

MEETING MINUTES

Subject: 222-S Laboratory Secondary Containment Upgrades - Project W-178 Status

TO: DISTRIBUTION

BUILDING Ecology Office, Kenn. WA

FROM: K. S. Tollefson, WMH

CHAIRMAN M. A. Cahill, WMH

Department-Operation-Component	Area	Shift	Date of Meeting	Number Attending
RL Waste Program Division	Kenn.	Day	06/04/98	6

Attendees

M. A. Cahill, WMH	T6-06
P. K. Clark, RL	S7-55
A. D. Huckaby, Ecology	B5-18
J. L. Hensley, Ecology	B5-18
D. S. McShane, FDNW	G3-17
K. S. Tollefson, WMH	T6-12

1. Current Project W-087/W-178 Status

Mr. M. A. Cahill provided a written summary of the current status of both Project W-178 and W-087 (Attachment 1).

Action:

Paula Clark to assure RL does not have issues with FDH capital vs expense determination. This action was completed on 6/5/98 with no requirement for review of determinations by RL.

2. Tank Integrity Assessment

Ms Alisa Huckaby introduced Mr. Jerry Hensley, Ecology to attendees and explained that he would be providing engineering support for Ecology.

M. A. Cahill said the project team had met with the new IQRPE for Project W-178, Mr. Jim Devine. Mr Devine suggested looking for possible microbial corrosion related to the water jackets. Mr. McShane said this issue would be reviewed as part of the integrity assessment.

Mr. McShane provided a history of Tanks 101 and 102. The tanks were manufactured in 1943 for use at U Plant but were never installed. They were installed at the 222-S Laboratory in 1951. He said that in 1987, an engineering evaluation was performed on the tanks. The evaluation included 15-18 ultrasonic test (UT) shots per tank. In 1990, a full integrity assessment was performed. This assessment included a structural analysis, including seismic load. It was found that there was no lateral restraint at the top of the tanks. The current evaluation will determine how much tank life is left. The evaluation will include visual inspection, and UT in much greater detail than the earliest evaluation. He explained that each tank surface will be divided into 6" squares. UT will be performed on up to 60 randomly



selected squares per tank). At least five UT shots will be taken per square. The shots in a particular square will be averaged to determine the thickness for that square. The second part of the evaluation will include UT/visual of the cooling jackets and any signs of microbial corrosion. The inspection will include drilling of holes in the water jacket to determine if water was ever used. Upon completion of the inspection (UT/Visual) of the exterior of the tanks, and prior to being removed from the pit, the exterior of the tanks will be sprayed with an "instacote" type coating.

Mr. Cahill said that as soon as the integrity assessment plan is reviewed, a copy will be transmitted to Ecology for information.

Action:

Mr. Cahill provide copy of plan to RL for transmittal to Ecology.

3. 219-S Sample System

Mr. Cahill described the three options evaluated. Attachment 2 includes a plan view of the 219-S system and includes hatched areas representing areas where the sample line would be in concrete.

Actions:

- 1) Dave McShane/Larry Goodwin provide descriptions for each of three options considered and used as basis for rough order magnitude estimates. This information is to be provided to RL (Paula Clark) for ccmail transmittal to Ecology. Due date is 6/18/98.
- 2) Dave McShane/Mike Cahill provide technical evaluation of each option. This evaluation shall include a discussion of technical benefits and risks. This information is to be provided to RL (Paula Clark) for ccmail transmittal to Ecology. Due date is 6/18/98.
- 3) Paula Clark to transmit information from 1) and 2) above to Ecology via ccmail.
- 4) Alisa Huckaby/Jerry Hensley to provide RL with waiver from WAC 173-303 secondary containment requirements or negotiated option based on RL submittal of option descriptions and evaluation.

4. Proposed Tank 103 Isolation Plan

Ms. Tollefson emphasized that the Tank 103 plan is not a closure or partial closure plan. The isolation steps are being performed solely for safety/vulnerability reasons. Closure of Tank 103 in accordance with WAC 173-303 will occur when the entire 219-S system is closed. However, the isolation steps and interim configuration of Tank 103 will be included with the final 222-S Part B permit.

