

Washington River Protection Solutions
EVENT SUMMARY

Check PART 1 box to hide that section of the form. Check PART 2 box it will show that section.

PART 1 (hide)* **PART 2 (show)***

NOTE: This form provides timely notification to management and documents preliminary information of an event that may require a more formal investigation. Details may change upon further examination and analysis. The following is a current status of available information:

Project: Retrieval/Construction Date: 08/31/2022

Area/Building/Location: 200E/241-A-103-A Pump Pit Approximate Time of Event: 0852

AR Number: WRPS-AR-2022-2391 Responsible Manager: [REDACTED]

EIR Number: EIR-2022-073 Event Investigator: [REDACTED]

EVENT SUMMARY PART I

Activity in Progress (What activity was under way, include procedures and work order numbers, as applicable):

Workers were installing wall nozzle vapor seals in support of the WO# 891852 "241-A Cleanout 02A and 03A Pits for Retrieval" work evolution.

Personnel Involved (Job positions, number of personnel, identify any support organizations or subcontractors directly involved):

Personnel providing outside support:

- 1 American Electric Hoisting and Rigging Designated Leader (DL)
- 1 American Electric Electrician

Personnel on the work platform around the 241-A-103-A pit:

- 4 WRPS Health Physician Technicians (HPTs)
- 4 American Electric Pipefitters
- 4 American Electric Laborers
- 1 WRPS Industrial Hygiene Technician (IHT)
- 1 American Electric Field Work Supervisor (FWS)

What Happened (Provide a short discussion of what happened):

On 08/31/2022, a Retrieval Construction work crew was installing wall nozzle vapor seals within the 241-A-103-A pump pit when a Ventis Pro personal ammonia monitor "Response Level" alarm initiated for a worker that was providing camera/remote video monitoring support outside of the established High Radiological Area (HRA)/Airborne Radiological Area (ARA)/Exclusion Zone (EZ) boundary. The worker was located approximately 20 feet away from the 241-A-103-A pump pit. The Ventis Pro personal ammonia monitor displayed an ammonia concentration of 6 ppm at the time of the instrument alarm. One additional worker was within the immediate area of the individual when the Ventis Pro personal ammonia monitor alarmed. The other workers' Ventis Pro personal ammonia monitor did not alarm or indicate elevated ammonia concentrations.

Fourteen additional workers were within the HRA/ARA/EZ boundary on the work platform around the 241-A-103-A pump pit. None of the fourteen other workers' Ventis Pro personal ammonia monitors alarmed or indicated elevated ammonia concentrations.

An IHT was performing continuous monitoring from the work platform around the 241-A-103-A pump pit within the HRA/ARA/EZ for ammonia, Volatile Organic Compounds (VOCs), and mercury. The highest source, area, or breathing zone concentrations observed were 0 ppm ammonia, 10 ppb VOCs, and 0 ng/m³ mercury, which are all below anticipated background levels.

Field response TF-AOP-015 monitoring around the 241-A-103-A pump pit indicated a less than detectable concentration (< 1 ppm) for ammonia, which is below anticipated background levels.

Workers reported they did not smell an odor at the time of the Ventis Pro personal ammonia monitor alarm. In addition, they reported experiencing no symptoms and declined precautionary medical surveillance.

Washington River Protection Solutions
EVENT SUMMARY (Continued)

Project: Retrieval/Construction Date: 08/31/2022

Area/Building/Location: 200E/241-A-103-A Pump Pit Approximate Time of Event: 0852

AR Number: WRPS-AR-2022-2391 Responsible Manager: [REDACTED]

EIR Number: EIR-2022-073 Event Investigator: [REDACTED]

Where Did It Happen (Description of work area and working conditions. Include information on weather conditions, PPE, Postings, etc.):

Workers were wearing FF-APR respiratory protection with combination chemical vapor/particulate cartridges as required by Standing Order SO-OPS-17-003 "Use of Respiratory Protection in Tank Farms" and TFC-PLN-173 "Use of FFAPR in Actively Ventilated Tank Farms".

