EVENT INVESTIGATION REPORT

Entered into AOP-015 at ETF

Event Investigation Report Number: EIR-2015-046

12/28/2015
Date

12/28/15
Date

Event Investigation Team Lead

PER Responsible Manager

PER No. WRPS-PER-2015-2550

Page 1 of 26
Investigation Summary

Monday December 7, 2015:

On December 7, 2015, at ~1020 hours Two (2) Pipe-Fitters, a Health Physics Technician (HPT), and a Nuclear Control Operator (NCO) were replacing pressure gauges associated with the Auxiliary Filter Canisters on the mezzanine of the process bay at 2025E. When the “sample lines” (1/4” stainless lines totaling about 6’ in length) were disconnected from the pressure gauges the 4 employees noticed a strong “hair perm”, “hair salon”, onion, metallic odor which presented in one employee with “metallic taste in throat” and a “cough/tickle” (See Attachment 3: Odor Response Cards).

The workers notified management and were taken to HPMC for medical evaluation. Management contacted the Central Shift Office and described the odors location, smell description, and the symptoms experienced by one of the workers. Per procedure TF-AOP-015 “Response to Reported Odors or Unexpected Changes to Vapor Conditions” Section 2.1.1 “Odors have caused symptoms of exposure... e.g. Metallic Taste” the Central Shift Manager made the determination to enter into AOP-015 and restrict access to the area and dispatch Industrial Hygiene to sample the area.

At ~ 1050 Two (2) Industrial Hygiene Technicians arrive at the central shift office and are briefed on the background, location, and symptoms experienced by the work crew. They were then dispatched to take air samples. The following are the results and observations from their analysis (IHTs began their survey of the area at ~1122 hours):

- All associated valves were found closed.
- Sample lines were disconnected from pressure gauges.
- No odors were apparent.
- Only slightly elevated Volatile Organic Compound (VOC) readings could be found directly within pressure gauge inlets.
- Pressure gauges were not oil filled
- Rectorseal™ Pipe thread sealant (lid closed) produced 6.330PPM VOC. Placed approximately 18in from area where open instrument lines and pressure gauges were left.
- Tedlar® bag was filled from area directly adjacent to (within 4in) open sample lines and directly above (12-18in) pressure gauges (24-36in from pipe sealant container).
- No other chemicals or open systems could be found near the event scene.

At ~1200 the four employees were released back to work without restriction. However, in accordance with TFC-BSM-HR_EM-C-04 (Fitness for Duty, Work Suitability, and Reasonable Accommodations to Work Restrictions Section 4.1) Management restricted ACES tank farm access to the affected employees until medical results associated with potential vapor/chemical exposure incidents have been received by the employee.

Neither bag sample taken by IH demonstrated chemical exposure hazards above site action levels or any indication that operations may not be safely resumed.
WRPS-1505841

Entered into AOP-015 at ETF

**Background Information on the Filter Skid:**

The Auxiliary filter canisters were left empty (filters removed) approximately 2 years ago. The system was back-flushed for 4 hours with de-ionized water prior to being placed out of service. The filter skid has historically been an area of algae accumulation with associated musty odors/smells experienced during filter changes. As a result of that history, facility personnel anticipated that odors could be present. The work package covering the gauge replacement had been approved by IH/IS. The package did not require IH monitoring and no monitoring was being performed at the time of the reported odors.

**Tuesday December 8, 2015:**

Two construction workers (laborer and carpenter) were on the south east corner of the process floor moving and staging equipment for the installation of a new hoist. As they staged equipment between a concrete wall and the UV oxidation system the workers identified an unknown smell. They stopped work and notified management, at which point management restricted access to the entire processing floor area, contacted the central shift office (which entered AOP-015), and sent the affected workers to HPMC for evaluation. Both construction workers were released to work without restriction. A survey of the area by IH identified a couple sheets of treated plywood as an odor source, but it didn’t represent the smell type described by the workers (“hair perm”). No other odor emitting sources were identified by the direct reading instrumentation and two bag samples were taken to be analyzed by the lab.

