

MEETING MINUTES

0050747

Subject: Project W-178 219-S Secondary Containment Upgrades – Ecology Interface

From: M. A. Cahill, WMH

BUILDING: Federal Building, Room 269

Department-Operation-Component	Area	Time	Date of Meeting	Number Attending
RL Waste Program Division	200W	2 p.m.	04/29/99	12



Attendees

B. Becker-Khaleel, Ecology	B5-18	K. M. Leonard, WMNW	T6-14
J. J. Beyer, FDNW	B4-09	A. C. McKarns, RL	A5-15
R. L. Bisping, FDH	H6-06	A. G. Miskho, FDH	H6-06
M. A. Cahill, WMH	T6-03	A. R. Sherwood, WMH	H6-26
P. K. Clark, RL	S7-55	G. L. Sinton, RL	S7-55
J. L. Hensley, Ecology	B5-18	J. C. Sonnichsen, WMH	H6-26

The purpose of this meeting was to conduct a review of the M-32-02 milestone and discuss project status.

Mr. Michael Cahill (WMH) provided an overview of Project W-087, "222-S Radioactive Liquid Waste Line Replacement" and Project W-178, "219-S Secondary Containment Upgrades."

Briefly, Project W-087 replaced piping within the 222-S Tunnels, between 222-S and 219-S, and between 219-S and 244-S DCRT with encased transfer lines. Completion of Project W-087 satisfied M-32-02-T02.

Project W-178 provided secondary containment external liners for existing tanks 101 & 102, and newly installed tank 104. When tanks 101 & 102 were removed to allow for installation of the liners, they were inspected before being reinstalled. Tank 103 will be removed from service and RCRA closed at the same time as the 219-S Facility. Completion of Project W-178 will satisfy M-32-02-T03 and close interim milestone M-32-02 as well.

Mr. Cahill reviewed the current status of Project W-178. See handout (attachment 1). He reviewed the previous Ecology/RL agreements that have been made. These are also listed in the handout. These agreements have been documented in various meeting minutes, correspondence, or in the M-32-98-01 change control form. See attachment 2 for actual documents. Ecology/RL concurred that previous agreements documented in meeting minutes or only partially documented in correspondence (formal response from Ecology requested) should be rolled up into another letter that will complete the documentation package. Mr. Cahill indicated that WMH would integrate these agreements into the 222-S facility's Part B Permit application.

Two new items discussed will also be included in the letter mentioned above. Ecology's agreement was sought in the acceptance of an in-service tightness test for locations where spool pieces are tied-in to the 219-S tank system and a flush of tank 103 prior to tank isolation.

Mr. Cahill explained that "spool pieces" refer to the sections of pipe shipped to a construction site that will be used to build an entire piping system. The spool pieces are fabricated in an "onsite" shop, where they are constructed, inspected, and tested. At the job site spool pieces are tied-in through flanged connections to wall and tank nozzles, to make up the piping system. When this is done, the spool piece tie-ins cannot be tightness tested with a pressure test. Mr. Cahill proposed that in these areas tightness be verified by an inspection of the torque on the flange bolts and during an in-service test (i.e., during initial operations). Mr. Cahill stated that the 219-S facility spool piece tie-ins, subjected to the in-service test, will be secured with bags to contain any potential leaks (to minimize contamination of the cell). These bagged tie-in locations will be inspected in about 6 months to verify no leaks have occurred. Ecology indicated approval of the in-service test method for the spool piece tie-in locations.

Previous agreements with Ecology required a RCRA protocol sample prior to the final waste transfer from tank 103 with the results being placed in the facility's operating record. Mr. Cahill indicated that this sample has been taken and the final waste transfer scheduled for on or about May 6, 1999. The current

project plans now include a 500 gallon flush of tank 103 immediately after the final waste transfer in order to lower radiation exposures to personnel during tank 103 isolation activities. Ecology has agreed that the flush should be done and will not require further sampling; that the RCRA protocol sample already taken would suffice to meet the pre-isolation sampling requirements for closure.

Mr. Cahill went on to inform Ecology that reports for Project's W-087 and W-178 (assessment/installation reports by project phase) were being prepared. At his suggestion, Ecology agreed that informal notification of the tank 103 isolation would suffice at the time of isolation and that formal notification would be included with the notification of completion of M-32-02.

Actions:

1. Ecology and WMH representatives will search the files to locate an Ecology response to DOE-RL letter, J. E. Rasmussen to D. L. Lundstrom, "Transmittal of the Hanford Facility 222-S Laboratory Complex Agreement of Leak Detection Requirements for Project W087", 7/14/95. **Status:** An Ecology response was not located. **Closed**
2. WMH (Ms. Leonard/Mr. Cahill) will generate a letter on completing the documentation package.
3. WMH (Mr. Cahill) issue meeting minutes and receive approvals prior to the transfer to Tank Farms.

Concurrence:

P. K. Clark 5/7/99

Ms. P. K. Clark, RL Waste Programs Division

Jerry Hensley 5/12/99
Mr. J. L. Hensley, State of Washington Department of Ecology

Attachment 1 - Briefing Material from meeting

Attachment 2 - Correspondence on leak detection spacing, room 1J drain, and out of service ancillary drain piping.

12/97 Minutes on the flush port & residual sump volumes

TPA Change Request M-32-98-01 on tank 103 isolation and the sample system.

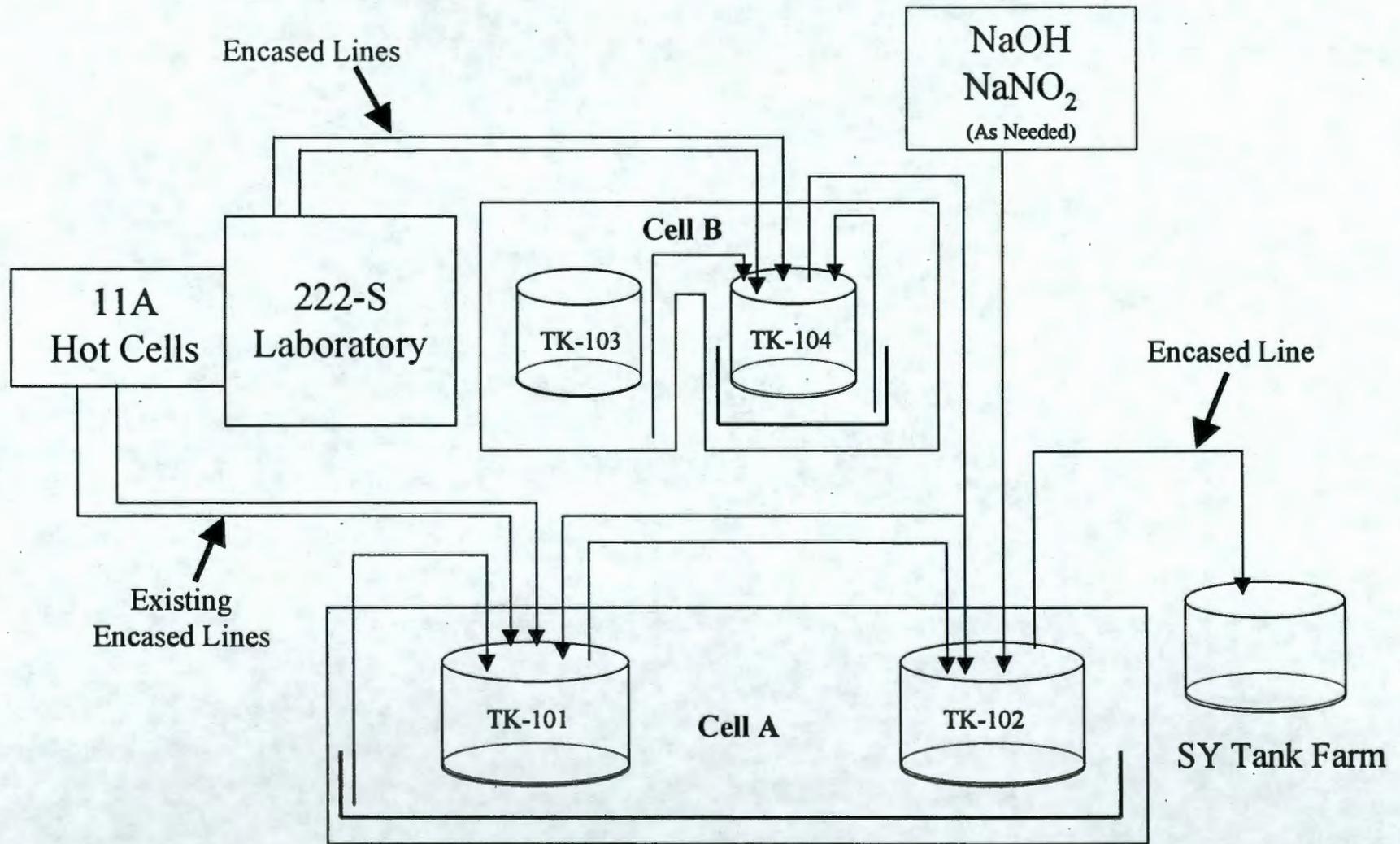
M-32-02 Review

“Completion of 219-S Tank Interim Status Actions”

