

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: TF-AOP-015 Event in A-Farm

Date: 08/17/2022

Area/Building/Location: A Farm/102C Pit

Approximate Time of Event: 1254

AR Number: WRPS-AR-2022-2321

Responsible Manager: [REDACTED]

EIR Number: WRPS-EIR-2022-068

Event Investigator: [REDACTED]

**EVENT SUMMARY PART I**

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

Eight Hanford workers were on a work deck over an open 102C Pit in A Farm. They were performing clean out of the pit under WO-874559.

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

One Field Work Supervisor (FWS)  
One Industrial Hygiene Technician (IHT)  
Two Health Physics Technicians (HPT)  
Four American-Electric Construction Workers

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

On 08/17/2022, a work crew was performing clean out of pit 102C in A Farm when a worker's Aventis Pro personal ammonia monitor "Response Level" alarm initiated. The Aventis Pro displayed an ammonia concentration of 6ppm at the time of the instrument alarm. Seven additional workers were in the immediate area of the individual when the Ventis Pro personal ammonia monitor alarmed. None of the other workers' personal ammonia monitors alarmed or indicated elevated ammonia concentrations. An IHT was supporting the work crew at the time an performed Direct Reading Instrument (DRI) monitoring sweep of the work area immediately following the instrument alarm and found no reading above action 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.

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

The crew was working in A-Farm, on a work deck above pit 102C, performing clean out of the pit. The workers were wearing full-face air purifying respirator with chemical cartridges.  
Meteorological Data from Met Data Station 6 @ 1300 08/17/2022:  
Wind-out of the North at 5 mph  
Temperature-98 degrees Fahrenheit  
Pressure-29.26  
Humidity-14%

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

Work was suspended and access was restricted for TF-AOP-015 response.

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

Workers immediately exited the work area, and access to the area was restricted. TF-AOP-015 response was entered at 1310. Industrial Hygiene (IH) was dispatched to the affected area to take DRI readings. All DRI readings were below action levels. TF-AOP-015 response was exited at 1446.

**Notifications Already Made** (Time and personnel notified):

-Central Shift Manager (CSM) notified at 1254 08/17/2022.  
-Production Operations IH arrives at Central Shift Office at 1310 08/17/2022.  
-WRPS Management and DOE Facility Representative notified at approximately 1310 08/17/2022.  
-SOEN at 1314 08/17/2022: Entered TF-AOP-015 for Response to Personal Ammonia Monitor Alarm in A-Farm. All Personnel Required to Exit A-Farm. CSM

Washington River Protection Solutions  
**EVENT SUMMARY (Continued)**

Project: TF-AOP-015 Event in A-Farm Date: 08/17/2022

Area/Building/Location: A Farm/102C Pit Approximate Time of Event: 1254

AR Number: WRPS-AR-2022-2321 Responsible Manager: [REDACTED]

EIR Number: WRPS-EIR-2022-068 Event Investigator: [REDACTED]

**Notifications Already Made** (Time and personnel notified):

-SOEN at 1446 08/17/2022: Exiting TF-AOP-015. Response actions for the TF-AOP-015 event in A Farm have been completed and the results are at or below background levels. Access to A Farm is no longer restricted. CSM

-SOEN at 0903 08/18/2022: Initiated EIR-2022-068 for TF-AOP-015 Event in A-Farm. POC [REDACTED]

☒ This event does not merit an Event Investigation meeting

☐ This event merits an Event Investigation meeting

**Basis for Determination:**

The statements taken from the work crew and follow-up IH response will provide the necessary information. No Event Investigation meeting required.

**Responsible Manager:**

[REDACTED]  
Print First and Last Name

[REDACTED] Digitally signed by [REDACTED]  
Date: 2022.08.18 11:14:18 -0700  
Signature / Date

**CAS Manager:**

[REDACTED]  
Print First and Last Name

[REDACTED] Digitally signed by [REDACTED]  
Date: 2022.08.18 11:24:26 -0700  
Signature / Date

**EVENT SUMMARY PART II**

**Key Elements of the Investigation** (Key investigation points):

A Personal Ammonia Monitor alarmed and indicated 6 ppm ammonia inside of 241-A Farm at 241-A-102C pit. Eight workers were present at the time of personal ammonia monitor alarm. Workers immediately exited 241-A Farm.

