

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

1. Project: Operations Field Support 2. Report Date: 06/08/2026
3. Title: C-67 Odor Response at 272WA
4. Investigation Report Number (if applicable): EIR-2026-041 5. Revision: 0
6. Responsible Manager: [REDACTED]
7. Event Investigator: [REDACTED]
8. Area/Building/Location: 200W / 272WA Parking Lot
9. Date and Approximate Time of Event: Date: 05/18/2026 Time: (military) 1015 hours
10. Associated Action Request (AR) Number: ITDC-AR-2026-1873
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 1015 hours on 05/18/2026, three H2C Nuclear Chemical Operators (NCO) arrived at 272WA to prepare their van for Liquid Observation Well (LOW) work. While outside of 272WA in the northwest parking lot the NCOs encountered a stronger than normal of "propane".

At 1023 hours, the Central Shift Manager (CSM) initiated response per TF-OPS-OPER-C-67, *Response to Stronger than Normal Odors*. No symptoms were reported, and all declined medical evaluation.

14. What Should Have Happened?

"Propane" odors should not be present in the 272WA parking lot.

15. Key Facts from Investigation:

- To summarize the conclusions of Industrial Hygiene Event Investigation Report IHIR-00137, TFC-OPS-OPER-C-67 272WA Parking Lot 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 of the odor.

The Response Team detected intermittent propane-like odors near the septic tank and flammable cabinet but could not locate a definitive source due to shifting winds. Occupants of a nearby 2715WA shop confirmed no propane-powered equipment was operating at the time, and no additional propane sources were identified. An open septic tank lid and an uncapped hose were found, though measurements at the septic tank were below action limits. Tank Farm emissions are considered unlikely based on distance, inactive monitoring systems, and available data. Other nearby possible odor sources exist, including an open septic system. The 272WA parking lot borders Central Plateau Cleanup Company (CPCCO) facilities that store mixed and radioactive mixed waste, further investigation is recommended to determine if any active odor sources exist within those facilities. This action will be documented in ITDC-CR-2026-1873.

- Further investigation determined that the most likely source of the odor was a propane-powered forklift that had been in used prior to the odor being reported, as no other contributing sources were identified.

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

Access was restricted to the 272WA parking lot 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

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

26. Signatures

Prepared By: *(Event Investigator)*

[Redacted Name]

Name (First, Middle Initial, Last)

[Redacted Signature / Date]

Signature / Date

Responsible Manager Approval:

[Redacted Name]

Name (First, Middle Initial, Last)

[Redacted Signature / Date]

Signature / Date

CAS Manager Approval:

[Redacted Name]

Name (First, Middle Initial, Last)

[Redacted Signature / Date]

Signature / Date

INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR)

Event Title:

TFC-OPS-OPER-C-67 272WA Parking Lot

IHIR Number:

IHIR-00137

IHEI Number:

N/A

Date:

05/18/2026

Time:

1015

Location:

272WA Parking Lot

Event Summary and Timeline:
Event Summary:

Three employees arrived at 272WA to prepare their van for Liquid Observation Well (LOW) work. While outdoors in the northwest parking lot, they detected a propane odor and reported it to the West Area Shift Manager. Following guidance from the shift manager, all three employees completed Odor/Vapor Response Cards. No symptoms were reported, and all declined medical evaluation.

The Central Shift Manager was notified, access to the area was restricted, and a response plan was developed. Industrial Hygiene (IH) responded by monitoring the 272WA parking lot, nearby areas, and flammable storage cabinets for ammonia, VOCs, LFL, and hydrogen sulfide. All readings were below action limits.

Timeline:

- 1015 Employees noticed propane odor in the 272WA NW parking lot while prepping LOW van
 Employees notified ST Team shift manager
 Medical evaluation offered; employees declined
 Employees completed Odor/Vapor Response Cards (OVRC).
- 1023 Central Shift Manager (CSM) notified of propane odor
- 1037 TFC-OPS-OPER-C-67 entered
 Area access restricted
 Industrial Hygiene Technician (IHT) supervisor directed IHT to prep instruments
 DFLAW IH reviewed Data Fusion Advisory System (DFAS)
- Mixing height: 1110 feet above grade
 - Stability Class: A (extremely unstable conditions)
- Hanford Meteorological Station data from 1000
- Wind Speed: 7 mph
 - Wind Direction: NNW
- 1043 Shift Office Event Notification (SOEN) issued for odor event
- 1052 Retrievals West Area Operations (RWO) Level 3 (L3) manager contacted Projects L3 manager for IH resource determination
- 1054 OVRCs received by CSM, confirming work activity, location, odor descriptors, absence of symptoms, and no medical evaluation needed
- 1056 RWO IH identified as responding IH
 L1, L2, and L3 IH managers notified of odor event and response
- 1104 PO IHT arrives at Central Shift Office (CSO)

INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)

Event Summary and Timeline:

