

WRPS-1603887

Enclosure

INITIAL EVENT INVESTIGATION REPORT
EIR-2016-039

“EVENT INVESTIGATION REPORT, EIR-2016-039, AOP-015 FOR ODORS
REPORTED OUTSIDE AY-1 CHANGE TRAILER”

Consisting of 23 pages
Including cover sheet

EVENT INVESTIGATION REPORT

**Event Investigation Report, EIR-2016-039, AOP-015 for Odors
Reported Outside AY-1 Change Trailer
EIR-2016-039**

Event Investigation Team Lead Under Instruction

Date

9/1/16

Event Investigation Team Lead

Date

9/1/2016

PER Responsible Manager

Date

9/1/2016

PER No. WRPS-PER-2016-1568

AOP-015 for Odors Reported Outside AY-1 Change Trailer

AOP-015 Summary

Event	Abnormal Operations for Odors Reported Outside AY-1 Change Trailer
Date/Time of Event	<ul style="list-style-type: none"> • August 3, 2016 • 0836 hours – 1st individuals • ~0900 hours – 2nd individual
Location	<ul style="list-style-type: none"> • Outside Southeast corner of AY-1 Change Trailer • Northwest of 244AR
Personnel Affected	<p>Symptoms Experienced:</p> <ul style="list-style-type: none"> • One (1) WRPS personnel experienced symptoms • One (1) MSA personnel experienced symptoms <p>No Symptoms Experienced:</p> <ul style="list-style-type: none"> • One (1) WRPS personnel with no symptoms
Odor / Taste	<ul style="list-style-type: none"> • Rotten • Strong Onion • “Nasty” • Metallic
Symptoms	<ul style="list-style-type: none"> • Dizziness/Light-Headed • Difficulty Breathing
Direct Read Instrumentation (DRI) Result During Event	<ul style="list-style-type: none"> • Ammonia: 0 ppm • VOCs: 0 ppm • Mercury: 0.00 mg/m³
Industrial Hygiene (IH) Investigative Monitoring / Sampling	<p>Monitoring and Sampling data results were at levels non-detectable:</p> <ul style="list-style-type: none"> • Ammonia: 0 ppm • Total VOCs: 0 ppm • Nitrous Oxide: 0 ppm • Mercury: 0.00 mg/m³ (odorless)* <p>*No odor thresholds to report</p>
Possible Source	244-AR Vault and/or 244-AR Soil
Wind Speed / Direction	<ul style="list-style-type: none"> • S-SW to N-NE @ 2-4 mph: @ 0800 • S-SE to N-NW @ 2-4 mph: @ 0815 • SE to NW @ 4-5 mph: @ ~0900
Waste Disturbing or Tank Work in Adjacent Area	No waste disturbing activities were occurring at the time.
Other Work in Adjacent Area	Construction work was occurring in AY Farm; crews in AY-1 change trailer were preparing to support the work

Investigation Summary

On August 3, 2016, at 0810 hours, two IMECH Pipefitters experienced a strong onion, rotten odor near the southeast corner of the AY-1 change trailer. One of the pipefitters experienced dizziness and lightheadedness. The individual who experienced the symptoms was taken to HPMC for a medical evaluation. The other individual declined an HPMC evaluation. The Field Work Supervisor (FWS) contacted the Central Shift Manager (CSM) to report the odor event.

At 0842 hours, the CSM sent out a shift office event notification (SOEN) announcing the entry into procedure TF-AOP-015, *Response to Reported Odors or Unexpected Changes to Vapor Conditions* (AOP-015). The SOEN notice also announced restricted access from the north corner of A Farm outer fence to the AY-2 change trailer and west of AY-1 change trailer. Industrial Hygiene Technicians (IHT) were dispatched to support the sampling response actions; and at 0850 hours, they commenced sampling (see Attachment 1, DRAFT Industrial Hygiene Sampling Report. Note: the final, signed Industrial Hygiene Sampling Report was not available at the time of issuing this event investigation report.).

AY-1 change trailer is located in a high-traffic area. At 0847, the Shift Nuclear Chemical Operators (NCOs) were directed to barricade Buffalo Street. At 0849 hours, the CSM makes an announcement to restrict access to the AY-1 change trailer. AY-2 change trailer lies north of AY-1 change trailer and just outside the restricted area. Personnel inside AY Farm were directed to AY-2 change trailer. At 0902, the CSM is informed of heavy traffic in the affected area. At 0902 hours, the CSM re-announces access restriction over the radio.

