

EVENT INVESTIGATION REPORT

AOP-015 Entry Outside of AN-Farm

Event Investigation Report Number: EIR-2015-030

Event Investigation Team Lead

7/21/2015

Date

PER Responsible Manager

7/21/2015

Date

PER No. WRPS-PER-2015-1413

Event Investigation Report Number: WRPS-2015-030 for PER 2015- 1413**Investigation Summary**

On Tuesday July 13, 2015 two Mission Support Alliance LLC (MSA) Radiological Control Technicians (RCTs) were surveying windblown tumbleweeds for removal along Buffalo Avenue and the west fence line of AN Farm. The RCTs began surveying at 0740 hours at the south end of Buffalo Ave working their way north towards 7th street. At 0815 hours they had completed surveying near the 241-AN Change Trailer and turned back south walking along Buffalo Ave to retrieve their vehicles. As they walked south (~100 feet south of 7th street) both RCTs reported smelling a heavy rotten egg/sulfur odor. Wind direction was from the northwest toward the southeast. The RCTs reported they observed no running vehicles in the immediate area, and the port-a-lets were upwind from their position. RCT 1 reported symptoms of a headache, dry nose and throat, metallic taste in their mouth. RCT2 reported symptoms of slight headache and dry mouth.

Once the RCTs arrived at their vehicle they contacted their supervisor to report the unexpected odors and inform the supervisor they were going to HPMC, the Hanford Site Medical Provider, because they believed they had been exposed to vapors carried by the wind from 241-C Tank Farm. The supervisor met the RCTs at HPMC at 0835 hours, blood and urine samples were taken and both RCTs were released without work restrictions.

Industrial Hygiene (IH) responded to the shift office after receiving the Central Shift Managers (CSM) radio call announcing entry of AOP-015 for the area west of AN Farm. IH discussed location and sampling plan with CSM and then dispatched IHTs to take samples along the west side of AN-Farm based on the description of where the affected MSA RCTs were working. IH sampling results were returned at 1600, reporting samples at or below background levels. AOP-015 was exited at that time based on sampling results.

Weather Information

At 0815 when the RCTs first reported the smell winds were out of the NW with an average wind speed of 10 mph.

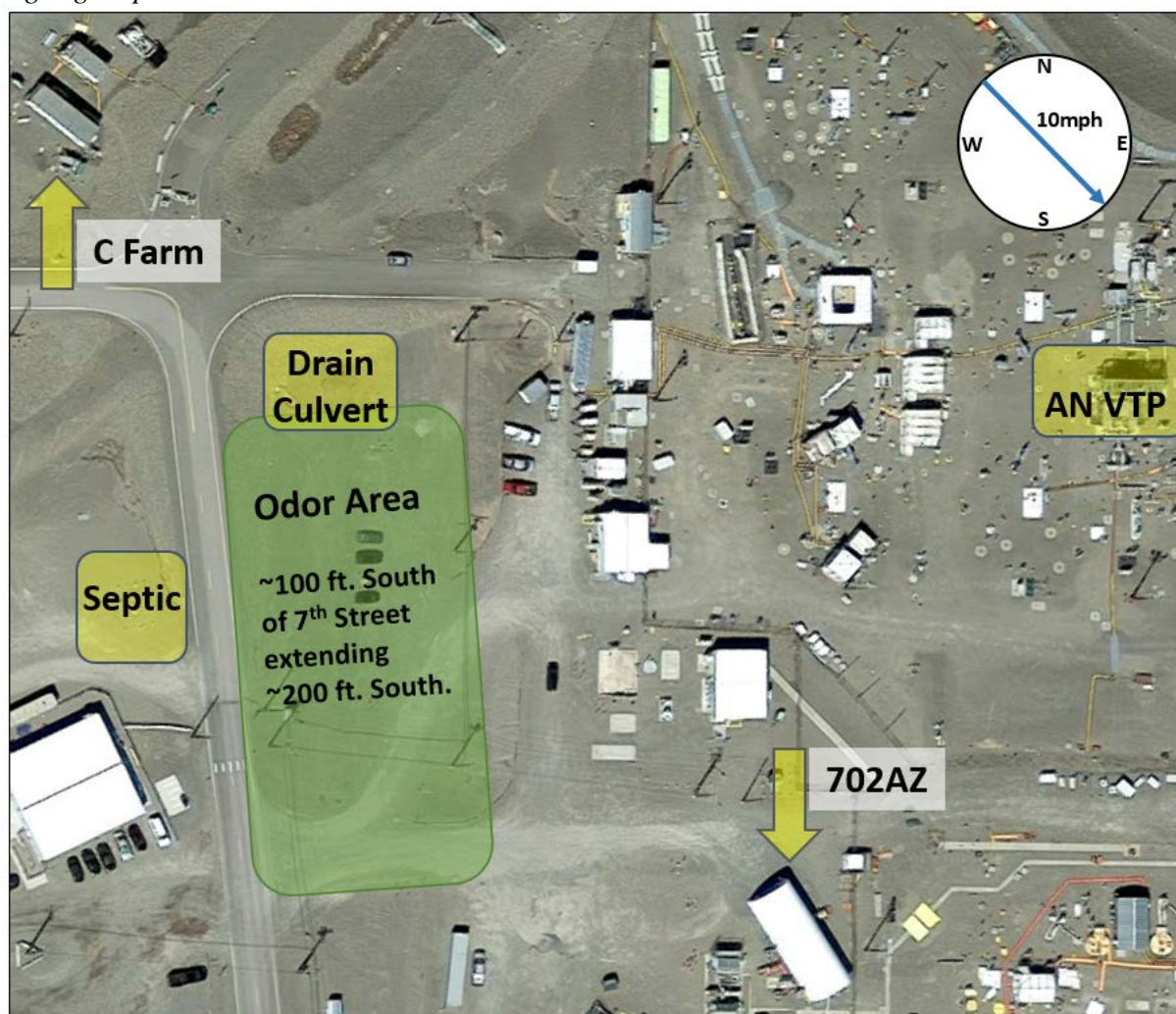
15 - Minute Data Station #6 (200E) 7-13-2015									
Date/Time (PST)	Avg Wind Speed	Wind Direction	Max Wind Speed	Avg Temp	Max Temp	Min Temp	Pressure	Humidity	Pressure
7/13/2015 7:30	13.3	303.1	18.2	75.0	75.6	74.6	991.578	38.97	29.281
7/13/2015 7:45	10.9	314.3	17.5	77.1	78.4	75.2	991.320	37.38	29.274
7/13/2015 8:00	11.8	304.2	18.6	78.2	79.5	76.7	991.777	35.25	29.287
7/13/2015 8:15	10.0	296.6	17.5	77.7	78.8	77.0	991.719	34.77	29.285
7/13/2015 8:30	10.0	300.1	15.6	78.7	80.0	77.6	991.356	33.84	29.275
7/13/2015 8:45	8.6	311	13.8	79.0	79.8	78.2	991.337	33.13	29.274
7/13/2015 9:00	8.2	302.5	15.9	79.1	80.0	78.5	991.570	32.97	29.281
7/13/2015 9:15	5.5	303	14.8	79.6	80.4	78.7	991.116	32.22	29.268
7/13/2015 9:30	4.8	358.8	11.0	81.2	82.7	80.0	990.771	30.67	29.257
7/13/2015 9:45	8.9	295.8	22.8	82.5	83.8	80.5	990.648	29.17	29.254
7/13/2015 10:00	7.5	216.4	15.9	83.0	84.0	81.8	990.751	28.56	29.257
7/13/2015 10:15	6.8	346.6	15.9	82.6	83.2	81.2	991.065	29.22	29.266
7/13/2015 10:30	5.4	225.2	15.0	83.2	84.5	81.4	990.882	28.91	29.261
7/13/2015 10:45	8.6	185.6	17.3	83.7	85.1	82.8	990.586	28.75	29.252

