

MEETING MINUTES for Revision of RPP-9937	
Date of Meeting: 9/24/2013	Location: Ecology/Room 3B
Preparer: A.G. Miskho, WRPS	Time: 2:00 – 3:30
Attendees: Jim Alzheimer, Ecology Joe Caggiano, Ecology Nancy Uziemblo, Ecology Jared Mathey, Ecology	Jeremy Johnson, ORP Mary Burandt, ORP Tony Miskho, WRPS John Guberski, WRPS Jeff Voogd, WRPS Mike Sheridan, WRPS Jerry Turknnett, WRPS
<p>Meeting minutes:</p> <p><u>Meeting minute format:</u> Discussion on content of the minutes was raised by Ecology. It was decided to change the format of the meeting minutes to summarize the issues, identify agreements/decisions, document actions, and provide summary of the discussion. The format will replace the style of person by person dialogue.</p> <p><u>Previous meeting minutes from 9/4/2013:</u> The meeting minutes from 9/4/2013 were approved.</p> <p><u>Open actions discussion</u> Discussion of open actions as follows.</p> <p>2013-06-12-1: DOE Providing a catch tank list remains open. The list is being developed and is anticipated to be provided from WRPS to ORP next week.</p> <p>2013-06-12-2: The action on “past practice” is open and tied to the catch list discussion. The term “Past practice” is related to monitoring catch tanks under RPP-9937.</p> <p>2013-06-26-1: Setting up a more detailed briefing remains open. The data Alzheimer sent over has been evaluated such that the meeting can be scheduled. Uziemblo and Sheridan will set the meeting up.</p> <p>2013-06-26-2: Setting up a repeat presentation to Ecology/HAB remains open. WRPS has action.</p> <p>2013-07-07-1: Ecology to determine ex-tank monitoring remains open.</p> <p>2013-09-04-01: Completed. The 8/21/ minutes are approved.</p> <p>2013-09-04-02: Ecology to determine position on dry well logging remains open</p> <p>2013-09-04-03: Comments on Chapter 2 are in process within Ecology, remains open</p> <p>2013-09-04-04: DOE providing 10-year inspection frequency justification is in process within WRPS, remains open</p> <p>2013-09-04-05: The LOW data was emailed by Alzheimer on 9/5/2013 for 22 tanks (cover email is attachment 1). Tied into action 2013-006-26-1 above. Action complete.</p> <p>2013-09-04-06: DOE providing the technical basis for LOW replacement is in process within WRPS, remains open</p> <p>2013-09-04-07: DOE providing the clarification on what tank integrity being compromised is in process within WRPS, remains open</p> <p>2013-09-04-08: A proposed definition of quarterly was completed by Ecology on 9/5/2013 via email to state: “From OSD-T-151-00031: The definition of a monitoring frequency of "quarterly" means at least once in each of the periods from 00:00 hours on January 1 through 23:59 hours on March 31, 00:00 hours April 1 through 23:59 on June 30, 00:00 hours on July 1 through 23:59 on September 30, and</p>	

60:00 hours on October 1 through 23:59 hours on December. 3.1. There shall be a minimum of 31 days between successive readings.” **Action complete.**

Discussion on draft Chapter 3.0, Data Analysis Process, and 4.0 Reporting and Action of RPP-9937:

DOE handed out draft Sections 3.0 Data Analysis Process, and Section 4.0 Reporting and Actions (Attachment 2)

DOE/WRPS stated Section 4.0 Reporting and Actions is not necessarily the response to leaks section; some items may be relocated from section 4 when section is developed. WRPS identified TBDs for deviation from a baseline to allow identification of appropriate values for each of series of (100 series, 200 series, and catch) tanks, and a change to sloped baselines require written technical justification. Ecology will need a technical justification when a baseline changes. DOE/WRPS indicated any time a baseline slope is changed, a technical justification will be provided before the baseline is changed. Ecology would like to have the annual report provide the technical basis for baseline changes.

The figure proposed came from the Catch Tank Leak Response Plan (RPP-PLAN-48438 Rev 1). Two changes were made to the figure: The top left box was changed from “IMUST” to “SST” and the 3rd box was changed to delete “CHEM D-42” and replace it with “Engineering Evaluation.”

A question was asked When is the rest of the document to be developed? The response section and the appendices are remaining. Discussion occurred on talking about the catch tank list versus getting through the document once for the SST 100 series and 200 series tanks. It was decided to complete the discussion on the 100 series and 200 series tanks before discussing catch tanks.