At 0932 hours, it is reported that a Mission Support Alliance (MSA) teamster experienced difficulty breathing while he was delivering SCBA bottles to the AY-1 change trailer at ~0900 hours. He was taken to HPMC for a medical evaluation. At 1236 hours, both the IMECH pipefitter and the MSA teamster are released from HPMC without restrictions.

The IH sampling team completed their survey using direct read instruments (DRI) and Hapsite analysis. The Hapsite analysis was completed at 1933 hours. Results of both the direct-reading instruments and lab analysis indicated the action limit was not exceeded. In other words, no chemicals of potential concern (COPC) were encountered at levels of concern. On 4 August 2016, at 0611 hours, the CSM exits out of TF-AOP-015 and normal operations were resumed.

An Event Investigation was initiated at 0920 hours on 3 August 2016 and the Office of River Protection (ORP) Facility Representative was informed. Interviews with affected parties were held over the next several days, but an official Fact Find Meeting was not held.

At the time of the event, there were no waste disturbing or tank-intrusive activities occurring in the nearby tank farms. Wind directions were from the south-southwest traveling at 2-4 mph and then began shifting at ~0815 hours from the south-southeast at 4-5 mph.








The event investigation looked at possible sources of chemical releases that may have attributed to the odors. Affected personnel as well as others in the area believed that odors were coming from the 244-AR area. More information on the background and potential odors from 244-AR follows. Septic tank activities were also considered in the investigation. However, septic activities were taking place ~1200 feet to the north in the C Farm area. Given the distance, wind direction, and wind speed, septic tank fumes are an unlikely source. The technical data is insufficient to present other possible sources.

Figure 1 - AOP-015 for Odors Reported Outside AY-1 Change Trailer



AOP-015 Diagram



Meteorological Data from Station 6 on 3 August 2016

Time	Mph	Direction
0730	4.0	NE 
0745	3.4	NE 
0800*	2.8	N-NE 
0815*	2.8	NW 
0830	3.5	NW 
0845	5.1	NW 
0900*	4.9	NW 

* Odors detected between 0800 and 0815 hours and then at ~0900

Legend	
	Location where Pipefitters and MSA Teamster experienced odors
	Temporary barricades; restricted area

244-AR Vault

244-AR Vault lies to the southwest ~250 ft. of where the affected individuals experienced odors. The vault is a “canyon” type facility that reached interim stabilization in 2003. The facility houses four waste processing tanks within three below grade concrete vaults and associated sumps. It was originally constructed between 1966 and 1968 to provide lag storage and treatment for the PUREX facility (Figure 2). By 2003, pumpable liquids from the tanks and sump 3 (no liquids were present in sumps 1 and 2) had been removed. For more information, refer to RPP-12051, *244-AR Vault Interim Stabilization Completion Report*.

The two stacks associated with the facility have been isolated: the concrete stack is capped at the top and the 150-ft. metal vessel vent stack is isolated at the bottom; neither would be viable paths for odor emissions. There may be a potential for other pathways for fugitive emissions.

Soil Around 244-AR

Adding to this investigation is an observation that was submitted two weeks after this AOP-015 event occurred, on 16 August 2016 (WRPS-PER-2016-1061). The observation took place during a routine maintenance walk down where personnel noticed an onion odor in the 244-AR location near several brown spots on the ground. The area was surveyed with multi rae pro equipment and readings indicated that any constituents of concern were at less-than-detectable levels. A PER was submitted which has prompted soil sampling of the area. A sampling plan is currently being developed (RPP-PLAN-61109, *Field Sampling and Analysis Plan for Soil Near 244-AR Vault Facilities*).

Septic Tank Pumping Activities

MSA representative contacted the CSM at 0854 and informed them that septic pumping took place that morning: upwind of AY-change trailer, near 241-C Farm. It is not considered a likely source.

Weather Information

According to the first two individuals who experienced the odors, the wind was coming from a southwesterly direction at the time. Meteorological data was taken from the Hanford Weather Station, Meteorological Station 6. Station 6 showed that between 0800 and 0815, the weather shifted slightly (see table below). The following data is for Wednesday, 3 August 2016. The highlighted rows indicate the approximate time when personnel detected odors:

Hanford Meteorological Station 6 for 3 August 2016			
Time (PST)	Direction (degrees)	Speed (mph)	Pressure (Hgin)
0700	268 / from W-SW	3.7	29.45”
0715	270 / from W-SW	3.4	29.45”
0730	208 / from SW	4.0	29.46”
0745	199 / from SW	3.4	29.45”
0800*	200 / from S-SW	2.8	29.47”
0815*	141 / from S-SE	2.8	29.46”
0830	121 / from SE	3.5	29.46”
0845	105 / from E-SE	5.1	29.46”
0900*	111 / from SE	4.9	29.46”