- 1107 DFLAW IH reviewed OVRCs to determine monitoring strategy and response plan
Attachment A - Response Plan generated and signed by DFLAW IH and CSM
- 1116 RWO IH arrived at CSO
Response Team briefed by DFLAW IH on Response Plan
- Industrial Hygiene Sample Plan (IHSP) IHSP-PO-MULTI-TFCOPSOPERC67
 - Response Plan
 - Voluntary respiratory protection
- 1121 Response Team of RWO IH and PO IHT depart CSO for 272WA
- 1216 RWO IH reported preliminary field response complete to CSO, Direct Reading Instrument (DRI) readings remained below action limits (AL) for hydrogen sulfide, ammonia, LFL and VOCs throughout 272WA parking lot, adjacent areas, flammable storage cabinets, septic tank, and perimeter
Intermittent propane odors noted by response team but DRI results remained below AL
- 1237 PO IHT reports to CSO that DRI instrumentation passed post-use function checks
- 1352 Access restored to 272WA parking lot SOEN issued indicating exit TFC-OPS-OPER-C-67 odor event
SOEN issued indicating exit TFC-OPS-OPER-C-67 odor event

Sampling/Monitoring Results:

IHTs used DRI to monitor for ammonia, VOCs, LFL, and hydrogen sulfide at the 272WA parking lot and adjacent areas (see images below for locations). All readings were less than action limits, with no elevated readings observed. Instrumentation passed the post-use function check.

Action Limits

NH3: 12 ppm
VOCs: 2 ppm
Hydrogen Sulfide: 0.5 ppm
LFL: $\geq 10\%$
Oxygen: $< 19.5\%$ or $> 23.5\%$

Results:

Flam gas storage cabinet (area and source)

NH3: 0 ppm
VOCs: 0 ppm
Hydrogen Sulfide: 0 ppm
LFL: 0%
Oxygen: 20.9%

Septic tank opening and hose (area and source)

NH3: 0 ppm
VOCs: 0 ppm
Hydrogen Sulfide: 0 ppm
LFL: 0%
Oxygen: 20.9%

INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)

Sampling/Monitoring Results:

Propane tank storage cage (area and source)

NH₃: 0 ppm
VOCs: 0 ppm
Hydrogen Sulfide: 0 ppm
LFL: 0%
Oxygen: 20.9%

Perimeter area readings

NH₃: 0 ppm
VOCs: 0 ppm
Hydrogen Sulfide: 0 ppm
LFL: 0%
Oxygen: 20.9%



INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)

Sampling/Monitoring Results:



Septic Tank Opening and Hose

INDUSTRIAL HYGIENE EVENT INVESTIGATION REPORT (IHIR) (Continued)

Sampling/Monitoring Results:



SWIHD References:

- "26-03012 TFC-OPS-OPER-C-67 Response at 272WA & 2715WA"

Additional Information:

The Response Team detected propane odors in the vicinity of the septic tank and flammable cabinet. However, due to frequent and rapid changes in wind direction, the Response Team was unable to pinpoint the source of the odor.

The Industrial Hygienist verified with carpenters at the adjacent carpenter shop (2715WA) that no propane-fueled equipment, such as forklifts or BBQs, was in operation at the time of the odor event. No additional sources of propane, aside from those already mentioned, were identified.

During their assessment, the Response Team found an open lid on a septic tank and an uncapped hose at the edge of the parking lot near the flammable cabinet. Measurements taken at the septic tank were below action limits.

The nearest active exhauster in the area is in SY Farm located approximately 1.02 miles southeast of 272WA. The Vapor Detection Monitoring System (VMDS) was inactive at the time of the odor event therefore exhaust stack concentrations are not available for analysis.

ODOR/VAPOR RESPONSE CARD

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

- Date and time of event: 5/18/2026 10:15
- Check Applicable:
 - Odor
 - Ammonia Alarm (6 ppm)
 - Ammonia Alarm (12 ppm)
 - Alarm (other - describe):
- Your name and the work you were performing: [REDACTED] LOW van prep
- Other Work Underway? Describe: _____
- Location of event (mark area on map and wind direction): [REDACTED] NW corner of [REDACTED] parking Lot 272-WA
- Name(s) of others in or near the affected [REDACTED]
- Was Industrial Hygiene present, who? _____
- Describe the odor:
 - Sweet
 - Sour
 - Smoky
 - Septic/Sewer
 - Musty
 - Rotten
 - Metallic
 - Onion
 - Earthy
 - Ammonia
 - Citrus
 - Solvent
 - Other (describe):
- Is source known/likely? Describe: propane
- 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

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

• Date and time of event: 5-18-2026 10:30 AM

• Check Applicable:

Odor Ammonia Alarm (6 ppm) Ammonia Alarm (12 ppm) Alarm (other - describe): _____

• Your name and the work you were performing:

[REDACTED] LOW'S

• Other Work Underway? Describe:

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

NORTHWEST CORNER 272 WA Bldg.

• 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): PROPANE

• Is source known/likely? Describe:

Smelled PROPANE

• 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

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

• Date and time of event: 5-18-26 10:15A

• Check Applicable:

Odor Ammonia Alarm (6 ppm) Ammonia Alarm (12 ppm) Alarm (other - describe):

• Your name and the work you were performing:

[REDACTED] L.O.W. van prep [REDACTED]

• Other Work Underway? Describe:

None

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

NORTH WILSON CORN 272 W PARKWAY LOT SE WARD.

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

[REDACTED]

• Was Industrial Hygiene present, who?

None

• Describe the odor:

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

• Is source known/likely? Describe:

Smelled like PROPANE. Possibly from Flame CANNIST.

• 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.