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(0069654H)

Meeting Minute Approval Sheet

**222-S Project Managers' Meeting  
And Miscellaneous Laboratory Issues  
(TSD: TS-2-1; Operating Unit 8)**

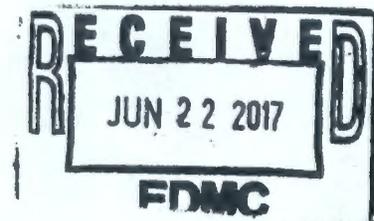
Ecology Offices, 3100 Port of Benton Blvd.

March 1, 2017

9:00 am – 10:00 am

DOE: Jeff Cheadle 4/19/17  
Jeff Cheadle Date

ECOLOGY: Kelly Elsethagen 4/19/17  
Kelly Elsethagen Date



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(15-067000)

## MEETING MINUTES

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### Meeting Attendees:

See Attachment 1 for the list of attendees.

### Agreements, Commitments, and Action Items:

See Attachment 1 to the 10/19/16 meeting minutes for the list of Action Items and Parking Lot Items.

One action was added to the Action Items list as follows:

- **New Action Item #1:** WRPS schedule a CAP meeting to discuss remaining topics on the Part A.

### 222-S TSD or Miscellaneous Issues:

The following miscellaneous issue was discussed:

- Ecology asked about a permitting issue regarding the hot cells. WRPS related that the radioactive air license for 222-S previously limited receipt of certain samples into the 11A hot cell only. Samples needed to be received into other hot cells due to a failed air inlet damper on the 11A hot cells. WRPS worked with WDOH and revised the license, allowing this to occur. Repair of the 11A damper is planned.

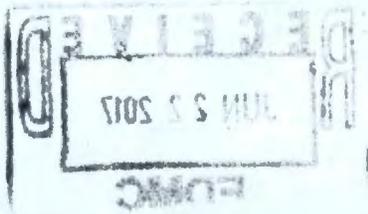
### 222-S RCRA TSD Permit Issues:

- Ecology hosted a CAP workshop regarding the 222-S Part A on November 9, 2016. Ecology requested a meeting to resolve remaining issues (see new Action).

### 222-S Laboratory Operations and Analytical Status:

Analytical and Operational reports are attached to these minutes.

- WRPS provided an update on work to replace the P-1 pump in the 219-S waste handling facility. An initial manned entry was made into the tank cells to survey for contamination levels and take measurements. The P-2 pump was also identified for replacement due to evidence of seepage that was seen on a pump flange. The next cell entry to be performed will decontaminate the cell and collect additional survey data so that the 219-S roof panels can be removed per WDOH requirements, allowing the pump replacement to occur. Ecology asked if the 219-S tanks have sufficient empty space to accommodate analytical waste. WRPS said empty space is available in tanks 101 and 104 for the near term and levels are monitored daily.



- Discussion occurred on the significance of the 81.63% proficiency result for MAPEP-34. DOE expressed that results less than 100% are normal for any laboratory.

Next Meeting:

April 19, 2017

9-10 am, location TBD

Attachments - 1

## Attachment 1

1. Agenda
2. Attendance Roster
3. 222-S Lab Operations and Analytical Reports
4. Action Items/Parking Lot Items

222-S Project Managers Meeting  
And Miscellaneous Laboratory Issues  
Washington State Department of Ecology Offices  
3100 Port of Benton Blvd., Richland, WA

March 1, 2017

Agenda

1. Introductions
2. Approval of Previous Meeting Minutes
3. Agreements, Commitments, and Status of Action Items
4. 222-S TSD or Miscellaneous Issues
5. 222-S RCRA TSD Permit Issues
6. 222-S Laboratory
  - a. Operations Report
  - b. Analytical Report
7. Review of New Action Items

Meeting held on March 1, 2017

### Attendance Roster

Name	Affiliation	Contact
Eric Van Mason	WRPS / 222-S	373-7436
Jacob Johnson	WRPS / 222-S	373-3847
Keith Greenough	WRPS / 222-S	373-9541
Kelly Elsethagen	ECY	424-2514
Ed Soto	ECY	372-7933
Rob Schroeder	WHL	373-5810
Tony Scott	WHL	373-2129
Jeff Chandle	DOE ORP	376-0755
Elis Eberlein	ECY	372-7906
Rana Evans	DOE ORP	376-7889