It is important to note that although the event occurred inside of 2025E Process Bay. The building ventilation in the process floor where the original event occurred provides a minimum of four air changes per hour (*Contact facility engineer for more information*).

Neither follow up investigation of the events at ETF On December 7th or 8th demonstrated chemical exposure hazards above site action levels or any indication that operations may not be safely resumed. Plans for resumption should be made with the cognizant S&H staff to minimize the potential for further odor concerns since no clear source was identified in either instance.

*No formal fact finding meeting was held in support of this event investigation.*

**Event Timeline**

**12/07/2015**

1020 Two (2) Pipe-Fitters, a Health Physics Technician (HPT), and a Nuclear Control Operator (NCO) encounter an obnoxious odor while replacing pressure gauges associated with the Auxiliary Filter Canisters on the mezzanine of the process bay at 2025E. The odor is reported to have smelled like a strong “hair perm/hair salon”, onion, and metallic odor which resulted in one of the employees experiencing a metallic taste and cough/tickle in their throat.
Effluent Treatment Facility Industrial Hygienist (ETF IH) notifies Production Operations Safety Manager (PO Safety Manager) of odor event at Effluent Treatment Facility (ETF).

Production Operations Safety Manager notifies AN-Team Industrial Hygiene Professional, ST-Team Industrial Hygiene Professional, EV-Team Industrial Hygiene Professional, EV-Team Industrial Safety Representative, and AY/AZ-Team Industrial Safety Representative) of possible odor event at ETF and dispatches personnel to Central Shift Office.

"Entering AOP-015 for ETF 2025E mezzanine area, stay clear of area. CSM" - SOEN E-Mail notification

Shift Industrial Hygiene Technician 1 & Shift Industrial Hygiene Technician 2 arrive at event scene.

- No odors were apparent.
- Only slightly elevated Volatile Organic Compound (VOC) readings could be found directly within pressure gauge inlets.
- Tedlar® bag was filled from area directly adjacent to (within 4in) open sample lines and directly above (12-18in) pressure gauges (24-36in from pipe sealant container).
- No other chemicals or open systems could be found near the event scene.

~1200 The two Pipe-Fitters, HPT, and NCO were released back to work without restriction.

12/08/2015

0610 The Work Crew was briefed on the previous day’s events related to an AOP-015 on the mezzanine of 2025E

0730 Project construction was released to work on the process floor.

0820 Employees (Laborer and Carpenter) smelled a “hair perm” like smell and exited the work area.

0830 IH/IS was contacted. SOM, workers, IH/IS, facility manager sat down and discussed event.

0835 SOM restricted access to the entire process floor. PAX announcement and barricades on door.

0845 Laborer and Carpenter were sent to HPMC
Compensatory Measures

1. Restricted ACES tank farm access to the affected employees per TFC-BSM-HR_EM-C-04, Fitness for Duty, Work Suitability, and Reasonable Accommodations to Work Restrictions:

   4.1: “Following a medical examination as a result of an Abnormal Operating Procedure (AOP) TF-AOP-015 event, employees will be restricted access to all TOC hazard waste areas until medical lab results associated with potential vapor/chemical exposure incidents have been received by the employee.”

Immediate Actions Taken

1. The four individuals who encountered the smell exited the area, notified management, and reported to HPMC for evaluation.
2. Management contacted the Central Shift Office and described the location, job task being performed, odor, and symptoms.
3. Central Shift Manager entered into AOP-015 based on the following criteria:

   1.1.1 “Odors have caused symptoms of exposure (e.g., headaches, irritation of skin, eyes, nose, or longs, nausea, difficulty breathing, metallic taste in mouth).

4. Industrial Hygiene was dispatched to take samples.

Preliminary Extent of Condition Review

A search of the Problem Evaluation Request (PER) database yielded a number of PERs regarding AOP-015 entries inside of the tank farms, but this is the first AOP-015 entry inside of the ETF facility.

Discussion of Potential Causes

1. The most likely potential cause in the event on December 7, 2015 is raw water and potential algae buildup inside of the system. The only other potential source identified was a can of RectorSeal™ Pipe Thread Sealant container found by Industrial Hygiene during their surveillance of the area. It is important to note that no fugitive emission sources were identified. Industrial Hygiene did not find any chemical exposure hazards above site action levels. Any discussion of potential causes is speculation.