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Tower Information				Tue Jul 14				00:02:20 PST 2015			
yr	mo	day	hr	Solar	Prevailing Wind			Peak Gust		Time	Stab
					Degrees	Speed	Direction	Degrees	Speed		
15	7	13	1	0.00	300.0	15.5	WNW	292.6	27.626	00:33	E
15	7	13	2	0.00	290.0	10.7	WNW	271.5	20.266	01:51	D
15	7	13	3	0.00	280.0	15.1	WNW	276.9	26.364	02:51	D
15	7	13	4	0.00	280.0	13.0	W	286.3	25.313	03:12	E
15	7	13	5	0.04	270.0	11.7	W	275.2	19.425	04:58	E
15	7	13	6	0.10	270.0	9.2	W	275.5	17.533	05:02	E
15	7	13	7	0.42	300.0	9.5	WNW	293.9	15.009	06:52	D
15	7	13	8	0.57	310.0	10.9	NW	311.6	18.794	07:25	A
15	7	13	9	0.57	310.0	12.1	NW	323.5	19.425	08:16	B
15	7	13	10	1.03	300.0	4.0	WNW	323.1	16.271	09:00	B
15	7	13	11	1.19	270.0	1.7	W	176.0	13.958	10:51	B
15	7	13	12	1.25	230.0	3.6	SW	212.8	13.748	11:31	B

Map of Potential Fugitive Emission Sources

The following map shows a depiction of where the RCTs encountered the odor, as well as highlights potential odor emission sources in the area.



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07/13/2015

- 0700 MSA RCTs attend Plan of Day Meeting prior to going out to their work assignment surveying windblown tumbleweeds for removal.
- 0740 MSA RCTs begin on the south end of Buffalo Avenue and begin working northbound toward 7th street.
- 0815 MSA RCTs complete their surveying assignment and turn around and begin walking South from 7th street (west of the AN Farm fence) to retrieve their vehicles. @ ~100 feet south of 7th street RCTs encounter the odor, and the odor remained for an additional ~200 feet before they moved out of the affected area. RCT 1 reported symptoms of a headache, dry nose and throat, metallic taste in their mouth. RCT2 reported symptoms of slight headache and dry mouth.
- 0822 MSA RCTs arrived at their vehicles and informed their supervisor they would be heading to HPMC for an evaluation, believing that they had experienced symptoms consistent with tank farm vapors.
- 0835 MSA RCTs are met by their supervisor when they arrive at HPMC
- 0850 MSA RCTs are checked in at HPMC and give blood and urine samples.
- 0903 MSA Supervisor contacts Central Shift Office (CSO) and notifies the Central Shift Manager (CSM) that two MSA RCTs reported symptoms of an obnoxious unknown odors, headaches, and sore and dry throats, and were taken to HPMC for evaluation.
- 0909 Central Shift Office Logbook: *"Late Entry 0909 SOEN sent for AOP-015."* [Note: Logbook does not match timestamp on SOEN]
- 0915 MSA RCTs are released back to work without restriction.
- 0919 IH and IH Managers arrive at Central Shift Office (CSO)
- 0929 SOEN Notification: *"Entering AOP-015 for odors near AN Farm. Access is restricted to AN Farm and the west side of AN Farm. CSM"*
- 0930 CSO briefs IH and IHTs of odors and symptoms.
- 0936 Finalize path forward as taking three bags samples. The first near west side of AN Farm. Second, near the water skid and control trailer between C and AN Farms. Third bag near the boundary of C farm.
- 1004 IHTs arrive at 241-AN

