Enclosure

INITIAL EVENT INVESTIGATION REPORT
EIR-2016-025

“AOP-015 FOR ODORS REPORTED OUTSIDE TX FARM”

Consisting of 26 pages
Including cover sheet
EVENT INVESTIGATION REPORT

AOP-015 for Odors Reported Outside TX Farm  
EIR-2016-025

Event Investigation Team Lead Under Instruction

06/02/2016
Date

Event Investigation Team Lead

06/02/2016

PER Responsible Manager

06/02/2016
Date

PER No. WRPS-PER-2016-0931
### AOP-015 for Odors Reported Outside TX Farm

#### AOP-015 Summary

<table>
<thead>
<tr>
<th>Event</th>
<th>EIR-2016-025, Odors Detected Outside TX Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor / Taste</td>
<td>Burnt onions, rotten smell (by two Washington River Protection Solutions [WRPS] personnel)</td>
</tr>
<tr>
<td>Symptoms</td>
<td>Cough, flu-like symptoms (from 1 non-WRPS personnel that did not experience odors)</td>
</tr>
<tr>
<td>Direct Read Instrumentation (DRI) Result During Event</td>
<td>Only mercury was found at 0.000005 mg/m³ which is well below the reporting limit (0.000016 mg/m³)</td>
</tr>
<tr>
<td>Industrial Hygiene (IH) Investigative Monitoring / Sampling</td>
<td>Results found to be predominately background. No constituents encountered at levels of concern. Only naphthalene compounds which are known wood preservatives and termite-proofing agents were found at slightly higher than normal background level (~0.175 ppm) but well below exposure limits (15 ppm short term exposure limit [STEL]).</td>
</tr>
<tr>
<td>Biological Control/ Herbicide Application Data</td>
<td>2,4-D herbicide called Hardball and another chemical called Overdrive were being applied at ~230 yards southeast of TX/TY at #216-S-23 and at ~178 yards east of TX/TY at UPR-W113 and at ~10 yards east of TX/TY at UPR-W199</td>
</tr>
<tr>
<td>Potential Source</td>
<td>Indeterminate</td>
</tr>
<tr>
<td>Wind Speed / Direction</td>
<td>3-4 mph; traveling from North to South. Note: The WRPS personnel that detected odors reported that the wind speed felt to be zero (0), stagnant. Note: Data shows that between 0800 hours and 0845 hours the weather shifted directions: going from South→North @ 0800 and then North→South @ 0845 at 2-4mph.</td>
</tr>
<tr>
<td>Waste Disturbing or Tank Work in Adjacent Area</td>
<td>Clean up of Radiological Material Area (RMA) located at the southwest @ ~130 ft. Clean up of a wooden box.</td>
</tr>
</tbody>
</table>

#### Investigation Summary

On May 10, 2016, at 0900 hours, two electricians experienced a stronger than normal onion odor while they were preparing the installation of a generator located 25 ft. north of the TY/TX Farm change trailer (MO-817) and 15 ft. west (outside) of the TX Farm fence line. The individuals filled out Odor Response Cards. Neither electrician experienced symptoms nor did they receive a medical evaluation at HPMC. Weather conditions were calm at 3-4 mph with a north to south wind direction per the Hanford Meteorological Station 19. Although it should be noted that the electricians reported that the weather felt stagnant and that the wind indicator flags were not moving.
To the southwest of MO-817 (~130 ft. away) between the hours of 0800 to 0930, another crew was performing separate work activities; cleaning-up a Radioactive Material Area (RMA). When the Field Work Supervisor (FWS) arrived at the TX Farm, he informed them that the area was now restricted due to an AOP-015 event. They did not report having experienced odors. The crew was accompanied by an Industrial Hygiene Technician (IHT) with direct reading instrumentation (DRI) and did not detect anything on his DRI while monitoring for volatile organic compounds (VOCs) and ammonia (SURVEY 16-03691).