2. The most likely potential cause in the event on December 8, 2015 is unknown. There was no fugitive emission source identified. Additionally, Industrial Hygiene did not find any
chemical exposure hazards above site action levels. Any discussion of potential causes is speculation.

**Discussion of Barriers That Could Have Impacted the Cause**

*NA – Other than the use of respiratory protections there were no barriers identified that would mitigate obnoxious odors. Respiratory protection is not being considered for this job function at this time.*

**Recommendations/Proposed Corrective Actions**

1. Given the nature of the work being conducted at ETF, consideration should be given to the idea of forming their own procedure to govern future scenarios where unexpected odors are encountered. For example, 222S Laboratory has its own process for addressing and responding to unexpected odors and spills. *(See 222S-AOP-115 Response to Reported Odors or Spill Events).*

**Conditions Adverse to Quality**

*NA – No Conditions Adverse to Quality were identified.*

**Attachments (as they apply):**

1. Personal Statements
2. Photos
3. Odor Response Cards from Dec 7, 2015
4. Odor Response Cards from Dec 8, 2015
5. Industrial Hygiene Sampling Results.
**Attachment 1: Personal Statements**

**TANK FARM EVENT REPORT**

<table>
<thead>
<tr>
<th>Case No.</th>
<th>12-7-2015</th>
</tr>
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</table>

**Due to Safety within 48 hours of reported event:**

- **2. Employee Name**
- **3. HID No.**
- **4. Job Title/Occupation**
- **5. Experience on This Job/Equipment**
  - [ ] < 3 months
  - [ ] 3-12 months
  - [ ] Over 12 months
- **6. Witness Names**
- **7. Date Reported**
  - 12-7-2015

**8. Date of Event**
- 12-7-2015

**9. Location of Event**
- Process Area/2025E/200E/ETF

**10. Time of Event**
- 1000

**11. Time Employee Began Work**
- 0600

**12. Manager, Supervisor, or Foreman Name(s)/Phone Number**

**13. Division and Department**
- Radiation Protection

**14. Cost Center**
- 21000

**15. Dept. I.D. (8 DIGIT)**
- TBD31000

**16. Company/Contractor**
- WRPS

**17. Other Contractor Name**
- N/A

**18. ARRA Funded Worker**
- [ ] Yes
  - [ ] No

**19. (Check all the Event Types that apply)**
- [ ] Injury/Illness
- [ ] Potential Exposure
- [ ] Spill
- [ ] Near Miss
- [ ] Excavation
- [ ] Lock and Tag
- [ ] Radiation Contamination
- [ ] Electrical
- [ ] Operator of Equipment/Vehicle
- [ ] Other

**20. Activity in progress at time of accident (i.e., what employee’s work assignment was the day of injury):**

Replace auxiliary filter gauges PI-60B-206 thru 211

**21. Events - Describe the event sequentially, beginning with initiating events and ending with nature, extent of injury/damage (i.e., laceration left index finger), and treatment provided. (Attach a separate sheet for any additional information.)**

ETF Personnel (2-Pipefitters, 1-HPT, 1-NCO) were performing maintenance activities on auxiliary filter gauges PI-60B-206 thru 211. While disconnecting tubing from gauges, worker smelled an odor causing a metallic taste in throat. Workers exited area and made notifications to supervisor.