Workers on the work platform around the 241-A-103-A pump pit were within a posted radiological High Radiological Area (HRA)/Airborne Radiological Area (ARA)/Contamination Area (CA) and were wearing anti-contamination clothing as required by RWP A-042. Workers performing outside support duties were within a posted Contamination Area (CA) and were wearing anti-contamination clothing as required by RWP A-042.

The Data Fusion and Advisory System (DFAS) application, powered by SmartSite™, was utilized for outdoor weather details at the time of the Ventis Pro personal ammonia monitor alarm. The DFAS dashboard indicated the following weather conditions at 0852 on 08/31/2022:

- Wind Speed: 6.8 miles per hour (mph)
- Wind Direction: 323° (out of Northwest)
- Mixing Height: 200 feet above grade
- Stability Class: E (slightly stable conditions)

The DFAS dashboard provides a Exhauster Potential Exposure Zone (PEZ) Model of the exhaust plumes at the reported time of the event based on wind speed, wind direction, mixing height, and stability class. Evaluation of the PEZ Model indicates no exhaust plumes were within the work area location at the reported time of the event, thus determining the cause of the personal ammonia alarm was unlikely to be resultant of Tank Farms exhauster emissions (Refer to Attachment 1).

Impact to Facility (Caused by the event or a description of known consequences):

Access was restricted around the 241-A-103-A pit for approximately 1 hour and 45 minutes. Performance of the WO# 891852 work evolution was delayed. No additional impacts to scheduled 08/31/2022 work evolutions occurred.

Immediate Actions Taken (List immediate actions taken to stabilize the scene or respond to the event):

- Central Shift Manager (CSM) initiated TF-AOP-015 and restricted access around the 241-A-103-A pump pit.
- CSM reviewed the DFAS data and determined mixing height was >100 ft., therefore, no additional access restrictions were required.
- CSM made required TF-AOP-015 notifications.
- CSM offered precautionary medical surveillance to workers. Workers declined medical surveillance.
- CSM requested Odor/Vapor Response Card from affected worker.
- Production Operations shift Industrial Hygiene Technician (IHT) initiated TF-AOP-015 response actions and monitoring per IHP-09001. Direct reading instrument (DRI) area readings around the 241-A-103-A pump pit indicated a less than detectable (< 1 ppm) ammonia concentration, which is below background levels.
- Event Investigation EIR-2022-073 "TF-AOP-015 Event at A103-A Pit" was initiated.

Notifications Already Made (Time and personnel notified):

[0854]- FWS contacted the CSM and informed them a Ventis Pro personal ammonia monitor alarm activated at the A103-A pit with a reading of 6 ppm ammonia. There were two workers within the immediate work area at the time of the Ventis Pro personal ammonia monitor alarm, the other workers personal ammonia monitor did not alarm. There were no reported odors or symptoms, and the workers declined medical evaluation. There were no readily identified fault conditions or alternate monitoring in place at the time of the alarm. An IHT was monitoring the source at the A103-A pit but was not the immediate area of the worker. The CSM instructed the FWS to put the pit in a safe configuration and leave the work area.

[0912]- The CSM initiated TF-AOP-015, restricted access, provided radio announcement, and issued SOEN "Entered TF-AOP-015 for Response to Personal Ammonia Monitor Alarm in A-Farm. Area around A103-A pit is restricted". CSM contacted the on-call DOE Facility Representative and informed them of TF-AOP-015 event initiation.

Washington River Protection Solutions
EVENT SUMMARY (Continued)

Project: Retrieval/Construction Date: 08/31/2022

Area/Building/Location: 200E/241-A-103-A Pump Pit Approximate Time of Event: 0852

AR Number: WRPS-AR-2022-2391 Responsible Manager: [REDACTED]

EIR Number: EIR-2022-073 Event Investigator: [REDACTED]

Notifications Already Made (Time and personnel notified):

[1048]- CSM provided TF-AOP-015, Attachment 1- Initial Communication Template to email to distribution list "DL - WRPS Odor/Vapor Event Notification".
[1100]- CSM issued SOEN "Exited TF-AOP-015 Response to Personal Ammonia Monitor Alarm. IHT monitoring results of the A103-A pit area are at or below background levels. Normal access is restored". CSM contacted the on-call DOE Facility Representative and informed them TF-AOP-015 response was exited.
[1125]- CSM provided TF-AOP-015, Attachment 2- Follow-up Event Summary to email to distribution list "DL - WRPS Odor/Vapor Event Notification".

