

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 at A Farm Date: 07/14/2022

Area/Building/Location: 200E/A Farm/Near A-102 & A-104 Approximate Time of Event: 0830

AR Number: WRPS-AR-2022-2081 Responsible Manager: [REDACTED]

EIR Number: WRPS-EIR-2022-058 Event Investigator: [REDACTED]

EVENT SUMMARY PART I

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

Three American Electric (AMEC) electricians were installing conduit along the vent line in A Farm between A-104 and A-105 under work package #824389.

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

Three AMEC electricians.

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

Three AMEC electricians were installing conduit in A Farm between A-104 and A-105 when one of their personal ammonia monitoring alarms (Ventis Pro V) alarmed at 10 ppm (parts per million). The workers were in an area that required respiratory protection. The workers were instructed to leave the area. The workers reported no indication of odors, did not experience any symptoms and declined medical evaluation at HPMC.

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

The workers were performing work in A Farm between A-104 and A-105. The workers were wearing full-face air purifying respirator with chemical cartridges and a cloth hood to protect against the sun.

Meteorological Data:

Wind: NW @ 4 mph
Temp: 74 degrees Fahrenheit
Pressure: 29.268
Humidity: 25%

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

Minimal impact was caused to the facility. Work in the area was suspended at approximately 0832. Industrial Hygiene (IH) performed monitoring utilizing direct reading instrument (DRI). All DRI readings were below action levels. TF-AOP-015 was exited at 1018. Work resumed.

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

All work in the area was suspended pending TF-AOP-015, "Response to Personal Ammonia Monitor Alarm," response actions.

Notifications Already Made (Time and personnel notified):

Central Shift Manager(CSM) notified at 0832.
Production Operations IH arrives at the Central Shift Office at 0835.
SOEN (Shift Operations Event Notification) sent at 0858.
WRPS Management and DOE Facility Representative notified at approximately 0900.

- 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.

Washington River Protection Solutions
EVENT SUMMARY (Continued)

Project: TF-AOP-015 Event at A Farm **Date:** 07/14/2022

Area/Building/Location: 200E/A Farm/Near A-102 & A-104 **Approximate Time of Event:** 0830

AR Number: WRPS-AR-2022-2081 **Responsible Manager:** [REDACTED]

EIR Number: WRPS-EIR-2022-058 **Event Investigator:** [REDACTED]

Responsible Manager:

[REDACTED]

Print First and Last Name

[REDACTED] *Date: 2022.07.18 07:22:52 -0700*

Signature / Date

CAS Manager:

[REDACTED]

Print First and Last Name

[REDACTED]

Signature / Date

Washington River Protection Solutions
EVENT SUMMARY

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Project: TF-AOP-015 Event at A Farm _____ Date: 07/14/2022

Area/Building/Location: 200E/A Farm/Near A-102 & A-104 _____ Approximate Time of Event: 0830

AR Number: WRPS-AR-2022-2081 _____ Responsible Manager: _____

EIR Number: WRPS-EIR-2022-058 _____ Event Investigator: _____

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

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

Three AMEC electricians were installing conduit in A Farm between A-104 and A-105 when one of their personal ammonia monitoring alarms (Ventis Pro V) alarmed at 10 ppm (parts per million). The workers were in an area that required respiratory protection. The workers were instructed to leave the area. The workers reported no indication of odors, did not experience any symptoms and declined medical evaluation at HPMC.

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

The workers were performing work in A Farm between A-104 and A-105. The workers were wearing full-face air purifying respirator with chemical cartridges and a cloth hood to protect against the sun.

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SOEN (Shift Operations Event Notification) sent at 0858.

