
 109N NUCLEAR SUMP PUMP  
 DECON CELL SUMP PUMP

## 5. Location

Facility IN *N Reactor*  
 Bldg/Rm 100N MISC

Other SUMP PUMPS Other

## 6. Associated Components

Component Number  
N/A

Name

7. Originator Name TREVINO, RA  
 Telephone No. 373-1663

MSIN X8-29

Date Organization  
 09/13/93 11270

## 8. Charge Code

## 9. Work Item Description

THE LISTED SUMP PUMPS IN THE COMPONENTS SECTION OF THIS J-1 (SECTION 4) WILL REQUIRE DISCONNECTING THEIR POWER SUPPLIES AS PART OF THE REQUIREMENTS FOR ISOLATING THE 1301N & 1325N CRIBS. REMOVE THE FUSES AND WIRES FROM THE BREAKER BOXES AS REQUESTED BY GRANVILLE PHILLIPS. THIS JOB CARRIES A "HIGH PRIORITY" TO MEET A DOE MILESTONE.

	Signature	Date
10. Operations Review	X. BOWEN, RH	09/13/93
11. Priority	2	
12. Phase Designator	08 <i>DEACTIVATION</i>	
13. Correct Maint. Assessment	Y	
14. Personnel Safety Related	N	

-----J-1 WORK REQUEST (W110)-----

\*\*\* INFORMATION ONLY \*\*\*

\*\*\* INFORMATION ONLY \*\*\*

-----J-1 WORK REQUEST (W110)-----

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- 1. Document Number 1N-93-00183/W *GENERIC WORK ITEM*
- 2. Work Item Title DEACTIVATE VARIOUS 100N SUMP PUMPS

- 15. Cognizant Engineer MYOTT, EM
- 16. Cognizant Manager GRONEWALD, TH

17. Reference Documents Type

18. Comments

\*PPG VALUE 3.0, C8 HIGH, GOOD MANAGEMENT. G8 HIGH, INTERNAL MILESTONE. H8 HIGH, INCREASED OPERATING COSTS. LEVEL 2.

-----J-1 WORK REQUEST (W110)-----

\*\*\* INFORMATION ONLY \*\*\*