- This event does not merit an Event Investigation meeting
- This event merits an Event Investigation meeting

Basis for Determination:

Information gathered from interviews and documentation reviews have provided sufficient information regarding this event.

Responsible Manager:

[REDACTED]
Print First and Last Name

[REDACTED] Digitally signed by [REDACTED]
Date: 2022.09.01 08:33:52 -0700
Signature / Date

CAS Manager:

[REDACTED]
Print First and Last Name

[REDACTED] Digitally signed by [REDACTED]
Date: 2022.09.01 08:33:58 -0700
Signature / Date

EVENT SUMMARY PART II

Key Elements of the Investigation (Key investigation points):

To summarize the conclusions of the Industrial Hygiene Event Investigation Report, IHIR-00051 "TF-AOP-015 Event at A Farm", the Ventis Pro personal ammonia monitor alarm was not indicative of an employee chemical exposure event or changing Tank Farm conditions related to Tank Farm vapors.

The following considerations support the IHIR-00051 conclusion:

- (1) An additional worker was within the immediate area of the individual when the Ventis Pro personal ammonia monitor alarmed. The other workers' Ventis Pro personal ammonia monitor did not alarm or indicate elevated ammonia concentrations.
- (2) Fourteen additional workers were on the work platform around the 241-A-103-A pump pit approximately 20 feet away when the Ventis Pro personal ammonia monitor alarmed. None of the other workers' Ventis Pro personal ammonia monitors alarmed or indicated elevated ammonia concentrations. If the Ventis Pro personal ammonia monitor alarm was resultant of Tank Farm vapors due to the open path to tank headspace, it would be anticipated a Ventis Pro personal ammonia monitor would alarm for the workers that were on the work platform around the 241-A-103-A pump pit.
- (3) Evaluation of the weather details determined the cause of the odor source was unlikely to be resultant of Tank Farms exhauster emissions based on the wind direction, wind speed, mixing height, and stability class at the reported time of event (Refer to Attachment 1 for DFAS PEZ Model).
- (4) Ammonia is used as a sentinel tank waste chemical vapor for chemicals of potential concern (COPC), therefore, direct reading instruments (DRIs) equipped with an ammonia sensor are utilized at a minimum when monitoring for tank waste chemical vapors/COPCs. In addition, a 2 ppm volatile organic compound (VOC) action limit was developed as a further indicator for tank waste chemical vapors/COPCs. An IHT was performing continuous monitoring from the work platform around the 241-

Washington River Protection Solutions
EVENT SUMMARY (Continued)

Project: Retrieval/Construction Date: 08/31/2022

Area/Building/Location: 200E/241-A-103-A Pump Pit Approximate Time of Event: 0852

AR Number: WRPS-AR-2022-2391 Responsible Manager: [REDACTED]

EIR Number: EIR-2022-073 Event Investigator: [REDACTED]

Key Elements of the Investigation (Key investigation points):

A-103-A pump pit within the HRA/ARA/EZ for ammonia, Volatile Organic Compounds (VOCs), and mercury. The highest source, area, or breathing zone concentrations observed were 0 ppm ammonia, 10 ppb VOCs, and 0 ng/m3 mercury, which are all below anticipated background levels. Therefore, providing indication the cause of the personal ammonia alarm was unlikely to be resultant of Tank Farms exhauster emissions.

(5) Field response DRI monitoring following initiation of TF-AOP-015, indicated a less than detectable ammonia concentration (< 1 ppm), which is below background levels. Providing additional indication the cause of the personal ammonia alarm was unlikely to be resultant of Tank Farms exhauster emissions.