Action 2013-09-24-1: Ecology to review Chapters 3 and 4 and provide comments.

Actions:

2013-06-12-1: ORP: **(OPEN)** Come with a list of tanks beyond the 100 and 200 series tanks that should be within the scope of -9937 for discussion.

2013-06-12-2: ORP: **(OPEN)** is there a better way to describe what is excluded from RPP-9937 than using the term “past practice.”

2013-06-26-1: **(OPEN)** ORP to set up a more detailed briefing on neutron probe data analysis and how it is converted to interstitial liquid levels for: T-111, SX-106, BY-105, and BY-109 to discuss data interpretation.

2013-06-26-2: **(OPEN)** ORP provide a repeat presentation to Ecology/HAB Single Shell Tank Liquid Monitoring from April. Include video on how ENRAF works.

2013-07-07-1: **(OPEN)** Ecology to determine path forward on ex-tank monitoring.

2013-09-04-1: **(completed)** Ecology to confirm that the comments submitted by ORP/WRPS on the 8/21/2013 minutes were acceptable.

2013-09-04-2: **(OPEN)** Ecology to meet and determine position on dry well logging.

2013-09-04-3: **(OPEN)** Ecology will take today’s discussion and offer suggestions on the text for the draft Chapter 2.0 of RPP-9937, Monitoring Methods.

2013-09-04-4: **(OPEN)** DOE to provide justification for 10-year video monitoring frequency

2013-09-04-5: Ecology to send a file showing LOW data interpretation.

2013-09-04-6: **(OPEN)** DOE to provide a technical basis for LOW replacement not considered reasonable

2013-09-04-7: **(OPEN)** DOE to provide additional clarification on what it means for tank integrity being compromised

2013-09-04-8: (completed) Ecology to propose a definition for “quarterly” monitoring.
2013-09-24-1: Ecology to review Chapters 3 and 4 and provide comments.

Decisions made:

- Change format of meeting minutes as identified above.
- Complete the discussion on the 100 series and 200 series tanks before discussing catch tanks.

Next meeting is October 9th at 2:00.

Attachment 1

Ecology email from 9/5/2013

Miskho, Anthony G

From: Alzheimer, James (ECY) <jalz461@ecy.wa.gov>
Sent: Thursday, September 05, 2013 8:05 AM
To: Johnson, Jeremy M; Miskho, Anthony G; Guberski, John D; Voogd, Jeffry A
Cc: Usherida, Nancy H; Lyon, Jeffery; Whalen, Cheryl (Washington Department of Ecology); Martiny, Jared W. (ECY); Caggiano, Joseph
Subject: RE: My interpretation of LOW data
Attachments: T111Enrafchange.xlsx; T111LOWchange.xlsx; A106Enrafchange.xlsx; A106LOWchange.xlsx; SX104Enrafchange.xlsx; SX104LOWchange.xlsx; AX105Enrafchange.xlsx; AX105LOWchange.xlsx; BY108Enrafchange.xlsx; BY108LOWchange.xlsx; TY108Enrafchange.xlsx; TY108LOWchange.xlsx; BY106LOWchange.xlsx; SX108Enrafchange.xlsx; SX108LOWchange.xlsx; S111LOWchange.xlsx; S108Enrafchange.xlsx; S108LOWchange.xlsx; S108Enrafchange.xlsx; S108LOWchange.xlsx; TX112Enrafchange.xlsx; TX112LOWchange.xlsx

Attached on some of the Excel spreadsheets is used to estimate LOW and Enraf changes. These are the six with the fastest LOW increases and fastest LOW decreases. Enraf data was not included for a few tanks.

My approach was to down load the last ten years of data, if available.

I created a parameter from the data equal to the time in years since the first data point I down loaded.

For the LOW data, I converted the feet to inches.

I then plotted the data of treatment reading versus time in years and examined the data. If there was no significant change in the past couple of years, I assigned a change of zero. If there was a steady increase or decrease in the data, I applied a linear curve fit and had the equation displayed on the plot. If the line seemed to be a good representation of the long term trend, I used the slope of the line to be the rate of change per year. If there was questionable data points, I might eliminate them from the pool used to generate the slope. For tanks like T-111 with a slope that is changing with time, I would only use the last several data points to establish the slope. In all cases, it was just engineering judgment that I used to accept my slope estimations. For the Enraf data, there are many tanks with significant step changes in the data which I assume are the plummet interfacing with different locations on the surface. Hopes these help.