At the time of the initiating event, the employee wearing the personal ammonia monitor that alarmed was working in an Airborne Radioactivity Area (ARA) and was wearing Respiratory Protection Equipment in accordance with the Management Directed Respiratory Protection Form "MDRPF-PLN-173" Task 2: Full Face Air Purifying Respirator (FF-APR) with chemical vapor and particulate cartridges (MSA GME/Pl00 Chemical Vapor & Particulate).

The worker was supporting 241-A-102C pit clean out and was located on the work deck above the pit when his PAM alarmed. The worker reported his PAM was facing inwards in his pocket, with the sensor against his chest. Production Operation Industrial Hygiene was unable to recreate the alarm via blocking the sensor.

Additionally, a MultiRAE was used during pit cleanout to monitor ammonia source concentrations. Ammonia source readings were less than detectable at the time of the event. Using the PI Vision application, A102 tank pressures were reviewed. POR 518 was -0.11 inched water column (in WC) and POR 519 was -0.13 in WC at the time of the event, demonstrating negative pressure was maintained at 241-A-102C pit when the PAM alarmed.

As a result of entering TF-AOP-015, Industrial Hygiene (IH) was dispatched to the affected area to take DRI readings. All DRI readings were less than detectable for ammonia (<1ppm).

Review of the Data Fusion and Advisor System (DFAS) application, powered by SmartSite™, Weather Details and Chemical Details dashboards around the reported time of the event indicate the cause of the Personal Ammonia Monitor alarm is unlikely to be from Tank Farm Exhauster emissions based on:

Washington River Protection Solutions  
**EVENT SUMMARY (Continued)**

Project: TF-AOP-015 Event in A-Farm Date: 08/17/2022

Area/Building/Location: A Farm/102C Pit Approximate Time of Event: 1254

AR Number: WRPS-AR-2022-2321 Responsible Manager: [REDACTED]

EIR Number: WRPS-EIR-2022-068 Event Investigator: [REDACTED]

**Key Elements of the Investigation (Key investigation points):**

Meteorological Data 08/17/2022 @ 1250

• Wind Speed: 5.4 mph, Wind Direction: 204° SSW, Mixing Height: 1200 feet above grade, Stability Class: C (slightly unstable conditions)

08/17/2022 Vapor Monitoring Data System (VMDS) ammonia readings:

• POR 518 at 1250: 0 ppm ammonia • POR 519 at 1250: 5.955 ppm ammonia  
• POR 126 at 1250: 0 ppm ammonia • POR 127 at 1250: 0.253 ppm ammonia  
• 702 AZ at 1250: 15.475 ppm ammonia

Washington River Protection Solutions (WRPS) Industrial Hygiene Department has established a conservative, reasonable, and data-derived response level (RL) of 6 ppm for Personal Ammonia Monitor concentrations associated with tank waste gases/vapors in the Hanford Tank Farms. The intent of this response level is to enhance the safety of Hanford Tank Farm workers by establishing a conservative and timely indicator of potential changing conditions in Tank Farm gas/vapor conditions, at which prudent and protective investigative measures may be taken.

The Ventis Pro V product manual states the obstruction of sensor opening can inhibit the unit's ability to measure gas concentrations accurately. Review of the stack emissions using the DFAS application, field readings, weather details, and chemical details dashboards for the reported time of the event indicate the cause of the PAM alarm is unlikely to be from Tank Farm Exhauster emissions or 241-A-102C pit emissions. Monitoring via direct reading instrumentation and observations made by the IH and IHTs during the event response demonstrated conditions which caused the alarm were no longer present, allowing the exit of TF-AOP-015.

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

N/A

**Lessons Learned or Information That the Work Force Needs Immediately:**

N/A

- ☐ 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

**Basis for Determination:**

Investigation determined the Ventis Pro (004734) personnel ammonia monitor alarm was not an indication of an employee chemical exposure event or changing Tank Farm conditions related to Tank Farm vapors.

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-00047 "TF-AOP-015 Entry at 241-A-102C Pit Farm", form the basis that further investigation will provide no additional information or operational benefit.