April 29, 1999

M-32-02

Complete 219-S Tank Interim Status Actions



222-S Radioactive Liquid Waste Line Replacement

2

Project W-087 Scope

- Phase I provided encased transfer system from 219-S (Tank 102) to SY Tank Farm (244-S DCRT).
- Phase II provided for
 - Replacement of the 222-S liquid waste collection system.
 - Encased transfer lines from 222-S to 219-S
- Milestone M-32-02-T02 - Completed 10/31/97

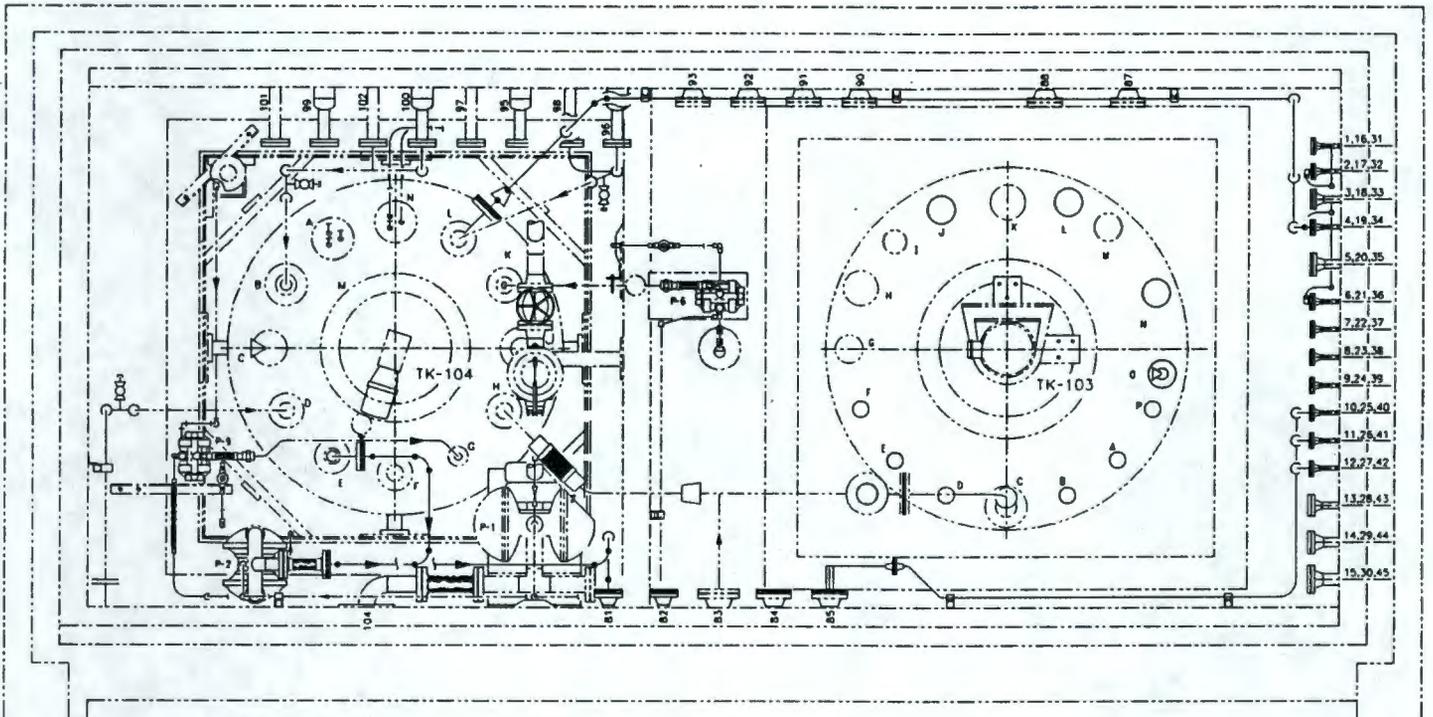
219-S Secondary Containment Upgrades

3

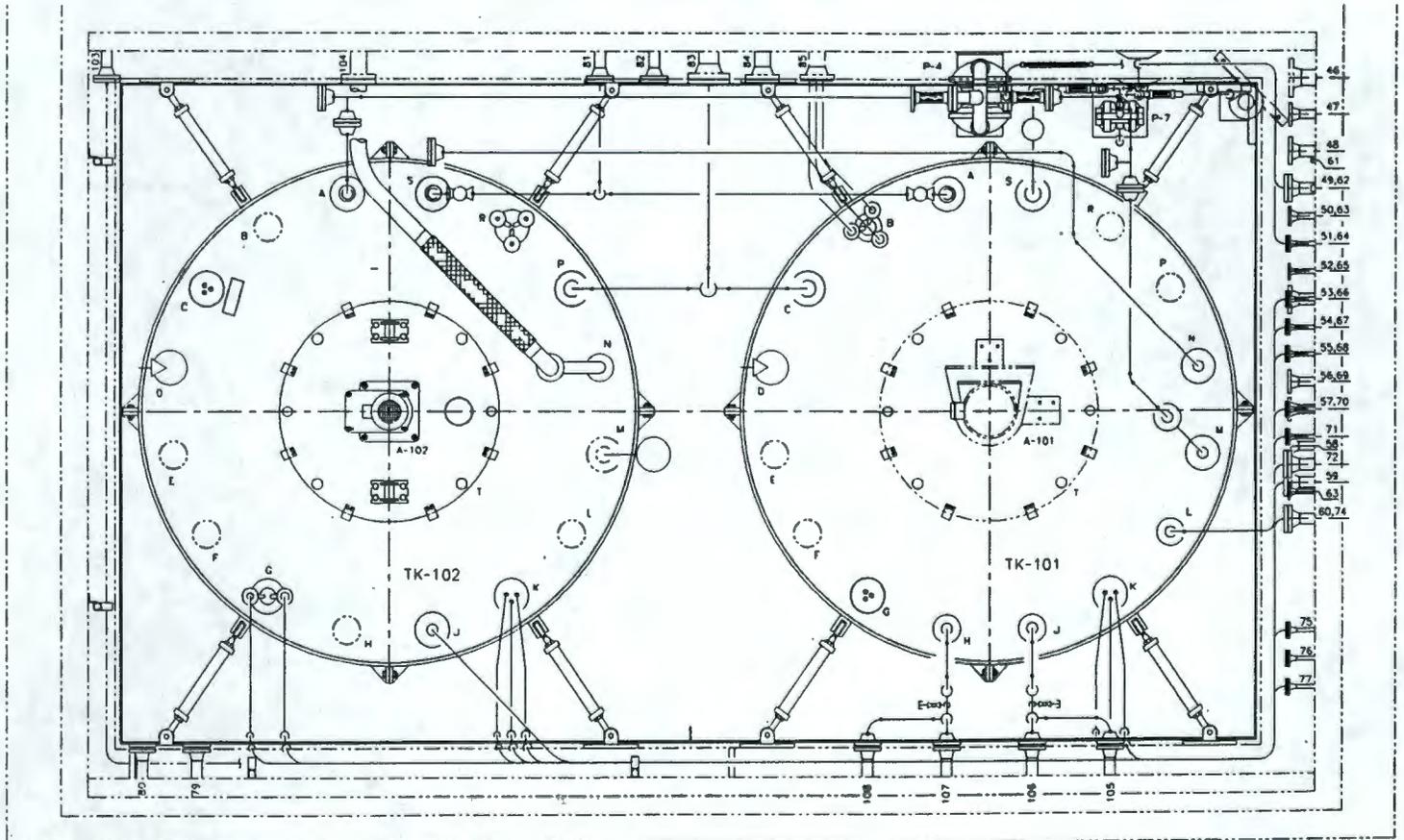
Project W-178 Scope

- Phase I provides for
 - Secondary containment (liner) and a new tank (TK-104) in cell B of the 219-S vault.
 - New monitoring and controls
- Phase II provides for
 - Removal of existing tanks 101 and 102
 - Installation of a liner in cell A of the 219-S vault
 - Inspection and reinstallation of the tanks in cell A
 - Removal of Tank 103 from service
 - New monitoring and controls
- Milestone M-32-02-T03 - Scheduled 6/30/99