**22. INJURY/ILLNESS ONLY**

**Was a work restriction placed on employee as a result of this incident?**
- [ ] Yes
  - [ ] No

**Does the work restriction preclude the employee from work activities he/she regularly performs at least once a week?**
- [ ] Yes
  - [ ] No

**Please explain:**

- Was employee wearing PPE?  
  - [ ] Yes
  - [ ] No
  - What Type? Gloves, Safety Glasses, Hard Hat

- Was a JHA performed on this job?  
  - [ ] Yes
  - [ ] No

- If vehicle accident, was the employee wearing seat belt?  
  - [ ] Yes
  - [ ] No

- Did the injury/illness require additional medical treatment beyond that provided by HPSC?  
  - [ ] Yes
  - [ ] No

**If yes, name and address of medical provider (i.e., physician or chiropractor’s name) if hospitalized overnight, name and address of hospital**

**OFFICIAL USE ONLY (when filled in)**

A-6030-580 (REV 8)
**EVENT REPORT (continued)**

### 23. Accident Causes
- **A. Conditions (Causing and/or Contributing to Event)**
  - N/A
- **B. Employee Actions (Contributing to Event)**
  - N/A
- **C. Factors influencing A. or B.**
  - N/A
- **D. Apparent Cause Code**

### 24. Prevention - Actions Taken (Describe measures taken to prevent a similar event. See instructions for further guidance.)
- Entered AOP-015

### 25. Prevention - Actions Recommended (Describe corrective actions that are planned. See instructions for further guidance.)

### PER # 2015-2550
- **Planned Completion Date:**

### 26. In detail explain what happened:
The fitter removed the tubing from the gauges. When he removed the tubing it smelled really bad. Then I got a metallic taste in my throat. So we stopped and called management. We also exited the vicinity.

### 27. Any recommendations on how to prevent this type of event?
Would be beneficial if we had an IH Tech that could have been sampling at the time.

### 28. Safety Professional:
- ☑ The corrective actions identified in this event report are appropriate to prevent recurrence.
- ☑ Corrective actions are completed or tracked to closure in ESTARS

### Comments:
See EIR-2015-046

### 29. I wish to file a worker’s compensation claim for this event at this time.
- ☐
  - Employee Initials

### At this time, I do not wish to file a worker’s compensation claim for this event. I understand I can change my mind and complete an application for benefits for this event within the limitations below.
- Within one year and a day from the date of an injury
- Within two years of the medical diagnosis of an occupational illness
- ☐
  - Employee Initials

### 30. Signatures:
- **Manager/Supervisor:**
  - Date: 12-7-15
- **Employee:**
  - Date: 12-7-15
- **Occupational Safety & Health:**
  - Date: 12-08-15

### Injury & Illness Coordinator:
- Date:
- WC Claim Number:

### Level 2 Manager:
- Date:

**OFFICIAL USE ONLY (when filled in)**

A-6003-580 (REV 8)
# TANK FARM EVENT REPORT

Due to Safety within 48 hours of reported event.

<table>
<thead>
<tr>
<th>2. Employee Name</th>
<th>3. HID No.</th>
<th>4. Job Title/Occupation</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pipefitter</td>
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<thead>
<tr>
<th>5. Experience on This Job/Equipment</th>
<th>7. Date Reported</th>
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<tbody>
<tr>
<td>&lt; 3 months</td>
<td>12-7-2015</td>
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<tr>
<td>3-12 months</td>
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<tr>
<td>Over 12 months</td>
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<td>None</td>
<td>1000</td>
<td>0600</td>
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<tr>
<th>8. Date of Event</th>
<th>9. Location of Event: (Room/Block/Area/Facility)</th>
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<tbody>
<tr>
<td>12-7-2015</td>
<td>Process Area/2025E/200E/ETF</td>
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<table>
<thead>
<tr>
<th>12. Manager/Supervisor or Foreman Name/Phone Number</th>
<th>13. Division and Department</th>
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<tbody>
<tr>
<td>WRPS</td>
<td>Maintenance</td>
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<tr>
<th>17. Other Contractor Name</th>
<th>18. ARRA Funded Worker</th>
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<tr>
<td>N/A</td>
<td>Yes/No</td>
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<thead>
<tr>
<th>19. (Check all Event types that apply)</th>
<th>(For Property Damage Type)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury/illness</td>
<td>Property Damage: Est. Cost $</td>
</tr>
<tr>
<td>Potential Exposure</td>
<td>Property ID No. (if applicable)</td>
</tr>
<tr>
<td>Fire</td>
<td></td>
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<tr>
<td>Near Miss</td>
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<td>Spill</td>
<td></td>
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<tr>
<td>Excavation</td>
<td></td>
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<tr>
<td>Radiation Contamination</td>
<td>Vehicle ID No.</td>
</tr>
<tr>
<td>Lock and Tag</td>
<td>Vehicle License Plate No.</td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
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<tr>
<td>Other</td>
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</table>

Activity in progress at time of accident (i.e., what employee's work assignment was the day of injury).