Washington River Protection Solutions  
**EVENT SUMMARY** (Continued)

Project: TF-AOP-015 Event in A-Farm Date: 08/17/2022

Area/Building/Location: A Farm/102C Pit Approximate Time of Event: 1254

AR Number: WRPS-AR-2022-2321 Responsible Manager: [REDACTED]

EIR Number: WRPS-EIR-2022-068 Event Investigator: [REDACTED]

**Responsible Manager:**

[REDACTED]  
\_\_\_\_\_  
Print First and Last Name

[REDACTED] Digitally signed by [REDACTED]  
Date: 2022.08.25 10:10:48 -07'00'  
\_\_\_\_\_  
Signature / Date

**CAS Manager:**

[REDACTED]  
\_\_\_\_\_  
Print First and Last Name

[REDACTED] ed by [REDACTED],  
Date: 2022.08.25 13:35:30 -07'00'  
\_\_\_\_\_  
Signature / Date

Washington River Protection Solutions  
**INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT**

<b>Event Title:</b>  <p style="text-align: center;">TF-AOP-015 Entry at 241-A-102C Pit Farm</p>	<b>PER Number:</b>  <p style="text-align: center;">N/A</p>
<b>IHIR Number:</b>  <p style="text-align: center;">IHIR-00047</p>	

<b>Date:</b> 08/17/2022	<b>Time:</b> 1250	<b>Location:</b> 241-A Farm, 241-A-102C Pit
----------------------------	----------------------	--

**Event Summary and Timeline:**

Event Summary:

A Personal Ammonia Monitor alarmed and indicated 6 ppm ammonia inside of 241-A Farm at 241-A-102C pit. Eight workers were present at the time of personal ammonia monitor alarm. Workers immediately exited 241-A Farm.

Field Response Timeline:

1250 Approximate Time of Event - Personal Ammonia Monitor (PAM) alarm  
1254 Central Shift Manager (CSM) is notified of Ventis Pro V alarm of 6 ppm ammonia at 241-A-102C pit and contacts Production Operations East (POE) Industrial Hygienist (IH) to request support for TF-AOP-015 entry due to PAM alarm.  
1308 POE Shift Industrial Hygiene Technician (IHT) Supervisor and POE Level 3 Safety and Health Manager arrive at Central Shift Office (CSO)  
1310 TF-AOP-015 is entered. POE IH arrives at CSO  
1317 POE Shift IHT Supervisor directs POE Shift IHT to support response  
1320 CSM contacts Field Work Supervisor (FWS) to direct him to bring the PAM to the CSO, ensure Odor/Vapor Response Card (OVR) is completed, and ensure medical is offered  
1323 POE IH reviews Data Fusion Advisory System (DFAS), powered Smart Site™, for current weather details:

- Wind Speed: 6.4 mph
- Wind Direction: 204° SSW
- Mixing Height: 1200 feet above grade
- Stability Class: D (neutral conditions)

1327 POE IH reviews Vapor Monitoring Data System (VMDS)

- POR 518: 0 ppm ammonia
- POR 519: 5.93 ppm ammonia
- POR 126: 0 ppm ammonia
- POR 127: 0.780 ppm ammonia
- 702 AZ: 15.928 ppm ammonia

1337 FWS contacts CSM to confirm the OVRs are completed and he is en route to CSO with the PAM and the OVRs  
1340 POE IH briefs POE Shift IHTs on response:

- monitor per IHP-09001
- provided map of area of alarm
- respiratory protection per RPF-TF-AOP-015 was not required
- respiratory protection prescribed per MDRPF-PLN-173, task 1

1342 POE IHTs depart CSO to retrieve equipment for response  
1343 POE IH contacts On-Duty Forecaster via email to obtain meteorological data for Station #6  
1347 PAM arrives at CSO  
1347 POE Shift IHT Supervisor departs CSO to download datalog  
1348 OVR delivered to CSO, medical has not yet been offered to worker  
1348 Retrieval/Closure (RC) IHTs arrive at CSO  
1353 PAM datalog confirms the peak reading was 6 ppm ammonia  
1354 FWS returns to CSO to inform POE IH that all workers declined precautionary medical  
1354 POE level 3 Safety and Health manager approves the initiation of response with confirmation of peak of 6 ppm ammonia  
1356 RC IH departs CSO to meet with POE shift IHTs for response  
1400 PAM was provided to Programs IHT  
1430 Responding RC IH contacted RC IH and POE IH at CSO to confirm field response is complete, reporting direct reading instrument (DRI) ammonia readings are below detection limits. RC IH and

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

**Event Summary and Timeline:**

POE shift IHTs are en route to post instrument

1444 POE shift IHT contacts POE Shift IHT Supervisor to report the instrument passed the post function test.

1450 Shift Office Event Notification (SOEN)- "Exiting TF-AOP-015. Response actions for the TF-AOP-015 event have been completed and the results are at or below background levels. CSM"

**Sampling/Monitoring Results:**

Field Response area readings:

- Ammonia: Less than Detectable (< 1 ppm)

Ventis Pro V 004734 (Event Initiating Personal Ammonia Monitor):

