

EVENT INVESTIGATION REPORT

Entered into AOP-015 at ETF

Event Investigation Report Number: EIR-2015-046

Event Investigation Team Lead

12/28/2015

Date

PER Responsible Manager

12/28/15

Date

PER No. WRPS-PER-2015-2550

Entered into AOP-015 at ETF

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.

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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.

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- 1042 Effluent Treatment Facility Industrial Hygienist (ETF IH) notifies Production Operations Safety Manager (PO Safety Manager of odor event at Effluent Treatment Facility (ETF)
- 1043 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.
- 1056 *“Entering AOP-015 for ETF 2025E mezzanine area, stay clear of area. CSM”* - SOEN E-Mail notification
- 1122 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

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0945 IHTs arrived and sampled the area with DRI instrumentation. No DRI results found. Two bag samples collected and taken for analysis by GC/MS.

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 lungs, 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

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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	1. Case No. Page 1 of 2
Due to Safety within 48 hours of reported event.		
2. Employee Name		3. HID No.
		4. Job Title/Occupation HPT
5. Experience on This Job/Equipment <input type="radio"/> < 3 months <input type="radio"/> 3-12 months <input checked="" type="radio"/> Over 12 months		
6. Witness Names		7. Date Reported 12-7-2015
8. Date of Event 12-7-2015	9. Location of Event: (Room/Bldg./Area/Facility) 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 21D00
		15. Dept. I.D. (8 DIGIT) TBD31000
16. Company/Contractor WRPS	17. Other Contractor Name N/A	18. ARRA Funded Worker <input type="radio"/> Yes <input checked="" type="radio"/> No
19. (Check all the Event Types that apply)		
<input type="checkbox"/> Injury/Illness <input type="checkbox"/> Spill <input type="checkbox"/> Property Damage: Est. Cost \$ _____ <input checked="" type="checkbox"/> Potential Exposure <input type="checkbox"/> Fire Property ID No. (if applicable) _____ <input type="checkbox"/> Near Miss <input type="checkbox"/> Excavation <input type="checkbox"/> Motor Vehicle Accident: Est. Cost \$ _____ <input type="checkbox"/> Lock and Tag <input type="checkbox"/> Radiation Contamination Vehicle ID No. _____ <input type="checkbox"/> Electrical <input type="checkbox"/> Operator of Equipment/Vehicle Vehicle License Plate No. _____ <input type="checkbox"/> 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		
MANAGER / SUPERVISOR 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?		<input type="radio"/> Yes <input checked="" type="radio"/> No
Does the work restriction preclude the employee from work activities he/she regularly performs at least once a week?		<input type="radio"/> Yes <input type="radio"/> No
Please explain: _____		
Was employee wearing PPE? <input checked="" type="radio"/> Yes <input type="radio"/> No What Type? <u>Gloves, Safety Glasses, Hard Hat</u>		
Was a JHA performed on this job? <input checked="" type="radio"/> Yes <input type="radio"/> No		
If vehicle accident, was the employee wearing seat belt? <input type="radio"/> Yes <input type="radio"/> No		
Did the injury/illness require additional medical treatment beyond that provided by HPMC? <input type="radio"/> Yes <input checked="" type="radio"/> 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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Entered into AOP-015 at ETF

EVENT REPORT (continued)		Page 2 of 2
MANAGER / SUPERVISOR	23. Accident Causes A. Conditions (Causing and/or Contributing to Event) <p style="text-align: center;">N/A</p> B. Employee Actions (Contributing to Event) <p style="text-align: center;">N/A</p> C. Factors influencing A. or B. <p style="text-align: center;">N/A</p> D. Apparent Cause Code	
	24. Prevention - Actions Taken (Describe measure taken to prevent a similar event. See instructions for further guidance.) <p style="text-align: center;">Entered AOP-015</p>	
	25. Prevention - Actions Recommended (Describe corrective actions that are planned. See instructions for further guidance.) PER #: <u>2015-2550</u> 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 tasted in my throat. So we stopped and called management. We also exited the vicinity.	
EMPLOYEE	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 <input type="checkbox"/> The corrective actions identified in this event report are appropriate to prevent recurrence. <input checked="" type="checkbox"/> Corrective actions are completed or tracked to closure in ESTARS Comments: <p style="text-align: center;">See ETR-2015-046</p>	
29. I wish to file a worker's compensation claim for this event at this time. <u>no</u>		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 <u>no</u>		Employee Initials
30. Signature,		
Manager, Supervisor _____ Date: <u>12-7-15</u>	Witness(es) as Shown in Page 1 _____ Date: _____	Employee _____ Date: <u>12-08-15</u>
Injury & Illness Coordinator _____ Date: _____		WC Claim Number _____
Level 2 Manager: _____ Date: _____		