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- 1010 IHT begins filling bag sample A by UT trailer and generators. IHT sweeps parking area W of AN-Farm and around AN-Farm buildings with direct reading instrumentation (include readings here). Wind steady and from the NW.
- 1018 IHTs move into drainage ditch in-between AN-Farm and C-Farm (between stairs and closed road) and begin filling bag B. Wind steady and from the NNW. IHT sweeps area in drainage ditch and around light plants on road berm with direct reading instrumentation.
- 1023 IHTs move towards C-Farm•
- 1024 IHT begins filling bag C just N of MO-522 and emergency shower. IHT performs sweep of area NE of MO-522 directly upwind of AN-Farm. Wind steady and from NW. People are present in the sweep area. Work is ongoing in C-Farm.
- 1028 IH2 picks up IHTs at lot NE of MO522.
- 1035 IH2 drops IHTs off at 272AW to begin processing samples.
- 1600 SOEN Notification *“Sample analysis for the AOP-015 event has been completed and the results are at or below background levels. Exiting AOP-015. CSM”*

Immediate Actions Taken

1. MSA RCTs were taken to HPMC for evaluation.
2. Radio communication of AOP-015 entry at AN-Farm.
3. SOEN Entry into AOP-015 outside of AN-Farm.
4. Initiated EIR-2015-030
5. Restricted access to affected area.
6. IHT responded and took sampling bags to lab for testing.

Compensatory Measures

No compensatory measures were identified as a result of the Fact Finding

Discussion of Potential Causes

Based on a review of the following, the source of the odors encountered by the two MSA RCTs was not able to be definitively determined.

- Review of information and investigative IH monitoring and sampling of the area. All samples came back at or below background.
- The terrain where the MSA RCTs experienced the odor is in a “belly” or low-ground and has been the location of a prior AOP-015 entry (EIR-2015-013). In the other AOP-015 event the location was in the same general area, but the wind direction was moving in the opposite direction and there was co-located work being conducted at the time.

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- A review of work planning in the C and AN Farms shows no waste disturbing activities during the time of the event that would have resulted in an increased potential for odors.
- IH Field Surveillance identified the following potential sources for fugitive odor emission points: Drainage Culvert, Septic tank (upwind), C-Farm portable exhausters (upwind), AN-Farm Primary Exhauster (downwind), 702AZ (downwind).
- Input from affected workers described the odor as “Rotten Egg” and “Sulfur”.

Preliminary Extent of Condition Review

The AOP-015 entry was specific to the area west of the AN Farm fence. With no fugitive emission sources detectible and the potential cause being unknown the preliminary extent of conditions is bound to the area adjacent to AN Farm.

Discussion of Barriers That Could Have Impacted the Cause

Impacting barriers is unknown because the cause of the odors was not able to be definitively determined.

Conditions Adverse to Quality

1. Odor Response Cards were not received until the day following the incident. This was largely due to the affected workers being MSA staff, with no WRPS Field Work Supervisor (FWS) or Management present to drive the process of obtaining Odor Response Cards once the RCTs arrived at HPMC. The MSA RCTs did not receive an Odor Response Card to populate until the Event Investigation Team Lead sent it to them the following day.

Recommendations/Proposed Corrective Actions

1. Reaffirm expectations for contractors working near or adjacent to a tank farm to check in with the Central Shift Office and obtain a radio, per the AIA.

Attachments (As they apply):

1. Photos
2. Odor Response Card
3. Personal Statements
4. Industrial Hygiene Area Surveillance

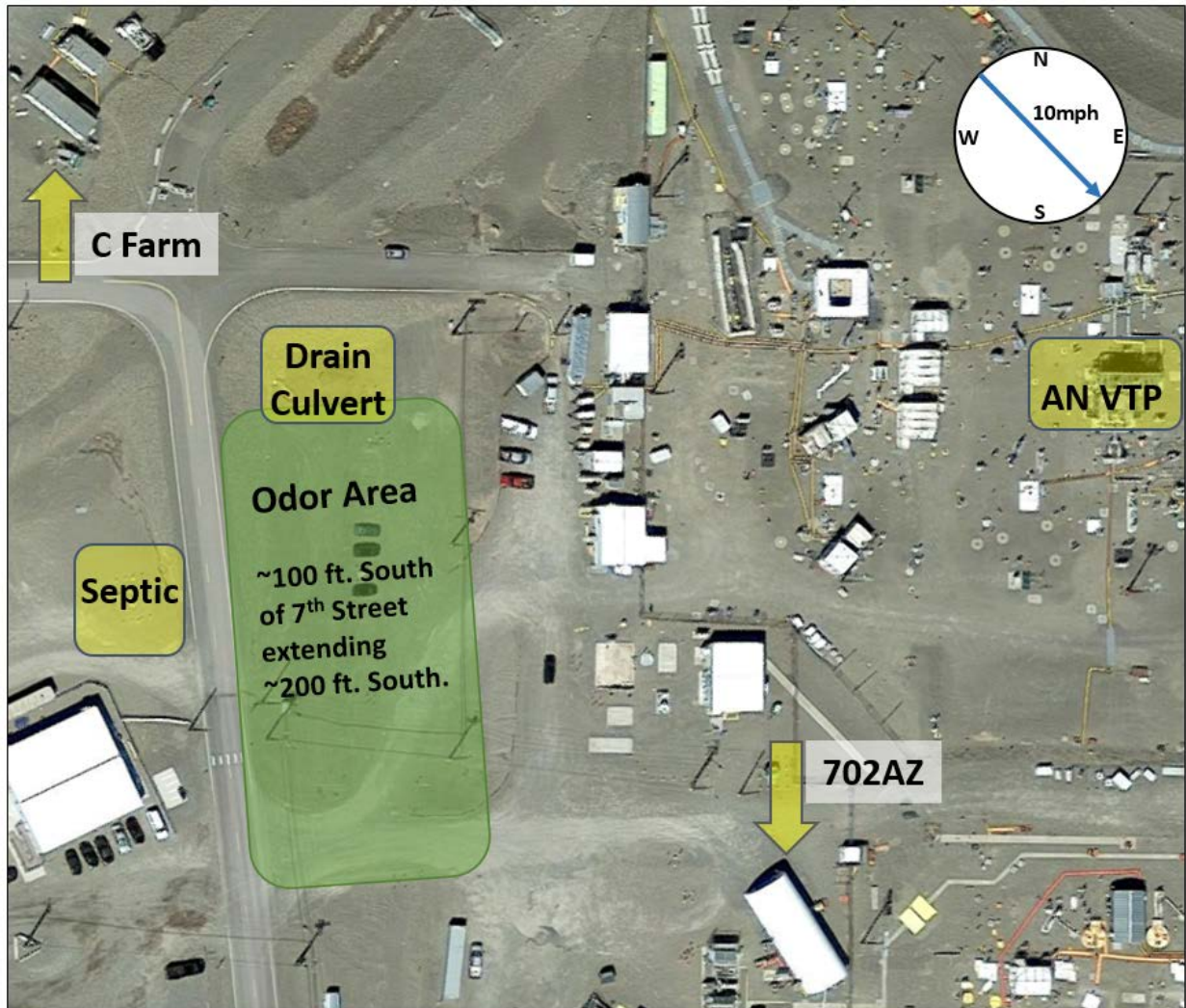
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Attachment 1
Photos