219-S Waste Handling Facility



PLAN CELL B



PLAN CELL A

219-S Secondary Containment Upgrades

5

Phase II Status

Completed Activities

- Tanks 101 and 102 cleaned, inspected, and removed.
- Cell A cleanup and application of coating to walls
- Installation of stainless steel liner
- Tanks 101 and 102 reinstalled and restrained
- Agitators and tank ventilation reinstalled

Remaining Activities

- Reinstallation of tank services and leak detectors
- Sample, empty, and isolate tank 103
- Install spool pieces for 11A lines to tank 101
- Complete Integrity Assessment Reports

Review of Ecology/RL Agreements

6

- **Transfer Line Leak Detection Spacing (7/95)**
- **Room 1-J Drain Line Floor Penetration (6/97)**
- **Stage Out-of-Service Piping in T8 (10/97)**
- **Flush Port Feature on T8 Drain line (12/97)**
- **Residual Sump Volumes (12/97)**
- **Isolation of Tank 103 (1/99)**
- **219-S Sample System(1/99)**

Discussion on Upcoming Activities/Deliverables

7

- **Six Integrity Assessment Reports (by phase and project)**
- **Tank 103 Flush**
- **Spool Piece Tie-ins**
- **Document Deviations from SW-846 Protocol Methods**
- **Notification of Tank 103 Isolation**
- **Notification of Completion of TPA M-32-02 Milestones**
- **Integration of Agreements into Part B Permit**

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author R. E. Rasmussen, RL W. T. Dixon, WHC (J. F. Williams Jr., WHC)	Addressee D. L. Lundstrom, Ecology	Correspondence No. Incoming 9503411 Xref 9551846D
Subject: TRANSMITTAL OF THE HANFORD FACILITY 222-S LABORATORY COMPLEX AGREEMENT OF LEAK DETECTION REQUIREMENTS FOR PROJECT W-087, RADIOACTIVE LIQUID WASTE LINE REPLACEMENT (TS-2-1)		

INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		L. D. Arnold	B2-35	
		B. A. Austin, Sr. Staff	B3-03	
		M. L. Bell	T6-16	
		J. J. Beyer	R3-35	X
		R. C. Bowman	H6-24	X
		D. J. Carrell	H6-22	
		W. T. Dixon	H6-21	
		E. M. Greager	H6-20	
		L. D. Goodwin	T6-12	X
		M. J. Hall	T6-07	X
		D. P. Hughes	R3-35	
		J. R. Kelly	R3-28	
		P. J. Mackey	B3-15	X
		R. P. Marshall	T6-14	
		A. G. Miskho	H6-20	X
		S. M. Price	H6-24	X
		A. R. Sherwood	H6-20	X
		R. E. Traister	T3-01	
		G. J. Warwick	T6-12	X
		J. F. Williams Jr.	H6-24	X
		JFW File/LB	H6-24	X
		RCRA Files/GHL	H6-24	X



Department of Energy

Richland Operations Office
P.O. Box 550
Richland, Washington 99352

Incoming 9503411

95-PCA-394

JUL 14 1995

Mr. David L. Lundstrom
Section Manager
200 Areas
Nuclear Waste Program
State of Washington
Department of Ecology
1315 West Fourth Avenue
Kennewick, Washington 99336

Dear Mr. Lundstrom:

TRANSMITTAL OF THE HANFORD FACILITY 222-S LABORATORY COMPLEX AGREEMENT OF LEAK DETECTION REQUIREMENTS FOR PROJECT W-087, RADIOACTIVE LIQUID WASTE LINE REPLACEMENT (TS-2-1)

This letter requests written concurrence with an agreement reached between the U.S. Department of Energy, Richland Operations Office (RL); Westinghouse Hanford Company (WHC); and the State of Washington Department of Ecology (Ecology) on leak detection requirements for Project W-087, "Radioactive Liquid Waste Line Replacement (Project W-087)." Project W-087 will upgrade the drain system and install leak detectors in the 222-S Laboratory Complex (222-S), Analytical Laboratory (222-SAL), and the 219-S Waste Handling Facility (219-S).

On March 22, 1995, a meeting was held among Ecology, RL, WHC, and ICF Kaiser Hanford (ICF KH) regarding leak detection/removal requirements as stated in Washington Administrative Code (WAC) 173-303-640(4)(c)(iii) and (iv) "Tank Systems." The WAC 173-303-640(4)(c)(iii) requires a leak detection system to detect a failure of either the primary or secondary containment structures within 24 hours and (iv) requires removal of spilled or leaked waste and accumulated precipitation within 24 hours.

Mr. Russell Warren of RL, Mr. John Beyer of WHC, and Mr. Chuck Zook of ICF KH explained that the drain system provides a path for liquid waste to be transferred to the 219-S storage tanks by gravity flow. Liquid from a leak would take longer than 24 hours to reach a leak detector because of the sporadic flow rate (approximately 24 gallons per day) and the force necessary to overcome the surface tension of 350 feet of piping. Mr. Zook presented Ecology with a discussion paper describing the sporadic flow rate, length of piping, construction materials, and description of where the leak detectors will be installed. It was concluded that the leak detectors planned for installation in the 222-SAL, and 219-S are in compliance with the requirements of WAC 173-303-640.

JUL 14 1995

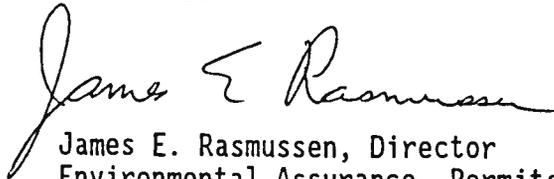
Mr. David L. Lundstrom
95-PCA-394

-2-

Mr. Moses Jaraysi of Ecology agreed that the planned installation and arrangement of the leak detectors within the 222-SAL and 219-S meets the intent of and therefore is in compliance with WAC 173-303-640(4)(c). Please provide written concurrence documenting this agreement.

Please contact Mr. C. E. Clark, RL, on (509) 376-9333, Mr. R. N. Warren, RL, on (509) 376-7330, or Mr. R. C. Bowman, WHC, on (509) 376-4876 should you have any questions regarding this letter.

Sincerely,



James E. Rasmussen, Director
Environmental Assurance, Permits,
and Policy Division
DOE Richland Operations Office

EAP:CEC



William T. Dixon, Director
Environmental Services
Westinghouse Hanford Company

Enclosure:
Discussion Paper on Project W-087,
Leak Detection Requirements

cc w/encl:
EDMC, H6-08
D. Duncan, EPA
M. Jaraysi, Ecology
C. Zook, ICF KH

cc w/o encl:
R. Bowman, WHC
W. Dixon, WHC
R. Jim, YIN
D. Powaukee, NPT
S. Price, WHC
J. Wilkinson, CTUIR

222-S LABORATORY RADIOACTIVE LIQUID WASTE DRAIN LINE AND LEAK DETECTION
ENVIRONMENTAL COMPLIANCE UPGRADE

PROJECT W-087

SUBJECT: W-087, DISCUSSION OF PIPING LEAK DETECTION WAC REQUIREMENTS

PREPARED BY: C. R. ZOOK
1995

DATE: MARCH 17,

The 222-S Laboratory Complex (222-S) radioactive liquid waste drain system is being replaced with double walled piping and leak detection as required by Washington Administrative Code (WAC) 173-303-640 (final status).

"(4)(c)(iii) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of dangerous waste or accumulated liquid in the secondary system within twenty-four hours, or at the earliest practicable time if the owner or operator can demonstrate to the department that existing detection technologies or site conditions will not allow detection of a release within twenty-four hours; and

(iv) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within twenty-four hours, or in a timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the department that removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four hours."

The piping will have a minimum slope of 1/8 inch per foot and will have leak detection to detect any leaks from the primary piping into the secondary pipe (encasement). The design has two detectors on each drain collection header. One will be installed inside 222-S Analytical Laboratory (222-SAL) where the pipe exits the building. The other detector will be located at the 219-S Waste Handling Facility (219-S). Any leak can be identified as either being in 222-SAL or in the buried pipe going to 219-S.