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TANK FARM		EVENT REPORT			1. Case No.
					Page 1 of 2
Due to Safety within 48 hours of reported event.					
2. Employee Name			3. HID No.	4. Job Title/Occupation Pipefitter	
5. Experience on This Job/Equipment <input type="radio"/> < 3 months <input type="radio"/> 3-12 months <input checked="" type="radio"/> 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/Bldg./Area/Facility) 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 Maintenance	14. Cost Center 2UB00	15. Dept. I.D. (8 DIGIT) TUB50000
16. Company/Contractor WRPS	17. Other Contractor Name N/A				18. ARRA Funded Worker <input type="radio"/> Yes <input checked="" type="radio"/> No
19. (Check all the Event Types that apply)					
<input type="checkbox"/> Injury/Illness		<input type="checkbox"/> Spill		<input type="checkbox"/> Property Damage: Est. Cost \$ _____	
<input checked="" type="checkbox"/> Potential Exposure		<input type="checkbox"/> Fire		Property ID No. (if applicable) _____	
<input type="checkbox"/> Near Miss		<input type="checkbox"/> Excavation		<input type="checkbox"/> Motor Vehicle Accident: Est. Cost \$ _____	
<input type="checkbox"/> Lock and Tag		<input type="checkbox"/> Radiation Contamination		Vehicle ID No. _____	
<input type="checkbox"/> Electrical		<input type="checkbox"/> Operator of Equipment/Vehicle		Vehicle License Plate No. _____	
<input type="checkbox"/> 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					
<div style="display: flex;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 5px;">MANAGER / SUPERVISOR</div> <div> 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, workers smelled an odor. Workers exited area and made notifications to supervisor. </div> </div>					
22. INJURY/ILLNESS ONLY					
Was a work restriction placed on employee as a result of this incident?				<input type="radio"/> Yes	<input checked="" type="radio"/> No
Does the work restriction preclude the employee from work activities he/she regularly performs at least once a week?				<input type="radio"/> Yes	<input type="radio"/> No
Please explain: _____					
Was employee wearing PPE? <input checked="" type="radio"/> Yes <input type="radio"/> No What Type? <u>Gloves, Safety Glasses, Hard Hat</u>					
Was a JHA performed on this job? <input checked="" type="radio"/> Yes <input type="radio"/> No					
If vehicle accident, was the employee wearing seat belt? <input type="radio"/> Yes <input type="radio"/> No					
Did the injury/illness require additional medical treatment beyond that provided by HPMC? <input type="radio"/> Yes <input checked="" type="radio"/> 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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EVENT REPORT (continued)		Page 2 of 2
M A N A G E R / S U P E R V I S O R	23. Accident Causes	
	A. Conditions (Causing and/or Contributing to Event) <i>N/A</i>	
	B. Employee Actions (Contributing to Event) <i>N/A</i>	
	C. Factors influencing A. or B. <i>N/A</i>	
	D. Apparent Cause Code	
	24. Prevention - Actions Taken (Describe measure taken to prevent a similar event. See instructions for further guidance.) <i>Entered AOP-015</i>	
	25. Prevention - Actions Recommended (Describe corrective actions that are planned. See instructions for further guidance.)	
	PER #: <i>2015-2550</i> Planned Completion Date: _____	
E M P L O Y E E	26. In detail explain what happened <i>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 HPMC.</i>	
	27. Any recommendations on how to prevent this type of event? <i>N/A</i>	
S A F E T Y	28. Safety Professional	
	<input type="checkbox"/> The corrective actions identified in this event report are appropriate to prevent recurrence. <input checked="" type="checkbox"/> Corrective actions are completed or tracked to closure in ESTARS. Comments: <i>See EIR-2015-046</i>	
	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
Signatures _____ Date: <i>12-7-15</i> Manager, Supervisor, Foreman _____ Date: <i>12-7-15</i> Employee _____ Date: <i>12-08-15</i> Occupational Safety & Health		
Injury & Illness Coordinator _____ Date: _____		WC Claim Number _____
Level 2 Manager: _____ Date: _____		