Hanford Meteorological Station 6 for 3 August 2016

Time (PST)	Direction (degrees)	Speed (mph)	Pressure (Hgin)
0915	102 / from E-SE	3.5	29.46"
0930	143 / from SE	4.4	29.46"

* Odors detected between 0800 and 0815 hours and at ~0900 hours

Event Timeline

Date	Time	Sequence of Activities
08/03/16	0724	Production Operations Shift IHTs perform Buffalo Street sweep during enhanced monitoring activities. Readings show 0ppm NH3; 0.00ppb VOC; 1 ng/m ³ . During the sweep, one of the IHTs noted the usual onion odor in the 244AR parking lot.
	0810	Two (2) IMEC Pipefitters experience strong onion, rotten, “nasty” odor near MO513. Symptoms of dizziness/lightheadedness was reported by one of the individuals and was escorted to HPMC by supervisor.
	0828	CSO is notified of odor event
	0833	AN Team field IH, EV Team field IH, COMs Team field IH, AN/AZ Team IHT Supervisor, and PO Safety Manager arrive at CSO and are briefed by CSM
	0835	AN/AZ Team IHT Supervisor notified PO Shift IHTs to report to CSO
	0836	Entered AOP-015 outside of AY-1 Change Trailer
	0836	PO Shift IHTs arrive at CSO and are directed to perform the following response actions: perform DRI survey of area for NH3, VOC, Hg; capture grab samples at reported location for Hapsite GCMS analysis, perform grab sample of odor if encountered for Hapsite GCMS analysis
	0842	SOEN is distributed: “Entering AOP-015 for odor outside of AY-1 Change Trailer. Access is restricted from north corner of A Farm outer fence to AY-2 Change Trailer & west of AY-1. CSM”
	0844	Odor Response Card from symptomatic pipefitter arrives at CSO
	0845	AN/AZ Team IHT Supervisor requests additional IHT
	0846	PO Shift IHTs leave to perform response actions

Date	Time	Sequence of Activities
	0847	Shift NCOs arrive at CSO and are briefed by CSM about access restriction response actions: Barricade Buffalo Street both north and south of AY-1 change trailer.
	0848	Shift NCOs depart to perform response actions
	0849	CSM makes radio announcement about access restriction to AY-1 change trailer
	0850	PO Safety Manager contacts programs group to ensure they are in ready status to receive grab samples and perform Hapsite analysis
	0850	SOEN is distributed: "Access to and from AY-1 change trailer is restricted due to AOP-015. CSM"
	0851	DOE Field Facility Representative arrives at CSO for briefing from CSM
	0854	CSM is contacted by septic contractor and notified that pumping was not taking place in the affected area, but had just completed septic pumping near 241-C Farm
	0857	CSM confirms with affected PF manager that 1 employee declined HPMC visit
	0859	CSM attempts notification of Safety Case Management
	~0900	MSA personnel was out delivering SCBA bottles. He approached the AY-1 change trailer and parked South of the trailer. He got out of the vehicle and crossed the street to use the restroom. While outside, he experienced a metallic taste and difficulty breathing. He got back into the vehicle and returned to his trailer. He notified his manager and then went to HPMC for evaluation.
	0902	CSM re-announces access restriction over radio
	0903	CSM calls RJ Lee Van to have them respond to affected area and notified by RJ Lee Van that they are still South of the Wye barricade and are 10-15 minutes out
	0904	AN Team field IH notifies Safety Case Management that 1 pipefitter had been escorted to HPMC

Date	Time	Sequence of Activities
	0910	CSO obtains additional OE support to keep personnel out of restricted area. They were briefed and departed
	0920	Initiated an Event Investigation
	0932	CSO notified that an MSA personnel, while delivering bottles to AY-1 Change Trailer, smelled an odor. He experienced symptoms of “metallic taste and difficulty breathing”. He was escorted to HPMC by supervisor.
	0935	CSM attempts to make Administrative Interface Agreement (AIA) notification to MSA POC for Worker Protection. Receives direction to notify backup POC
	0936	CSM notifies backup AIA, [REDACTED]
	0941	CSM notifies DOE Field Facility Representative of MSA Teamster
	0948	HAMTC Safety Representatives receive briefing from CSM
	1236	IMECH Pipefitter was released from HPMC without restriction. MSA Teamster was released from HPMC without restriction.
	1933	Hapsite analysis is complete. Results of both the DRI and lab analysis indicate the action limit was not exceeded. There was an initial issue with interference on the Hapsite equipment, but insufficient to make the results unacceptable.
08/04/16	0611	CSO exits out of the TF-AOP-015

Immediate Actions Taken

8/3/2016

- CSM takes into account location, meteorological data, and logistics and determines the boundary for the restricted area: Access is restricted from south corner of A Farm outer fence to AY-2 change trailer and west of AY-1.

