



Department of Energy

Washington, DC 20585

July 30, 2025

Mr. Russell P. Hammonds
President
Omni Services, Inc.
110 County Road 701
Riceville, Tennessee 37370

WEA-2025-02

Dear Mr. Hammonds:

This letter refers to the Department of Energy's (DOE) investigation into the facts and circumstances associated with the March 9, 2023, worker toluene overexposure event at the depleted uranium hexafluoride (DUF6) conversion facility near Paducah, Kentucky. The Office of Enforcement provided the results of the investigation to Omni Services, Inc. (OMNI) in an investigation summary, dated May 24, 2024. An enforcement conference was convened with you on July 10, 2024, to discuss the findings outlined in the summary and OMNI's response.

DOE considers the toluene overexposure event to be of high safety significance. The incident was a near miss to a fatality. The event occurred when an OMNI worker (the entrant) mistakenly spilled an open container of adhesive (containing approximately 85 percent toluene) inside a permit-required confined space (tank 552) without the required ventilation and respiratory protection. Toluene is a flammable liquid and vapor. High concentrations may also cause loss of consciousness, respiratory depression and death.

The entrant was rescued from the tank after the lower explosive limit monitor alarmed, and another OMNI worker (the attendant) observed that the entrant appeared unsteady and unresponsive. Emergency services personnel were notified approximately 15 minutes later, and upon arrival, they assessed and then transported the entrant to the onsite medical facility for further evaluation. Although the entrant was released and returned to work, a urine analysis later that day confirmed an occupational exposure to toluene. The event revealed deficiencies in: (1) hazard identification and assessment, (2) hazard prevention and abatement, and (3) permit-required confined space hazards.

Based on an evaluation of the evidence in this matter, including information presented at the enforcement conference, DOE concludes that OMNI violated requirements enforceable under 10 Code of Federal Regulations (C.F.R.) Part 851, *Worker Safety and Health Program*. Accordingly, DOE hereby issues the enclosed Preliminary Notice of Violation (PNOV) which cites one Severity Level I violation with a total base civil penalty, before mitigation, of \$118,000.

DOE acknowledges that OMNI promptly reported the occurrence to the DOE management and operating contractor, Mid-America Conversion Services, LLC (MCS). After the event, OMNI participated in a fact finding conducted by MCS. In addition, OMNI fully cooperated with DOE's investigation of this event and developed corrective actions which, if adequately implemented, should address the conditions that led to the worker toluene overexposure and prevent recurrence.

In recognition of OMNI's overall response to the event, including corrective actions, DOE grants 50 percent mitigation of the base civil penalty for the Severity Level I violation. DOE grants an additional 25 percent mitigation based on OMNI's small staffing size at the time of the event, in alignment with DOE's worker safety and health enforcement policies and past practice for small business entities. As a result, the total proposed civil penalty, after mitigation, is \$29,500.

Pursuant to 10 C.F.R. § 851.42, *Preliminary Notice of Violation*, you are obligated to submit a written reply within 30 calendar days of receipt of the enclosed PNOV and to follow the instructions specified in the PNOV when preparing your response. If you fail to submit a reply within the 30 calendar days, then in accordance with 10 C.F.R. § 851.42(d), you relinquish any right to appeal any matter in the PNOV, and the PNOV will constitute a final order.

After reviewing your reply to the PNOV, DOE will determine whether any further activity is necessary to ensure compliance with DOE worker safety and health requirements.

Sincerely,



Robin M. Keeler
Acting Director
Office of Enforcement
Office of Enterprise Assessments

Enclosures: Preliminary Notice of Violation (WEA-2025-02)
Payment Processing Instructions

cc: Joel Bradburne, PPPO
Carisa Kremin, Mid-America Conversion Services, LLC

Preliminary Notice of Violation

Omni Services, Inc.
Paducah DUF6 Conversion Facility

WEA-2025-02

A U.S. Department of Energy (DOE) investigation into the facts and circumstances associated with the March 9, 2023, worker toluene overexposure event at the depleted uranium hexafluoride (DUF6) conversion facility near Paducah, Kentucky, revealed multiple violations of DOE worker safety and health requirements by Omni Services, Inc. (OMNI). At the time of the event, OMNI was under contract to Mid-America Conversion Services, LLC (MCS), which manages and operates the DUF6 conversion facility at DOE's former Paducah Gaseous Diffusion Plant.