Other activity in the area included tumbleweed control activities by Mission Support Alliance (MSA). Beginning at 0800 hours on 10 May 2016, MSA applied a 2,4-D herbicide and a sodium dicamba herbicide at ~230 yards northeast of TX/TY at #216-S-23 and at ~178 yards east of TX/TY at UPR-W99 and UPR-W113. Safety Data Sheet for the 2,4-D herbicide called “Hardball” describes the chemical as having a surfactant odor. Safety Data Sheet for the sodium dicamba application describes the odor as moderate but at a concentrated level it should be noted that this investigation found the sodium dicamba to be “offensive” and “rotten smelling”.

The Central Shift Manager (CSM) entered into procedure TF-AOP-015, Response to Reported Odors or Unexpected Changes to Vapor Conditions (AOP-15) due to the reported odors. A Shift Office Event Notification (SOEN) was distributed at 0937 hours. Upon entering into AOP-015, an ST Team Field Work Supervisor (FWS) began activities to remove all personnel from the west side of TX/TY change trailer area. The FWS proceeded to contact other ST personnel to gather stanchions and equipment to barricade the area in order to assist Central Shift until they arrived.

At approximately 0940 hours, a CH2M Hill Plateau Remediation Contract (CHPRC) Nuclear Chemical Operator (NCO) approached the restricted area from the north driving a tan van. The NCO was stopped by the FWS at ~150 ft. north of the change trailer. The FWS asked the NCO some questions and then informed the NCO that the area was restricted due to odors. The NCO turned the vehicle around and headed back north. The ST Area Manager was later informed that the NCO experienced sore throat symptoms shortly after being stopped; however, they did not report having experienced any odors. The NCO went to the onsite medical clinic for a chemical exposure evaluation.

Industrial Hygiene began sampling at approximately 1100 hours on 10 May 2016; however, there was a problem with the sample pump and only the DRI data that was collected that day was reliable. The DRI data showed zero readings for ammonia, total VOCs, and nitrous oxide. Only mercury was found at 0.000005 mg/m$^3$ which is well below the reporting limit (0.000016 mg/m$^3$).

The following day, at 1520 hours on 11 May 2016, the equipment was functioning properly and another grab sample was taken. Results showed constituents of concern to be at background levels. Only naphthalene compounds which are known wood preservatives and termite-proofing agents were found at slightly higher than normal background level (~0.175 ppm) but well below exposure limits (15 ppm STEL).

An Event Investigation was initiated at 1400 hours on 10 May 2016 and Office of River Protection (ORP) was informed. Interviews with affected parties were held over the next several days. An official Fact Find Meeting was not held.

At 1636 hours on 12 May 2016, Washington River Protection Solutions (WRPS) exited out of AOP-015 for odors outside of TX Farm and normal access was restored to the area.
Figure 1 - AOP-015 for Odors Reported Outside TX Farm

<table>
<thead>
<tr>
<th>Time</th>
<th>Speed Mph*</th>
<th>Wind Direction (from the...)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800</td>
<td>3</td>
<td>SE</td>
</tr>
<tr>
<td>0815</td>
<td>3.1</td>
<td>N-NE</td>
</tr>
<tr>
<td>0830</td>
<td>3.8</td>
<td>N-NW</td>
</tr>
<tr>
<td>0845</td>
<td>3.9</td>
<td>N</td>
</tr>
<tr>
<td>0900**</td>
<td>3.7</td>
<td>N-NW</td>
</tr>
</tbody>
</table>

* Wind speeds ranged from 2-4 mph in West Area at this time. WRPS Personnel who detected odors noted that the air in their immediate area felt stagnant.  
** 0900 when odors were detected
Figure 2 – Co-located Work In and Around TX/TY during Same Timeframe

- **0940 Hours**: NCO from CHPRC is traveling from the North and is stopped at the barricade and informed that the area is closed due to odor issues. NCO turns around but later experiences symptoms and is sent to HPMC for evaluation.

- **0900 Hours**: Electricians experience odors (no symptoms). They stop work and report it.