- Buffalo Street is barricaded both north and south of AY change trailer at ~150 feet. Access to and from AY-1 change trailer is restricted.
- Industrial Hygiene Techs begin taking samples.
- Another individual from MSA has reported to have experienced symptoms related to odors and the CSO notifies the MSA Point of Contact for Workforce Protection to inform them of the event involving MSA Teamster.

Compensatory Measures

1. 8/3/2016, 0836 hours, entered into AOP-015.
2. 8/3/2016, 0827 hours, SOEN notification goes out; access to north of AP Farm is restricted
3. 8/3/2016, 1933 hours, Hapsite analysis is complete.
4. 8/4/2016, 0611 hours, CSM exits out of TF-AOP-015 after IH report data shows no chemicals of potential concern to be at actionable levels.

Preliminary Extent of Condition Review

Odors at 244-AR: The area surrounding 244-AR has become notorious for onion odors. It was noted in the IH Investigation Report that at 0724 hours on 3 August 2016, an IHT who was out performing a daily Buffalo Street sweep, noted the “usual” onion odor in the 244-AR Parking Lot. Also, WRPS-PER-2016-1601: It was reported on 16 August 2016 that,

“While performing a management (work site) walk down around AY and AZ I noticed the onion odor that was in the 244AR location. This was just east of the large concrete stack. The day before I didn't notice the odor. Several large brown spots are on the ground. The "onion" odor was coming from these locations. I had an IHT that was on his way to support work at 4th and buffalo check the location with his multi rae pro and it indicated less than detectable. Notified the Shift Office and had the Shift Manager come to the location and verified the odor.”

Discussion of Potential Causes

At the time of this investigation, the cause is indeterminate. Affected personnel as well as others in the area believed that odors were coming from the 244-AR area. More technical analysis of the 244-AR facility and surrounding soil is needed. A Soil Sampling Plan is being developed by Engineering (RPP-PLAN-61109, *Field Sampling and Analysis Plan for Soil Near 244-AR Vault Facilities*).

Discussion of Barriers That Could Have Impacted the Cause

See Discussion of Potential Causes above.

Recommendations/Proposed Corrective Actions

Three recommendations:

- Response Actions: During the response actions to the AOP-015 event, personnel were directed to evacuate the AY-1 change trailer. Evacuating the trailer potentially placed

individuals directly into the odor zone. It is recommended that the CSM consider sheltering in place when the route of egress is through the odor zone. (WRPS-PER-2016-1752)

- Odor Response Cards: The Odor Response Cards provide valuable information to the Event Investigation. They provide insight into what types of odors, symptoms experienced, the wind direction, the time it was experienced, etc. Two things occurred in during this event with regard to the Cards that hindered the investigation:
 - The first two individuals to experience the odors did not fill out cards. The FWS filled one card out for the both of them. It is recommended that each individual fill out their own card so that we can better ensure that the information is an accurate account of that person's experience. (WRPS-PER-2016-1644)
 - The MSA personnel filled out an Odor Response Card and turned it into the shift office several days later. The Shift Office turned the card over to the Industrial Hygiene team but it was misplaced and has yet to be found. It is recommended that there be a better tracking and managing system of the Odor Response Cards. (WRPS-PER-2016-1644)

Attachments:

1. DRAFT Industrial Hygiene Investigative Report includes Odor Response Card
2. WRPS-PER-2016-1568
3. Central Shift Office Log

Attachment 1 – Industrial Hygiene Investigative Report [DRAFT]

Time/Date & Event location: 0810 08/03/2016 N of 244AR

1. Event Summary (including number of workers involved and activity in progress):

0810 08/03/2016 2 construction PFs reported "Strong Onion, Rotten, Nasty" odor North of 244AR near MO513. Symptoms of "Dizziness/Light-Headed" were experienced by one of the individuals.