- 8/18/2022 12:37:03 0 ppm ammonia
- 8/18/2022 12:40:24 2 ppm ammonia
- 8/18/2022 12:40:46 2 ppm ammonia
- 8/18/2022 12:41:27 3 ppm ammonia
- 8/18/2022 12:43:07 3 ppm ammonia
- 8/18/2022 12:45:21 4 ppm ammonia
- 8/18/2022 12:47:29 5 ppm ammonia
- 8/18/2022 12:48:40 5 ppm ammonia
- 8/18/2022 12:49:34 5 ppm ammonia
- 8/18/2022 12:50:44 6 ppm ammonia
- 8/18/2022 12:52:06 3 ppm ammonia
- 8/18/2022 12:52:38 2 ppm ammonia
- 8/18/2022 12:57:10 0 ppm ammonia

All readings before 12:37:03 and after 12:57:10 were below detectable limits.

**SWIHD References:**

- Event Response Site Wide Industrial Hygiene Database Direct Reading Instrument Survey #22-05343

**Additional Information:**

At the time of the initiating event, the employee wearing the personal ammonia monitor that alarmed was working in an Airborne Radioactivity Area (ARA) and was wearing Respiratory Protection Equipment in accordance with the Management Directed Respiratory Protection Form "MDRPF-PLN-173" Task 2: Full Face Air Purifying Respirator (FF-APR) with chemical vapor and particulate cartridges (MSA GME/PI00 Chemical Vapor & Particulate).

The worker was supporting 241-A-102C pit clean out and was located on the work deck above the pit when his PAM alarmed. The worker reported his PAM was facing inwards in his pocket, with the sensor against his chest. POE IHTs were unable to recreate the alarm via blocking the sensor.

Additionally, a MultiRAE was used during pit cleanout to monitor ammonia source concentrations. Ammonia source readings were less than detectable at the time of the event. Using the PI Vision application, A102 tank pressures were reviewed. POR 518 was -0.11 inched water column (in WC) and POR 519 was -0.13 in WC at the time of the event, demonstrating negative pressure was maintained at 241-A-102C pit when the PAM alarmed.

Additional Information on the Personal Ammonia Monitor (Ventis Pro V):

Ventis Pro V 004772 (event initiating instrument):

- Put into service on 07/12/2022
- Sensor ID: 21090HR076
- Unit Serial Number (SN): 21091UB-170
- User ID: 004772
- Datalog Interval: 10 seconds
- Passed Daily Function Test for Ammonia (Bump Test): 8/17/2022
- Last Successful Calibration of Unit for Ammonia: 08/04/2022

Review of the Data Fusion and Advisor System (DFAS) application, powered by SmartSite™, Weather

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

**Additional Information:**

Details and Chemical Details dashboards around the reported time of the event indicate the cause of the Personal Ammonia Monitor alarm is unlikely to be from Tank Farm Exhauster emissions based on:

08/17/2022 @ 1250

- Wind Speed: 5.4 mph
- Wind Direction: 204° SSW
- Mixing Height: 1200 feet above grade
- Stability Class: C (slightly unstable conditions)

08/17/2022 Vapor Monitoring Data System (VMDS) ammonia readings:

- POR 518 at 1250: 0 ppm ammonia
- POR 519 at 1250: 5.955 ppm ammonia
- POR 126 at 1250: 0 ppm ammonia
- POR 127 at 1250: 0.253 ppm ammonia
- 702 AZ at 1250: 15.475 ppm ammonia

Memo WRPS-1904672.1, TANK FARM EXHAUST STACK CONCENTRATION ALARM/ ACTION LEVELS FOR AMMONIA establishes stack alarm/action set points for Tank Farm Exhausters. The alarm/action set points are based on a linear extrapolation of the Quantitative Risk Assessment (QRA) model prediction resulting in various ammonia concentrations at an unspecified ground receptor.

- 241-A:
  - o High Alarm was conservatively established at 160 ppm Ammonia
    - Ammonia concentration of 2.5 ppm at an unspecified ground receptor
  - o High High Alarm was conservatively established at 320 ppm Ammonia
    - Ammonia concentration of 5 ppm at an unspecified ground receptor

**Recommendations/Conclusions:**

Recommendations:

N/A

Conclusions:

Washington River Protection Solutions (WRPS) Industrial Hygiene Department has established a conservative, reasonable, and data-derived response level (RL) of 6 ppm for Personal Ammonia Monitor concentrations associated with tank waste gases/vapors in the Hanford Tank Farms. The intent of this response level is to enhance the safety of Hanford Tank Farm workers by establishing a conservative and timely indicator of potential changing conditions in Tank Farm gas/vapor conditions, at which prudent and protective investigative measures may be taken.