Septic Area West of 241-AN-Farm



Overlay Positional Map



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Attachment 2
Odor Response Cards

7-13-2015

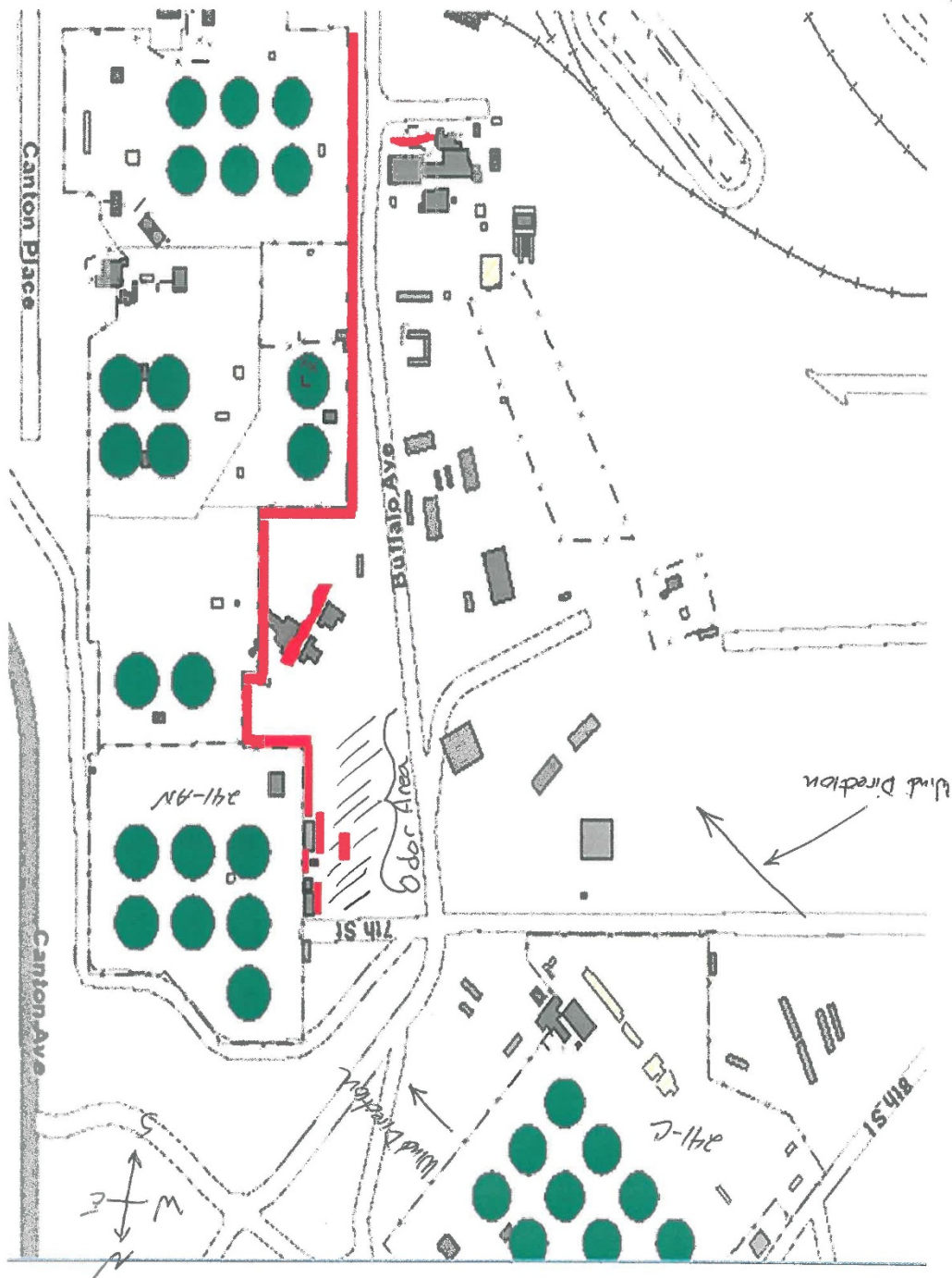
Odor Response Card

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

- Date and time odor was noticed 7-13-2015 0815am *removing windblown trucks*
- Your name and the work you were performing _____
- Location of odors (mark area on map and wind direction) see map
- 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 241-C Trunk 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 Dry Mouth

