

Hanford Tank Waste Operations & Closure (H2C)  
**EVENT REPORT FORM**

1. Project: Waste Services 2. Report Date: 04/23/2026  
3. Title: C-67 Response to LLW Horse Trailer  
4. Investigation Report Number (if applicable): EIR-2026-030 5. Revision: 0  
6. Responsible Manager: [REDACTED]  
7. Event Investigator: [REDACTED]  
8. Area/Building/Location: 200E/241-AP LLW Trailer and 241-AW LLW Trailer  
9. Date and Approximate Time of Event: Date: 04/14/2026 Time: (military) 1543 hours  
10. Associated Action Request (AR) Number: ITDC-AR-2026-1588  
11. Occurrence Report Number (if applicable): N/A  
12. Event Learning Meeting Held: Yes [ ] or No [x] Date: N/A Time: (military) N/A

**13. Brief Summary of Event: What Happened?**

At approximately 1500 hours on 04/14/2026, an H2C NCO was performing Low-Level Waste (LLW) inspections at the Horse Trailer near AP Farm Change Trailer (MO-2259) and the Horse Trailer near AW Farm Change Trailer (MO-818). The NCO encountered a stronger than normal "metallic", "musty", "solvent", "heavy gun grease" and "plastic" odors when arriving at the LLW Horse Trailer at AP Farm and the LLW Horse Trailer at AW Farm.

At 1543 hours, the Central Shift Manager (CSM) initiated response per TF-OPS-OPER-C-67, *Response to Stronger than Normal Odors*. The NCO reported symptoms of "feeling dizzy", "nauseous", "having an odd feeling in their head", and "having difficulty breathing". The NCO was taken to the Inomedic Health Applications clinic for precautionary medical evaluation. The NCO was released without restrictions from the site medical provider.

**14. What Should Have Happened?**

"metallic", "musty", "solvent", "heavy gun grease" and "plastic" odors should not be present in the LLW Horse Trailer at AP Farm and the LLW Horse Trailer at AW Farm.

**15. Key Facts from Investigation:**

- To summarize the conclusions of Industrial Hygiene Event Investigation Report IHIR-00134, TFC-OPS-OPER-C-67 Response - AP/AW LLW Trailers Direct Reading Instruments (DRI) monitoring performed during response actions did not indicate further action was necessary to protect workers' safety and health. Monitoring results are not indicative of Tank Chemical Vapors, nor did monitoring readily identify a source.

At the time of the event Data Fusion Advisory System (DFAS) shows winds blowing 21.4 miles per hour and blowing from southeast to northwest. Based on wind direction, both LLW Horse Trailers were potentially downwind from the 241-AW exhauster. Based on wind speed, mixing height, Vapor Monitoring Detection System (VDMS) data indicating 0.000 parts per million ammonia at the 241-AW exhauster, at the time of the event and the workers description of the odor matching that of the material present within the trailers themselves, it is unlikely that odor experienced by the affected worker was tank vapor related.

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- Further investigation performed with Industrial Hygiene found the most likely source of the odor was determined to be the plastic from the LLW bags, as no other contributing sources were identified.

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

Access was restricted to the Horse Trailer near AP Farm Change Trailer (MO-2259) and the Horse Trailer near AW Farm Change Trailer (MO-818) until response actions could be completed.

**17. Problem Statement** *(Who, What, Where, When, and Consequence/Impact):*

N/A

**18. Event Causal Matrix Summary:**

N/A

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**EVENT REPORT FORM** (Continued)