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5. Experience on This Job/Equipment <input type="radio"/> < 3 months <input type="radio"/> 3-12 months <input checked="" type="radio"/> 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/Bldg./Area/Facility) 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 Maintenance	14. Cost Center 2UB00	15. Dept. I.D. (8 DIGIT) TUB50000	
16. Company/Contractor WRPS	17. Other Contractor Name N/A			18. ARRA Funded Worker <input type="radio"/> Yes <input checked="" type="radio"/> No	
19. (Check all the Event Types that apply)					
<input type="checkbox"/> Injury/Illness		<input type="checkbox"/> Spill	<input type="checkbox"/> Property Damage: Est. Cost \$ _____		
<input checked="" type="checkbox"/> Potential Exposure		<input type="checkbox"/> Fire	Property ID No. (if applicable) _____		
<input type="checkbox"/> Near Miss		<input type="checkbox"/> Excavation	<input type="checkbox"/> Motor Vehicle Accident: Est. Cost \$ _____		
<input type="checkbox"/> Lock and Tag		<input type="checkbox"/> Radiation Contamination	Vehicle ID No. _____		
<input type="checkbox"/> Electrical		<input type="checkbox"/> Operator of Equipment/Vehicle	Vehicle License Plate No. _____		
<input type="checkbox"/> 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					
<div style="display: flex;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 5px;">MANAGER / SUPERVISOR</div> <div> 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, workers smelled an odor. Workers exited area and made notifications to supervisor. </div> </div>					
22. INJURY/ILLNESS ONLY					
Was a work restriction placed on employee as a result of this incident?					<input type="radio"/> Yes <input checked="" type="radio"/> No
Does the work restriction preclude the employee from work activities he/she regularly performs at least once a week?					<input type="radio"/> Yes <input type="radio"/> No
Please explain: _____					
Was employee wearing PPE? <input checked="" type="radio"/> Yes <input type="radio"/> No What Type? <u>Gloves, Safety Glasses, Hard Hat</u>					
Was a JHA performed on this job? <input checked="" type="radio"/> Yes <input type="radio"/> No					
If vehicle accident, was the employee wearing seat belt? <input type="radio"/> Yes <input type="radio"/> No					
Did the injury/illness require additional medical treatment beyond that provided by HPMC? <input type="radio"/> Yes <input checked="" type="radio"/> No					
If yes, name and address of medical provider (i.e., physician's or chiropractor's name) _____					
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	C. Factors influencing A or B. <u>N/A</u>	
D. Apparent Cause Code .		
24. Prevention - Actions Taken (Describe measure taken to prevent a similar event. See instructions for further guidance.) <u>Entered AOP-015</u>		
25. Prevention - Actions Recommended (Describe corrective actions that are planned. See instructions for further guidance.)		
PER #: <u>2015-2550</u> Planned Completion Date: _____		
E M P L O Y E E	26. In detail explain what happened <u>We started changing out the gauges for the aux filters when we all started smelling a hair perm like smell. We put the job in a safe configuration and went to HPMC.</u>	
	27. Any recommendations on how to prevent this type of event? <u>Have IH present when breaching systems.</u>	
S A F E T Y	28. Safety Professional	
	<input type="checkbox"/> The corrective actions identified in this event report are appropriate to prevent recurrence. <input checked="" type="checkbox"/> Corrective actions are completed or tracked to closure in ESTARS. Comments: <u>See EIR-2015-046</u>	
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30. Signatures		
_____ Manager, Supervisor, Foreman		_____ Date: <u>12-7-15</u>
_____ Employee		_____ Date: <u>12/07/15</u>
_____ Occupational Safety & Health		_____ Date: <u>12-08-15</u>
_____ Injury & Illness Coordinator		_____ Date: _____
_____ Level 2 Manager:		_____ Date: _____
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5. Experience on This Job/Equipment <input type="radio"/> < 3 months <input type="radio"/> 3-12 months <input checked="" type="radio"/> Over 12 months				
6. Witness Names None				7. Date Reported 12-7-2015
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12. Manager, Supervisor, or Foreman Name(s)/Phone Number		13. Division and Department Operations	14. Cost Center 2LX00	15. Dept. I.D. (8 DIGIT) TLX41000
16. Company/Contractor WRPS	17. Other Contractor Name N/A			18. ARRA Funded Worker <input type="radio"/> Yes <input checked="" type="radio"/> No
19. (Check all the Event Types that apply)				
<input type="checkbox"/> Injury/Illness		<input type="checkbox"/> Spill	<input type="checkbox"/> Property Damage: Est. Cost \$ _____	
<input checked="" type="checkbox"/> Potential Exposure		<input type="checkbox"/> Fire	Property ID No. (if applicable) _____	
<input type="checkbox"/> Near Miss		<input type="checkbox"/> Excavation	<input type="checkbox"/> Motor Vehicle Accident: Est. Cost \$ _____	
<input type="checkbox"/> Lock and Tag		<input type="checkbox"/> Radiation Contamination	Vehicle ID No. _____	
<input type="checkbox"/> Electrical		<input type="checkbox"/> Operator of Equipment/Vehicle	Vehicle License Plate No. _____	
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Does the work restriction preclude the employee from work activities he/she regularly performs at least once a week?			<input type="radio"/> Yes	<input type="radio"/> No
Please explain: _____				
Was employee wearing PPE? <input checked="" type="radio"/> Yes <input type="radio"/> No What Type? <u>Gloves, Safety Glasses, Hard Hat</u>				
Was a JHA performed on this job? <input checked="" type="radio"/> Yes <input type="radio"/> No				
If vehicle accident, was the employee wearing seat belt? <input type="radio"/> Yes <input type="radio"/> No				
Did the injury/illness require additional medical treatment beyond that provided by HPMC? <input type="radio"/> Yes <input checked="" type="radio"/> 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)