- Was an IHT Present? [] Yes [X] No
- Was Respiratory Protection Being Worn by Affected Worker(s)? [] Yes [X] No

2. Summary of Employee Reported Information (e.g., symptoms):

Odor Response Card

1. Contact CSM, 373-2689, complete below bulleted information and map.

- Date and time odor was noticed 8-3-16 8:10 AM
- Your name and the work you were performing _____
- Location of odors (mark area on map and wind direction) Outside MO 513
- Name of others in or near the affected area _____
- Was an IHT present? NO
- Describe the odor Sweet Sour Musty Earthy Metallic Smoky Rotten Onion
 Cleaning Solution Ammonia Other Nasty
- Possible source North of 244AR
- Your symptoms (if any) Headache Dizziness/Light-Headed Nausea Cough
 Fatigue/Drowsiness/Weakness Sore/Burning Throat Difficulty Breathing Watery/Irritated Eyes/Trouble with Vision Tingling/Numbness/Paralysis Rash/Itching
 Other _____

2. Send this card to the Central Shift Office.

Revised 2/9/15

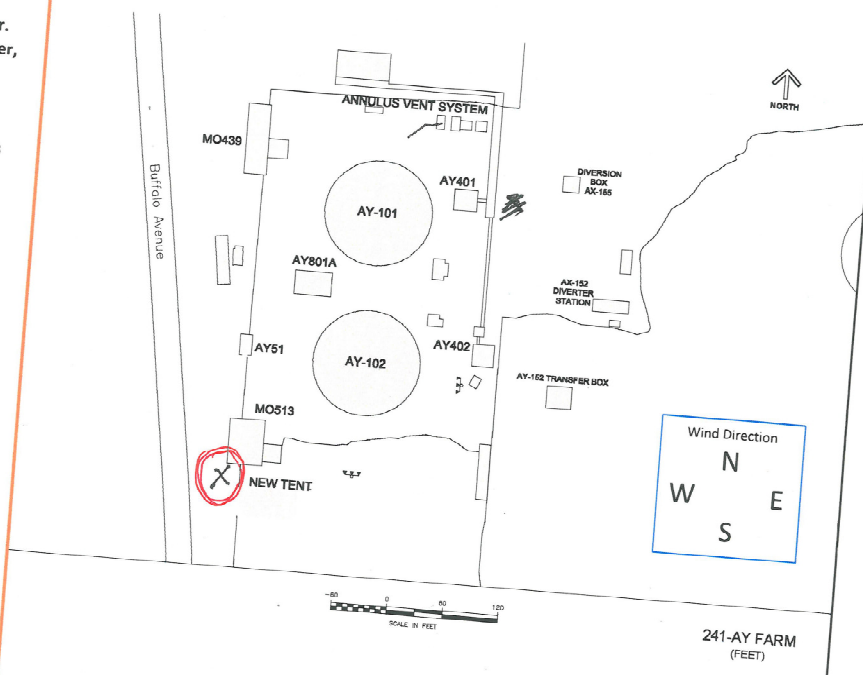
Time/Date & Event location: 0810 08/03/2016 N of 244AR

Odor Response Card**Odors Detected with NO Immediate symptoms**

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager, 373-2689. Provide below bulleted information.
3. Complete map, return to Central Shift Office as soon as practicable.

Odors Detected WITH Symptoms

4. Notify Immediate Supervisor.
5. Contact CSM, 373-2689, complete below bulleted information and map.
 - Your name and the work you were performing
 - Your symptoms (if any)
 - Date and time odor was noticed
 - Location of odors (mark area on map and wind direction)
 - Describe the odor
 - Name of others in or near the affected area
 - Was an IHT present?
 - Possible source
6. Provide information on the back of card.
7. **Send this card immediately to the Central Shift Office.**

3. Identification of Source of the Concern: [] Yes [X] No4. Time Line of the Event:

0724 PO Shift IHTs perform Buffalo St. sweep during Enhanced Monitoring activities:

NH3: 0ppm

VOC: 0.00ppb

Hg: 1 ng/m³

1 of the 2 IHTs smelled the usual onion odor in the 244AR parking lot.

0810 2 IMEC PFs experience "Strong Onion, Rotten, Nasty" odor near MO513. Symptoms of "Dizziness/Light-Headed" were experienced by one of the individuals and was escorted to HPMC by supervisor.

0828 CSO notified of odor event

0833 AN Team field IH, EV Team field IH, Coms Team field IH, AN/AYAZ Team IHT Supervisor, PO Safety Manager arrive at CSO and were briefed by CSM

0835 AN/AYAZ Team IHT Supervisor notified PO Shift IHTs to report to CSO

0836 PO Shift IHTs arrive at CSO and are briefed on response actions:

- Perform DRI survey of area for NH3, VOC, Hg.
- Capture grab sample at reported location for Hapsite GCMS analysis
- Perform grab sample of odor if encountered for Hapsite GCMS analysis

0843 SOEN: "Entering AOP-015 for odor outside of AY-1 Change Trailer. Access restricted from south corner of A Farm outer fence to AY-2 Change Trailer & west of AY-1. CSM"