**26. Signatures**

**Prepared By:** *(Event Investigator)*

\_\_\_\_\_  
*Name (First, Middle Initial, Last)*

\_\_\_\_\_  
*Signature / Date*

**Responsible Manager Approval:**

\_\_\_\_\_  
*Name (First, Middle Initial, Last)*

\_\_\_\_\_  
*Signature / Date*

**CAS Manager Approval:**

\_\_\_\_\_  
*Name (First, Middle Initial, Last)*

\_\_\_\_\_  
*Signature / Date*

## INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR)

<b>Event Title:</b> TFC-OPS-OPER-C-67 Response - AP/AW LLW Trailers		<b>IHIR Number:</b> IHIR-00134
		<b>IHEI Number:</b> N/A
<b>Date:</b> 04/14/2026	<b>Time:</b> 1543	<b>Location:</b> 241-AP LLW Trailer and 241-AW LLW Trailer

### Event Summary and Timeline:

#### Event Summary:

At approximately 1500 while performing LLW inspections at the Horse Trailer near AP Farm Change Trailer (MO-2259) and the Horse Trailer near AW Farm Change Trailer (MO-818) a NCO experienced unexpected odors. The NCO reported "metallic, musty, solvent and plastic" odors at the LLW Horse Trailer at AP Farm and "metallic, musty, solvent, heavy gun grease and plastic" odors at the LLW Horse Trailer at AW Farm. The worker initially reported no symptoms to the CSM but later reported feeling dizzy, nauseas, having a odd feeling in their head, and having difficulty breathing, when their Odor/Vapor Response Card was received. The worker reported LLW bags and laundry as the likely source of the odor for both LLW Horse Trailers. The individual received precautionary medical surveillance and was released without restrictions.

On the job personnel: One NCO

Field response team: Two shift IHT's, PO IH-2, and DFLAW IH Manager.

#### Timeline:

1543 CSM notified of odor.

1555 DFLAW IH Manager arrives at CSO.

1556 DFLAW IH Manager contacts PO IH Supervisor to request IHT resources.

1558 PO IH-1 arrives at CSO.

1559 PO IH Manager contacts CSM to ensure IH support is available to the CSM if needed.

1600 CSM brief conducted.

-Affected worker reports' odors of gun oil, military oil, burnt electronics, and burning plastic.

-No symptoms reported.

-Worker enroute to medical, for precautionary medical surveillance.

1603 PO IH-1 contacts DFLAW IH Manager and discusses preliminary monitoring strategy.

-The following monitoring and equipment were selected:

-10.6 eV and 11.7 eV PIDs selected for VOC monitoring

-Ammonia (NH3)

-Dusttrak for particulate monitoring

1605 DFLAW IH Manager notifies Safety Supervisor of event and request they collect OVRC from the affected worker.

1605 PO IH-1 reviews DFAS data.

-Mixing height 1500 feet.

-Information communicated to CSM.

1607 Shift OE contacts CSM.

-LLW Horse Trailers are roped off.

-LLW Horse Trailers are next to and downwind from gas for the Argos (PCM) system.

Field Response Timeline continued on next page.

## INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)

### Event Summary and Timeline:

Field Response (continued):

1607 SOEN stating "Entering TFC-OPS-OPER-C-67 Response to Stronger than Normal Odors at LLW Horse Trailer near AP Farm Change Trailer (MO-2259) and LLW Horse Trailer near AW Farm Change Trailer (MO-818). Access Restricted to the involved LLW Horse Trailers. CSM".

1608 CSM contacts 241-Evaporator SM to determine if work associated with the CA19 Dump Valve is occurring. 241-Evaporator SM confirmed that work on the CA19 Dump Valve was not occurring and that the valve is not located next to 241-AW Farm.

1610 PO Shift IHT arrives at CSO

- PO IH-1 discusses potential initial monitoring with IHT
- 10.6 eV and 11.7 eV PIDs selected for VOC monitoring
- Ammonia (NH3)
- Dusttrak for particulate monitoring

1612 PO IH-2 arrives at CSO.

-PO IH-1 contacts DFLAW IH Manager to generate OAT for IHT-2 for IH instrument setup.