WRPS Operations/Analytical Report  
August 17, 2016 – October 19, 2016

<b>Activities of Note</b>	
<b>Operational Activities</b>	<b>Date</b>
Completed maintenance on 222-S primary exhaust fan #1.	10/19/2016
Completed investigative surveys and sampling of 219-S cell A. Surveys are prerequisite to replacement of the P-1 transfer pump.	10/20/2016
Performed initial entry into 219-S Cell B for investigative survey.	10/25/2016
Performed investigative survey of 219-S in preparation for transfer pump P-1 replacement.	11/15/2016
Repaired EF-4 engine coolant block heater and circulation pump.	11/15/2016
Completed repair to a leak in the process water line and restored water to lab sinks, hotcells and reagent water purification systems.	12/12/2016
Completed calibration of 219-S tank level monitoring instrumentation	12/12/2016
Completed annual filter testing of 219-S Portable Temporary Radioactive Air Emissions Unit that provides filter ventilation for 219-S platform and pits	12/21/16
Completed testing of 3 Backflow Preventers allowing continued process water and sanitary use within Laboratory rooms which allow Lab analysis to continue.	12/29/16
Completed repair of cracked ducting on exhaust fan 2.	01/25/17
Completed flushing of 219-S Cell B waste lines utilized for waste transfer from the lab to 219-S storage tank 104.	02/02/17
Completed replacement of 11A2 hot cell wall plug needed to facilitate subsequent installation of a new multi-potentiostat to perform corrosion studies on highly radioactive samples.	02/06/17

<b>FY2017 222-S Laboratory Upgrades</b>	
<b>New Non-Rad Standards Laboratory:</b> Design was finalized in October FY17.	Status as of 1/14/2017
<b>Secondary transformer replacement:</b> 3 transformers to be replaced	
<b>Room 1J upgrade design:</b> Design FY17, Construction FY18	
<b>HVAC upgrade design:</b> Design, procure, fabrications in FY17, Construction FY18	

### Analytical Equipment

#### FY2016 Carryover:

- (2) Multipotentiostats (WRPS Corrosion testing): Both units has been received. One installation is complete. The other installation is planned for FY17.

#### FY2017:

- Gas Chromatograph/Mass Spectrometer: Procured, and installation is planned for FY17.
- Thermal Desorption Unit: Procured, and installation planned for FY17.
- Total Inorganic Carbon/Total Organic Carbon analyzer: Procured, and installation planed for FY17.
- Cold Vapor Atomic Absorption Spectrometer: Procured, and installation planned for FY17.
- Ion Chromatograph: Procurement in process. Installation planned for FY17.

### Waste Shipments

<i>Waste Type</i>	<i>Containers Shipped from 2225 (10/19/16 – 2/28/17)</i>	<i>Receiving Facility</i>
LLW	22	PFNW
LLW	14	ERDF
DW	38	Stericycle
Recycle	16	CCRC

LLW: Low-level radioactive waste

DW: Dangerous Waste (non-radioactive Dangerous Waste)

MW: Mixed waste

## Wastren Advantage, Inc. Hanford Laboratory (WHL)

### 222-S Analytical Contractor Quarterly Report – February 13 2017

#### Events of Interest

On 10/25/2016 a WHL chemical technologist discovered that they had a radioactive skin contamination when they were unable to successfully clear through the Argos/PCM while exiting the CA area. HPTs found 23,000 dpm beta/gamma on the exterior distal area of the left forearm. The chem-tech had been conducting Tc-99 separations (LA-348-101) in room 4L hood 11 on tank AW-103 samples. Lab surveys did not discover any contamination spread outside of the fume hood. An event investigation was unable to identify the origin of the contamination, however, it was determined that the employee did not perform an adequate self-survey when doffing PPE to exit the CA zone of the lab.

As a result of this event, and three others within the previous month of lab operations, WHL management issued an occurrence notification on 10/28/16 to DOE under the category Group 10 (2) SC3, "An event, condition, or series of events that does not meet any of the other reporting criteria, but is determined by the Facility Manager or line management to be of safety significance or of concern for that facility or other facilities or activities in the DOE complex."