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This event does not merit an Event Investigation meeting

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

Washington River Protection Solutions
EVENT SUMMARY (Continued)

Project: TF-AOP-015 Event at A Farm Date: 07/14/2022

Area/Building/Location: 200E/A Farm/Near A-102 & A-104 Approximate Time of Event: 0830

AR Number: WRPS-AR-2022-2081 Responsible Manager: [REDACTED]

EIR Number: WRPS-EIR-2022-058 Event Investigator: [REDACTED]

Responsible Manager:

[REDACTED] Digitally signed by [REDACTED]
Date: 2022.07.18 07:22:52 -07'00'

Print First and Last Name Signature / Date

CAS Manager:

[REDACTED] Digitally signed by [REDACTED]
Date: 2022.07.18 07:30:25 -07'00'

Print First and Last Name Signature / Date

EVENT SUMMARY PART II

Key Elements of the Investigation (Key investigation points):

At the time of the initiating event, the employee wearing the event initiating personal ammonia monitor 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). Additionally, the worker was wearing a canvas hood to shade himself. The worker noted in their Odor/ Vapor Response Card that the hood was covering the Ventis Pro V instrument. Production Operations East Industrial Hygienists were unable to recreate the working conditions and were therefore unable to replicate the alarm.

Review of the Weather Details and Chemical Details dashboards within the Data Fusion and Advisor System (DFAS) application, powered by SmartSite™, was utilized for outdoor weather details at the time of the personal ammonia monitor alarm. The DFAS dashboard indicated the following weather conditions at 07/14/2022 @ 0824:

- Wind Speed: 5.4 mph
- Wind Direction: 252° WSW
- Mixing Height: 140 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.

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 241-A is 160 ppm ammonia. According to the POR 518 Vapor Monitoring Data System (VMDS), an ammonia concentration of 0.286 ppm was observed at 0824 on 07/14/2022, whereas, the POR 519 VMDS indicated an ammonia concentration of 3.597 ppm. Conservatively utilizing the higher ammonia concentration observed in the POR 519 exhauster, a predicted ground receptor ammonia concentration of 0.056 ppm would be expected if tank farm exhauster emissions were present. Providing indication the cause of the personal ammonia alarm was unlikely to be resultant of Tank Farms exhauster emissions.

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. TF-AOP-015 field response area readings indicated a less than detectable concentrations (<1 ppm) for ammonia, which is below the anticipated background level. The field response reading provides an additional indication the cause of the personal ammonia alarm was unlikely to be resultant of Tank Farms exhauster emissions.

Washington River Protection Solutions
EVENT SUMMARY (Continued)

Project: TF-AOP-015 Event at A Farm Date: 07/14/2022

Area/Building/Location: 200E/A Farm/Near A-102 & A-104 Approximate Time of Event: 0830

AR Number: WRPS-AR-2022-2081 Responsible Manager: [REDACTED]

EIR Number: WRPS-EIR-2022-058 Event Investigator: [REDACTED]

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

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 exact cause of the Personal Ammonia Monitor alarm is unknown. However, review of the stack emissions using the Data Fusion and Advisor System (DFAS) application and chemical details dashboards for the reported time of the event indicate the cause of the Personal Ammonia Monitor alarm is unlikely to be from Tank Farm Exhauster emissions. Monitoring via direct reading instrumentation and observations made by the Industrial Hygienist and Industrial Hygiene Technician during the event response demonstrated conditions which caused the alarm were no longer present, allowing the exit of TF-AOP-015.

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 (005679) 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-00043 "TF-AOP-015 Entry at 241-A Farm", form the basis that further investigation will provide no additional information or operational benefit.

Responsible Manager:

[REDACTED]
Print First and Last Name

[REDACTED] Digitally signed by [REDACTED]
Date: 2022.07.28 08:44:29 -07'00'
Signature / Date

CAS Manager:

[REDACTED]
Print First and Last Name

[REDACTED] Digitally signed by [REDACTED]
Date: 2022.07.28 09:09:20 -07'00'
Signature / Date

Washington River Protection Solutions
INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT

Event Title: <p style="text-align: center;">TF-AOP-015 Entry at 241-A Farm</p>	PER Number: <p style="text-align: center;">N/A</p>
	IHIR Number: <p style="text-align: center;">IHIR-00043</p>

Date: 07/14/2022	Time: 0824	Location: 241-A Farm, Between 241-A-104 & 241-A-105
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Event Summary and Timeline:

Event Summary:

A Personal Ammonia Monitor alarmed and indicated 10 ppm ammonia inside of 241-A Farm. Three workers were present at the time of personal ammonia monitor alarm. Workers immediately exited 241-A Farm.

