

## MEETING MINUTES

**Subject:** 222-S Laboratory Secondary Containment Upgrades - Project W-178 Status and Issue Clarification

**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	700	Day	03/17/98	9

**Attendees**

J. J. Beyer, FDNW	G3-17
M. A. Cahill, WMH	T6-06
P. K. Clark, RL	S7-55
L. D. Goodwin, WMH	T6-04
A. D. Huckaby, Ecology	B5-18
J. S. Klug, RL	X3-61
K. S. Tollefson, WMH	T6-12
G. J. Warwick, WMH	T6-12
J. F. Williams, WMH	H6-24



The following items were discussed during this meeting:

**Assessment of existing tank system integrity**

- A. Administrative element review/documentation - Performed by FDNW Issued as separate report - IQRPE review and certify (either by incorporating into his report or incorporate by reference)
- Review of design standards used for construction of tanks
  - Waste compatibility
  - Existing corrosion protection measures (not applicable because the tanks are sitting in a vault and not buried underground)
  - Documented age of the tank system
- B. Project W-178 Physical integrity assessment approach

**Note 1** - Internal inspection (remote video and ultrasonic testing) with focus on integrity of weld joints, abrasion/wear, and corrosion

**Note 2** - Leak testing at pressures greater than the normal operating pressure (atmospheric pressure) may be utilized if insufficient data is collected from the internal inspection

- Planned Sequence
  - Remove Tk-101 blind flange (save in case hydrotest is required) and install inspection flange
  - Hydrolance Tk-101 and drain to Tk-102

- Perform internal inspection, video-taping only (decision point/ Note 2)
- Demolish Tk- 102 agitator and install inspection flange
- Hydrolance Tk-102 and drain to Tk-103 or Tk-104
- Perform internal inspection (decision point/note 2)
- Disconnect/blind flange Tk-101/102 nozzles
- Perform gross decontamination of Tk-101/102
- Perform gross decontamination of Tk-101/102
- Apply encapsulant to Tk-101/102
- Remove Tanks from 219-S and set in staging area
- Perform Ultrasonic Testing and/or other NDE (Outside only)
- Verify results of engineering assessment prior to installation

**Action:**

1. John Beyer to provide Alisa Huckaby, Ecology with a copy of the plan detailing the actions described above, when available.
2. Alisa Huckaby to review the Washington Administrative Code to determine if Ecology has an action during this process
3. Mike Cahill to inform Ecology on planned major project actions involving tank integrity assessment activities.

**219-S Sample System - Secondary Containment Issue**

- General Description of the sample system

The storage tanks located in the 219-S vaults are sampled in preparation for transfer to tank farms. A 500 milliliter sample is drawn from the tank before treatment and after treatment.

The samplers (two) are located in lead-lined concrete vaults (approximately 16 inches cubed) within the 219-S Sample Gallery. Three schedule 40 stainless steel lines connect each sampler to its tank. The suction line is 1/8 inch. The return line is 1/2 inch, and the drain line is 1 inch. The lines are encased within the buildings concrete.

An air jet is used to draw a sample from the tank. The sample is deposited into a sample chamber and from there pumped into the 500 milliliter sample bottle. Any liquid remaining in the lines drains back to the tank system when the jet is turned off

- Drawing of the system

- Recommendation for sample system - leave as is

**Actions:**

1. Alisa Huckaby to identify engineer within Ecology to assist with review of this issue.
2. Mike Cahill/John Beyer to provide ROM estimate for various alternatives to provide encasement/secondary containment for sample lines. This estimate is expected to be complete by the end of March, 1998.
3. Mike Cahill to set up separate meeting to discuss with Ecology when estimates are completed and Ecology has assigned engineer to assist with review.
4. Alisa Huckaby to provide written waiver of secondary containment for sample system based on concurrence with recommendations.

**Leak Detection Approach For Duration of Project W-178**

- Tank 101 and 102
  - Use level instrumentation and sump alarms.
- Tank 103
  - Use sump alarm which is in place in the event of a leak. No leak test scheduled because this tank will be isolated at completion of construction.
- Tank 104
  - At completion of construction will be placed on annual leak detection schedule with Tanks 101 and Tank 102

Note: IQRPE would be hired by the facility to review existing level instrumentation accuracy/sump alarm records.

Note: It was reaffirmed that Ecology agreed in the 12/17/98 meeting minutes that both annual leak detection and tank integrity assessment would not be required until completion of all secondary containment upgrades. This is consistent with the unit manager meeting minutes where this agreement was made at the start of the secondary containment upgrades project. It was noted by Ecology that tank integrity assessment schedule would be a subject during Part B permit discussions.

**Leak Detector Probes/Corrosion Issue**

Mike Cahill discussed a problem with the leak detector probe in the P6 pit. Prior to raising the probe, it had been standing in water for some period of time. As a result, the probe acted as a sacrificial anode. The vendor was contacted and the probe will be replaced at some point during the project. The volume in the sump table presented in the December 17, 1997 meeting is inaccurate for this particular probe because the corroded portion of the probe had to be removed, raising the volume at which the low-level alarm would be activated in the case of a spill. Once the probe is replaced, the referenced sump table will be accurate. A review of the other probes will also be undertaken to

assure that they have not been affected. Ecology will be informed of further actions as they take place.

### Tank 103 Isolation Approach

- Rinse Tk-103 (Fill/Agitate/Drain)
  - First fill at 100% operating capacity, agitate and field screen.
- **Hold Point** - Evaluate field screen results. If acceptable, the following step (second and third fill) will not be performed. Field screen tests and acceptance criteria will be detailed in Tk-103 Sampling and Analysis Plan.
  - Second fill at 50%/Field Screen/Discharge and drain to Tk-101/102 (Decision Point/third rinse necessary/use field screen for indicator)
  - Small residual heel left (10-15 gallons)
- Isolate Tk 103
  - Disconnect transfer lines and install blind flanges
  - Disconnect tank instrumentation and install blind flanges
  - Disconnect tank services (caustic, sample and vessel vent) and install blind flanges
  - Disconnect agitator services (power and lubrication)
  - Install PRV valve (low pressure, e.g., 15 psi) as additional safety precaution based on PFP

### Actions:

1. Kathy Tollefson to discuss the proposed Tank 103 sampling plan with WMH Environmental Services and find out if proposal is consistent with other tank isolation activities (e.g., PUREX, B-Plant) with similar objectives. Results and recommendations are to be included on the agenda for the next status meeting.
2. Based on recommendations from WMH Environmental Services and Generator Services, Kathy Tollefson will initiate development of the Tank 103 sampling plan. This plan will define sampling objectives field screening methods, decision points and acceptance criteria. This item will be included on the agenda for the next status meeting.

### Concurrence:

P. K. Clark 4/30/98  
Ms. P. K. Clark, RL Waste Programs Division

Alan D. Huckaby 4/30/98  
Ms. A. D. Huckaby, State of Washington Department of Ecology