(6) Memo WRPS-1904672.1, "TANK FARM EXHAUST STACK CONCENTRATION ALARM/ACTION LEVELS FOR AMMONIA" establishes ammonia concentration stack alarm/action set points for tank farm exhausters based on the predicated ammonia concentration at unspecified ground receptors utilizing the Quantitative Risk Assessment (QRA) model. The exhauster high level alarm was established at concentrations where the predicted ground receptor ammonia concentration of 2.5 ppm (or 10% of the established Occupational Exposure Limit for ammonia) could be observed. The exhauster high level alarm conservatively established for A Complex (excluding A farm) is 460 ppm. According to the Vapor Monitoring and Detection System (VMDS), the ammonia concentration observed at the time of event occurrence was 0 ppm at the POR-126 exhauster, 0.621 ppm at the POR-127 exhauster, and 10.665 ppm at the 702-AZ exhauster. Conservatively utilizing the higher ammonia concentration observed in the 702-AZ exhauster, a predicted ground receptor ammonia concentration of 0.058 ppm (or 0.23% of the established Occupational Exposure Limit for ammonia) would be expected if AY/AZ or AX tank farm exhauster emissions were present. The exhauster high level alarm conservatively established for A farm is 160 ppm. According to the Vapor Monitoring and Detection System (VMDS), the ammonia concentration observed at the time of event occurrence was 2.999 ppm at the POR-518 exhauster and 3.689 ppm at the POR-519 exhauster. Conservatively utilizing the higher ammonia concentration observed in the POR-519 exhauster, a predicted ground receptor ammonia concentration of 0.058 ppm (or 0.23% of the established Occupational Exposure Limit for ammonia) would be expected if A tank farm exhauster emissions were present. Therefore, providing further indication the cause of the personal ammonia alarm was unlikely to be resultant of Tank Farms exhauster emissions.

(7) PI Vision was utilized to verify 241-A-103 maintained negative tank pressures at the time of event occurrence, with -0.37 inches water column at POR518 and -0.36 inches water column at POR519.

Additional Compensatory/Remedial Measures (any additional measures taken if different from immediate actions):

None.

Lessons Learned or Information That the Work Force Needs Immediately:

None. Per TFC-OPS-OPER-C-28, "Operating Experience/Lessons Learned", this event did not meet the criteria requiring generation of a Lessons Learned.

- An Event Investigation will be completed per [TFC-OPS-OPER-C-14](#)
- This event will be managed by another process, i.e., Operability Evaluation, Engineering Technical Evaluation, etc.
- This event does not require continuation of the Event Investigation process

Washington River Protection Solutions
EVENT SUMMARY (Continued)

Project: Retrieval/Construction Date: 08/31/2022

Area/Building/Location: 200E/241-A-103-A Pump Pit Approximate Time of Event: 0852

AR Number: WRPS-AR-2022-2391 Responsible Manager: [REDACTED]

EIR Number: EIR-2022-073 Event Investigator: [REDACTED]

Basis for Determination:

This event does not require continuation of the event investigation process under TFC-OPS-OPER-C-14, "Event Investigation Process". The facts, findings, and comprehensive account captured under this Event Summary and the Industrial Hygiene Event Investigation Report, IHIR-00051 "TF-AOP-015 Event at A Farm" form the basis that further investigation will provide no additional information or operational benefit.

Responsible Manager:

<p>[REDACTED]</p> <hr/> <p style="text-align: center;"><i>Print First and Last Name</i></p>	<p>[REDACTED]</p> <hr/> <p style="text-align: center;"><i>Signature / Date</i></p>
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*Digitally signed by [REDACTED]
Date: 2022.09.14 08:05:56 -0700*

CAS Manager:

<p>[REDACTED]</p> <hr/> <p style="text-align: center;"><i>Print First and Last Name</i></p>	<p>[REDACTED]</p> <hr/> <p style="text-align: center;"><i>Signature / Date</i></p>
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*Digitally signed by [REDACTED]
Date: 2022.09.14 08:28:47 -0700*

EIR-2022-073 Attachment 1

702-AZ EXHAUSTER

POR-127 EXHAUSTER

POR-126 EXHAUSTER

POR-518/POR-519 EXHAUSTERS
Estimated Potential Exposure Zone

241-A-103-A Pump Pit
Location of Ventis Pro
Instrument Alarm

DFAS Exhauster Potential Exposure Zone Model

Actual conditions on 08/31/2022 @ 0852:

- Wind Speed: 6.8 mph
- Wind Direction: 323°
- Mixing Height: 200 feet
- Stability Class: E (slightly stable)