Replace auxiliary filter gauges FI-60B-206 thru 211

ETF Personnel (2-Pipefitters, 1-RFT, 1-NCO) were performing maintenance activities on auxiliary filter gauges FI-60B-206 thru 211. While disconnecting tubing from gauges, workers smelled an odor. Workers exited area and made notifications to supervisor.

INJURY/ILLNESS ONLY

Was a work restriction placed on employee as a result of this incident?

Does the work restriction preclude the employee from work activities he/she regularly performs at least once a week?

Please explain:

Was employee wearing PPE? Yes/No

What Type? Gloves, Safety Glasses, Hard Hat

Was a JHA performed on this job? Yes/No

If vehicle accident, was the employee wearing seat belt? Yes/No

Did the injury/illness require additional medical treatment beyond that provided by HPMC? Yes/No

If yes, name and address of medical provider (i.e., physician's or chiropractor's name)

If hospitalized overnight, name and address of hospital

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A-6003-580 (REV 8)
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<table>
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<tr>
<td>23. Accident Causes</td>
<td></td>
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<tr>
<td>A. Conditions (Causing and/or Contributing to Event)</td>
<td>N/A</td>
</tr>
<tr>
<td>B. Employee Actions (Contributing to Event)</td>
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</tr>
<tr>
<td>C. Factors influencing A. or B.</td>
<td>N/A</td>
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<td>D. Apparent Cause Code</td>
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<td>24. Prevention - Actions Taken (Describe measure taken to prevent a similar event. See instructions for further guidance.)</td>
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<td>25. Prevention - Actions Recommended (Describe corrective actions that are planned. See instructions for further guidance.)</td>
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</tr>
<tr>
<td>PER #: 2015-2550</td>
<td>Planned Completion Date:</td>
</tr>
<tr>
<td>26. in detail explain what happened</td>
<td>We started changing out the gauges for the aux filters when we all started smelling something that smelled like a hair perm. Stopped work and went to RPMC.</td>
</tr>
<tr>
<td>27. Any recommendations on how to prevent this type of event?</td>
<td>N/A</td>
</tr>
<tr>
<td>28. Safety Professional</td>
<td></td>
</tr>
<tr>
<td>☑ The corrective actions identified in this event report are appropriate to prevent recurrence.</td>
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<td>Comments:</td>
<td>See EIR-2015-046</td>
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<td>29. I wish to file a worker's compensation claim for this event at this time.</td>
<td></td>
</tr>
<tr>
<td>At this time, I do not wish to file a worker's compensation claim for this event. I understand I can change my mind and complete an application for benefits for this event within the limitations below.</td>
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<td>- Within one year and a day from the date of an injury</td>
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<td>- Within two years of the medical diagnosis of an occupational illness</td>
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<td>30. Manager: Supervising Foreman</td>
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<tr>
<td>Date: 12-7-15</td>
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<td></td>
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<tr>
<td>Employee</td>
<td></td>
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<tr>
<td>Date: 15-7-15</td>
<td>Occupational Safety &amp; Health</td>
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<td>Date: 12-8-15</td>
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<tr>
<td>Injury &amp; Illness Coordinator</td>
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<tr>
<td>Date:</td>
<td>WC Claim Number</td>
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<tr>
<td>Level 2 Manager:</td>
<td></td>
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<td>Date:</td>
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<td>OFFICIAL USE ONLY (when filled in)</td>
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<td>A-0003-580 (REV B)</td>
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Due to Safety within 48 hours of reported event.