Both the 2 inch inner and 4 inch outer pipe are designed for 30 year life. The pipes are to be fabricated using Schedule 40S, ASTM A 312, Grade TP 304L stainless steel. The estimated corrosion rate obtained from NACE standard tables will be approximately 0.001 inch per year. This is based on

the pipe. The 2 inch primary pipe has a 0.154 inch thick wall and the 4 inch secondary has a 0.237 inch thick wall. Based on corrosion alone the primary pipe should last $0.154/0.001 = 154$ years without a leak and the secondary pipe will have a life of $0.237/0.001 = 237$ years without a leak.

Engineers at 222-S indicate that over the previous 40 years leaks have occurred using the same pipe materials. However, the leaks have occurred mostly at elbows and weld joints. Weld failure probably occurred due to less stringent quality assurance standards than those acceptable today. Also during the period REDOX was operating, a lot of debris was washed down the drains. This caused puddling to occur as the debris settled out of the slow moving fluid. Today, 222-S laboratory procedures restrict the practice of washing solids into the drains. Waste reduction programs, on the other hand, encourage using as little flush water as practicable which compounds the settling problem. The ideal system would be a continuously flowing collection system which would continuously wash the pipe of any solids and concentrations of chemicals which cause corrosion.

There has been much discussion about why there is so much conservatism built into the system. The waste generated and dumped into the drain will be a nonhomogeneous assortment of chemicals used by chemists performing tests on various radioactive waste forms. However, this waste will be only beaker or test tube quantities. These small volumes will then be flushed down the drain by washing the drain using water from a small low pressure tube (most are 1/4 inch). The drain lines from the various glove boxes and hot cells are 1 inch to 2 inch diameter and feed into the main 2 inch header that is sloped a minimum of 1/8 inch per foot inside 222-SAL and 1/4 inch per foot outside 222-SAL toward 219-S. Any liquid will drain by gravity to 219-S. The waste plus flush water is estimated to not exceed 50,000 gallons per year. If the 222-S only worked 5 days per week for 8 hour per day the flow rate would be 24 gallons per hour or 0.4 gallons per minute. The 222-S actually works 24 hours per day so the average flow rate is 0.133 gallons per minute. The flow actually is sporadic. As different experiments are performed, the flow will come from different sources at different times each day, month, or year. As an example, the 219-S, tank 103, received zero gallons over the weekend but received 5 gallons on Tuesday and 9 gallons on Thursday of the following week. The 219-S, Tank 101, collected 10 gallons Monday, 30 gallons Tuesday, 40 gallons Wednesday, 20 Friday and 60 gallons over last weekend.

The significant part about the sporadic flow rate is that there is never enough pressure or flow to cause a significant leak. Mr. Moses Jaraysi of the State of Washington Department of Ecology agreed that the WAC appears to have been written for pressurized piping systems. This system is strictly gravity drain. Any leak that occurs in this system will be the size of a drip as a pin hole corrosion opening expands large enough to enable the liquid to overcome surface tension and wet the outside of the primary pipe or form a droplet of fluid. This would then drop to the secondary containment where it would have to wet this pipe and overcome surface tension as it travels to the leak detector. The leak detector is a continuity probe inserted vertically into a short horizontal section of 2 inch Schedule 40 pipe connected to the bottom of the 4 inch Schedule 40 encasement by a drop leg. A normally closed valve forces leakage to accumulate below the detector. A minimum of

0.02 gallons, about 1/4 inch, of liquid is required at the leak detector to activate the detector. Should the detector activate it will energize a specific leak detector annunciator in 219-S which in turn will activate a general leak detector annunciator in 222-SAL control room. The operator in 222-SAL control room will see the general alarm. Operations will then identify which specific leak detector had been activated at the 219-S. Leakage collected in the encasement can be disposed of in two ways. The detectors located in 222-SAL are at the low point in the 222-S drain piping. There is a 2 inch pipe adjacent to each detector which can be used to facilitate draining the leakage into a drum or carboy. The drum will then be transported to the Double-Shell Tank System for disposal. At 219-S the same detector/valve arrangement is coupled directly to the same tank as the primary drain line. To summarize, the form of leak discussed above could not be detected within the 24 hour regulatory time limit. However, this leak would be determined long before it corrodes through the secondary pipe. Any sizable leak will be detected within minutes and action will be initiated to correct the problem. In both cases there will be no threat of contamination leaking to the environment.

Consideration has been given to installing continuous leak detection cable along the bottom of the containment pipe. This is impractical in light of the postulated type of leak and the design life of the pipe. Continuous leak detection systems also are susceptible to maintenance problems and are a source of many erroneous signals.

To summarize, corrosion rates of pipe material, addition of secondary containment, administrative controls and laboratory procedures, cathodic protection, an asphalt covering which will prevent moisture from reaching the buried pipe (hence reducing the risk of external corrosion to the secondary containment), prohibit the need for continuous leak detection any more sophisticated than that proposed by the project.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

June 17, 1997

Mr. Thomas K. Teynor
U.S. Department of Energy
P.O. Box 550, MSIN S7-55
Richland, WA 99352

Dear Mr. Teynor:

Re: Request for Waiver of Secondary Containment Requirements for Sections of Drain Line from the Inductively Coupled Plasma Emission Spectrometers to the 219-S Waste Handling Facility

This letter notifies you that the Washington State Department of Ecology (Ecology) grants the waiver for secondary containment requested in the above-referenced letter by the U.S. Department of Energy (USDOE). The reasons for Ecology's waiver are:

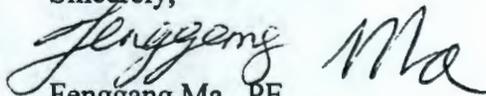
1. It is highly unlikely that a leakage could occur in the designated location of the waiver under current operational conditions.
2. The adverse impacts to operations in the 222-S Analytical Laboratory does not justify the installation of the 21/2-inch-long pipeline using currently available technologies.

Thus, if either of following conditions occurs, Ecology may reverse the waiver and require the installation of the secondary containment:

1. When operational procedures and/or conditions change substantially in the vicinity of the room 1-J of 222-S Analytical Laboratory, such as the volume of hazardous and/or mixed wastes drained through these pipe segments are substantially increased; or
2. When new and/or innovative technologies become available such that the difficulties to install the pipe segments are substantially decreased.

If you have any questions or need further help, feel free to call me at (509) 736-3035 or Alisa Huckaby at (509) 736-3034.

Sincerely,


Fenggang Ma, PE
Nuclear Waste Program

FM:rb

cc: R. M. Gordon, USDOE
M. A. Cahill, RFSH
L. F. Perkins, RFSH

J. A. Winterhalder, RFSH
Mary Lou Blazek, ODOE
Administrative Record H6-08

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
T. E. Teynor, RL (J. F. Williams Jr., 376-4782)	R. E. Skinnerland, Ecology	RFSH-9752586D Incoming 9700271

Subject: REQUEST FOR WAIVER OF SECONDARY CONTAINMENT REQUIREMENTS FOR SECTIONS OF DRAIN LINE FROM THE INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETERS TO THE 219-S WASTE HANDLING FACILITY

INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		President's Office	H5-20	
		<u>Fluor Daniel Hanford, Inc.</u>		
		C. G. Mattsson	N1-26	
		S. M. Price	H6-23	X
		F. A. Ruck	H6-23	
		B. D. Williamson	B3-15	
		<u>Fluor Daniel Northwest, Inc.</u>		
		J. J. Beyer	S2-54	X
		F. A. Hardy	S2-54	
		C. R. Zook	G3-17	X
		<u>Rust Federal Services of Hanford Inc.</u>		
		R. C. Bowman	H6-24	
		M. A. Cahill	T6-06	
		R. H. Engelmann	H6-26	
		A. G. King	T6-03	
		L. F. Perkins, Jr.	T6-14	
		D. L. Renberger	T3-03	
		K. S. Tollefson	T6-12	X
		D. B. Van Leuven	H6-10	
		G. J. Warwick	T6-12	X
		J. F. Williams Jr.	H6-24	X
		J. A. Winterhalder	H6-21	
		M. T. Yasdick	H6-10	
		RCRA File	H6-23	X
		JFW File/LB	H6-22	X



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

APR 09 1997

97-ASP-004

Mr. Ron E. Skinnarland
State of Washington
Department of Ecology
200 Area Section
1315 West Fourth Avenue
Kennewick, Washington 99336

Dear Mr. Skinnarland:

**REQUEST FOR WAIVER OF SECONDARY CONTAINMENT REQUIREMENTS FOR
SECTIONS OF DRAIN LINE FROM THE INDUCTIVELY COUPLED PLASMA
EMISSION SPECTROMETERS TO THE 219-S WASTE HANDLING FACILITY**

The U. S. Department of Energy, Richland Operations Office (RL) is requesting the State of Washington, Department of Ecology (Ecology) formal approval to waive the secondary containment requirements for 2 1/2-inch-long vertical sections of pipeline within the concrete floor of Room 1-J Inductively Coupled Plasma Emission Spectrometers (ICP), located in the 222-S Analytical Laboratory.