TF-AOP-015 INDUSTRIAL HYGIENE INVESTIGATION REPORT

PER Number:

N/A

Time/Date & Event location: 0810 08/03/2016 N of 244AR

0844 Odor response card from symptomatic PF arrives at CSO
 0845 AN/AYAZ Team IHT Supervisor requests additional IHT support for response
 0846 PO Shift IHTs leave to perform response actions
 0847 Shift NCOs arrive at CSO and are briefed by CSM about access restriction response actions:

- Barricade buffalo street both N and S of 244 AR

0848 Shift NCOs depart to perform response actions
 0849 CSM makes radio announcement about access restriction to AY change trailer.
 0850 PO Safety Manager contacts programs group to ensure they are in ready status to receive grab samples and perform Hapsite analysis
 0850 SOEN: "Access to and from AY-1 change trailer is restricted due to AOP-015. CSM"
 0851 DOE Field Facility Representative arrives at CSO for briefing from CSM
 0854 CSM is contacted by septic contractor and notified that pumping was not taking place in the affected area, but had just completed septic pumping near 241-C Farm.
 0857 CSM confirms with affected PF manager that 1 employee declined HPMC visit.
 0859 CSM attempts notification of Safety Case Management
 0902 Station 22 notifies CSO of heavy traffic in affected area
 0902 CSM re-announces access restriction over radio
 0903 CSM calls RJ Lee Van to have them respond to affected area and notified by RJ Lee Van that they are still S. of the Wye barricade and are 10-15 minutes out.
 0904 AN Team field IH Notifies Safety Case Management that 1 PF has been transported to HPMC
 0910 CSO Obtains additional OE support to keep personnel out of restricted area. They were briefed and departed
 0932 CSO notified that a MSA Teamster, while delivering bottles to AY-1 change trailer, smelled odor. Symptoms of "metallic taste and difficulty breathing." Escorted to HPMC by supervisor
 0935 CSM attempts to make AIA notification. Receives direction to notify backup.
 0936 CSM notifies backup AIA
 0941 CSM notifies DOE Field Facility Representative of MSA Teamster
 0948 HAMTC safety representatives receive briefing from CSM

5. Summary of IH Monitoring and Sampling Data:

SEE AREA RAE DRI SURVEY# 16-06715

SEE ENHANCED MONITORING DRI SURVEY# 16-06714

SEE AOP-015 RESPONSE DRI SURVEY# 16-06724

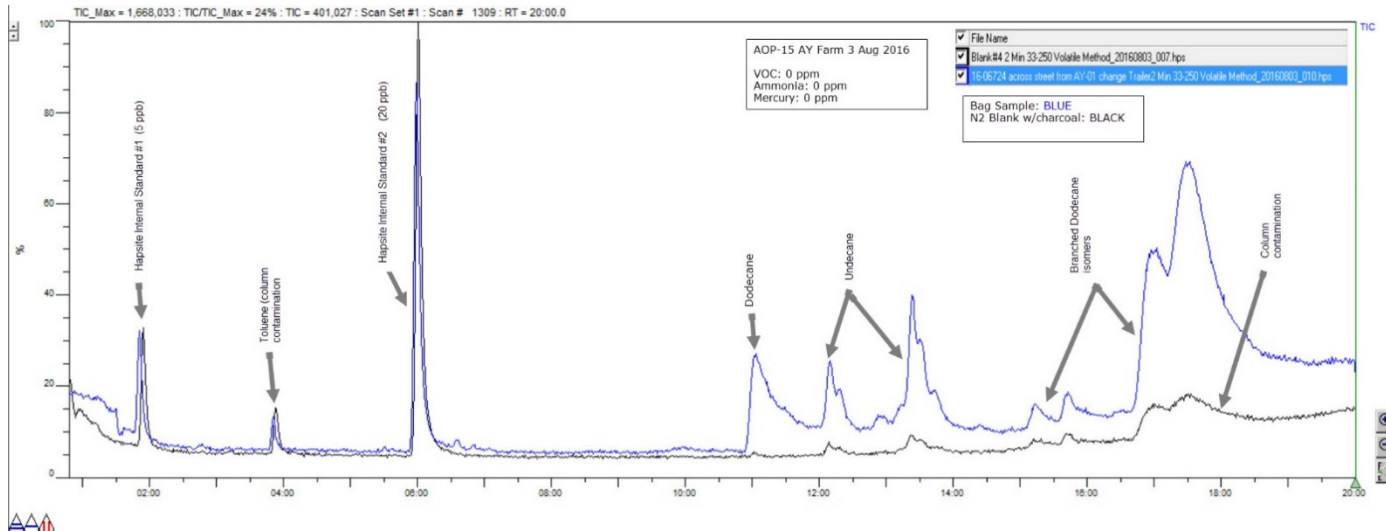
a. Monitoring

No monitoring data available at time of odor event. No known source has been identified for this known odor location. Refer to above surveys for additional information.