TANK FARM

**EVENT REPORT**

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<tbody>
<tr>
<td></td>
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<td>Pipemaker</td>
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5. Experience on This Job/Equipment
   - ○ < 3 months
   - ○ 3-12 months
   - ○ Over 12 months

6. Witness Names
   - None

7. Date Reported
   - 12-7-2015

8. Date of Event
   - 12-7-2015

9. Location of Event: (Room/Block/Area/Facility)
   - Process Area/202E/208E/ETF

10. Time of Event
    - 1000

11. Time Employee Began Work
    - 0600

13. Division and Department
    - Maintenance

14. Cost Center
    - 2UB00

16. Company/Contractor Name
    - WRPS

17. Other Contractor Name
    - N/A

19. (Check all the event types that apply)
   - ☑ Injury/ Illness
   - ☑ Potential Exposure
   - ☑ Near Miss
   - ☑ Lock and Tag
   - ☑ Electrical
   - ☑ Other

   - ☑ Spill
   - ☑ Fire
   - ☑ Excavation
   - ☑ Radiation Contamination
   - ☑ Operator of Equipment/Vehicle
   - ☑ Vehicle Accident

20. Activity in progress at time of accident (i.e., what employee’s work assignment was the day of injury).
    - Replace auxiliary filter gauges PI-60B-206 thru 211

21. Events - Describe the event sequentially, beginning with initiating events and ending with nature, extent of injury/damage (i.e., laceration left index finger), and treatment provided. (Attach a separate sheet for any additional information.)
    - ETF Personnel (2-Pipefitters, 1-RPT, 1-NCO) were performing maintenance activities on auxiliary filter gauges PI-60B-206 thru 211. While disconnecting tubing from gauges, workers smelled an odor. Workers exited area and made notifications to supervisor.

22. INJURY/ILLNESS ONLY
   - Was a work restriction placed on employee as a result of this incident?
     - ○ Yes
     - ○ No
   - Does the work restriction preclude the employee from work activities he/she regularly performs at least once a week?
     - ○ Yes
     - ○ No
   - Please explain: ____________________________

   - Was employee wearing PPE?
     - ○ Yes
     - ○ No
   - What Type? Gloves, Safety Glasses, Hard Hat

   - Was a JHA performed on this job?
     - ○ Yes
     - ○ No

   - If vehicle accident, was the employee wearing seat belt?
     - ○ Yes
     - ○ No

   - Did the injury/illness require additional medical treatment beyond that provided by HPMC?
     - ○ Yes
     - ○ No
   - If yes, name and address of medical provider (i.e., physician’s or chiropractor’s name): __________________________________________
   - If hospitalized overnight, name and address of hospital: ____________________________

OFFICIAL USE ONLY (when filled in)
## Event Report (continued)

### 23. Accident Causes
- **A. Conditions (Causing and/or Contributing to Event)**: NA
- **B. Employee Actions (Contributing to Event)**: NA
- **C. Factors Influencing A. or B.**: NA
- **D. Apparent Cause Code**: 

### 24. Prevention - Actions Taken (Describe measure taken to prevent a similar event. See instructions for further guidance.)

Entered Aop-015

### 25. Prevention - Actions Recommended (Describe corrective actions that are planned. See instructions for further guidance.)

PER # 2015-2550 Planned Completion Date:

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<td>We started changing out the gauges for the axx filters when we all started smelling a hair perm like smell. We put the job in a safe configuration and went to HPMC.</td>
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<tr>
<td>Have IH present when breaching systems.</td>
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### 28. Safety Professional
- ☒ Corrective actions are completed or tracked to closure in ESTARS.
- □ The corrective actions identified in this event report are appropriate to prevent recurrence.