Washington River Protection Solutions
INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT

Event Title: <p style="text-align: center;">TF-AOP-015 Event at A Farm</p>	PER Number: <p style="text-align: center;">N/A</p>	
		IHIR Number: <p style="text-align: center;">IHIR-00051</p>

Date: 08/31/2022	Time: 0851	Location: 241-A Farm A-103 A Pit
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Event Summary and Timeline:

Event Summary:
A Ventis Pro V personal ammonia monitor (PAM) alarmed at six parts per million (ppm) inside 241-A-Farm. The individual whose PAM alarmed was sitting approximately 10ft south outside the work platform at A-103 A pit next to another worker whose PAM did not have detectable ammonia (NH3) readings. At the time of the event, 14 workers were present on the work platform installing wall nozzle vapor seals within the open pit. An Industrial Hygiene Technician (IHT) was present on the work platform performing continuous monitoring of the source and area with a MultiRAE Direct Reading Instrument (DRI) and had ammonia readings below detectable (<1ppm NH3). All workers on the work platform did not have detectable ammonia readings on their PAMs. The Central Shift Manager (CSM) restricted access around A-103 A pit, directed the work crew to exit the farm, and entered AOP-015.

Field Response Timeline:
0851 Approximate Time of Event - PAM alarm.
0859 Production Operations (P/O) Industrial Hygienist (IH) arrive at Central Shift Office (CSO).
0901 P/O IH reviews Data Fusion Advisory System (DFAS), powered Smart Site™, for current weather details:

- Wind Speed: 6.8 miles per hour (mph)
- Wind Direction: 323° East
- Mixing Height: 200 feet above grade
- Stability Class: D (neutral)

0902 P/O Shift IHT Supervisor arrives at CSO.
0909 P/O Shift IHT arrives at CSO.
0912 SOEN: "Entered TF-AOP-015 for Response to Personal Ammonia Monitor Alarm in A-Farm. Area around A103-A pit is restricted. CSM".
0918 Field Work Supervisor (FWS) contacts CSM.

- No odors detected
- No symptoms reported
- Individual declined medical
- CSM requested Odor/Vapor Response Cards (OVRC) and PAM from FWS

0927 FWS informed CSM that A-103 A pit was left in a safe configuration.
0928 Retrieval Closure (R/C) IH arrives at CSO.
0931 CSM notifies DOE Facility Representative of AOP-15 via phone.
0942 P/O IH briefs P/O Shift IHT.

- Monitor per IHP-09001 "Response to Ammonia Monitor Alarm"
- Respiratory Protection Form "TF-AOP-015" Task 4 (Voluntary Use)
- If not voluntarily used, then "MDRPF-PLN-173" Task 1
- Must confirm peak on PAM. If >12ppm AOP-015 RPE equivalent to "MDRPF-PLN-173" Task 1.

0943 Responding R/C IH and P/O Shift IHT depart CSO.
0946 PAM/OVRC arrive at CSO.
0946 P/O Shift IHT Supervisor departs CSO to download PAM and confirm peak.
0950 P/O Shift IHT Supervisor notifies P/O IH with confirmed peak of 6ppm NH3.
0952 P/O IH notifies R/C IH of confirmed peak.
1005 R/C IH and P/O Shift IHT enter A Farm.
1015 R/C IH notifies P/O IH that ammonia readings were less than detectable (<1ppm).
1015 R/C IH and P/O Shift IHT exit A Farm.
1054 P/O Shift IHT notifies P/O IH that DRI passed Post-Use-Function-Test.
1100 SOEN: "Exited TF-AOP-015 Response for Personal Ammonia Monitor Alarm. IHT monitoring results of the A103-A pit area are at or below background levels. Normal access is restored. CSM".

Washington River Protection Solutions
INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT(Continued)

Sampling/Monitoring Results:

Field Response Area Readings:

- Ammonia: Less than detectable (< 1ppm)

During the response, one IH accompanied one IHT into A Farm to perform DRI monitoring with the MultiRAE. Monitoring was performed around A-103 A pit for potential sources of ammonia and/or tank vapors. DRI monitoring and observations made by the IH and IHT demonstrated conditions which caused the alarm were no longer present.