On March 13, 1996, a meeting was held with Ecology, RL, Fluor Daniel Hanford, and ICF Kaiser Hanford (KEH) concerning this subject. In the meeting, A. D. Huchaby and F. Ma (Ecology), agreed that chipping out the concrete floor to install 2 1/2-inch-long vertical secondary piping was not necessary and not cost effective. Secondary containment piping was installed in Room 1-J from the ICPs to the concrete floor and below the concrete floor to the 219-S Waste Handling Facility. Enclosed is the Ecology requested KEH prepared justification along with an applicable drawing of the secondary containment modifications to Room 1-J.

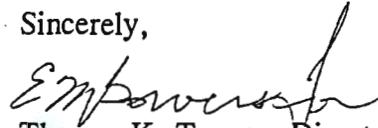
APR 09 1997

Mr. Skinnerland
97-ASP-004

-2-

Please direct any questions you or your staff may have regarding this waiver request to Roger Gordon, of my staff, on (509) 372-2139.

Sincerely,


Thomas K. Teynor, Director
Waste Programs Division

WPD:RMG

Enclosure

cc w/o encl:

M. A. Cahill, RFSH

A. D. Huckaby, Ecology

F. Ma, Ecology

L. F. Perkins, RFSH

J. A. Winterhalder, RFSH



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

October 10, 1997

Mr. Thomas Teynor, Director
Waste Programs Division
P.O. Box 550, MSIN: S7-55
Richland, WA 99352

Dear Mr. Teynor:

Re: Request for Approval to Stage Out of Service Ancillary Drain Piping in the 222-S Laboratory Service Tunnels (WA7890008967) (TSD: TS-2-1)

The Washington State Department of Ecology (Ecology) has received and reviewed the U.S. Department of Energy's (USDOE) above-referenced request dated July 3, 1997. The letter accurately documents the agreements made regarding the staging of high dose drain piping that was removed from service in a shielded staging area within the T8 tunnel. The following items hereby outline the agreements, as well as their status:

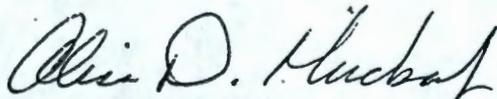
1. The Engineering Control Notice (ECN) was issued against the facility drawings. This documents the location and configuration of the staging area.
2. The piping will be included in the 222-S Laboratory Complex closure plan, which will be addressed as part of the revised 222-S Laboratory Complex Part B Permit Application.
3. Prior to project completion, signs will be installed to clearly identify the purpose for which the area is being used. In addition, the postings require the facility manager's approval to add or remove any materials. The requirement to obtain the facility manager's approval is also included on the ECN.
4. An inventory has been developed and will be maintained for aiding in the closure of the facility. A retrieval record of this package will be developed and the location identified on the as-built drawing.
5. A letter dated July 3, 1997, documenting the previously listed agreements was generated.

Mr. Thomas Teynor
October 10, 1997
Page 2

In addition to the above agreements, Ecology requests the existence of the solid waste management unit (SWMU) be formally tracked by the Waste Information Data System (WIDS) (or any such equivalent system used to track Hanford Site SWMUs).

If you have any questions regarding this letter, please contact me at (509) 736-3034.

Sincerely,



Alisa D. Huckaby, S Plant Project Manager
Nuclear Waste Program

AH:sb

cc: Robert P. (Paul) Carter, USDOE
Cliff Clark, USDOE
Roger Gordon, USDOE
Russ Bisping, FDH
Sue Price, FDH
J.J. Beyer, FDNW
Mike Cahill, WMFSH
R.H. Engelman, WMFSH
Mary Lou Blazek, ODOE
Administrative Record: 222-S Laboratory Complex



9850850

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

JUL 23 1997

97-ASP-014

Mr. Ron E. Skinnarland
State of Washington
Department of Ecology
200 Area Section
1315 West Fourth Avenue
Kennewick, Washington 99336

RECEIVED

JUL 26 1997

J. A. WINTERHALDER

Dear Mr. Skinnarland:

REQUEST FOR APPROVAL TO STAGE OUT OF SERVICE ANCILLARY DRAIN PIPING IN THE
222-S LABORATORY SERVICE TUNNELS

The U.S. Department of Energy, Richland Operations Office (RL) is requesting the State of Washington, Department of Ecology (Ecology) formal approval to stage out of service ancillary drain piping in the 222-S Laboratory T8 tunnel.

On April 29, 1997, a meeting was held with representatives of RL, Ecology, Waste Management Federal Services of Hanford Inc., and Fluor Daniel Northwest Inc., to discuss several options for proceeding with Project 93L-EWW-087, "222-S Radioactive Liquid Waste Line Replacement." A proposal was presented to Ecology, which entailed the staging of high dose drain piping that was removed from service in a shielded staging area within the T8 tunnel until facility closure. Ecology (Alisa Huckaby and Fenngang Ma) concurred with the proposal as a means to maximize use of the available funding in obtaining a fully compliant drain system. An Engineering Change Notice (ECN) would be the mechanism used to document and control the configuration of the out-of-service piping. It was agreed that a letter documenting this agreement would be generated.

The following rationale is provided as a basis for this proposal:

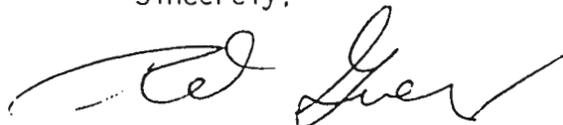
- The out-of-service piping is highly radioactive and poses a significant radiological exposure hazard to construction workers.
- It would be more cost effective, ALARA and more efficient to dispose of this pipe during closure of the facility, where economy of scale can be realized and advanced technologies can be utilized.
- The piping can be secured and shielded to limit exposure to workers during construction and operations personnel in the future.
- The savings in schedule, cost and radiation exposure would increase the likelihood of obtaining full compliance with WAC 173-303-640

There was discussion as to where the piping would be staged and how it would be documented and controlled. The following items outline the agreement:

- The draft ECN, which was reviewed at the meeting, would be issued against the facility drawings. This would document the location and configuration of the staging area.
- This piping will be included in the 222-S facility closure plan, which is part of the revised 222-S Part B Permit Application.
- Signs will be installed to clearly identify what this area is being used for and require facility manager approval to add or remove any materials. This requirement is included on the ECN.
- An inventory would be developed and maintained for aiding in the closure of the facility. A retrieval record of this package will be developed and the location identified on the as-built drawing.
- A letter documenting this agreement would be generated.

ECN W-087-76 has been issued and a copy is attached for your information. Please direct any questions you or your staff may have to Roger Gordon, of my staff, on 372-2139.

Sincerely,



for Thomas K. Teynor, Director
Waste Programs Division

Attachment

cc w/att:

A. D. Huckaby, Ecology
F. Ma, Ecology

cc w/o att:

EDMC, H6-08
J. J. Beyer, FDNW
M. A. Cahill, WMFSH
R. H. Engelmann, WMFSH
R. Jim, YIN
D. Powaukee, Nez Perce Tribe
S. M. Price, FDH
K. S. Tollefson, WMFSH
J. Wilkinson, CTUIR
J. F. Williams Jr., WMFSH
J. A. Winterhalder, WMFSH
97-ASP-014

DISTRIBUTION COVERSHEET

Report Name: Meeting Minutes: 222-S Laboratory Secondary
Containment Upgrades - Project W-087/W-178 Status
and Issue Clarification

Date: 3/13/98

Name	MSIN	Name	MSIN
J. J. Beyer	G3-17		
M. A. Cahill	T6-06		
R. P. Carter	S7-55		
P. K. Clark	S7-55		
C. E. Clark	A5-15		
L. D. Goodwin	T6-04		
A. D. Huckaby	B5-18		
L. F. Perkins	T6-14		
A. R. Sherwood	H6-26		
D. M. Thornton	T6-20		
K. S. Tollefson	T6-12		
S. J. Turner	T6-14		
G. J. Warwick	T6-12		
J. F. Williams	H6-24		
J. A. Winterhalder	H6-21		

I do not have a need for this report. Please remove me from distribution.