- **0935 Hours**: ST Team FWS informs RMA Clean-up Crew to Vacate the area due to reported AOP-015. No odors or symptoms experienced.

- **0800**: MSA begins applying herbicide to the SE and East of TX/TY at: 216-S-23, UPR-W-99/113

<table>
<thead>
<tr>
<th>Time</th>
<th>Speed Mph*</th>
<th>Wind Direction (from the...)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800</td>
<td>3</td>
<td>SE</td>
</tr>
<tr>
<td>0815</td>
<td>3.1</td>
<td>N-NE</td>
</tr>
<tr>
<td>0830</td>
<td>3.8</td>
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</tr>
<tr>
<td>0845</td>
<td>3.9</td>
<td>N</td>
</tr>
<tr>
<td>0900**</td>
<td>3.7</td>
<td>N-NW</td>
</tr>
</tbody>
</table>

* Wind speeds ranged from 2-4mph in West Area at this time. WRPS Personnel who detected odors noted that the air in their immediate area felt stagnant.

** 0900 when odors were detected
Figure 3 – Locations of Herbicide Applications in West Area on the Morning of 10 May 2016

UPR-200-W-99

216-S-23

UPR-200-W-113
Weather Information

At the time odors were detected, wind speeds were approximately 3-4 mph moving in a North to South direction. The electricians both noted that the air felt stagnant. The weather data was provided by the Hanford Weather Station and taken from meteorological station 19 at 15 minute increments. The data shows that between 0800 hours and 0845 hours the weather shifted directions: going from South→North then North→South. The following data is for Tuesday, 10 May 2016. The highlighted rows indicate the approximate time when winds began shifting:

<table>
<thead>
<tr>
<th>Time (PDT)</th>
<th>Direction (degrees)</th>
<th>Speed (mph)</th>
<th>Pressure (Hgin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0700</td>
<td>174.9 / from S-SE</td>
<td>2.1</td>
<td>29.48”</td>
</tr>
<tr>
<td>0715</td>
<td>128.6 / from SE</td>
<td>3.1</td>
<td>29.49”</td>
</tr>
<tr>
<td>0730</td>
<td>144.6 / from SE</td>
<td>3.1</td>
<td>29.49”</td>
</tr>
<tr>
<td>0745</td>
<td>145 / from SE</td>
<td>3.4</td>
<td>29.49”</td>
</tr>
<tr>
<td>0800</td>
<td>111.7 / from SE</td>
<td>3</td>
<td>29.50”</td>
</tr>
<tr>
<td>0815</td>
<td>4 / from N-NE</td>
<td>3.1</td>
<td>29.50”</td>
</tr>
<tr>
<td>0830</td>
<td>4.6 / from N</td>
<td>3.8</td>
<td>29.50”</td>
</tr>
<tr>
<td>0845</td>
<td>350.6 / from N</td>
<td>3.9</td>
<td>29.50”</td>
</tr>
<tr>
<td>0900*</td>
<td>342.1 / from N</td>
<td>3.7</td>
<td>29.50”</td>
</tr>
<tr>
<td>0915</td>
<td>347.6 / from N</td>
<td>3.7</td>
<td>29.51”</td>
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<tr>
<td>0930</td>
<td>358.7 / from N</td>
<td>3.1</td>
<td>29.51”</td>
</tr>
<tr>
<td>0945</td>
<td>321.3 / from NW</td>
<td>3.7</td>
<td>29.51”</td>
</tr>
<tr>
<td>1000</td>
<td>29.8 / from NE</td>
<td>3.3</td>
<td>29.51”</td>
</tr>
</tbody>
</table>

* Odors detected at 0900 hours

Biological Control Data

Other activity occurring in the area at the time, included tumbleweed control activities by MSA. Beginning at 0800 hours on 10 May 2016, MSA applied a 2,4-Dichlorophenoxyacetic Acid herbicide called “Hardball” along with another application called “Overdrive” which is primarily a sodium dicamba. They applied it at three locations: at ~230 yards northeast of TX/TY at #216-S-23 and at ~178 yards east of TX/TY at UPR-W99 and UPR-W113 (see Figures 1 and 2). Safety Data Sheet for “Hardball” describes the chemical as having a surfactant odor. Safety Data Sheet for the sodium dicamba application describes the odor as moderate but at a concentrated level it should be noted that this investigation found the sodium dicamba to be “offensive” and “rotten smelling”.