Ventis Pro V 004744 (8/31/2022 Event Initiation PAM):

- 0829: 0ppm NH3
- 0830-0833: 2ppm NH3
- 0834: 0ppm NH3
- 0835: 2ppm NH3
- 0836-0837: 0ppm NH3
- 0838: 2ppm NH3
- 0839-0840: 3ppm NH3
- 0841: 2ppm NH3
- 0842-0845: 4ppm NH3
- 0846: 3ppm NH3
- 0847: 0ppm NH3
- 0848: 4ppm NH3
- 0849-0850: 5ppm NH3
- 0851: 6ppm NH3
- 0852: 4ppm NH3
- 0853: 3ppm NH3
- 0854: 0ppm NH3

All readings before 0829 and after 0854 were below detectable limits.

SWIHD References:

Field Response Site Wide Industrial Hygiene Database Direct Reading Instrumentation Survey:

- #22-05724, "TF-AOP-015 Field Response Actions 241-A-103 A Pit"

Additional Information:

At the time of the initiating event, the worker whose PAM alarmed was wearing respiratory protection equipment in accordance with the Management Directed Respiratory Protection Form, "MDRPF-PLN-173" Task 1: Full Face Air Purifying Respirator (FF-APR) with Gas/Vapor cartridges (MSA GME Chemical Vapor).

Exhauster stacks in A Farm have enhanced monitoring, Vapor Monitoring and Detection System (VMDS) that can be used to detect elevated readings and provide further warnings of unexpected conditions. The A Farm exhausters POR518 and POR519 were operational at the time of the event. At 0851, VMDS at POR518 and POR519 had peak readings less than 4ppm ammonia. Additionally, negative tank pressure was maintained at A-103 and was -0.37 inches water column (in WC) (POR518) and -0.36 in WC (POR519).

Exhauster stack occupational exposure level (OEL) concentrations to reach ground level were calculated from Computation Fluid Dynamics (CFD) modeling and is reported in 62043-000-SUB-055-002, "QRA 241-A Tank Farm Quantitative Risk Analysis. Table 3, "Minimum Exhauster Stack Concentrations of COPCs Required to Reach Concentrations of Concern in Breathing Zones" states that to reach an action level at ground level in A Farm the exhauster stack concentration for ammonia would need to be 816ppm. If such conditions do occur, they are rare and/or of short duration and will vary with different meteorological conditions.

Additionally, a more conservative approach was established for High Alarm and High High Alarm set points for the exhausters per the Interoffice Memorandum WRPS-1904672.1. To reach predicted ground receptor ammonia concentrations of 2.5ppm and 5ppm, the following set alarms at the exhaust stacks would need to be 160ppm (High Alarm) and 320ppm (High High Alarm), respectively.

Washington River Protection Solutions
INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT(Continued)

Additional Information:

Furthermore, the review of VMDS data concludes that there was very low potential for ground level exposure from A-Farm exhausters.

Recommendations/Conclusions:

The exact cause of the PAM alarm is unknown. An IHT was present on the work platform performing continuous monitoring of the source and area via DRI during intrusive pit work at A-103 A pit and had ammonia readings less than detectable. All other PAMs in the surrounding area were below the low-level alarm of 6ppm. After entering AOP-015 and the crew exited the farm, DRI monitoring was performed by the responding IH and IHT. DRI monitoring and observations made by the IH and IHT during the event response demonstrated conditions that may have caused the alarm were no longer present, allowing the exit of AOP-015. Furthermore, a thorough review was performed of the event and of environmental conditions related to worker location, wind direction, available monitoring data, and the event initiation PAM data-log. It is unlikely that the PAM alarm was caused by Tank Farm vapors.

It is recommended that the Event Investigator and the Industrial Hygienist review the results from the investigation report with the work crew.