Field Response Timeline:

0824 Approximate Time of Event - Personal Ammonia Monitor alarm

0832 Central Shift Manager contacts Production Operations East Industrial Hygienist to request support for TF-AOP-015 entry due to Personal Ammonia Monitor alarm

0836 Production Operations East Industrial Hygienist contacts Shift Production Operations Industrial Hygiene Technician Supervisor to request Shift Production Operations Industrial Hygiene Technician support for TF-AOP-015 field response actions

0837 Production Operations East Industrial Hygienists reviews Data Fusion Advisory System (DFAS), powered Smart Site™, for current weather details:

- Wind Speed: 5.4 mph
- Wind Direction: 252° WSW
- Mixing Height: 140 feet above grade
- Stability Class: C (slightly unstable conditions)

0838 Retrieval/Closure Field Work Supervisor contacts Central Shift Manager with event details:

- Ventis Pro V alarmed at 10 ppm
- Production Operations East Industrial Hygienist requests Retrieval/Closure Field Work Supervisor:
 - Bring Personal Ammonia Monitor to Central Shift Office
 - Populate Odor/Vapor Response Card at Central Shift Office
 - Offer employee precautionary medical surveillance

0840 Production Operations East Shift Industrial Hygiene Technician arrives at Central Shift Office

0841 Production Operations East Shift Industrial Hygiene Technician departs Central Shift Office to gather equipment for field response actions

0843 Production Operations East Shift Industrial Hygiene Technician Supervisor arrives at Central Shift Office

0845 Production Operations East Industrial Hygienist contacts On-Duty Forecaster to obtain Meteorological data for Station #6

- On-Duty Forecaster asks for request to be sent via email

0850 Production Operations East Industrial Hygienist emails Hanford Weather data request for Station 6 at 0815 and 0830:

- Wind speed and direction
- Relative Humidity
- Barometric pressure and trend
- Temperature

0853 Retrieval/Closure Field Work Supervisor arrives at Central Shift Office with Personal Ammonia Monitor and fills out the Odor/Vapor Response Card, reporting no odors or symptoms and that the worker wearing the Personal Ammonia Monitor that alarmed declined medical.

0857 Retrieval/Closure Field Work Supervisor submits Odor/Vapor Response Card for review

0859 Shift Office Event Notification (SOEN)- Entered TF-AOP-015 Response for Personal Ammonia Monitor Alarm greater than 6ppm and less than 12ppm near A-104 & A-105.

0900 Production Operations East Industrial Hygienist briefs Production Operations East Shift Industrial Hygiene Technician and Retrieval/Closure Industrial Hygienist on response:

- monitor per IHP-09001
- provided map of area of alarm

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

Event Summary and Timeline:

- respiratory protection per RPF-TF-AOP-015 was not required
 - respiratory protection prescribed per MDRPF-PLN-173
 - radiological work permit number requested
- 0902 Production Operations East Industrial Hygienist, Production Operations East Shift Industrial Hygiene Technician, and Retrieval/Closure Industrial Hygienist depart Central Shift Office
- 0905 Hanford meteorological station emails data:
- 0815 07/14/2022
 - Wind speed: 6.06 mph
 - Direction: 301.3 degrees (NW)
 - RH: 27%
 - BP: 29.28 inHg
 - Trend: Slowly increasing
 - Temperature: 72.4 F
 - 0830 07/14/2022
 - Wind speed: 4.47 mph
 - Direction: 314.1 degrees (NW)
 - RH: 27%
 - BP: 29.27 inHg
 - Trend: Stabilizing
 - Temperature: 73.5 F
- 0907 Central Shift Manager contacts RadCon for appropriate radiological work permit
- 0908 Production Operations East Shift Industrial Hygiene Technician arrives at Central Shift Office with datalog
- 0908 Radcon provides radiological work permit TF-012
- 0909 Production Operations East Industrial Hygienist reviews datalog:
- 7/14/2022 8:23:48 0 ppm ammonia
 - 7/14/2022 8:23:58 3 ppm ammonia
 - 7/14/2022 8:24:05 9 ppm ammonia
 - 7/14/2022 8:24:08 6 ppm ammonia
 - 7/14/2022 8:24:11 11 ppm ammonia
 - 7/14/2022 8:24:18 6 ppm ammonia
 - 7/14/2022 8:24:28 2 ppm ammonia
 - 7/14/2022 8:24:38 3 ppm ammonia
 - 7/14/2022 8:24:47 2 ppm ammonia
 - 7/14/2022 8:24:57 2 ppm ammonia
 - 7/14/2022 8:25:07 7 ppm ammonia
 - 7/14/2022 8:25:17 0 ppm ammonia
 - 7/14/2022 8:25:27 0 ppm ammonia
 - 7/14/2022 8:25:31 10 ppm ammonia
 - 7/14/2022 8:25:37 4 ppm ammonia
 - 7/14/2022 8:25:44 5 ppm ammonia
 - 7/14/2022 8:25:49 6 ppm ammonia
 - 7/14/2022 8:25:54 0 ppm ammonia
- All readings before 8:23:48 and after 8:25:54 were below detectable limits.
- 0918 Production Operations East Industrial Hygienist reviews Vapor Monitoring Data System
- POR 518 at 0824: 0.286 ppm ammonia
 - POR 519 at 0824: 3.597 ppm ammonia
- 0920 Central Shift Office updates Department of Energy representative on AOP-015
- 0925 Public affairs representative contacts Central Shift Manager for clarification on restricted access. Clarified access is restricted around A-104 and A-105, not entire farm because alarm was less than 12ppm
- 0929 Retrieval/Closure Industrial Hygienist in route to A Farm to meet up with Production Operations East Shift Industrial Hygiene Technician
- 0949 Retrieval/Closure Industrial Hygienist and Production Operations East Shift Industrial Hygiene Technician enter the farm via AY1 change tent to perform monitoring for ammonia and volatile organic compounds (VOCs) using direct reading instrumentation at the site of the Personal Ammonia Monitor alarm
- 0955 Retrieval/Closure Industrial Hygienist contacts Production Operations East Industrial Hygienist to report VOCs and ammonia were below detectable limits. Production Operations East Industrial Hygienist requested Production Operations East Shift Industrial Hygiene Technician

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

to perform a post function instrument test upon exiting the farm
1019 Production Operations East Shift Industrial Hygiene Technician contacts Production Operations East Shift Industrial Hygiene Technician supervisor to report the instrument passed post function test
1023 Shift Office Event Notification (SOEN)- Exiting TF-AOP-015 Response to Personal Ammonia Monitor Alarm. IHT surveys are at or below background levels. Normal access to A Farm restored.