It is a possibility that the current IH instruments are not calibrated for the ionization levels of these herbicide chemicals and therefore would not be detected in the grab sample. It is recommended that this be further investigated by IH.
Event Timeline

05/10/16

0800 Two electricians begin installation of a generator (work package #207439) at TX farm change trailer (MO-817); located 25 ft. north of the trailer and 15 ft. west of the TX farm fence line. (Source: Interview with Electrician #1)

0800 Another crew, which includes 7 personnel: 1 FWS, 2 Health Physics Technicians (HPTs), 3 Operators, and 1 IHT, is performing separate work to clean up an RMA (wooden box; TFC-WO-1502). This crew is located southwest of the electricians at ~130 ft. (Source: Summary Report by FWS, ; Interview with IHT of the RMA clean-up crew)

0800 MSA begins performing tumbleweed control activities. They apply a 2,4-D herbicide called “Hardball” along with a sodium dicamba application called “Overdrive” at ~230 yards southeast of TX/TY at waste information data system (WIDS) site 216-S-23 and at ~178 yards east of TX/TY at WIDS sites UPR-200-W-113 and at ~10 yards east of TX/TY at UPR-200-W-99. (Source: Interview with Biological Control Manager at MSA,

0900 While the electricians are performing the installation, they encounter a rotten onion odor (Source: Interviews with Electricians and Odor Response Cards)

0900-0917 Electricians return to ST Team Office, report the odors to the Area Day Shift Manager (ADSM), and fill out odor response cards. **Positive: ADSM acted with deliberate speed to recognize the potential AOP and to ensure that personnel complete Odor Response Cards.** (Source: Interview with Electricians)

0917 Notification is made to the Central Shift office by the ADSM that stronger than normal odors had been experienced in the West Area of Tank Farms and that no symptoms had been reported. (Source: Shift Log)

0927 Shift Office contacts ADSM to establish boundaries for restricting the area where odors had been reported. (Source: Written summary of events by ST Team FWS)

0928 ADSM instructs ST FWS to remove all personnel from the west side of TX/TY change trailer area and to assist Central Shift with cordoning off the area. FWS coordinates with ST Team personnel to gather stanchions and equipment. **Positive: ST Team works with deliberate speed to assist Central Shift in barricading the area.** (Source: Written summary of events by ST Team FWS)
0931 Central Shift Office reports that an AOP-015 has been entered. (Source: Shift Log)

0935 FWS travels to the AOP-015 area and informs RMA clean-up crew to vacate the area.

0937 SOEN is distributed

0940 Tan van approaches the restricted area from the north. The driver, an NCO from CHPRC, is flagged down by the FWS. The NCO rolls down the window and the FWS asks the NCO some questions and then informs the NCO that the area is restricted due to odors detected in the area. The driver turns around and leaves the area. The NCO reports to her manager that she is experiencing flu-like symptoms. Her manager suggests she get evaluated at HPMC. HPMC later performs a Chemical Exposure evaluation which includes baseline lab tests and vital signs. A chest x-ray and pulmonary function test were not ordered. (Source: Interview with NCO)

0945 ST ADSM is informed that RMA clean-up crew had an IHT with them and had been taking direct readings. The DRI did not detect anything out of range while monitoring for VOCs and ammonia (SURVEY 16-03691) (Source: IH Investigation Report)

1021 ST Area Manager is contacted by CHPRC supervisory personnel who informs Area Manager that the NCO that approached the TX area did not detect odors but a short time later exhibited symptoms and was sent to HPMC for a medical evaluation. (Source: Interview with ADSM)