Other:

N/A

Industrial Hygienist:

Print First and Last Name

Signature / Date

Industrial Hygiene Level 2 Manager:

Print First and Last Name

Digitally signed by

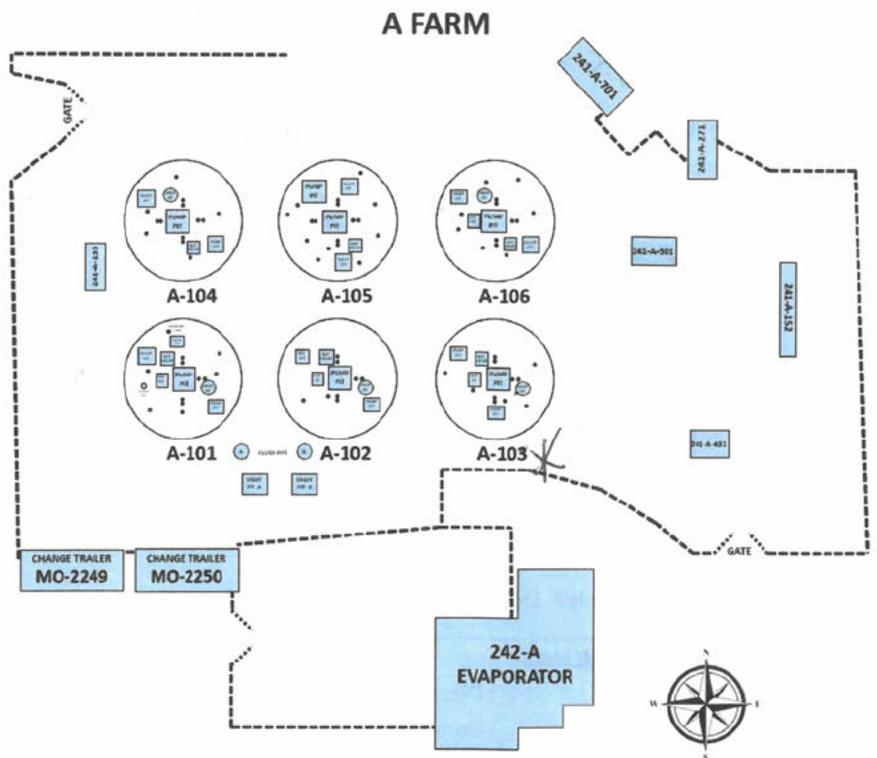
Signature / Date

ODOR/VAPOR RESPONSE CARD - 241 A FARM

Instructions:

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager (CSM), at [REDACTED]
3. Complete both pages of this form and include as many details as possible, including:
 - a. Approximate location, see map at right;
 - b. Wind direction, speed and description, such as stable or gusty wind;
 - c. Environmental conditions, such as hot, cold, windy, rainy;
 - d. Other work or contractors in the area;
 - e. Anything else you think is relevant.
4. Provide the completed card to your Supervisor*, Industrial Hygiene*, Union Safety Representative* or the CSM.

* If received by Supervisor, IH, or Union Safety Representative, the Supervisor/IH/ Union-SR will ensure card it is provided to the CSM.



ODOR/VAPOR RESPONSE CARD - 241 A FARM

1. Complete below information and map (Page 1).

- Date and time of event: 8/31 8:55
- Check Applicable:
 Odor Ammonia Alarm (6 ppm) Ammonia Alarm (12 ppm) Alarm (other - describe):
- Your name and the work you were performing: [REDACTED] Camera Work
- Other Work Underway? Describe: INSTALLING VAPOR SEALS IN 103-A PIT
- Location of event (mark area on map and wind direction): SEE MAP
- Name(s) of others in or near the affected area: [REDACTED]
- Was Industrial Hygiene present, who? YES [REDACTED]
- Describe the odor: N/A
 Sweet Sour Smoky Septic/Sewer Musty Rotten
 Metallic Onion Earthy Ammonia Citrus Solvent
 Other (describe):
- Is source known/likely? Describe:
- Your symptoms? None
 Headache Dizziness Nausea Cough Fatigue
 Weakness Sore Throat Difficulty Breathing Eye Irritation Rash
 Itch Tingling Numbness Taste
 Other (describe):

2. Provide this completed card (Page 1 & 2) to Supervisor, Industrial Hygiene, your Union Safety Representative or the CSM. If received by Supervisor/IH/U-SR, Supervisor/IH/U-SR will ensure card is provided to the CSM.