The Ventis Pro V product manual states the obstruction of sensor opening can inhibit the unit's ability to measure gas concentrations accurately. Review of the stack emissions using the DFAS application, field readings, weather details, and chemical details dashboards for the reported time of the event indicate the cause of the PAM alarm is unlikely to be from Tank Farm Exhauster emissions or 241-A-102C pit emissions. Monitoring via direct reading instrumentation and observations made by the IH and IHTs during the event response demonstrated conditions which caused the alarm were no longer present, allowing the exit of TF-AOP-015.

**Other:**

Event Investigation Report # EIR-2022-068

**Industrial Hygienist:**

[Redacted]

*Print First and Last Name*

[Redacted]

*Signature / Date*

*Digitally signed by* [Redacted]

*Date: 2022.08.25 08:07:02 -07'00'*

**Industrial Hygiene Level 2 Manager:**

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

[Redacted]

*Print First and Last Name*

[Redacted]

*Digitally signed by*

[Redacted]

*Signature / Date*



### ODOR/VAPOR RESPONSE CARD - 241 A FARM

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

- Date and time of event: 8-17-22 1:00pm
- Check Applicable:
  - ☐ Odor
  - ☐ Ammonia Alarm (6 ppm)
  - ☐ Ammonia Alarm (12 ppm)
  - ☐ Alarm (other - describe):
- Your name and the work you were performing: [redacted] cleaning work pit 102c
- Other Work Underway? Describe: N/A
- Location of event (mark area on map and wind direction): A-farm pit 102c
- Name(s) of others in or near the affected area: [redacted]
- Was Industrial Hygiene present, who? [redacted]
- Describe the odor:
  - ☐ Sweet
  - ☐ Sour
  - ☐ Smoky
  - ☐ Septic/Sewer
  - ☐ Musty
  - ☐ Rotten
  - ☐ Metallic
  - ☐ Onion
  - ☐ Earthy
  - ☐ Ammonia
  - ☐ Citrus
  - ☐ Solvent
  - ☐ Other (describe):
- Is source known/likely? Describe: N/A
- 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.

### ODOR/VAPOR RESPONSE CARD - 241 A FARM

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

- Date and time of event: 8/17/22 1:00 pm
- Check Applicable:
  - ☐ Odor
  - ☒ Ammonia Alarm (6 ppm)
  - ☐ Ammonia Alarm (12 ppm)
  - ☐ Alarm (other - describe):
- Your name and the work you were performing:  
[REDACTED] / pit works @ 102 C pit
- Other Work Underway? Describe:
- Location of event (mark area on map and wind direction): A-102 C pit A farm
- Name(s) of others in or near the affected area:  
[REDACTED]
- Was Industrial Hygiene present, who?  
Yes, [REDACTED]
- Describe the odor:
  - ☐ Sweet
  - ☐ Sour
  - ☐ Smoky
  - ☐ Septic/Sewer
  - ☐ Musty
  - ☐ Rotten
  - ☐ Metallic
  - ☐ Onion
  - ☐ Earthy
  - ☐ Ammonia
  - ☐ Citrus
  - ☐ Solvent
  - ☐ Other (describe):
- Is source known/likely? Describe: N/A
- 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.

### ODOR/VAPOR RESPONSE CARD - 241 A FARM

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

- Date and time of event: 8/17/22 1300
- Check Applicable:
  - ☐ Odor
  - ☒ Ammonia Alarm (6 ppm)
  - ☐ Ammonia Alarm (12 ppm)
  - ☐ Alarm (other - describe): \_\_\_\_\_
- Your name and the work you were performing: [REDACTED] HPT
- Other Work Underway? Describe: PIT CLEANOUT.
- Location of event (mark area on map and wind direction): A-102 C PIT
- Name(s) of others in or near the affected area: \_\_\_\_\_
- Was Industrial Hygiene present, who? YES, [REDACTED]
- Describe the odor:
  - ☐ Sweet
  - ☐ Sour
  - ☐ Smoky
  - ☐ Septic/Sewer
  - ☐ Musty
  - ☐ Rotten
  - ☐ Metallic
  - ☐ Onion
  - ☐ Earthy
  - ☐ Ammonia
  - ☐ Citrus
  - ☐ Solvent
  - ☐ Other (describe): N/A
- 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.