- (a) Fill tank 103 to 100% operating capacity and agitate
Collect sample
Perform the following standard suite of field screen tests:
 - Oxidizer
 - pH
 - Sulfide
 - Cyanide
 - PeroxideAdditional parameters could be added based on results of initial field screening.
Decision Point -
 - If any field screen test is positive, proceed to step (b)
 - If all field screen tests are negative, drain waste water to Tank 102 and proceed to step (d)
- (b) Fill tank 103 to 50% of operating capacity and agitate
Collect Sample
Repeat field screen tests identified in (a) above that tested positive
Decision Point -
 - If any field screen test is positive, proceed to step (c)
 - If all field screen tests are negative, drain waste water to Tank 102 and proceed to step (d)
- (c) Fill to just above agitator line, agitate and dispose of waste water to Tank 102. A small residual heel of approximately 10 gallons will be left. Proceed to step (d).
- (d) Disconnect transfer lines and install blind flanges.
- (e) Disconnect tank instrumentation and install blind flanges.
- (f) Disconnect tank services (caustic, sample and vessel vent) and install blind flanges.
- (g) Disconnect agitator services (power and lubrication).
- (h) Install pressure relief valve (set at low pressure, e.g., 10 psi) as additional safety precaution.

Action:

Jay Warwick to provide courtesy copy to RL for transmittal to Ecology for review/comment.

5. Project Logic Sequence - Post Restart

Mr. Cahill explained the planned project logic after restart (Attachment 3).

Mr. Cahill explained that the current project baseline includes:

Tank 101 - compliant secondary containment and agitator installation only. Original baseline included backup sample/batching capability.

Tank 102 - Compliant secondary containment, and full sampling and batching capability.

Tank 103 - Isolated from remainder of 219-S System.

Tank 104 - Already compliant with Washington Administrative
(WAC) 173-303 tank system requirements.

Concurrence:

P. K. Clark

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

A. D. Huckaby 9-11-98

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

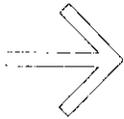
Ecology Status Meeting June 4, 1998

Project W-178 “219-S Secondary Containment Upgrades

- All Preparatory activities leading to tank cleanout have been completed.
- Project activities were curtailed on April 16th to preserve funding until the 219-S tanks can be emptied. As a result of the work stoppage, the majority of the FDNW crew was laid off. It will take 30 days to rehire workers, mobilize and restart work.
- The decision date for restart has slipped from May 15th to June 19th. Construction would now resume on July 20th. The slip severely impacts the ability to meet the TPA milestone.
- The existing budget is inadequate to complete the project. Sources for meeting the funding shortfall are being explored.
- A letter to WDOE is being prepared to formalize the communications on W-178 status.

Project W-087 “222-S Radioactive Liquid Waste Line Replacement”

- Project underruns will be applied to the W-178 funding shortfall
- The “Insta-Cote” floor coating for T7/T8 will not be installed as part of the project. A bid for this work will be sought as a workscope option in the W-178 proposal. However, the work would have to be funded as a 222-S Operations activity.