1613 Call SM and reported no waste in AW LLW Horse Trailer. - is SM supposed to be CSM and who called?

1614 PO IH-1 and IH-2 discuss and concur on IHT DRI monitoring for response plan.

1616 PA contacts CSM for event update. CSM informs PA that they will report back once further information is available.

-DFLAW IH Manager returns to CSO and notifies Level 1 ESH&Q Manager, Level 1 ESH&Q Deputy and Level 2 IH Manager of the event.

1618 PO IH-1 reviews 6-RMA-828 and gas for Argos PCM.

- Gas for Argos is determined to be similar to GHS-SDS# 063613 and determined to have a composition consisting of 10% Methane and 90% Argon.
- No change to monitoring strategy but bottles, and connections will be inspected visually.

1620 CSM updates DOE Fact Representative.

1624 DFLAW IH Manager updates Level 1 ESH&Q Manager and Level 2 IH Manager and notifies both that worker is proceeding to medical.

1637 CSM contacts PA notified event investigator.?????

- EIR-2026-030

1638 DFLAW IH Manager notifies DOE of TFC-OPS-OPER-C-67 event. DOE did not answer phone, and a text message was sent instead.

1639 PO IH-1 creates SWIHD Survey 26-02167

1641 PO IH-1 and CSM sign response plan page 1 of 2.

Field Response Timeline continued on next page.

## INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)

### Event Summary and Timeline:

#### Field Response (continued):

1647 PO IH-1 briefs PO IHTs, POIH-2, DFLAW IH Manager on the following:

- IHSP-PO-MULTI-TFCOPSOPERC67
- NH3: 12 ppm
- VOCs 10.6eV: 2 ppm
- VOCs 11.7eV: N/A (indication)
- PNOR - Total: 5mg/m3
- PNOR - Respirable: 2.5 mg/m3
- No RWP
- No RPE
- Odors: Mineral oil, burning plastics
- Monitor around and inside of LLW Horse Trailers
- Monitor around Argos (CH4 10% and Ar 90%)
- Informed individuals at the briefing that the gas for the Argos (PCMs) was a simple asphyxiant that displaces oxygen.

1650 Responding personnel depart CSO.

1653 Responding personnel began field response.

1700 CSM provides update to DOE Fact Representative.

1700 PO IH checks VMDS data for 1530 and alternative VMDS Data for 04/14/2026.

- POR518: 0.00 ppm NH3
- POR 519: 0.180 ppm NH3
- AN: 0.00 ppm NH3
- AP: N/A
- AW: 0.00 ppm NH3
- AYAZ: 3.885 ppm NH3
- Alternative VMDS Data for 04/14/2026:
  - AN at 0808: 4ppm NH3
  - 702AZ at 0821: 1 ppm NH3
  - AW at 0842: 6 ppm NH3
  - POR518 at 0905: 1 ppm NH3
- All NH2 values less than the high alarm.

1703 PO IH-2 notifies PO IH-1 that:

- Field Response is complete.
- No odor sources identified.
- All readings are less than the specified Action Limits (AL)
- IHTs in route to post instrumentation.

1707 PO IH-2 and DFLAW IH Manager brief CSM and PO IH-1 on results from initial response.

- No sources of odor identified.
- Response team noticed an odor of plywood.
- Both LLW Horse Trailers were clean and no signs of moisture.
- Some waste bags contain electrical components. It was noted that electrical components can sometimes contain oil, however no oil or odors associated with oil were observed.

1729 Affected Worker's Supervisor notified CSM of the following:

- Worker was released from medical and cleared to go home.
- OVRC completed and is being scanned and sent to CSM.

1740 OVRC reviewed and the affected worker noted symptoms in addition to smelling a solvent odor.

1755 PO IH-1 and CSM sign Response Plan page 2 of 2.

Field Response Timeline continued on next page.

## INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)

### Event Summary and Timeline:

Field Response (continued):

1806 SOEN stating "Exiting TFC-OPS-OPER-C-67 Response to Stronger than Normal Odors at LLW Horse Trailer near AP Farm Change Trailer (MO-2259) and LLW Horse Trailer near AW Farm Change Trailer (MO-818). IHT response is complete. Normal Access is restored. CSM."