2. Send this card to the Central Shift Office.

Revised 2/9/15



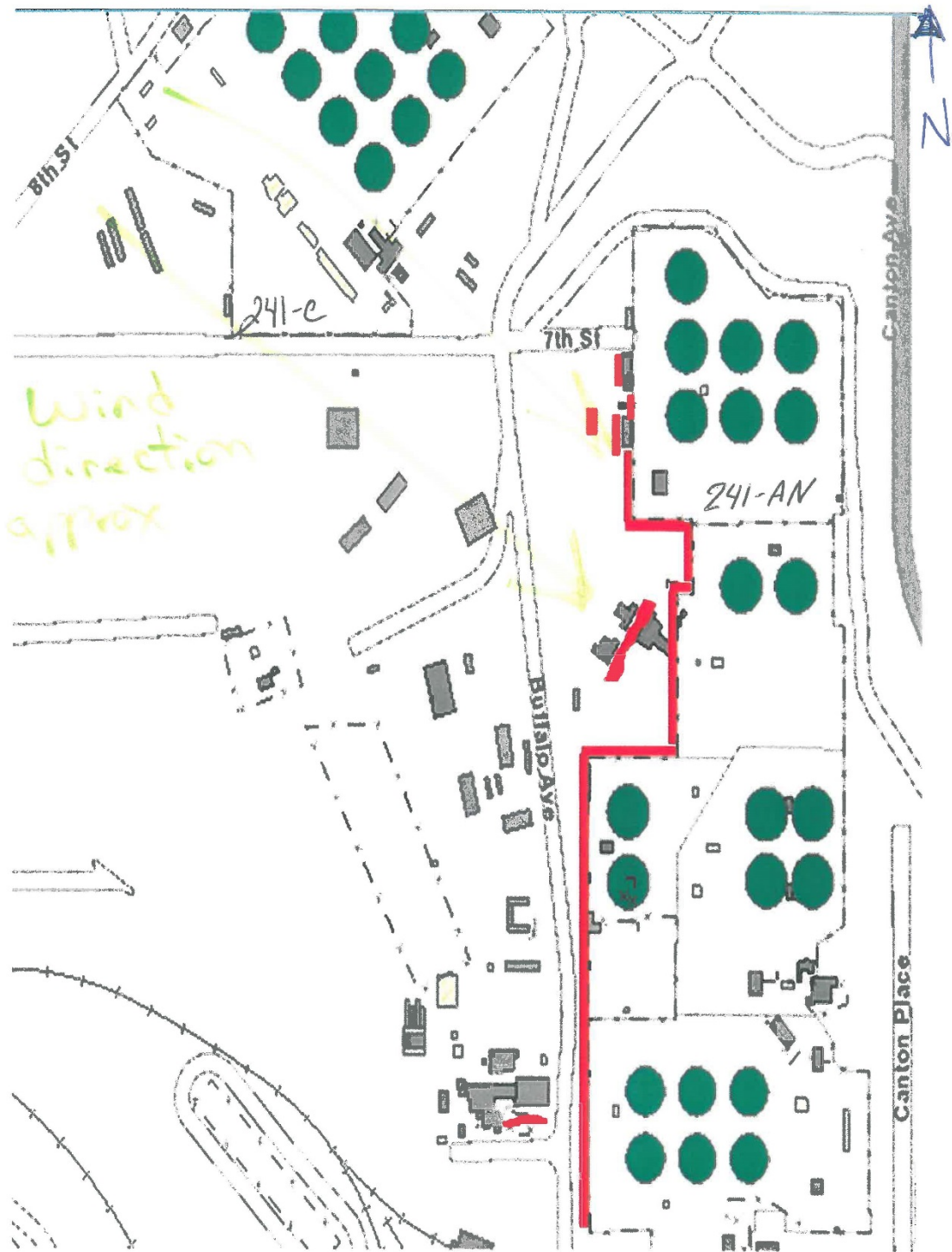
Odor Response Card

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

- Date and time odor was noticed 7-13-2015/0815
- Your name and the work you were performing
- Location of odors (mark area on map and wind direction) Alona Buffalo Ave near
ten
- 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 thick heavy sulfur
- Possible source 241-C²/winds were coming from that direction
- 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 dry nose/throat

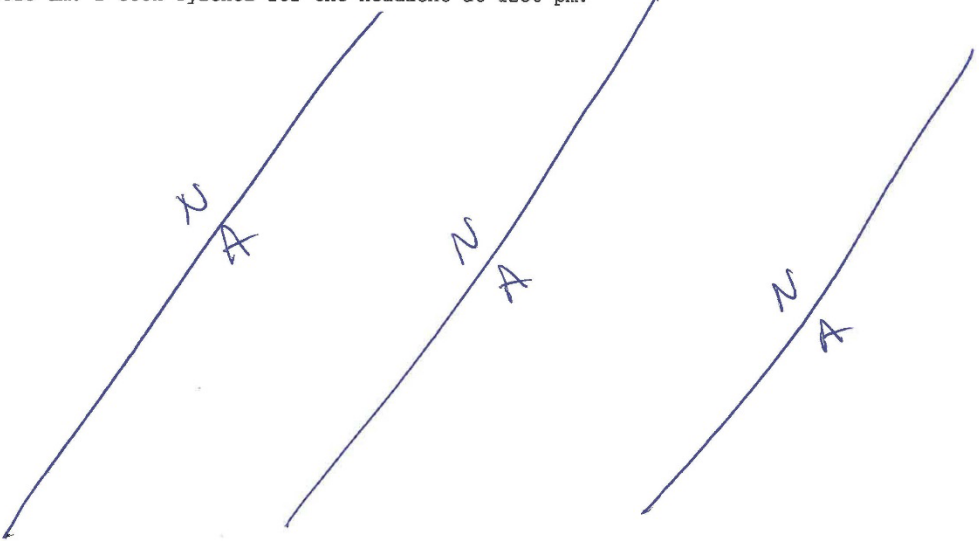
2. Send this card to the Central Shift Office.