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- Within two years of the medical diagnosis of an occupational illness |

### Manager, Supervisor, Foreman

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<thead>
<tr>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-01-15</td>
<td>12-01-15</td>
</tr>
</tbody>
</table>

### Employee

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-01-15</td>
<td>12-05-15</td>
</tr>
</tbody>
</table>

### Occupational Safety & Health

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-01-15</td>
<td>12-05-15</td>
</tr>
</tbody>
</table>

### Injury & Illness Coordinator

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Level 2 Manager

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Official Use Only (when filled in)**

A-6003-580 (REV 8)
<table>
<thead>
<tr>
<th>Due to Safety within 48 hours of reported event.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Employee Name</td>
</tr>
<tr>
<td>NCO</td>
</tr>
<tr>
<td>5. Experience on This Job/Equipment</td>
</tr>
<tr>
<td>☐ &lt; 3 months</td>
</tr>
<tr>
<td>☐ 3-12 months</td>
</tr>
<tr>
<td>☐ Over 12 months</td>
</tr>
<tr>
<td>10. Time of Event</td>
</tr>
<tr>
<td>1000</td>
</tr>
<tr>
<td>12. Manager, Supervisor, or Foreman Name(s)/Job(s)</td>
</tr>
<tr>
<td>Operations</td>
</tr>
<tr>
<td>13. Division and Department</td>
</tr>
<tr>
<td>14. Cost Center</td>
</tr>
<tr>
<td>2LX00</td>
</tr>
<tr>
<td>15. Dept. ID. (8 DIGIT)</td>
</tr>
<tr>
<td>TLX4100</td>
</tr>
<tr>
<td>16. Company/Contractor Name</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>☐ Yes</td>
</tr>
<tr>
<td>19. (Check all the Event Types that apply)</td>
</tr>
<tr>
<td>☐ injury/illness</td>
</tr>
<tr>
<td>☐ spill</td>
</tr>
<tr>
<td>☐ potential exposure</td>
</tr>
<tr>
<td>☐ excavation</td>
</tr>
<tr>
<td>☐ lock and tag</td>
</tr>
<tr>
<td>☐ electrical</td>
</tr>
<tr>
<td>☐ other</td>
</tr>
<tr>
<td>20. Activity in progress at time of accident (i.e., what employee's work assignment was the day of injury).</td>
</tr>
<tr>
<td>Replace auxiliary filter gauges FI-608-206 thru 211</td>
</tr>
</tbody>
</table>

**Manager/Supervisor**

ETF Personnel (2-Pipefitters, 1-HPT, 1-NCO) were performing maintenance activities on auxiliary filter gauges FI-608-206 thru 211. While disconnecting tubing from gauges, workers smelled an odor. Workers exited area and made notifications to supervisor.

**Injury/Illness Only**

Was a work restriction placed on employee as a result of this incident? ☐ Yes ☐ No

Does the work restriction preclude the employee from work activities he/she regularly performs at least once a week? ☐ Yes ☐ No

Please explain:

Was employee wearing PPE? ☐ Yes ☐ No

What Type? Glore, Safety Glasses, Hard Hat

Was a JHA performed on this job? ☐ Yes ☐ No

If vehicle accident, was the employee wearing seat belt? ☐ Yes ☐ No

Did the injury/illness require additional medical treatment beyond that provided by HPMC? ☐ Yes ☐ No

If yes, name and address of medical provider (i.e., physician's or chiropractor's name)

If hospitalized overnight, name and address of hospital

OFFICIAL USE ONLY (when filled in)

A-6003-580 (REV 8)
23. Accident Causes
   A. Conditions (Causing and/or Contributing to Event)
      N/A

   B. Employee Actions (Contributing to Event)
      N/A

   C. Factors influencing A. or B.
      N/A

   D. Apparent Cause Code

24. Prevention - Actions Taken (Describe measure taken to prevent a similar event. See instructions for further guidance.)
   Entered AOP-15

25. Prevention - Actions Recommended (Describe corrective actions that are planned. See instructions for further guidance.)

PER #: 2015-2550
Planned Completion Date: ______________

26. In detail explain what happened
   While fitters were removing gauges, one of them said "I smell something bad." At the same time the rest of us started to smell it. It smelled like a hair salon and a little metallic. We stopped work, warned others and reported to supervisor.

27. Any recommendations on how to prevent this type of event?
   Have IH involvement

28. Safety Professional
   ☐ The corrective actions identified in this event report are appropriate to prevent recurrence.
   ☑ Corrective actions are completed or tracked to closure in ESTARS.