Thanks,
 Jim

Attachment 2

Chapter 3.0, Data Analysis Process, and 4.0 Reporting and Action

3.0 DATA ANALYSIS PROCESS

In-tank video monitoring is reviewed to identify if there are indications of a change in the tank. Review of the video is normally accomplished in the calendar quarter after the monitoring is performed. The video can confirm an ENRAF is reporting a valid measurement of a liquid pool. Changes looked for in the review are indications of an increase or decrease in a surface liquid pool, drips, or other indications of intrusion of liquid into the tank. If the review indicates an intrusion is/has occurred, the next step is to inform Tank Operations Contractor Management and request direction. If review indicates a possible tank leak, the tank leak assessment process is initiated.

Analysis of buoyance or conductivity surface level monitoring as well as liquid observation well interstitial liquid level monitoring is performed in the calendar quarter after the monitoring is performed. Review is to determine if data show a deviation beyond a predetermined band from a fixed baseline. A trend baseline can be used in lieu of a fixed baseline when the surface level or interstitial liquid level slope can be explained by technical analysis/justification of known naturally-occurring waste phenomena in the tank, such as evaporation or accumulation of retained gas. A fixed baseline is used for single-shell tanks classified as “assumed leakers” and for tanks with a history of rainwater/snowmelt intrusion, unless the baseline needs to account for evaporation. A change greater than the specified value from the baseline (see table below) triggers a review to determine the cause.

Level Device Deviation Limits – 100 Series Tanks

Monitoring Type	Assumed Waste Surface		
	Liquid	Partial Liquid	Dry
Interstitial liquid level	+/-TBD	+/-TBD	+/-TBD
Surface Level	+/-TBD.	+/-TBD	+/-TBD

Surface Level Device Deviation Limits – 200 Series Tanks

Monitoring Type	Assumed Waste Surface		
	Liquid	Partial Liquid	Dry
Surface Level	+/-TBD.	+/-TBD	+/-TBD

Surface Level Device Deviation Limits – Catch Tanks

Monitoring Type	<i>Assumed Waste Surface</i>		
	Liquid	Partial Liquid	Dry
Surface Level	+/-TBD.	+/-TBD	+/-TBD

4.0 REPORTING AND ACTIONS

If data analysis indicates that a change in tank level may be occurring, the initial response is to check that measurement equipment is operating correctly. After confirming correct operation of the equipment, a review of the data is made to identify if the change is due to an intrusion or leak. If the review indicates an intrusion is/has occurred, the next step is to inform Tank Operations Contractor Management and request direction. If review indicates a possible tank leak, the tank leak assessment process is initiated.

If a tank leak may be occurring, a formal process to evaluate available information is initiated by the Tank Operations Contractor, and Ecology is informed of the initiation of the process. The tank leak assessment process is the point at which information from various programs is reviewed to reach a reasonable conclusion regarding the existence of a tank leak. Reports of data from other Hanford monitoring programs (e.g., ex-tank) can be used to assist in review of tank surface level or interstitial liquid level changes.

Analysts performing the data evaluation collectively have a background covering in-tank data, ex-tank data, and tank operations & processes; exceptions may be made when necessary (e.g., no ex-tank exists). After evaluating available information a recommendation is made to the Tank

Operations Contactor Executive Safety Review Board on changing the tank status. Ecology is notified of the decision. If a tank classification is changed to “leak,” and the leak is to the environment, notification to Ecology occurs as required by 40 CFR 265.196 (173-303-640).

If the leak is from a catch tank, response is per RPP-PLAN-48438, “Single-Shell Tank System Catch Tank Assumed Leak Response Plan,” Revision 1. If the leak is from a 100 series or 200 series single-shell tank, the response will be dependent on the several variables, as identified in the figure below. Absent intrusion of liquid into the tank above a dry waste surface, pumping is not considered a viable option as liquids capable of being pumped have previously been removed from the tanks during saltwell pumping. The non-viability is based on the introduction of liquid into the tank as part of the pumping operation as well as that the infrastructure for saltwell pumping would need to be re-established.

If the review indicates an intrusion is/has occurred, information on the intrusion (e.g., location, rate, possible source) is reported via the annual summary report on SST Leak Detection and Monitoring. The annual report is prepared on a (calendar/fiscal?) year basis and placed into the RCRA operating record by end of the next quarter. Contents of the report are TBD

Likely Annual Report contents include:

- Monitoring performed after the specified interval
- Out of service periods for level monitoring instruments
- Evaluation performed for deviations beyond the allowed +/- from baseline
- Changes in baseline values

Surveillance Program indicates potential SST leak

September 23, 2013