Revised 2/9/15



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Attachment 3
Personal Statements

Date: 7-13-2015	INITIAL EVENT INVESTIGATION PERSONAL STATEMENT	Page 1 of 2
Critique Title: <i>N/A</i>		
Critique Number: <i>N/A</i>		
PART 1 INSTRUCTIONS:		
In your own words, write down what happened in the event. Include any information from before the event began until after it was over. Include the following:		
<ol style="list-style-type: none"> 1. Plant conditions as you know them prior to the event. 2. Any indications that a problem existed. 3. List any equipment malfunctions. 4. What you were doing immediately prior to the event. 5. What were your actions in response to the indications? 6. List any inadequacies in the procedures, practices, or training. 		
<p>We (Another RCT and myself) were assigned to survey tumble weeds along Buffalo street and associated trailer areas. After our POD we started the survey at approximately 0740 at the south end of Buffalo Ave working north towards 7th street along the west fence line of 241-A, AY, AZ and AN tank farms and trailer areas.</p> <p>At @ 0815 we finished surveying tumble weeds along the west fence line of 241-AN tank farm at the north end of Buffalo Ave and 7th street and turned back south walking along Buffalo Ave to retrieve our vehicles. Approximately 100 feet south of 7th street, on Buffalo Ave, I smelled a heavy rotten egg / sulfur odor. The winds were light as we were surveying to the north and then when we finished surveying tumble weeds the winds had begun to blow stronger. Winds were blowing from the NW, from C-Farm towards AN Tank farm. There were no vehicles passing by or port-a-lets upwind from me that I observed. I had to walk approx. 200 feet farther to the south before I got out of the odor.</p> <p>Another tech surveying with me smelled the same odor. At first the smell was just obnoxious, not quite nauseating, but after walking a distance in the odor I developed a metallic taste in my mouth, dry nose and throat, and headache in the forehead area radiating back. We reported the incident to our manager who met us at OCC health in 200W. We arrived at 0835 and were checked in at 0850. Blood and urine draw at 1015 am. I took Tylenol for the headache at 1230 pm.</p>		
		

A-6003-098 (REV 1)

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Date: 7-13-2015		INITIAL EVENT INVESTIGATION PERSONAL STATEMENT (continued)		Page 2 of 2	
Critique Title: <i>N/A</i>					
Critique Number: <i>N/A</i>					
PART 2 INSTRUCTIONS:					
Check any of the common error precursors below that you experienced or observed leading up to the event. Leave the check box blank if it does not apply or you are not sure of the meaning. Provide a brief description of the error precursor by annotating the number and then the details (e.g., 1A - We only had two hours until the end of the shift and were told to complete the job or we will be held over to finish).					
TASK DEMANDS			INDIVIDUAL CAPABILITIES		
1A	Time pressure (in a hurry)	<input type="checkbox"/>	3A	Unfamiliarity with task/first time	<input type="checkbox"/>
1B	High workload (memory requirements)	<input type="checkbox"/>	3B	Lack of knowledge (faulty mental model)	<input type="checkbox"/>
1C	Simultaneous, multiple tasks	<input type="checkbox"/>	3C	New technique not used before	<input type="checkbox"/>
1D	Repetitive actions/monotony	<input type="checkbox"/>	3D	Imprecise communication habits	<input type="checkbox"/>
1E	Irreversible acts	<input type="checkbox"/>	3E	Lack of proficiency/inexperience	<input type="checkbox"/>
1F	Interpretation requirements	<input type="checkbox"/>	3F	Indistinct problem solving skills	<input type="checkbox"/>
1G	Unclear goals, roles, or responsibilities	<input type="checkbox"/>	3G	'Unsafe' attitudes for critical task	<input type="checkbox"/>
1H	Lack of or unclear standards	<input type="checkbox"/>	3H	Illness/fatigue (general health)	<input type="checkbox"/>
1I	Confusing procedure/vague guidance	<input type="checkbox"/>	3I	Unawareness of critical parameters/steps	<input type="checkbox"/>
WORK ENVIRONMENT			HUMAN NATURE		
2A	Distractions/interruptions	<input type="checkbox"/>	4A	Stress (limits attention)	<input type="checkbox"/>
2B	Changes/departure from routine	<input type="checkbox"/>	4B	Habit patterns (done it before successfully)	<input type="checkbox"/>
2C	Confusing displays/controls	<input type="checkbox"/>	4C	Assumptions (inaccurate mental picture)	<input type="checkbox"/>
2D	Work-around needed	<input type="checkbox"/>	4D	Complacency/overconfidence	<input type="checkbox"/>
2E	Hidden system response	<input type="checkbox"/>	4E	Mind set	<input type="checkbox"/>
2F	Unexpected equipment conditions	<input type="checkbox"/>	4F	Inaccurate risk perception	<input type="checkbox"/>
2G	Lack of alternative indication	<input type="checkbox"/>	4G	Mental shortcuts (biases)	<input type="checkbox"/>
2H	Personality conflicts	<input type="checkbox"/>	4H	Limited short-term memory	<input type="checkbox"/>
2I	Back shift or recent shift change	<input type="checkbox"/>	4I	Limited perspective (lack of big picture)	<input type="checkbox"/>
Name (First, Middle Initial, Last)		Signature		Date/Time Completed By	