### Event Summary and Field Response Timeline Acronyms:

ADM	Area Dayshift Manager	LEL	Lower Explosive Limit
CSM	Central Shift Manager	mph	miles per hour
CSO	Central Shift Office	OP	Operator
DFAS	Data Fusion Advisory System	PA	Performance Assurance
DFLAW	Direct Feed Low Activity Waste	PID	photoionization detector
DOE	Department of Energy	PO	Production Operations
DRI	direct reading instrument/instrumentation	PFS	Project Field Support
EIR	Event Investigation Report	ppm	parts per million
ESH&Q	Environmental, Safety, Health, & Quality	S&H	Safety & Health
eV	electron-volts	SMO	Sample Management Organization
FWS	Field Work Supervisor	SOEN	Shift Office Event Notification
HIHTL	hose-in-hose transfer line	TDU	thermal desorption unit
HPT	Health Physics Technician	TSCR	Tank Side Cesium Removal
IH	Industrial Hygienist	VMDS	Vapor Monitoring Detection System
IHT	Industrial Hygiene Technician	VOC	volatile organic compound
L	liter	LB	Laborer
LLW	Low Level Waste	NCO	Nuclear Chemical Operator
PCM	Personal Contamination Monitor	RWP	Radiological Work Permit
RPE	Respiratory Protection Equipment	OVRC	Odor/Vapor Response Card
SM	Shift Manager		

### Sampling/Monitoring Results:

Monitoring Results from 04/16/2026.

#### Field Response:

Results from LLW Horse Trailer located West of AP Farm Change Trailer

Outside of trailer at 1651:

- Ammonia: 0.000 ppm
- VOC 10.6eV: 0.000 ppb
- VOC 11.7eV: 0.000 ppm
- Airborne Particulate - PM 1: 0.007 mg/m<sup>3</sup>
- Airborne Particulate - PM 10: 0.008 mg/m<sup>3</sup>
- Airborne Particulate - PM 2.5: 0.009 mg/m<sup>3</sup>
- Airborne Particulate - Respirable: 0.016 mg/m<sup>3</sup>
- Airborne Particulate - Total: 0.028 mg/m<sup>3</sup>

Inside of trailer at 1653:

- Ammonia: 0.000 ppm
- VOC 10.6eV: 0.000 ppb
- VOC 11.7eV: 0.000 ppm
- Airborne Particulate - PM 1: 0.005 mg/m<sup>3</sup>
- Airborne Particulate - PM 10: 0.005 mg/m<sup>3</sup>
- Airborne Particulate - PM 2.5: 0.006 mg/m<sup>3</sup>
- Airborne Particulate - Respirable: 0.008 mg/m<sup>3</sup>
- Airborne Particulate - Total: 0.022 mg/m<sup>3</sup>

Results from LLW Horse Trailer located South of AW Farm Change Trailer

Outside of trailer at 1657:

- Ammonia: 0.000 ppm
- VOC 10.6eV: 0.000 ppb

## INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)

### Sampling/Monitoring Results:

-VOC 11.7eV: 0.040 mg/m<sup>3</sup>  
-Airborne Particulate - PM 1: 0.040 mg/m<sup>3</sup>  
-Airborne Particulate - PM 10: 0.041 mg/m<sup>3</sup>  
-Airborne Particulate - PM 2.5: 0.045 mg/m<sup>3</sup>  
-Airborne Particulate - Respirable: 0.073 mg/m<sup>3</sup>  
-Airborne Particulate - Total: 0.122 mg/m<sup>3</sup>