Sampling/Monitoring Results:

Field Response area readings:

- Ammonia: Less than Detectable (< 1 ppm)

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

- 7/14/2022 8:23:48 0 ppm ammonia
- 7/14/2022 8:23:58 3 ppm ammonia
- 7/14/2022 8:24:05 9 ppm ammonia
- 7/14/2022 8:24:08 6 ppm ammonia
- 7/14/2022 8:24:11 11 ppm ammonia
- 7/14/2022 8:24:18 6 ppm ammonia
- 7/14/2022 8:24:28 2 ppm ammonia
- 7/14/2022 8:24:38 3 ppm ammonia
- 7/14/2022 8:24:47 2 ppm ammonia
- 7/14/2022 8:24:57 2 ppm ammonia
- 7/14/2022 8:25:07 7 ppm ammonia
- 7/14/2022 8:25:17 0 ppm ammonia
- 7/14/2022 8:25:27 0 ppm ammonia
- 7/14/2022 8:25:31 10 ppm ammonia
- 7/14/2022 8:25:37 4 ppm ammonia
- 7/14/2022 8:25:44 5 ppm ammonia
- 7/14/2022 8:25:49 6 ppm ammonia
- 7/14/2022 8:25:54 0 ppm ammonia

All readings before 8:23:48 and after 8:25:54 were below detectable limits.

SWHD References:

- Event Response Site Wide Industrial Hygiene Database Direct Reading Instrument Survey #22-04404 "TF-AOP-015 response at 241-A Farm"

Additional Information:

At the time of the initiating event, the employee wearing the personal ammonia monitor that 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).

Additionally, the worker was wearing a canvas hood to shade himself. The worker noted in his Odor/Vapor Response Card the hood was covering the Ventis Pro V. Production Operations East Industrial Hygienists were unable to recreate the working conditions and were therefore unable to replicate the alarm.

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

Ventis Pro V 004734 (event initiating instrument):

- Put into service on 10/28/2021
- Sensor ID: 21090N0169
- Unit Serial Number (SN): 210922D-087
- User ID: 004734
- Datalog Interval: 10 seconds
- Passed Daily Function Test for Ammonia (Bump Test): 07/14/2022
- Last Successful Calibration of Unit for Ammonia: 6/23/2022

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

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

Additional Information:

the Personal Ammonia Monitor alarm is unlikely to be from Tank Farm Exhauster emissions based on:

07/14/2022 @ 0824

- Wind Speed: 5.4 mph
- Wind Direction: 252° WSW
- Mixing Height: 140 feet above grade
- Stability Class: E (slightly stable conditions)

7/14/2022 Vapor Monitoring Data System (VMDS) ammonia readings:

- POR 518 at 0824: 0.286 ppm ammonia
- POR 519 at 0824: 3.597 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 exact cause of the Personal Ammonia Monitor alarm is unknown. However, review of the stack emissions using the Data Fusion and Advisor System (DFAS) application and chemical details dashboards for the reported time of the event indicate the cause of the Personal Ammonia Monitor alarm is unlikely to be from Tank Farm Exhauster emissions. Monitoring via direct reading instrumentation and observations made by the Industrial Hygienist and Industrial Hygiene Technician during the event reponse demonstrated conditions which caused the alarm were no longer present, allowing the exit of TF-AOP-015.

Other:

Event Investigation Report # EIR-2022-058

Industrial Hygienist:

Print First and Last Name

Signature / Date

Date: 2022.07.27 10:04:05 -07'00'

Industrial Hygiene Level 2 Manager:

Print First and Last Name

Signature / Date

Digitally signed by _____
Date: 2022.07.27 10:44:45 -07'00'

ODOR/VAPOR RESPONSE CARD - 241 A FARM

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

- Date and time of event: 7/14/22 8:25am
- Check Applicable:
 - Odor
 - Ammonia Alarm (6 ppm)
 - Ammonia Alarm (12 ppm)
 - Alarm (other - describe): _____
- Your name and the work you were performing:
[REDACTED] INSTALLING CONDUIT ALONG VENT LINE
- Other Work Underway? Describe:
LABORER CREW NEAR BY WORKING ON BACKFILLING DITCH
- Location of event (mark area on map and wind direction):
A-FARM BETWEEN A-104 A-105
- Name(s) of others in or near the affected area:
[REDACTED]
- Was Industrial Hygiene present, who?
No
- 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:
WEARING A HOOD, WAS COVERING VENTIS PRO
- 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

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.