Please add the following person to distribution: _____

Return to:

Mr. Beyer and Mr. Cahill showed Ms. Huckaby a photograph of a valve in the T-8 tunnel that they propose leaving installed for purposes of flushing the new process lines to lower radiation dose (Attachment 2). The new drain header is gravity-feed only, slopes away from the valve location, and leaves approximately 2" of the pipe (which is normally empty) without secondary containment. This section of pipe is located upstream of the normal flow and would therefore have limited contact with waste during routine operations. The potential exists for high-radiation dose residual solids from laboratory operations (e.g., tank farm samples from hot cells) to settle in the line, resulting in a significant increase in dose in the area. Should this occur, the process lines would be flushed via the valve. Experience has shown the benefit of being able to flush the line for dose reduction. The valve would provide an access point for pipe cleaning which would be of value for maintenance. Ms. Huckaby asked what sort of secondary containment, if any, would be provided. Mr. Cahill stated that because the potential for a leak was so small, none was planned and that the very low potential for any type of failure is far outweighed by the value of having this flush port available. It was concluded that concurrence would be sought from the independent qualified registered professional engineer (IQRPE) documenting the "value" versus "risk" in the assessment. Ms. Huckaby agreed with the recommendation, pending concurrence of the IQRPE in the assessment.

Annual Leak Test/Tank Integrity Assessment - The requirement to perform an annual leak test and a tank integrity assessment was discussed. Annual leak tests have not been performed since the start of construction for the W-087 Project. However, the 222-S Laboratory records daily tank liquid levels and alarm information on the daily operating record. Tanks 101 and 102 are scheduled to be out-of-service in the January/February, 1998 timeframe, while tank 103 will be in-service for approximately one more year. Ms. Anna Sherwood, Waste Management Hanford, proposed that daily 222-S Laboratory operating records, be certified by a IQRPE, if possible, in lieu of performing a 24-hour leak test (tank 103 is currently at its maximum operating level). Ms. Alisa Huckaby requested copies of the meeting minutes where this issue was initially discussed and agreement reached between Ecology and RL that a tank integrity assessment would not be required until completion of secondary containment upgrades (Project W-178). Attachment 3 is a copy of the requested meeting minutes. Project W-178 will perform a visual inspection, via video camera, of the inside of Tanks 101 and 102. A hydrotest may also be performed, at maximum design capacity, for these two tanks to assist the IQRPE in certifying the integrity of the tanks. If the hydrotesting is performed, liquid waste from other tanks will be used to the extent possible, in order to minimize the addition of raw water and creation of additional waste to complete this task.

Residual Sump Volumes/Low-Level Leak Detector Location for the 219-S System Tanks - The low-level leak detectors for the P6, P7, P8, and P9 Sumps which are part of the 219-S System must be raised to prevent the drain back from the sump drain line causing a continuous low-level alarm. Mr. Cahill provided a "Sump Volume Table" which provided estimated residual volumes (in gallons) remaining in each sump after pumping, estimated volumes in each sump at low-level, mid-level, and high-level leak detection. The table is summarized below:

Sump Volume Table

Sump Number	Vol. after pumping (gals)	Vol. at low level leak (gals)	Vol. at mid level leak (gals)	Vol. at high level leak (gals)
P6	0.83	1.40	6.67	No Detector.
P7	0.34	1.11	2.22	41.92
P8	0.20	0.78	3.75	4.37
P9	0.61	1.11	2.22	35.64

Ms. Huckaby agreed that proposed locations of the low-level leak detectors would be acceptable. The change in elevation of the leak detector's will be documented in the facility's revised Part B permit application.

Concurrence:

See Attachment

Ms. M. L. Greene, Department of Energy, Richland Operations Office,
Program Office

A. D. Huckaby

Ms. A. D. Huckaby, State of Washington Department of Ecology

Concurrence:

M. L. Green

Ms. M. L. Green, Department of Energy, Richland Operations Office,
Program Office

Ms. A. D. Huckaby, State of Washington Department of Ecology

Attachment 1
Ecology Approval to Stage Out of Service Ancillary Drain
Piping in the 222-S Laboratory Service Tunnels



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

October 10, 1997

Mr. Thomas Teynor, Director
Waste Programs Division
P.O. Box 550, MSIN: S7-55
Richland, WA 99352

Dear Mr. Teynor:

Re: Request for Approval to Stage Out of Service Ancillary Drain Piping in the 222-S Laboratory Service Tunnels (WA7890008967) (TSD: TS-2-1)

The Washington State Department of Ecology (Ecology) has received and reviewed the U.S. Department of Energy's (USDOE) above-referenced request dated July 3, 1997. The letter accurately documents the agreements made regarding the staging of high dose drain piping that was removed from service in a shielded staging area within the T8 tunnel. The following items hereby outline the agreements, as well as their status:

1. The Engineering Control Notice (ECN) was issued against the facility drawings. This documents the location and configuration of the staging area.
2. The piping will be included in the 222-S Laboratory Complex closure plan, which will be addressed as part of the revised 222-S Laboratory Complex Part B Permit Application.
3. Prior to project completion, signs will be installed to clearly identify the purpose for which the area is being used. In addition, the postings require the facility manager's approval to add or remove any materials. The requirement to obtain the facility manager's approval is also included on the ECN.
4. An inventory has been developed and will be maintained for aiding in the closure of the facility. A retrieval record of this package will be developed and the location identified on the as-built drawing.
5. A letter dated July 3, 1997, documenting the previously listed agreements was generated.

Mr. Thomas Teynor
October 10, 1997
Page 2

In addition to the above agreements, Ecology requests the existence of the solid waste management unit (SWMU) be formally tracked by the Waste Information Data System (WIDS) (or any such equivalent system used to track Hanford Site SWMUs).

If you have any questions regarding this letter, please contact me at (509) 736-3034.