   Comments: See EIR-2015-046

29. I wish to file a worker's compensation claim for this event at this time.
   N/A

   Employee Initials: ___________________________

   At this time, I do not wish to file a worker's compensation claim for this event. I understand I can change my mind and complete an application for benefits for this event within the limitations below.
   - Within one year and a day from the date of an injury
   - Within two years of the medical diagnosis of an occupational illness

   Date: ___________________________

   Employee: ___________________________

   Date: ___________________________

   Occupational Safety & Health

   Date: ___________________________

   Injury & Illness Coordinator

   Date: ___________________________

   Level 2 Manager: ___________________________

   Date: ___________________________

   OFFICIAL USE ONLY (when filled in)
Attachment 3: Odor Response Cards From December 7, 2015

Odor Response Card

1. Contact CSM, complete below bulleted information and map.
   - Date and time odor was noticed: 12-7-15 1000
   - Your name and the work you were performing: HPT
   - Location of odors (mark area on map and wind direction): East side of scrubbers
   - Name of others in or near the affected area:
   - Was an IHT present? No
   - Describe the odor: Rotten off stake worker with 2 years of organic
   - Possible source:
   - Your symptoms (if any): Headache

2. Send this card to the Central Shift Office.

Revised 2/9/15
Odor Response Card

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager, (Contact CSM, if necessary) Provide below bulleted information.
3. Complete map, return to Central Shift Office as soon as practicable.

   Odors Detected WITH Symptoms

   1. Notify Immediate Supervisor.
   2. Contact CSM, if necessary.
   3. 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 ITH present?
   • Possible source

   4. Provide information on the back of card.
   5. Send this card immediately to the Central Shift Office.

* = odor came from here

[Hand-drawn diagram with labels: N, E, S, W, and an arrow indicating wind direction.]

Page 18 of 26
Odor Response Card

1. Contact CSM, [redacted] complete below bulleted information and map.
   - Date and time odor was noticed: 12-7-2015
   - Your name and the work you were performing: [redacted]
   - Location of odors (mark area on map and wind direction): [redacted]
   - Name of others in or near the affected area: [redacted]
   - Was an IHT present? NO

2. Send this card to the Central Shift Office.

Revised 2/9/15
1. Contact CSM, __________ complete below bulleted information and map.

- Date and time odor was noticed __________ 12-7-2015
- Your name and the work you were performing __________ Replacing Aux. Filter Gages
- Location of odors (mark area on map and wind direction) __________ Alley 2025 E near Aux. Filter Skid
- 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  __________ Hair Perm

- Possible source __________ filter canister

- 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  __________ Above

2. Send this card to the Central Shift Office.  __________ Revised 2/9/15
Odor Response Card

1. Contact CSM, [redacted] complete below bulleted information and map.
   - Date and time odor was noticed: 12-7-15 1000
   - Your name and the work you were performing: waste packaging
   - Location of odors (mark area on map and wind direction): on reverse
   - 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: hair salon
   - Possible source: water line for auxiliary filters
   - 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: None

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 4: Odor Response Cards from December 8, 2015

Odor Response Card

1. Contact CSM, [redacted] complete below bulleted information and map.
   - Date and time odor was noticed: 12-8-15 8:20 am
   - Your name and the work you were performing: [redacted] placing material down
   - Location of odors (mark area on map and wind direction): [redacted]
   - Name of others in or near the affected area: [redacted]
   - Was an IHT present? [No]
   - Possible source: [redacted] did not know
     [redacted] 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.

Wind Direction

N W E S
Odor Response Card

1. Contact CSM, [redacted] complete below bulleted information and map.
   - Date and time odor was noticed: 12-8-15 8:20
   - Your name and the work you were performing:
   - Location of odors (mark area on map and wind direction):
   - Name of others in or near the affected area:
   - Was an IHT present? [ ]
   - Describe the odor: [ ] Sweet [ ] Sour [ ] Musty [ ] Earthy [ ] Metallic [ ] Smoky [ ] Rotten [ ] Onion
     - Cleaning Solution [ ] Ammonia [ ] Other:
   - Possible source:
   - 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
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, [Provide 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.

Wind Direction

N E W S

Map of the area where the odor was noticed.