### Inside of trailer at 1700:

-Ammonia: 0.000 ppm  
-VOC 10.6eV: 0.000 ppb  
-VOC 11.7eV: 0.000 ppm  
-Airborne Particulate - PM 1: 0.018 mg/m<sup>3</sup>  
-Airborne Particulate - PM 10: 0.019 mg/m<sup>3</sup>  
-Airborne Particulate - PM 2.5: 0.020 mg/m<sup>3</sup>  
-Airborne Particulate - Respirable: 0.025 mg/m<sup>3</sup>  
-Airborne Particulate - Total: 0.038 mg/m<sup>3</sup>

### SWIHD References:

Event Response Site Wide Industrial Hygiene Database Direct Reading Instrumentation (DRI) Survey:  
• #26-02167 "TFC-OPS-OPER-C-67 Response AP-AW LLW Trailers"

### Additional Information:

At the time of odor discovery one NCO was performing inspections of the LLW Horse Trailers located outside of 241-AW and 241-AP Farms. The odor discoverer was not wearing RPE at the time. The affected worker initially reported the odors at the 241-AW LLW Horse Trailer as musty, metallic, heavy gun grease and later reported a solvent odor on their ORVC. At the 241-AP LLW Horse Trailer the affected worker reported the odors as musty, metallic, plasticky and latter indicated solvent odor on their OVRC. At both the 241-AP and 241-AW LLW Horse Trailers the affected worker indicated that the likely source of the odor were LLW bags and laundry that were stored in the trailers themselves and the odor response team noted that interior smelled like plywood. The affected worker initially reported no symptoms but later reported feeling nauseas, dizzy, having difficulty breathing and having an odd feeling in their head. The affected worker received precautionary medical screening from IHA and was released to work without restrictions.

At the time of the event DFAS shows winds blowing 21.4 mph and blowing from southeast to northwest (see attachment DFAS). Based on wind direction, both LLW Horse Trailers were potentially downwind from the 241-AW exhauster. However, based on wind speed, mixing height, VDMS data indicating 0.000 ppm ammonia at the 241-AW exhauster, at the time of the event and the workers description of the odor matching that of the material present within the trailers themselves, it is unlikely that odor experienced by the affected worker was tank vapor related.

### DFAS Data for 241-AP Farm

04/14/2026 @ 1530

- Wind Speed: 19.8 mph
- Wind Direction: 202° (out of the Southwest)
- Mixing Height: 1,500 feet above grade
- Stability Class: D (slightly stable conditions)

### Recommendations/Conclusions:

#### Recommendations:

N/A

#### Conclusions:

DRI monitoring performed during response actions did not indicate further action was necessary to protect workers' safety and health. As a result, the LLW Horse Trailer near AP Farm Change Trailer (MO-2259) and the LLW Horse Trailer near AW Farm Change Trailer (MO-818) were released from restricted access and work was allowed to continue. Monitoring results are not indicative of Tank Chemical Vapors, nor did monitoring readily identify a source.

**INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)**

**Others:**

The affected worker was offered and accepted precautionary medical surveillance. The affected worker reported experienced symptoms but was later released to work without restrictions. See Event Investigation Report #2026-030 for additional information.

**Associated Documents:**

iCAS Number: N/A

EIR Number: 2026-030

**Industrial Hygienist:**

[Redacted Name]

*Print First and Last Name*

[Redacted Signature]

*Signature / Date*

**Industrial Hygiene Level 3 Manager**

[Redacted Name]

*Print First and Last Name*

[Redacted Signature]

*Signature / Date*

**Industrial Hygiene Level 2 Manager:**

[Redacted Name]

*Print First and Last Name*

[Redacted Signature]