Sincerely,

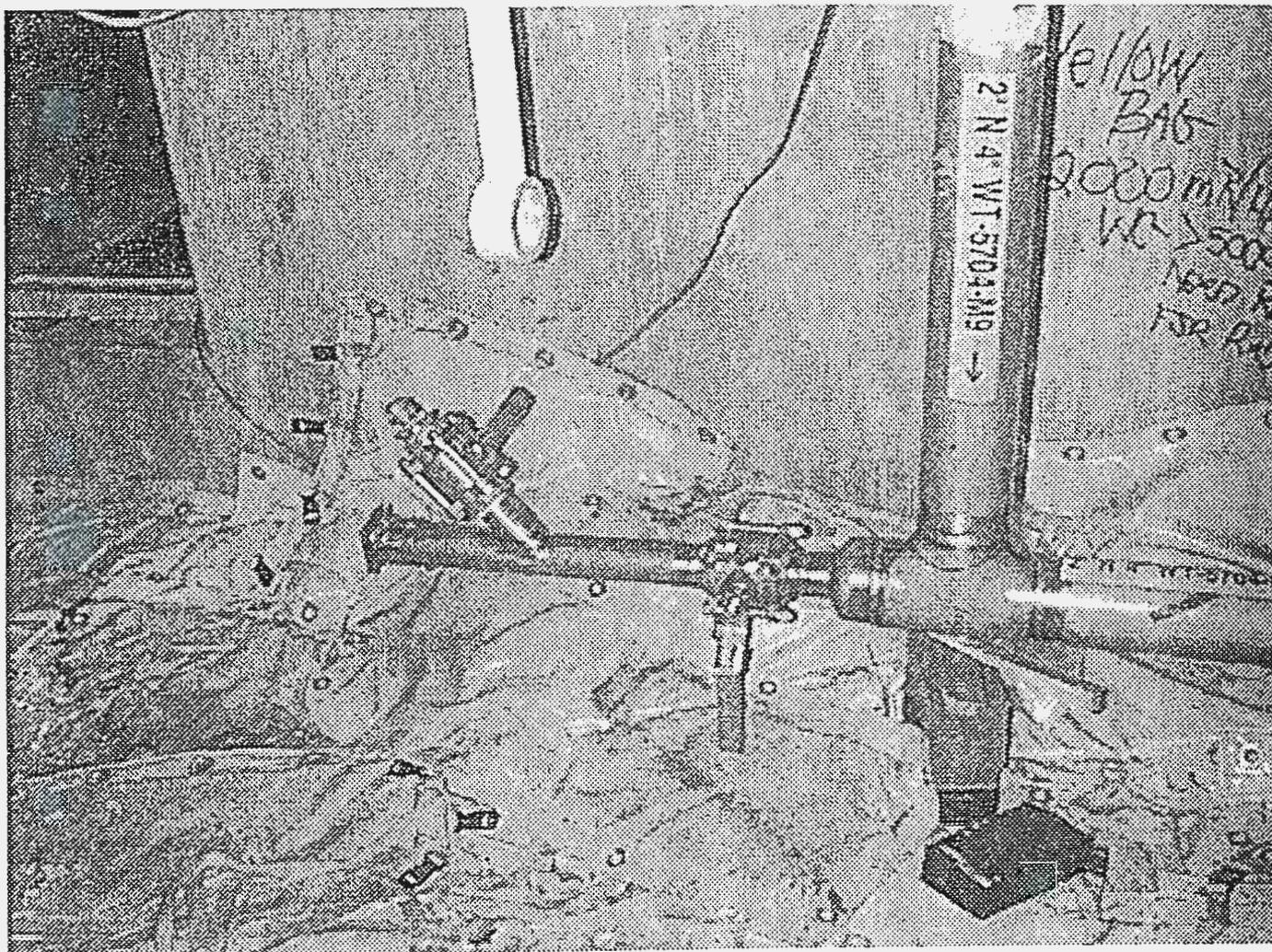


Alisa D. Huckaby, S Plant Project Manager
Nuclear Waste Program

AH:sb

cc: Robert P. (Paul) Carter, USDOE
Cliff Clark, USDOE
Roger Gordon, USDOE
Russ Bisping, FDH
Sue Price, FDH
J.J. Beyer, FDNW
Mike Cahill, WMFSH
R.H. Engelman, WMFSH
Mary Lou Blazek, ODOE
Administrative Record: 222-S Laboratory Complex

Attachment 2
Photograph of Drain Valve in T-8 Tunnel



Attachment 3
Unit Manager Meeting Minutes Dated December 12, 1994

Attachment 1

MILESTONE M-32-00
UNIT MANAGERS MEETING
2440 Stevens Center
Richland, Washington

December 12, 1994
8:00 a.m. to 10:00 a.m.

Agenda

ACCOMPLISHMENTS

- a. PFP - M-32-01-T03, Completed construction of piping upgrades between 234-Z, 236-Z and 241-Z Tank System. (Project C-031H).
- b. B Plant - M-32-07-T02, Submitted integrity assessment plan for tanks 25-1, 25-2, 24-1 and identified ancillary equipment.

SIGNIFICANT PLANNED ACTIVITIES

- a. T Plant - Provide response to October 18, 1994 Ecology inspection.
- b. DST - Conduct meeting with Ecology to establish new interim milestone.
- c. B Plant - Submit proposed target actions.

UM ISSUES

- a. PFP - Ecology's approval of compliance strategy/future interim milestone.
- b. 219-S - Budget cut impacts to Project W-087.
Annual leak test.
Integrity assessment schedules.
- c. B Plant - Proposed organic tanks target actions.

Handwritten scribbles consisting of two horizontal lines with arrows pointing left, and two stars drawn to the right of the lines.

Attachment 2

Page 1 of 2

MILESTONE M-32-00
UNIT MANAGERS MEETING
2440 Stevens Center
Richland, Washington

December 12, 1994
8:00 a.m. to 10:00 a.m.

Summary of Discussion, Agreements and Actions

ACCOMPLISHMENTS

An update on M-32-00 significant accomplishments during the last month was provided:

PFP - Project C-031H has been completed. Project C-031H is upgrading piping between the 236-Z, 234-5Z and 241-Z buildings (M-32-01-T03).

B Plant - The integrity assessment plan has been submitted to Ecology (M-32-07-T02).

SIGNIFICANT PLANNED ACTIVITIES

Significant planned activities for M-32-00 were outlined as:

T Plant - T Plant is drafting a response to Mr. R. W. Wilson's (Ecology) November 7, 1994 letter, which included a discussion on a repair of the 2706-T sump. ICF KEH is preparing an estimate for this repair.

Double-Shell Tanks (DST) - TWRS will continue to meeting with Ecology in separate meetings to address specific M-32-00/TWRS' issues and establish a new interim milestone. To date, two such meetings have been held; the first on November 10, 1994 and the second on December 8, 1994.

B Plant - B Plant is drafting the transmittal letters for their proposed organic waste tank change control package. (The proposed target actions are discussed below.)

UM ISSUES

PFP - Ecology was asked for their approval of the PFP compliance strategy (M-32-01-T02).

219-S - Mr. J. J. Beyer (WHC Projects) provided a description of budget cut impacts to Project W-178 (M-32-02-T01/tank upgrades) and Project W-087 (M-32-02-T02/line replacement). Budget impacts to Project W-178 appear to be minor if no further cuts are experienced. At current budget levels, Project W-087 would undergo an approximate 9 month schedule slippage as well as some loss in scope.

Budget cut figures are as follows:

Originally, \$8.9 million was requested.
Budget was reduced to \$3.3 million.
\$600 thousand is being held until mid-to-late FY 95.
Leaving \$2.64 million available Jan. 95.

Phase I of Project W-087, replacement of transfer lines from 219-S to 244-S, would most likely be completed. Completion is currently expected by calendar year 1995. Phase II, replacement of transfer lines within 222-S and between 222-S and 219-S, might be partially completed. The initial evaluation on this is that the transfers lines between 222-S and 219-S would be installed but not tied-in at either 219-S or 222-S, nor would work within 222-S be performed.

Summary of Discussion, Agreements and Actions

Page 2 of 2

Mr. J. L. Waite mentioned that we would need to reevaluate Phase II of Project W-087. Mr. Beyer agreed to investigate alternative to the work required within 222-S to see if 222-s' situation was similar to that of the 242-A Evaporator (in which Ecology made a determination that some modifications were not necessary at this time).

Another issue that was discussed was Project W-087's leak detection (continuous/24-hour detection). It was decided that a separate meeting would be scheduled to look into Project W-087's leak detection intervals.

Mr. Waite pointed out that we had until 110 days before the M-32-02-T02 interim milestone due date (Sept. 97) to make modifications to M32's schedule.

219-S' second topic dealt with this annual integrity test. Mr. M. J. Hall explained the situation which led up to TK-103 not being leak tested this year (TK-101 and TK-102 have been tested as scheduled). Basically, the activity of the waste within Tk-103 is too high to allow regular shipments (tanker truck shipments must meet DOT requirements for shipping). As shipments were not made at their usual quantities, remaining tank capacity needs to be used carefully. Leak testing, which is performed at 95% of the tank capacity, would introduce more liquid into the tank that would in turn increase the amount of high activity waste in the tank. The test water would then be at activity levels requiring restricted shipment quantities thereby multiplying the shipping problems at Tk-103. Once the transfer line to 244-S (Project W-087, Phase I) is completed, scheduled for Jan. 95, tanker truck shipments will not be required. 219-S expects to have a new SARP in place by mid-year 1995 under which the high activity waste can be shipped from TK-103. A new leak test will be performed at that time.

In 219-s' final topic, Mr. Hall requested a change in the 219-S tank system written integrity assessment frequency schedule. In the original assessment, 219-S stated that another assessment would be performed in three years. The three year interval was used due to the temporary use of wooden seismic supports. The tanks were later scheduled for upgrades (M-32-02-T01/completion date of Jan. 96). As an integrity assessment is required at the completion of the upgrade project, Mr. Hall proposed that the "three-year" assessment be postponed until then.

Action: Mr. Hall and Ms. Sherwood will schedule a separate meeting with Ecology to discuss Project W-087 leak detection.

Agreement: Mr. Wilson (Ecology) agreed with 219-S' plans to perform TK-103's leak test once the new SARP, expected mid-year 1995, is in place.

Agreement: Mr. Wilson (Ecology) agreed with 219-S' schedule change for future IAR (perform next IAR upon completion of upgrade projects W-178 and W-087).

B Plant - Mr. S. E. Killoy provided a draft copy of the proposed organic waste tank target actions to Ecology. During his review of the target actions, Mr. Killoy pointed out that proposed target action M-32-07-T04 would provide a non-pressurized "hold" or "static" leak test as the integrity test. This type of test, valid for liquid levels at or below the test levels used, would be acceptable as no further additions to the organic waste tanks would occur after the test.

During discussion on the second proposed target action, M-32-07-T05, Mr. Killoy explained that performing a chemical separation (caustic strike) of radionuclides from the waste was required to get characterization data to support an engineering study on the disposition of the organic waste. He pointed out that Treatment-by-Generator provisions did not apply as the organic waste tanks are permitted as a Treatment, Storage, and Disposal unit.