1100 IH sampling is performed but only the DRI readings are valid at the time because sampling equipment is malfunctioning and another grab sample will be needed. (Source: IH Investigation Report)

05/11/16

1520 IH sampling is performed again. (Source: IH Investigation Report)

05/12/16

1400 IH Investigation Report is completed and distributed. The report indicates no harmful constituents in the area. (Source: IH Investigation Report)

1636 WRPS exits out of AOP-015 and normal access to TX/TY farm area is restored.

Immediate Actions Taken

1. 5/10/2016 Access to the west of TX/TY farm is barricaded and work is restricted until IH investigation is complete and WRPS exits out of AOP-015.
Compensatory Measures

1. 5/10/2016, 0931 hours, entered into AOP-015.
2. 5/10/2016, 0940 hours, restricted area is physically controlled
3. 5/10/2016, 1100 hours, IH begins sampling and analysis
4. 5/12/2016, prior to exiting AOP-015, the CSM validated with the IH Program Manager that readings were at or below background prior to down-posting the farm.

Preliminary Extent of Condition Review

The TF-AOP-015 entry was specific to the areas near TX/TY farm.

Discussion of Potential Causes

At the time of this investigation the cause is indeterminate.

A potential source of odors might include the herbicide applications that were being conducted in the area at the time. It is a possibility that the current IH instruments are not calibrated for the ionization levels of these herbicide chemicals and therefore would not be detected in the grab sample. It is recommended that this be further investigated by Industrial Hygiene.

Discussion of Barriers That Could Have Impacted the Cause

At the time of this investigation, the cause, as well as any barriers, is indeterminate.

Recommendations/Proposed Corrective Actions

There are no proposed corrective actions as the cause of the odors is indeterminate.

A question was asked during the investigation as to whether or not continuous monitoring would be applied to TX/TY Farm: According to Industrial Hygiene Program Manager, continuous monitoring will not be performed in the immediate future; however, an assessment of vapor detection and monitoring equipment is currently being performed. Once the equipment has been tested and the data collected, WRPS will look at the data and evaluate the most effective methods of detection and monitoring. After that, it may be determined that continuous monitoring equipment will be set up to monitor TX Farm vapor activities.

WRPS-PER-2016-1078 has been initiated to the Industrial Hygiene Team to further investigate the possibility of odors caused by herbicide applications with emphasis on the herbicides Hardball and Overdrive. The investigation should look at the ionization levels of these chemicals and how they are detected with current IH instrumentation.

Attachments:

1. Odor Response Cards
2. Industrial Hygiene Investigative Report
3. Summary Report by Field Work Supervisor for ST Team
Attachment 1 – Odor Response Cards
Odor Response Card

1. Contact CSM, [Redacted] complete below bulleted information and map.
   - Date and time odor was noticed: 5-10-14 9:00 am
   - Your name and the work you were performing: [Redacted] Electrical
   - Location of odors (mark area on map and wind direction): TX CHANGE TELL
   - Name of others in or near the affected area:
   - Was an IHT present? X
   - Describe the odor: □ Sweet □ Sour □ Musty □ Earthy □ Metallic □ Smoky □ Rotten [X] Onion □ Cleaning Solution □ Ammonia □ Other: [Redacted]
   - Possible source: TX Farm
   - 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: [Redacted]

2. Send this card to the Central Shift Office.

Revised 2/9/15
Odor Response Card

Odors Detected with *NO* Immediate symptoms

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager, 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, 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.
Odor Response Card

1. Contact CSM, [Redacted] complete below bulleted information and map.
   - Date and time odor was noticed _5-10-16_ 9:00 AM
   - Your name and the work you were performing _Electrical_
   - Location of odors (mark area on map and wind direction) _outside of TX Charger
   - 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_ [Other:_
   - Possible source _TX Farm_
   - 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_ [Other:_

2. Send this card to the Central Shift Office.

Revised 2/9/15
Odor Response Card

Odors Detected with **NO**
Immediate symptoms

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager,
   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, 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.
Attachment 2 – Industrial Hygiene Investigative Report
1. Event Summary (including number of workers involved and activity in progress):

Two electricians and an HPT were performing generator inspections on the W side of the TX- change trailer (MO-817) when a stronger than normal onion odor detected by multiple people outside of the TX change trailer.