*Signature / Date*

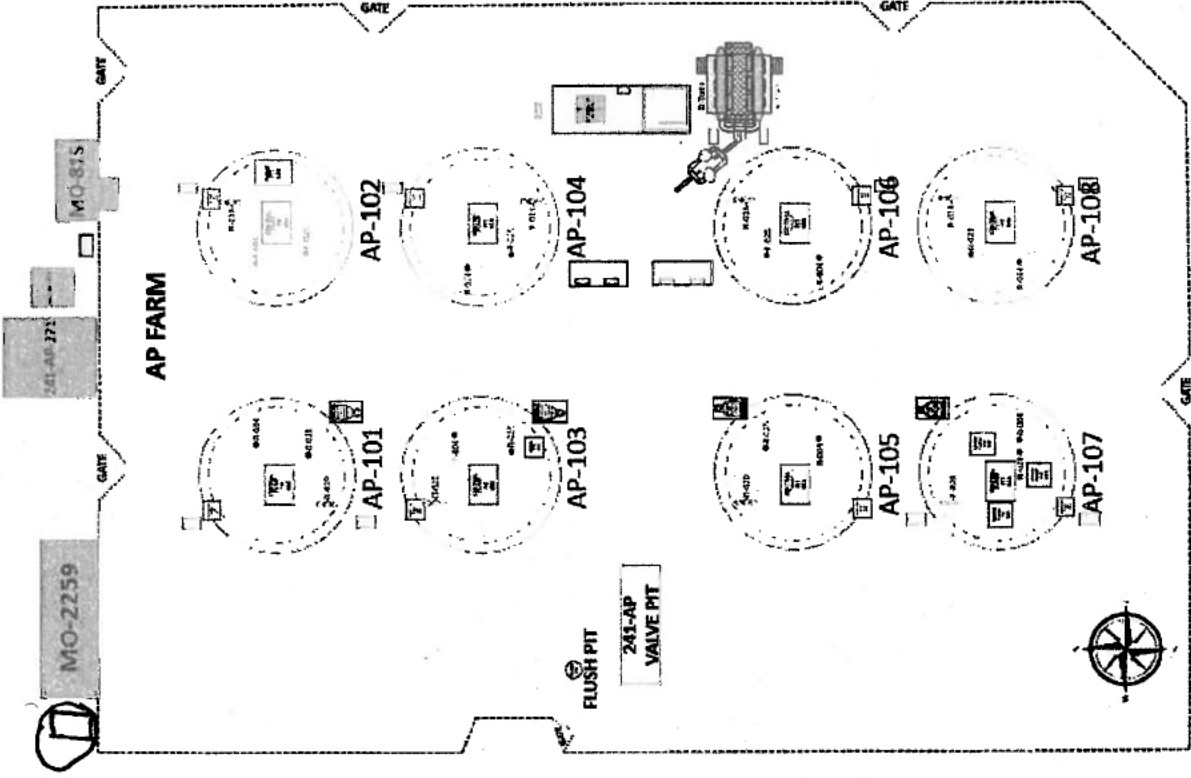
## ODOR/VAPOR RESPONSE CARD - 241 AP FARM

**Instructions:**

1. Notify Immediate Supervisor.
2. Contact Central Shift Manager (CSM), at (509) 373-2689.
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 AP FARM

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

- Date and time of event: 4-14-26 1500
- Check Applicable:
  - Odor
  - Ammonia Alarm (6 ppm)
  - Ammonia Alarm (12 ppm)
  - Alarm (other - describe):

Your name and the work you were performing:

UV inspections

Other Work Underway? Describe:

N/A

Location of event (mark area on map and wind direction):

AP West RMA017

Name(s) of others in or near the affected area:

N/A

Was Industrial Hygiene present, who?

NO

Describe the odor:

- Sweet
- Metallic
- Other (describe): Plasticity
- Sour
- Smoky
- Septic/Sewer
- Musty
- Rotten
- Onion
- Earthy
- Ammonia
- Citrus
- Solvent

Is source known/likely? Describe: LLW Bags/Laundry

Your symptoms?  None

- Headache
- Weakness
- Itch
- Other (describe): odd feeling in head
- Dizziness
- Sore Throat
- Tingling
- Nausea
- Difficulty Breathing
- Numbness
- Cough
- Eye Irritation
- Taste
- Fatigue
- Rash

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.