### ODOR/VAPOR RESPONSE CARD - 241 A FARM

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

- Date and time of event: 1300 8/7/22
- Check Applicable:
  - ☐ Odor
  - ☒ Ammonia Alarm (6 ppm)
  - ☐ Ammonia Alarm (12 ppm)
  - ☐ Alarm (other - describe): \_\_\_\_\_
- Your name and the work you were performing: [REDACTED] HPT coverage
- Other Work Underway? Describe: Pit Clean-out
- Location of event (mark area on map and wind direction): A-102 C-Pit
- Name(s) of others in or near the affected area: \_\_\_\_\_
- Was Industrial Hygiene present, who? yes, [REDACTED]
- Describe the odor:
  - ☐ Sweet
  - ☐ Sour
  - ☐ Smoky
  - ☐ Septic/Sewer
  - ☐ Musty
  - ☐ Rotten
  - ☐ Metallic
  - ☐ Onion
  - ☐ Earthy
  - ☐ Ammonia
  - ☐ Citrus
  - ☐ Solvent
  - ☒ Other (describe): None
- 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.

### ODOR/VAPOR RESPONSE CARD - 241 A FARM

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

- Date and time of event: 1:00 pm 8-17-22
- Check Applicable:
  - ☐ Odor
  - ☒ Ammonia Alarm (6 ppm)
  - ☐ Ammonia Alarm (12 ppm)
  - ☐ Alarm (other - describe):
- Your name and the work you were performing: [REDACTED] cleaning 102C Pit
- Other Work Underway? Describe: N/A
- Location of event (mark area on map and wind direction): A-farm 102C pit
- Name(s) of others in or near the affected area: [REDACTED]
- Was Industrial Hygiene present, who? [REDACTED]
- Describe the odor:
  - ☐ Sweet
  - ☐ Sour
  - ☐ Smoky
  - ☐ Septic/Sewer
  - ☐ Musty
  - ☐ Rotten
  - ☐ Metallic
  - ☐ Onion
  - ☐ Earthy
  - ☐ Ammonia
  - ☐ Citrus
  - ☐ Solvent
  - ☐ Other (describe):
- Is source known/likely? Describe: N/A
- 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.

### ODOR/VAPOR RESPONSE CARD - 241 A FARM

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

- Date and time of event: 8/17/22 1:00 PM
- Check Applicable:
  - ☐ Odor
  - ☒ Ammonia Alarm (6 ppm)
  - ☐ Ammonia Alarm (12 ppm)
  - ☐ Alarm (other - describe): \_\_\_\_\_
- Your name and the work you were performing: [REDACTED]
- Other Work Underway? Describe: cleaning 102c pit
- Location of event (mark area on map and wind direction): 102c pit 1A-farm
- Name(s) of others in or near the affected area: [REDACTED]
- Was Industrial Hygiene present, who? [REDACTED]
- Describe the odor:
  - ☐ Sweet
  - ☐ Sour
  - ☐ Smoky
  - ☐ Septic/Sewer
  - ☐ Musty
  - ☐ Rotten
  - ☐ Metallic
  - ☐ Onion
  - ☐ Earthy
  - ☐ Ammonia
  - ☐ Citrus
  - ☐ Solvent
  - ☐ Other (describe): \_\_\_\_\_
- Is source known/likely? Describe: N/A
- 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.

### ODOR/VAPOR RESPONSE CARD - 241 A FARM

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

- Date and time of event: 1300 / 8.17.22
- Check Applicable:
  - ☐ Odor
  - ☒ Ammonia Alarm (6 ppm)
  - ☐ Ammonia Alarm (12 ppm)
  - ☐ Alarm (other - describe):
- Your name and the work you were performing:  
[REDACTED] A-102 C-PIT WORKER CLEAN-OUT
- Other Work Underway? Describe:  
PIT CLEAN-OUT (HPT COVERAGE)
- Location of event (mark area on map and wind direction):  
A-102 C-PIT
- Name(s) of others in or near the affected area:
- Was Industrial Hygiene present, who?  
YES [REDACTED]
- Describe the odor:
  - ☐ Sweet
  - ☐ Sour
  - ☐ Smoky
  - ☐ Septic/Sewer
  - ☐ Musty
  - ☐ Rotten
  - ☐ Metallic
  - ☐ Onion
  - ☐ Earthy
  - ☐ Ammonia
  - ☐ Citrus
  - ☐ Solvent
  - ☒ Other (describe): N/A
- Is source known/likely? Describe:  
NO ORDER WAS SMOELD
- 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.