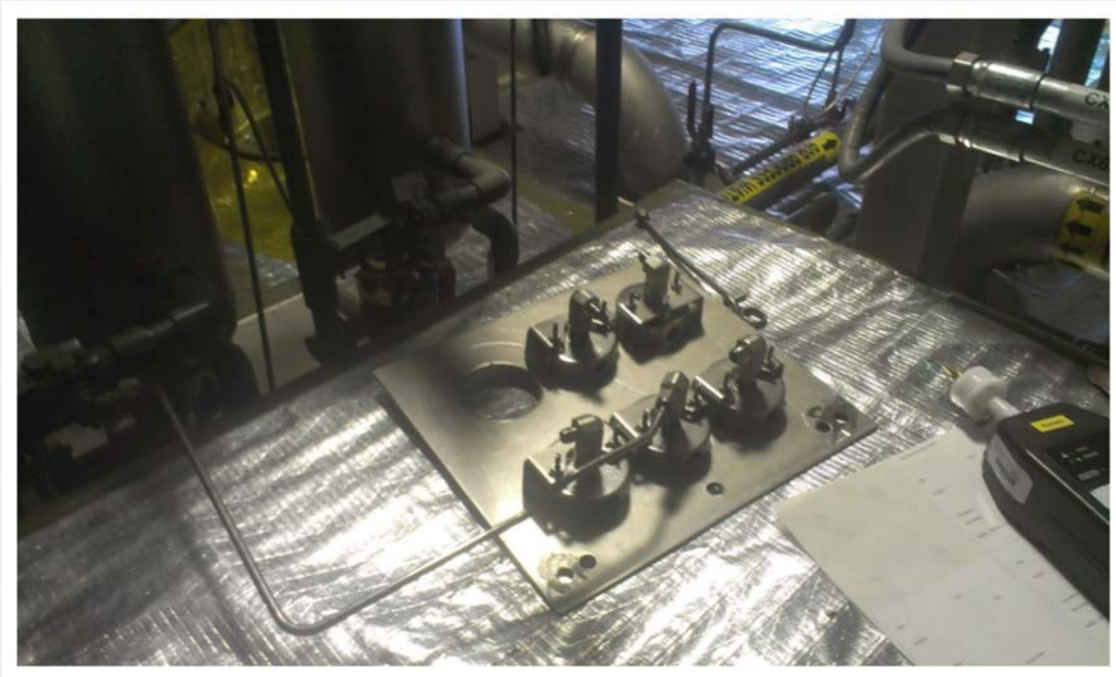
Entered into AOP-015 at ETF

EVENT REPORT (continued)		Page 2 of 2
MANAGER / SUPERVISOR	23. Accident Causes A. Conditions (Causing and/or Contributing to Event) <p style="text-align: center; font-size: 1.2em;">N/A</p>	
	B. Employee Actions (Contributing to Event) <p style="text-align: center; font-size: 1.2em;">N/A</p>	
	C. Factors influencing A. or B. <p style="text-align: center; font-size: 1.2em;">N/A</p>	
	D. Apparent Cause Code	
24. Prevention - Actions Taken (Describe measure taken to prevent a similar event. See instructions for further guidance.) <p style="font-size: 1.2em;">Entered AOP-15</p>		
25. Prevention - Actions Recommended (Describe corrective actions that are planned. See instructions for further guidance.) 		
PER #: <u>2015-2550</u> Planned Completion Date: _____		
EMPLOYEE	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	
SAFETY	28. Safety Professional <input type="checkbox"/> The corrective actions identified in this event report are appropriate to prevent recurrence. <input checked="" type="checkbox"/> Corrective actions are completed or tracked to closure in ESTARS. Comments: <p style="font-size: 1.2em;">See EIR-2015-046</p>	
	29. I wish to file a worker's compensation claim for this event at this time.	
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 <p style="font-size: 1.2em;">N/A</p>
Signature: _____ Date: <u>12/7/15</u>		Employee Initials
Manager/Supervisor/Foreman: _____ Date: <u>12-7-15</u>		Witness(es) as shown on Page 1: _____ Date: <u>12-08-15</u>
Employee: _____ Date: _____		Occupational Safety & Health Date: _____
Injury & Illness Coordinator: _____ Date: _____		WC Claim Number: _____
Level 2 Manager: _____ Date: _____		