AGENT	@ODOR	@SOURCE	EXPOSURE LIMIT	REPORTING LIMIT
Ammonia	N/A ppm	N/A ppm	25 ppm OEL/35ppm STEL	>0 ppm
Total VOCs	N/A ppm	N/A ppm	2 ppm AL	>0 ppm
Mercury	N/A mg/m ³	N/A mg/m ³	0.025 mg/m ³ OEL	0.000016 mg/m ³
Nitrous Oxide	N/A ppm	N/A ppm	25 ppm AL	>0 ppm

Time/Date & Event location: 0810 08/03/2016 N of 244AR

b. GCMS Sample Results:



c. Sampling:

- Source [] Yes [X] No
- Area [] Yes [X] No
- Personal [] Yes [X] No

6. Weather Conditions at Time of Event: Station 6 0815 08/03/2016

- Wind Direction & Speed SSW @ 4mph
- Barometric Pressure 29.46 inHg Rising
- Temperature (°F) 68.0 °F
- Humidity 42%

6. Recommendations/Conclusions: N/A7. Other: See EIR-2016-398. Glossary:

AIA: Administrative Interface Agreements
 CSM: Central Shift Manager
 CSO: Central Shift Office (274AW)
 DRI: Direct Reading Instrumentation
 GCMS: Gas Chromatograph Mass Spectrometer
 HAMTC: Hanford Atomic Metal Trades Council
 IH: Industrial Hygienist
 IHT: Industrial Hygiene Technician
 NCO: Nuclear Control Operator
 OE: Operations Engineer
 PF: Pipefitter
 SCBA: Self Contained Breathing Apparatus

TF-AOP-015 INDUSTRIAL HYGIENE INVESTIGATION REPORT

PER Number:

N/A

Time/Date & Event location: 0810 08/03/2016 N of 244AR

IH Author	(Print) _____	_____	_____
	(Sign) _____	Phone	Date

S&H Program Mgmt.	(Print) _____	_____	_____
	(Sign) _____	Phone	Date

Attachment 2 – WRPS-PER-2016-1568

Save

Problem Evaluation Request (PER)**WRPS-PER-2016-1568**

In Process/Work

PER No	Date of Discovery	Time of Discovery (24:00)	Project
WRPS-PER-2016-1568	08/03/2016	08:00	Retrieval and Closure
Location			
AY Farm			
How Was Problem Discovered			
Self-Revealing (Event)			
Description of Concern or Problem			
On the morning of 8/3/16 at approximately 0800 two construction pipefitters reported odors outside of AY Farm near the AY-1 Change Trailer. This was reported to their supervision as well as WRPS construction management and the Central Shift Office. One of the individuals reported symptoms. This worker had not entered into the Tank Farm on this day prior to this incident..			
Requirement Not Satisfied		Source Document Number	
Equipment Identification Number		System Identification	
N/A		Not Applicable	
Does issue require immediate actions?			
No			
Immediate actions Taken or Planned			
One employee reported symptoms and was taken to the site medical provider for evaluation, he later returned to work with no restrictions. The Central Shift Office entered AOP-015 at approximately 0830 and established a VCZ on the west side of AY-Farm along a corridor with the north boundary between AY-1 and AY-2 Change Trailers and the south boundary to the south of AY-1 change trailer. The east and west boundaries of the VCZ extended from the AY-Farm west fence on the east, across Buffalo to the west side of the AY-102 Control Trailer. The AOP-015 was exited at approximately 0645 on 8/4/16 with IH sample and monitoring results equal to or less than background.			
Recommended Corrective Actions			
Originator Contact			
No			
Originators Name	Originators ID	Originators Phone	Date Initiated
			08/10/2016
SHIFT OPERATIONS REVIEW			
Title			
AOP-015 entry outside AY Farm			
Reportability	SSC Operability	Operability Review	Comp Measures Req
Non-Reportable	N/A	N/A	
Describe actions Taken or Recommended			
No additional actions taken or recommended by the POCSSO.			
SO Reviewer Name	SO Reviewer ID	SO Reviewer Phone	SO Review Date
			08/11/2016
SCREENING			
PER Significance Level	Analysis Level	How Discovered	
PER with Resolution	Not Applicable	3 Self-Revealing	
Ind Assessment Rev	Occurrence Rpt #	DOE CAP Required?	
		No	
Assigned Responsible	Facilities Rep / SSO	Safety Mgmt Rep	Potentially Recurring