7-13-2015 / 1330

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Date: 07/13/2015	INITIAL EVENT INVESTIGATION PERSONAL STATEMENT	Page 1 of 2
Critique Title:		
Critique Number:		
PART 1 INSTRUCTIONS:		
In your own words, write down what happened in the event. Include any information from before the event began until after it was over. Include the following:		
<ol style="list-style-type: none"> 1. Plant conditions as you know them prior to the event. 2. Any indications that a problem existed. 3. List any equipment malfunctions. 4. What you were doing immediately prior to the event. 5. What were your actions in response to the indications? 6. List any inadequacies in the procedures, practices, or training. 		
<p>Myself and another MSA RCT were surveying windblown tumbleweeds for removal along Buffalo Ave and 241-AN/AZ/AX/A Tank Farm west fence lines. After our POD, we started surveying at 7:40am at the south end of Buffalo Ave working our way north towards 7th street. At 8:15am we finished surveying near the 241-AN Tank Farm Change Trailer and turned back south walking along Buffalo Ave to retrieve our vehicles. It was then that we both smelled a heavy rotten egg odor. The winds were light as we had been surveying but by the time we finished the winds had increased. Wind direction was from the northwest toward the southeast (from 241-C toward 241-AN). There were not running vehicles or port-a-lets upwind from the area when we first noticed the odor. We had to walk southward approximately 200 ft before we could no longer smell the odor. During that time I developed a slight headache and dry mouth. When I got back to my vehicle I called my supervisor to report that I was going to the medical provider because I believe I had been exposed to vapors carried by the wind from 241-C Tank Farm. He met me at OCC in 200-West Area at 8:35am and I was checked in at 8:50am Blood and urine samples were drawn at 9:15am. Following exam I was released without restrictions to return to work.</p> <p>NOTE: At 9:41am I received a notice on my pager that Tank Farm Operation "Entering AOP-015 for odors near AN Farm. Access is restricted to AN Farm and the west side of AN Farm". Previous to my exposure (that morning) there were no warnings sent by pager of any issues around 200-East Tank Farm areas.</p>		

A-6003-098 (REV 1)

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Date: 07/13/2015	INITIAL EVENT INVESTIGATION PERSONAL STATEMENT (continued)	Page 2 of 2
Critique Title:		
Critique Number:		
PART 2 INSTRUCTIONS:		
Check any of the common error precursors below that you experienced or observed leading up to the event. Leave the check box blank if it does not apply or you are not sure of the meaning. Provide a brief description of the error precursor by annotating the number and then the details (e.g., 1A - We only had two hours until the end of the shift and were told to complete the job or we will be held over to finish).		
TASK DEMANDS		INDIVIDUAL CAPABILITIES
1A Time pressure (in a hurry)	<input type="checkbox"/>	3A Unfamiliarity with task/first time <input type="checkbox"/>
1B High workload (memory requirements)	<input type="checkbox"/>	3B Lack of knowledge (faulty mental model) <input type="checkbox"/>
1C Simultaneous, multiple tasks	<input type="checkbox"/>	3C New technique not used before <input type="checkbox"/>
1D Repetitive actions/monotony	<input type="checkbox"/>	3D Imprecise communication habits <input type="checkbox"/>
1E Irreversible acts	<input type="checkbox"/>	3E Lack of proficiency/inexperience <input type="checkbox"/>
1F Interpretation requirements	<input type="checkbox"/>	3F Indistinct problem solving skills <input type="checkbox"/>
1G Unclear goals, roles, or responsibilities	<input type="checkbox"/>	3G 'Unsafe' attitudes for critical task <input type="checkbox"/>
1H Lack of or unclear standards	<input type="checkbox"/>	3H Illness/fatigue (general health) <input type="checkbox"/>
1I Confusing procedure/vague guidance	<input type="checkbox"/>	3I Unawareness of critical parameters/steps <input type="checkbox"/>
WORK ENVIRONMENT		HUMAN NATURE
2A Distractions/interruptions	<input type="checkbox"/>	4A Stress (limits attention) <input type="checkbox"/>
2B Changes/departure from routine	<input type="checkbox"/>	4B Habit patterns (done it before successfully) <input type="checkbox"/>
2C Confusing displays/controls	<input type="checkbox"/>	4C Assumptions (inaccurate mental picture) <input type="checkbox"/>
2D Work-around needed	<input type="checkbox"/>	4D Complacency/overconfidence <input type="checkbox"/>
2E Hidden system response	<input type="checkbox"/>	4E Mind set <input type="checkbox"/>
2F Unexpected equipment conditions	<input type="checkbox"/>	4F Inaccurate risk perception <input type="checkbox"/>
2G Lack of alternative indication	<input type="checkbox"/>	4G Mental shortcuts (biases) <input type="checkbox"/>
2H Personality conflicts	<input type="checkbox"/>	4H Limited short-term memory <input type="checkbox"/>
2I Back shift or recent shift change	<input type="checkbox"/>	4I Limited perspective (lack of big picture) <input type="checkbox"/>
Name (First, Middle Initial, Last) _____		Date/Time Completed By _____
Signature _____		