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A-6003-580 (REV 8)

Attachment 2: Photos



Entered into AOP-015 at ETF



Attachment 3: Odor Response Cards From December 7, 2015

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 HPT
- Location of odors (mark area on map and wind direction) East side of Aux Filters
- Name of others in or near the affected area _____
- Was an IHT present? NOPE
- Describe the odor Sweet Sour Musty Earthy Metallic Smoky Rotten Onion
 Cleaning Solution Ammonia Other Smelled like hair perm solution
- Possible source rotten oil stale water with 2 years of organic
- Your symptoms (if any) Headache Dizziness/Light-Headed Nausea Cough/Tickle
 Fatigue/Drowsiness/Weakness Sore/Burning Throat Difficulty Breathing Watery/Irritated
Eyes/Trouble with Vision Tingling/Numbness/Paralysis Rash/Itching
 Other metallic taste in throat

2. Send this card to the Central Shift Office.

Revised 2/9/15

Entered into AOP-015 at ETF

Odor Response Card

Odors Detected with NO
Immediate symptoms

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager, [REDACTED] 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, [REDACTED] 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 came from HERE *

N		Wind Direction - 1 - was indoors - Not at Tank Farms	
W			E
	S		

Entered into AOP-015 at ETF

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 replace gauges
- Location of odors (mark area on map and wind direction) Bldg 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 Aux 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 NONE

2. Send this card to the Central Shift Office.

Revised 2/9/15

Entered into AOP-015 at ETF

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 _____, Replacing Aux. Filter Gauges
- Location of odors (mark area on map and wind direction) Bldg 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 NONE

2. Send this card to the Central Shift Office.

Revised 2/9/15

Entered into AOP-015 at ETF

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 auxillary 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

Entered into AOP-015 at ETF

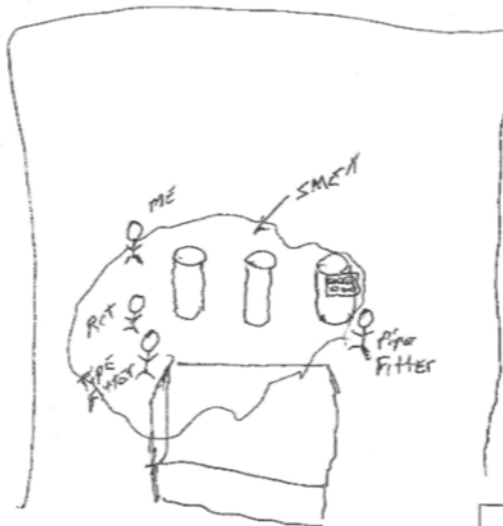
Odor Response Card

Odors Detected with NO
Immediate symptoms

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager, [REDACTED] 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, [REDACTED] 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.



Entered into AOP-015 at ETF

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 placing material down
- Location of odors (mark area on map and wind direction) _____
- 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 _____
- Possible source did not know
- 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

Entered into AOP-015 at ETF

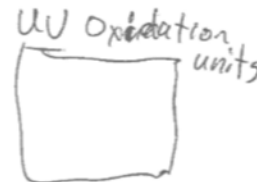
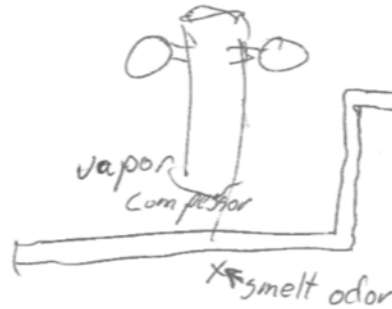
Odor Response Card

Odors Detected with NO Immediate symptoms

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager, [REDACTED] 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, [REDACTED] 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.



Entered into AOP-015 at ETF

Odor Response Card

1. Contact CSM, [REDACTED] complete below bulleted information and map.

- Date and time odor was noticed 12-8-15 0820
- 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? no
- 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

Entered into AOP-015 at ETF

Odor Response Card

Odors Detected with **NO** Immediate symptoms

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager, [REDACTED] 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, [REDACTED] 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.