Manager		Issue	
Requirements Area Manager (RAM)			
<ul style="list-style-type: none"> • ^N/A^ 		<ul style="list-style-type: none"> • IH010A - Industrial Hygiene / AOPs / Exposure • IH010B - Industrial Hygiene / AOPs / Sampling • IH010C - Industrial Hygiene / AOPs / Monitoring 	
PER Screening Comments			
8/11/16 EIR-2016-039			
ORPS Code	Functional Area	Work Process	ISMS
Not Applicable	Construction Management	<ul style="list-style-type: none"> • Routine Facility Operation 	
PER Screening Chair	PER Screening Chair ID	PER Screening Chair Phone	PER Screening Date
			08/11/2016
PAAA REVIEW			
PAAA Screening	PAAA Codes	Function Codes	
Under Review			
PAAA Causal Analysis Review	NTS Report Number	NTS Report Date	
No			
PAAA Screening Comments			
Waiting on EIR			
PAAA Reviewer Name	PAAA Review Date		
	8/11/2016		
PAAA Approver Name	PAAA Approve Date		
CAUSE ANALYSIS			
Problem Statement			
Remedial Corrective Action			
Causal Analysis			
Causes			
Extent of Condition			
HPI Error Precursors			
Task Demands	Work Environment	Individual Capabilities	Natural Tendencies/ Human Nature
Has the evaluation of this PER resulted in additional information that could affect the Central Shift Office (CSO) determination of operability or reportability?		Comments	
No			
ATTACHMENTS			
Link to PER			
AUDIT HISTORY			
Change Date	Auditor	Comments	
08/10/2016 15:38		Initiator Tab initial submission.	
08/11/2016 01:53		SO Tab initial submission.	

08/11/2016 11:23	PAAA Tab initial submission.
08/11/2016 14:26	Screening Tab initial submission.

-- End of Report --
08/15/2016 08:31 AM

Attachment 3 – Central Shift Office Log

2137 Swapped TOBAC VIP from A-Train/A-Fan to B-Train/B-Fan.

8/3/16

B-Shift

0935

0500 - Relieved as csm by

0940

0500 Relieved

as CSM

1139

0725 IT

was in a pejob at MO-578

and he passed out, 911 has been called?

is on scene.



1140

0730

is ~~gone~~ conscious and will

be transported to Kadlec.

0732 Notified EOC Shift Office, DOE FR

1236

& Safety

0748 "an" "ca"

reports a bug bite from

8/3/16. Elected to self treat w/management

& safety concurrence.

1250

0810 SQ safety Shower has been placed o/s.

The eye wash caps would not blow off.

Notified maintenance

1345

0828

reports that IMECH Pipefitter

smelt a strong onion odor

outside (west). Had dizziness symptoms.

(IMECH PF) was also

present & smelt odor but reports no

symptoms & declined HPMC. is

at HPMC.

1608

0836

~~0840~~

8/3/16

Entered AOP-015 outside of AOP-AP-1 change

trailer. Access is restricted.

0845 Notified DOE FR

S. Mgt

0920 Initiated an Event Investigation for AOP-015

outside of AP-1 Change trailer.

0930 LATE ENTRY 0850 616 NCO

got a small cut on her hand. Elected to

self treat. with management & safety concurrence.

0932 MSA teamster

was delivering

SCBA bottles to AP-1 at the time of

8/3/16

C-Shift

0932 CONT. the ADP-015 entry is experiencing difficulty breathing & metallic taste. He is at HPMC.

0935 Notified AIA

0940 Notified DOE FR

1139 IHT completed flam gas readings for A4/AZ All readings 0% LFL.

→ 1140 Entered LCO 3.1.A for on 7/24/15 @ 0845 hours for A4/AZ farm In-Service VTP In-Operable. LCO 3.1.A.2.1 due NLT 8/6/16 @ 0748 hours, LCO 3.1.A.2.3 due NLT 3/4/17. (POSO-002 pg 273 @ 0847) 1236 IMECH PF was released from HPMC without restriction.

was also released with no restrictions

1250 Closed process memos PM-16-08 & 09 due to EC-06 being postponed.

1345 Waste Services NCO was ^{for 8/3/16} disposing of printer cleaning cartridges & the cleaner contacted his skin. No injury or irritation occurred. Declined medical treatment. The SDS recommends rinsing area w/ water & changing clothes which is what was performed.

1608 IT was released from Kadlec to his personal physician.