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Attachment 4

Industrial Hygiene Sampling Plan

SAFETYINSP - Complete Survey

Page 1 of 2

SAFETY AND HEALTH FIELD SURVEILLANCE REPORT									
Record ID: <u>3634</u>			ARRA Work: <input type="checkbox"/>		Subcontractor Work: <input type="checkbox"/>				
Date: <u>07/15/2015</u>			Subcontractor:						
Organization: <u>Base Operations</u>			Location: <u>Other</u>						
Project:			Location Other: <u>Drainage Basin W of 241-AN Farm</u>						
Work Activity: <u>Odor Response Card Location Walkdown</u>			Performed By: <u>HID</u>						
Participant(s):									
Surveillance Type			Work Planning Document(s)/Permits						
			Sat Unsat						
Management Request			<input type="checkbox"/> Job Hazard Analysis						
Routine			<input type="checkbox"/> Applicable Permits						
Employee Safety Concern Follow-up			<input checked="" type="checkbox"/> Pre-Job Briefing						
Post Event Review			<input type="checkbox"/> Work Document(s)						
Other:									
Industrial Safety			Industrial Hygiene			Fire Protection			
	Sat	Unsat		Sat	Unsat		Sat	Unsat	
<input type="checkbox"/> Applicable PPE	0	0	<input type="checkbox"/> Asbestos	0	0	<input type="checkbox"/> Ceiling Tiles	0	0	
<input type="checkbox"/> Electrical	0	0	<input type="checkbox"/> Biological	0	0	<input type="checkbox"/> Combustible Storage	0	0	
<input type="checkbox"/> Elevating Work Platforms	0	0	<input type="checkbox"/> Chemical Container Labeling	0	0	<input type="checkbox"/> Compressed Gas Storage	0	0	
<input type="checkbox"/> Excavation	0	0	<input type="checkbox"/> Cold Stress	0	0	<input type="checkbox"/> Construction Site Safety	0	0	
<input type="checkbox"/> Fall Protection	0	0	<input type="checkbox"/> Confined Space	0	0	<input type="checkbox"/> Control of Hot Work	0	0	
<input type="checkbox"/> Falling Objects	0	0	<input type="checkbox"/> Ergonomics	0	0	<input type="checkbox"/> Emergency Action Plans	0	0	
<input type="checkbox"/> First Aid	0	0	<input type="checkbox"/> Hazard Communication	0	0	<input type="checkbox"/> Exit Signs	0	0	
<input type="checkbox"/> Hand/Power Tools	0	0	<input type="checkbox"/> Heat Stress	0	0	<input type="checkbox"/> Exits Unobstructed	0	0	
<input type="checkbox"/> Heavy Equipment	0	0	<input type="checkbox"/> Lighting	0	0	<input type="checkbox"/> Fire Extinguishers	0	0	
<input type="checkbox"/> Hoisting and Rigging	0	0	<input type="checkbox"/> Monitoring/Sampling	0	0	<input type="checkbox"/> Fire Hazards	0	0	
<input type="checkbox"/> Housekeeping	0	0	<input type="checkbox"/> Noise	0	0	<input type="checkbox"/> Fire Lanes	0	0	
<input type="checkbox"/> Ladders	0	0	<input type="checkbox"/> Respiratory Protection	0	0	<input type="checkbox"/> Fire Riser	0	0	
<input type="checkbox"/> Lockout/Tagout	0	0	<input type="checkbox"/> Ventilation/IAQ	0	0	<input type="checkbox"/> Flammable Cabinets	0	0	
<input type="checkbox"/> Machine Guarding	0	0	<input type="checkbox"/> Vibration	0	0	<input type="checkbox"/> Heaters	0	0	
<input type="checkbox"/> Material Storage	0	0	<input type="checkbox"/> Other IH	0	0	<input type="checkbox"/> Sprinklers Clearance	0	0	
<input type="checkbox"/> Motor Vehicle	0	0				<input type="checkbox"/> Transient Combustible Materials	0	0	
<input type="checkbox"/> Overhead Utilities	0	0				<input type="checkbox"/> Other FP	0	0	
<input type="checkbox"/> Roof	0	0							
<input type="checkbox"/> Scaffolding	0	0							
<input type="checkbox"/> Showers & Eyewash Stations	0	0							
<input type="checkbox"/> Signs, Tags and Barriers	0	0							
<input type="checkbox"/> Slip, Trip, and Fall	0	0							
<input type="checkbox"/> Underground Utilities	0	0							
<input type="checkbox"/> Walking Surfaces	0	0							
<input type="checkbox"/> Other Safety	0	0							
Work Place Safety			Safety Culture Questions						

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SAFETYINSP - Complete Survey

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	Sat	Unsat		Sat	Unsat
Master Safety Rules	0	0	Workers feel they have adequate communication with their manager/supervisor.	0	0
The Worker's Bill of Rights	0	0	Workers attend safety meetings and feel they are well run and meaningful.	0	0
WRPS Stop Work Responsibility	0	0	Workers take their time to do the job correctly (no rushing).	0	0
10 CFR 851, It's the Law Poster	0	0			
Evacuation Plan, Exits, and Facility Contacts	0	0			
Other	0	0			
Vehicle Safety			Recreational Area		
	Sat	Unsat		Sat	Unsat
360 Walk Around	0	0	Fitness Equipment (stationary bike, elliptical, weights, etc)	0	0
Cell Phone Usage	0	0	Basketball (court, net, portable, and permanent hoop Stand)	0	0
Driving Practices	0	0	Volleyball (court and net)	0	0
Handrails	0	0	Other	0	0
Parking	0	0			
Seat Belt Usage	0	0			
Speed Limit	0	0			
Using Crosswalks and Sidewalks	0	0			
Vehicle Hazards	0	0			
General Comments:					
<p>On the morning of July 15th 2015 two Industrial Hygienists and one Industrial Safety Specialist walked-down the drainage basin and surrounding area west of 241-AN-Farm. The walk-down was performed as a follow-up to odor response cards submitted to Safety and Health staff on the morning of the 15th in response to an AOP-015 entry that occurred on the morning of Monday July 13th 2015. The walk-down revealed the location of 2 unrecognized potential fugitive odor emission points: A drainage culvert inhabited by small animals exists in the center of the area indicated on the odor response cards. A septic holding tank exists on the West edge of the area indicated on the odor response cards, directly upwind of the area of concern. No other obvious potential odor emission points were located. Other potential emission points in the area include the C-Farm portable exhausters, the AN-Farm primary exhauster, and 702AZ. Please see attached map and photo.</p>					
PER Issued? <u>N/A</u>			PER No.:		
Approver Name: _____			Approver Date: <u>07/15/2015</u>		

* The electronic approval indicated above acts as the authentication of this record on the above date.

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