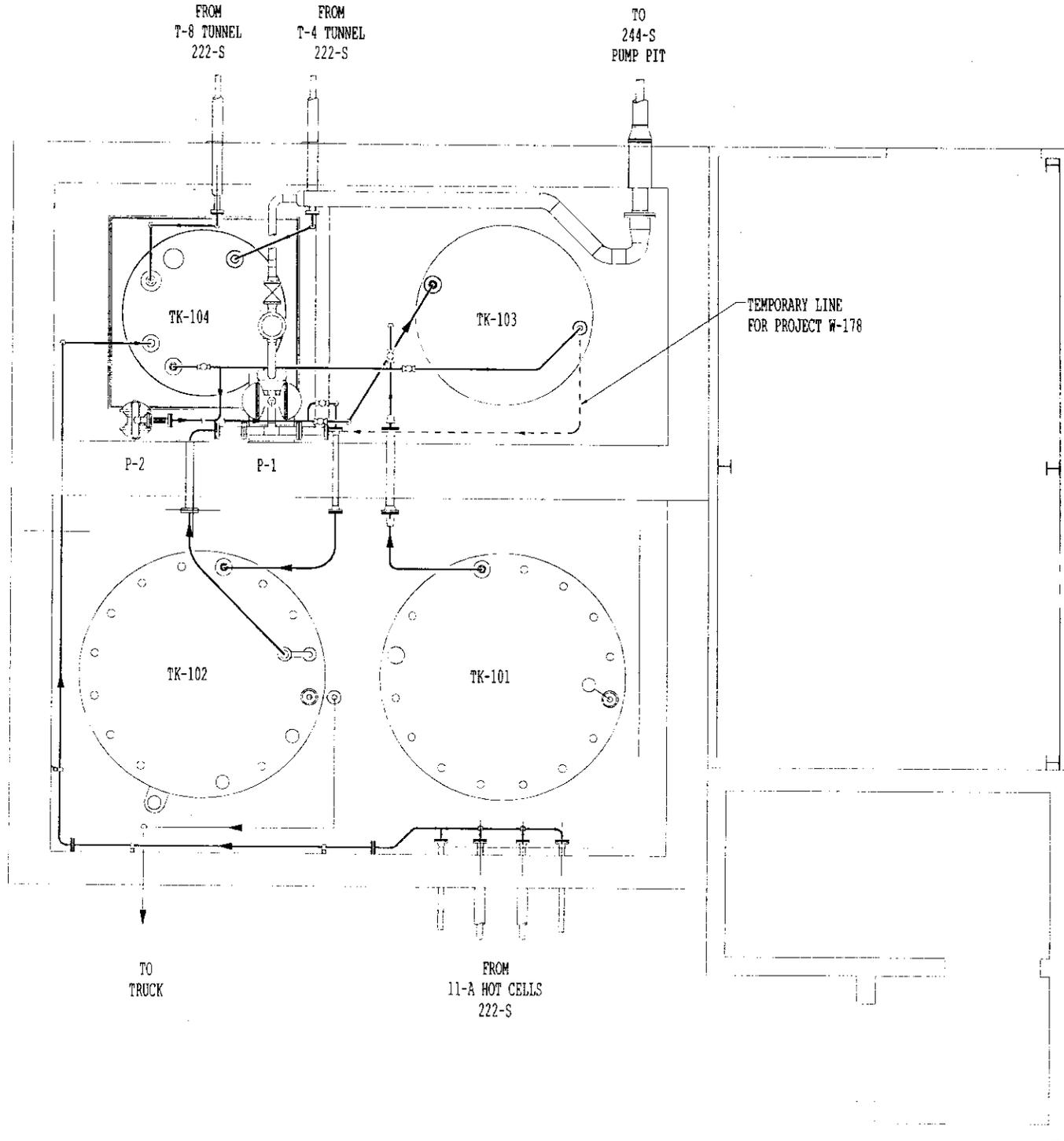


NORTH

219-S Facility

CELL B

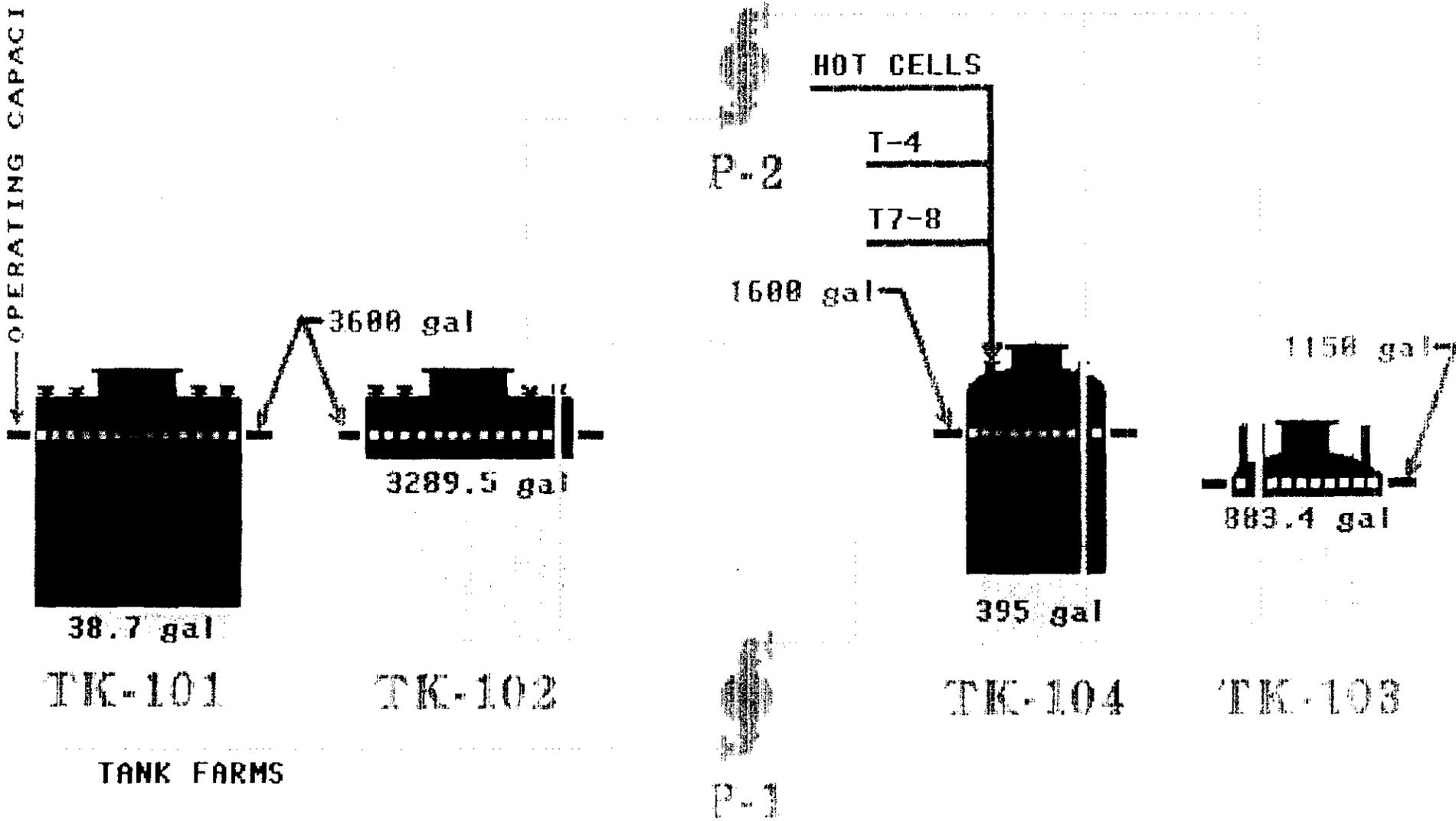
CELL A



Attachment 2
Plan View of 219-S System Tanks

219-S WASTE HANDLING FACILITY STATUS AS OF 5-26-98

OPERATING CAPACITY (TYPICAL)



Attachment 3
Project W-178 Program Logic - Post Restart

Waste Management Federal Services of Hanford	DOCUMENT TRANSMITTAL	Transmittal No. W-178-018
Date September 16, 1998		Page 1 of 1
To: Distribution	From: Mike Cahill 373-3715	
Project/Work Order Number: Project W-178		
Project/Work Order Title: 219-S Secondary Containment Upgrade		
Subject: Meeting Minutes 6/4/98 Ecology Status Meeting		

No. of Copies	Company and Distribution	Mailing Address
1	J. J. Beyer/FDNW	G3-17
1	R. L. Bisping/FDH	N1-26
1	R. J. Boom/WMH	T6-12
1	M. A. Cahill/WMH	T6-03
1	R. P. Carter/DOE-RL	S7-55
1	P. K. Clark/DOE-RL	S7-55
1	M. S. Collins/DOE-RL	A5-18
1	J. L. Hensley/WDOE	B5-18
1	A. D. Huckaby/WDOE	B5-18
1	J. E. Hyatt/WMH	T6-14
1	D. S. Mc Shane/FDNW	G3-17
1	A. G. Mishko/FDH	H6-23
1	L. F. Perkins/WMH	H6-30
1	G. J. Warwick/WMH	T6-14
1	J. F. Williams/WMH	H6-24
1	J. A. Winterhalder/WMH	H6-21
1	Project Files	R1-29

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 June 4, 1998 meeting with Department of Ecology