- **Was an IHT Present?** [ ] Yes [x] No  **NOTE:** An IHT supporting a separate work activity approximately 130ft away did not detect anything on his DRI at that location while monitoring for VOCs and ammonia (SURVEY 16-03691).

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

2. Summary of Employee Reported Information (e.g., symptoms):  See Odor Response Cards below.
Odor Response Card

1. Contact CSM, complete below bulleted information and map.
   - Date and time odor was noticed: 5-10-16, 9:00AM
   - Your name and the work you were performing: Electrician
   - Location of odors (mark area on map and wind direction): TX Change trailer
   - Name of others in or near the affected area:
   - Was an IHT present? No
   - Describe the odor: Sweet, Sour, Musty, Earthy, Musty, Smoky, Rotten Onion, Cleaning Solution, Ammonia, Other: TX Farm
   - Possible source: TX Farm

2. Send this card to the Central Shift Office.
3. Identification of Source of the Concern: [ ] Yes  [X] No

4. Time Line of the Event:

05/10/2016:
0931 SOEN: “Entered AOP-015 for odors outside of TX Farm, access is restricted to TX Farm and West of TX Farm near the change trailer. CSM”
0940 AN Team Field IH, EV Team Field IH, AY/AZ Team Field IH arrive at CSO and are briefed on situation by CSM
0942 PO Shift IHT arrives at CSO
0945 ST Team/IH supervisor arrives at CSO
0951 AY/AZ Team field IH briefs PO Shift IHTs on response actions, IHTs leave to acquire RPE and head to event scene.
1000 AY/AZ Team field IH contacts programs IH department to co-ordinate equipment set up and analysis of grab samples
1016 Programs IS contacts CSO to confirm that none of the affected employees are visiting HPMC
1110 PO Shift IHTs complete collection of grab samples.

05/11/2016:
1520 Grab sample acquired TX farm 20’ exterior to change trailer exit door. Delay in grab sample resulted from initial problems with the sample pump that was discovered during HAPSITE sample evaluation.

05/12/2016:
0436 SOEN: “Exiting AOP-015 for odors outside of TX Farm, normal access is restored to TX Farm and West of TX Farm near the change trailer. CSM”

5. Summary of IH Monitoring and Sampling Data:

SEE DRI SURVEY# 16-03685 AOP 15 AT TX OUTSIDE CHANGE TRAILER
SEE DRI SURVEY# 16-03691 Clean up RMA-2 outside TX/TY
a. Monitoring

<table>
<thead>
<tr>
<th>AGENT</th>
<th>@ODOR</th>
<th>@SOURCE</th>
<th>EXPOSURE LIMIT</th>
<th>REPORTING LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRI Readings from initial response: 1100 05/10/2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia</td>
<td>0.0 ppm</td>
<td>N/A ppm</td>
<td>25 ppm OEL/35ppm STEL</td>
<td>&gt;0 ppm</td>
</tr>
<tr>
<td>Total VOCs</td>
<td>0.0 ppm</td>
<td>N/A ppm</td>
<td>2 ppm AL</td>
<td>&gt;0 ppm</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.000005 mg/m³</td>
<td>N/A mg/m³</td>
<td>0.025 mg/m³ OEL</td>
<td>0.000016 mg/m³</td>
</tr>
<tr>
<td>Nitrous Oxide</td>
<td>0.0 ppm</td>
<td>N/A ppm</td>
<td>25 ppm AL</td>
<td>&gt;0 ppm</td>
</tr>
<tr>
<td>Grab sample results from Hapsite GC-MS analysis: 1520 05/11/2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>~0.175 ppm</td>
<td>N/A ppm</td>
<td>15 ppm STEL</td>
<td>&gt;0.000 ppm</td>
</tr>
</tbody>
</table>

b. GCMS Sample Results:

Results found to be predominately background. No constituents encountered at levels of concern.

c. Sampling:

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

6. Weather Conditions at Time of Event: Station 19

- Wind Direction & Speed N 4 MPH
- Barometric Pressure (steady/rising/falling) 29.51 inHg ↑
- Temperature (°F) 59.9 °F
- Humidity 45%
7. **Recommendations/Conclusions:** No source for this event was identified. No specific course of action is indicated.

8. **Other:** See EIR-2016-025

<table>
<thead>
<tr>
<th>IH Author</th>
<th>(Print)</th>
<th>(Sign)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;H Program Mgmt.</td>
<td>(Print)</td>
<td>(Sign)</td>
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05/12/2016
Date

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Attachment 3 – Summary Report for Field Work Supervisor for ST Team
TIME'S ARE APPROXIMATE

0720 MET 3 - RIGGERS, 2 - TEAMSTERS @ 272-WH. WE PROCEEDED TO TX/TX FARM, WEST OF COMM. TEL.

0730 PARKED @ LOCATION # 1, AND WALKED AROUND VISUALLY INSPECTED LOCATION # 2, FOR THE MATERIAL & WORK NEEDED TO BE DONE.

0755 RIGGERS/TEAMSTERS STARTED WORK @ LOCATION # 2.

0825 WORK IS COMPLETE @ Loc. # 2.

0840 RECEIVED CALL FROM RIGGER DL - WORK IS COMPLETE.

0915 PARKED MY VEHICLE @ LOCATION # 3, AND TALKED TO FWS PAUL RAYMON @ LOCATION # 4.

0925 MET UN @ 272-WH. WAS TOLD TO REMOVE ALL PERSONNEL FROM THE WEST SIDE OF TX/TX CHANCE TRAILER AREA. ASSIST CENTRAL SHIF 과 POSTING THIS AREA AS RESTRICTED, DUE TO REPORTS OF VAPORS.

0928 CALLED NCO DL FOR ST TEAM, HE & NCO'S PROCEEDED TO GATHER STANCHIONDS AND EQUIPMENT TO ASSIST CS NCO'S.
0935 PARKED AGAIN @ LOCATION #5, PROCEEDED TO LOCATION #4 & INFORMED A CREW TO VACATE THIS AREA.

0940 A TAN VEHICLE (VAN) W/ A FEMALE NCO, ARRIVED AT THIS AREA. I STOPPED HER @ LOCATION #5, INFORMED HER THIS AREA IS CLOSED DUE TO VIAPOR ISSUES. SHE U-TURNED & LEFT THE AREA. COMING AND LEAVING USING ACCESS RD. #1.

0942 INFORMED BY TEXT MESSAGE THAT I AM PHYSICALLY CONTROLLING THE AREA.

0946 INFORMED BY TEXT MESSAGE THAT I HAD ARRIVED. HE PARKED HIS VEHICLE TO BLOCK ACCESS RD. #1, @ LOCATION #6.

0956 RECEIVED A PHONE CALL FROM I INFORMED HIM THAT SHIFU NCO'S WERE CURRENTLY ON STATION. I WAS TOLD TO LET Them FINISH THE POSTING & CONTROL OF THIS AREA.
1000 - ST NCO'S DRANK OFF STANCHIONS AND EQUIPMENT W/ THE 3 OF US THEN LEFT THE AREA.

NOTE: SHIFT NCO'S STARTED POSTING @ ACCESS RD #3, IN THE SOUTH, CONTINUING TO ACCESS RD #2, AND THE ACCESS RD #1. WHEN I LEFT, WAS STILL PARKED @ LOCATION #6.

WS ST TEAM / 200W