Mr. Killoy mentioned that he was preparing a letter to accompany the proposed target actions that would request Ecology's approval, by January 1995, to initiate the caustic strike prior to the proposed target actions approval.

Action: Mr. Killoy is to prepare a proposed target action transmittal letters in which he will request Ecology's approval, by January 1995, to initiate the caustic strike.

Meeting Minutes
Interim Status Dangerous Waste Tank Systems
Hanford Federal Facility Agreement and Consent Order
Milestone M-32-00

UNIT MANAGERS MEETING
2440 Stevens Center
Richland, Washington

December 12, 1994
8:00 a.m. to 10:00 a.m.

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Unit Managers Meeting (UMM).

M. Greager
M. Greager, Contractor Representative, WHC

Date: 1/27/95

S. Kube
S. Kube, Unit Manager, RL

Date: 1/31/95

Not Present
J. Oates, Unit Manager, EPA Region 10

Date: _____

W. Wilson
W. Wilson, Unit Manager, Washington State Department of Ecology

Date: 1/31/95

Purpose: Discuss current status and issues related to Milestone M-32-00.

Meeting minutes are attached. The minutes are comprised of the following:

- Attachment 1 - Agenda
- Attachment 2 - Summary of Discussion, Agreements and Actions
- Attachment 3 - Attendance List
- Attachment 4 - Reference Document List
- Attachment 5 - Milestone M-32-00

T6-03



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

February 11, 1999

Mr. George H. Sanders, Administrator
Hanford Tri-Party Agreement
U.S. Department of Energy
P.O. Box 550
Richland, Washington 99352

Dear Mr. Sanders:

Re: Change Control Form M-32-98-01, 219-S Construction Upgrade Schedule Revision,
Interim Milestone M-32-02

This letter is in response to your letter (99-EAP-140) dated January 28, 1999. Your letter transmitted a Tri-Party Agreement (TPA) Milestone change package to revise interim milestone M-32-02 for the upgrade of the tank system in the 219-S facility.

Washington State Department of Ecology (Ecology) staff have reviewed your letter and change package. In response, we recommended to our Program Manager, Michael Wilson, that he approve the referenced change package. Enclosed is the approved change package signed by Ecology.

Ecology also concurs with your request to delay the final closure of Tank 103 to coincide with the final closure of the 219-S facility. The immediate removal of this tank, as originally required by this milestone, will have adverse impact on the environment and on the critical operation of the 219-S tank system. You are requested to formally inform Ecology of the completion of all field construction activities aimed at isolating Tank 103.

If you have any questions regarding this letter, please contact me at (509) 736-3016, or Ms. Brenda Becker-Khaleel at (509) 736-3003.

Sincerely,

Moses Jaraysi, Waste Management Project Manager
Nuclear Waste Program

MJ:sb
Enclosure

cc: Jeff Hertz, FDH
Janice Williams, FDH
John Winterhalder, FDH
William Adair, DESH
Michael Cahill, WMH
Robert Giroir, WMH

Ana Sherwood, WMH
J.R. Wilkinson, CTUIR
Donna Powaukee, NPT
Russell Jim, YIN
Mary Lou Blazek, OOE
Administrative Record



M-32-98-02

Change Control Form

January 20, 1999

Do not use blue ink. Type or print using black ink.

Originator

Helen E. Blason

Phone

(509) 376-1366

Class of Change

I - Signatories

II - Executive Manager

III - Project Manager

Change Title

219-S Construction Upgrade Schedule Revision (Interim Milestone M-32-02)

Description/Justification of Change

This change request revises the due date of Tri-Party Agreement interim milestone M-32-02 and target date M-32-02-T03 as follows:

Note: ~~Strikethrough~~ text indicates text to be removed and [REDACTED] text indicates text to be added.

M-32-02 Complete 219-S Tank Interim Status Actions ~~April 30, 1999~~

M-32-02-T03 Complete Construction Upgrades to 219-S Facility (Project W-178). ~~April 30, 1999~~

The interim milestone description and deliverable do not change.

Continued on Page 2 of 2.

Impact of Change

Approval of this change request will result in a schedule revision for interim milestone M-32-02 and for target date M-32-02-T03.

Affected Documents

Hanford Federal Facility Agreement and Consent Order, Action Plan, Appendix D, as amended.

Approvals

Jay Augusteby Project Manager 1/28/99 Approved Disapproved
DOE Date

Miss L. C. L. Ecology 2/11/99 Approved Disapproved
EPA Date

Description/Justification of Change (cont'd)

Phase II of the 219-S compliance upgrades could not start until the liquid waste inventory in Tanks 101 and 102 was removed. This was scheduled to occur in January 1998. However, resolution of polychlorinated biphenyl (PCB) related issues and preparing for Mega Rule requirements in the January 1998 through August 1998 time frame delayed the waste removal until August 1998. The June 30, 1999 date reflects the revised project completion date.

Completion of this interim milestone will include the removal of Tank 103 from service. The Tank 103 waste inventory will be transferred to another tank. A small residual heel will remain (<1% of tank capacity). Tank 103 will be isolated and the heel allowed to evaporate to dryness. All service piping will be removed and a pressure relief valve installed. RCRA closure of Tank 103 will not take place until RCRA closure of the 219-S Waste Handling Facility

After completion of Project W-178, the 219-S Waste Handling Facility will contain a compliant dangerous waste tank system. The existing 219-S Sample System will not be upgraded. An evaluation of the system has been performed and the system found to be adequate for future use.

Waste Management Federal Services of Hanford	DOCUMENT TRANSMITTAL	Transmittal No. W-178-021
Date: May 27, 1999		Page 1 of 1
To: Distribution	From: Mike Cahill 373-3715 <i>MA Cahill</i>	
Project/Work Order Number: Project W-178		
Project/Work Order Title: 219-S Secondary Containment Upgrade		
Subject: Ecology Interface Meeting Minutes for April 29, 1999		

Distribution:

<u>NAME</u>	<u>MSIN</u>	<u>W/ATT</u>	<u>NAME</u>	<u>MSIN</u>	<u>W/ATT</u>
Correspondence Control	A3-01	X	A. C. McKarns/DOE-RL	A5-15	
B. Becker-Khaleel/WDOE	B5-18		D. S. McShane/FDNW	G3-17	
R. L. Bisping/FDH	N1-26		F. R. Miera/DOE-RL	A7-75	
E. M. Bowers/DOE-RL	S7-55		A. G. Mishko/FDH	H6-06	
M. A. Cahill/WMH	T6-03	X	R. E. Piippo/FDH	A5-15	
R. P. Carter/DOE-RL	S7-55		A. R. Sherwood/WMH	H6-26	
P. K. Clark/DOE-RL	S7-55		G. L. Sinton/DOE-RL	S7-55	
M. S. Collins/DOE-RL	A5-18		J. C. Sonnichsen/WMH	H6-26	
J. L. Hensley/WDOE	B5-18		J. F. Williams/WMH	H6-24	
M. F. Jarvis/DOE-RL	A5-15		J. A. Winterhalder/WMH	H6-21	
K. M. Leonard/WMNW	T6-14		Project Files	R1-29	X
Administrative Record: TPA Milestone M-32-00: TS-2-1[Care of EDMC, LMSI]				H6-08	X

Attached Are	Purpose	Comments	Please
<input type="checkbox"/> Prints	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Preliminary	<input type="checkbox"/> Comment
<input type="checkbox"/> Specifications	<input type="checkbox"/> Action	<input type="checkbox"/> Unchecked	<input type="checkbox"/> Approve
<input type="checkbox"/> Travelers	<input type="checkbox"/> Signature	<input type="checkbox"/> Checked	<input type="checkbox"/> Destroy Previous Issue
<input type="checkbox"/> Appr. Data	<input type="checkbox"/> Update	<input type="checkbox"/> Final	<input type="checkbox"/> Return Previous Issue
<input type="checkbox"/> Forms	<input type="checkbox"/> Review	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Note Revision
<input type="checkbox"/> Library Material	<input type="checkbox"/>	<input type="checkbox"/> Working Copies	<input type="checkbox"/> Note Holds
<input type="checkbox"/> Procedures	<input type="checkbox"/>	<input type="checkbox"/> Controlled Copies	<input checked="" type="checkbox"/> File
<input checked="" type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/> Other:	<input type="checkbox"/>

Document Numbers, Titles, and/or Comments

Approved meeting minutes from April 29, 1999 meeting with Department of Ecology