This occurrence report documented the negative trend in the performance of analytical operations. The four events included in this report had no significant impact on the 222-S facility, its systems, or programs. As an immediate corrective action, WHL held an all-employee Safety Pause on 10/31/2016. The agenda included discussion of the recent events, the apparent factors that led to them, reinforcement of HPI error prevention techniques, and the need to follow procedures, use good fume hood use and radiological work practices, good communications, and to not proceed in the face of uncertainty.

#### Contract Performance Metrics

##### Report on Time Deliverables

Deliverables metric for Fiscal year 2016 was 98.4%. To date for FY 2017, 100% were reported on time.

FY 2016/2017 Monthly Completed Deliverable Packages													
Month	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sept 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017
Total	20	18	28	15	31	22	26	24	13	19	29	20	17
FY 2016	40	58	86	101	132	154	180	204	217				
FY 2017										19	48	68	85

**QA Evaluations/Proficiency Tests:**

The total number of analyses performed in FY 2016 was 780 with 748 being acceptable, resulting in 95.9% performance level. The total number of analyses performed in FY 2017 is 396 with 382 being acceptable, resulting in 96.5% performance level.

<b>QA Evaluations/Proficiency Study Summary Results Status of 01/31/2017</b>				
<b>Report Data</b>	<b>Study</b>	<b>Reported</b>	<b>Correct</b>	<b>Study %</b>
10/31/2016	WP260	113	112	99.12%
11/15/2016	IHPAT-207	12	12	100%
11/22/2016	MRAD25	41	41	100%
12/1/2016	MAPEP-35	49	40	81.63%
12/5/2016	SOIL96	175	171	97.71%
12/16/2016	BePAT-42	4	4	100.0%
01/30/2017	WP263	1	1	100%
01/31/2017	WPQRJan17	1	1	100%
<b>Total</b>		<b>396</b>	<b>382</b>	<b>96.5%</b>

**Holding Time Performance:**

The holding times metric for fiscal year 2016 was 99.5% with fiscal year 2017 at 100%.

<b>Holding Time Performance Met Status as of 1/31/2017</b>													
<b>Month</b>	<b>Jan 2016</b>	<b>Feb 2016</b>	<b>Mar 2016</b>	<b>Apr 2016</b>	<b>May 2016</b>	<b>Jun 2016</b>	<b>Jul 2016</b>	<b>Aug 2016</b>	<b>Sept 2016</b>	<b>Oct 2016</b>	<b>Nov 2016</b>	<b>Dec 2016</b>	<b>Jan 2017</b>
<b>Total</b>	<b>314</b>	<b>118</b>	<b>244</b>	<b>182</b>	<b>162</b>	<b>277</b>	<b>101</b>	<b>26</b>	<b>27</b>	<b>92</b>	<b>31</b>	<b>35</b>	<b>34</b>
<b>FY 2016</b>	<b>460</b>	<b>578</b>	<b>822</b>	<b>1004</b>	<b>1166</b>	<b>1443</b>	<b>1544</b>	<b>1570</b>	<b>1597</b>				
<b>FY 2017</b>										<b>92</b>	<b>122</b>	<b>157</b>	<b>191</b>

### **Projects in Progress**

- NH3 & Hg Vapor Tubes
- SY103 Chemistry Control
- Separable Organics
- AZ301 Catch Tank
- Be IH
- AN101 Floating Solids
- Tank 241 B and T Core Samples for Be
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### **30-Day Forecast**

- IH Vapor Sampling from Tank Farm work areas
- AW104 Grab for corrosion chemistry control, waste compatibility and strategic planning
- Cartridge Evaluation

**222S TSD TPA PMM**  
**Action Items and Parking Lot Items**  
**3/1/17 STATUS**

<b><i>ACTION ITEMS</i></b>			
<b>#</b>	<b>Action</b>	<b>Due Date</b>	<b>Status</b>

<b><i>PARKING LOT ITEMS</i></b>		
<b>#</b>	<b>Action</b>	<b>Resolution</b>
<b>PL1</b>	Revise permit text regarding Tank 103 to better describe why Tank 103 is being left in place until Closure.	To be resolved during Permit Working Group meetings
<b>PL2</b>	WRPS to evaluate Tank 103 analytical data and propose a path forward for the tank and potential waste residue.	To be resolved during Permit Working Group meetings
<b>PL3</b>	Ecology to review the synopsis of the status of piping staged in the T-8 tunnel alcove and determine a permitting path forward.	To be resolved during Permit Working Group meetings