The event occurred when an OMNI worker (the entrant) mistakenly spilled an open container of adhesive, containing approximately 85 percent toluene, inside a permit-required confined space (tank 552) without the required ventilation and respiratory protection. Toluene is characterized as a highly flammable liquid and vapor. High concentrations of toluene, usually from use in a confined space or unventilated area, can cause loss of consciousness, respiratory depression and death. The entrant was subsequently rescued from the tank after the lower explosive limit monitor alarmed, and another OMNI worker (the attendant) observed that the entrant appeared unsteady and unresponsive. Emergency services personnel were notified approximately 15 minutes later, and upon arrival, they assessed and then transported the entrant to the onsite medical facility for further evaluation. Although the entrant was released and returned to work, a urine analysis later that day confirmed an occupational exposure to toluene.

Pursuant to Section 234C of the Atomic Energy Act of 1954, as amended, and DOE regulations set forth at 10 Code of Federal Regulations (C.F.R.) Part 851 *Worker Safety and Health Program*, DOE hereby issues this Preliminary Notice of Violation (PNOV) to OMNI. The violations include deficiencies in: (1) hazard identification and assessment, (2) hazard prevention and abatement, and (3) permit-required confined space hazards. DOE has grouped and categorized the violations as one Severity Level I violation.

Severity Levels are explained in Part 851, appendix B, *General Statement of Enforcement Policy*. Subparagraph VI(b)(1) states that “[a] Severity Level I violation is a serious violation. A serious violation shall be deemed to exist in a place of employment if there is a potential that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use, in such place of employment.”

In consideration of the mitigating factors, DOE proposes to impose a total civil penalty of \$29,500.

As required by 10 C.F.R. § 851.42(b) and consistent with Part 851, appendix B, the violation is listed below. If this PNOV becomes a final order, then OMNI may be required to post a copy of this PNOV at or near the location where the violation occurred until the violation is corrected in accordance with 10 C.F.R. § 851.42(e).

I. VIOLATION

Hazard Identification and Assessment, Hazard Prevention and Abatement, and Permit-Required Confined Space Hazards

Title 10 C.F.R. § 851.10, *General requirements*, subsection (b), states that “[t]he written worker safety and health program must describe how the contractor complies with the: (1) [r]equirements set forth in subpart C of this part that are applicable to the hazards associated with the contractor's scope of work....”

Title 10 C.F.R. § 851.21, *Hazard identification and assessment*, subsection (a), states that “[c]ontractors must establish procedures to identify existing and potential workplace hazards and assess the risk of associated workers injury and illness. Procedures must include methods to: (1) [a]ssess worker exposure to chemical, physical, biological, or safety workplace hazards through appropriate workplace monitoring.”

Title 10 C.F.R. § 851.22, *Hazard prevention and abatement*, subsection (a), states that “[c]ontractors must establish and implement a hazard prevention and abatement process to ensure that all identified and potential hazards are prevented or abated in a timely manner.” Paragraph (a)(2) states that “[f]or existing hazards in the workplace, contractors must:... (i) [p]rioritize and implement abatement actions according to the risk to workers,” [and] “(iii) [p]rotect workers from dangerous safety and health conditions.” Subsection (b) states that “[c]ontractors must select hazard controls based on the following hierarchy: (1) [e]limination or substitution of the hazards where feasible and appropriate; (2) [e]ngineering controls where feasible and appropriate; (3) [w]ork practices and administrative controls that limit worker exposures; and (4) [p]ersonal protective equipment.”

Title 10 C.F.R. § 851.23, *Safety and health standards*, paragraph (a)(3), requires contractors to comply with 29 C.F.R. Part 1910, *Occupational Safety and Health Standards*, excluding 29 C.F.R. § 1910.1096, *Ionizing Radiation*, and 29 C.F.R. § 1910.1000, *Air Contaminants*, Tables Z-1 and Z-2, as they relate to beryllium and beryllium compounds; and 29 C.F.R. § 1910.1024, *Beryllium*. Paragraph (a)(7) requires contractors to comply with 29 C.F.R. Part 1926, *Safety and Health Regulations for Construction* except for 29 C.F.R. § 1926.1124, *Beryllium*. Subsection (b) states that “[n]othing in this part relieves contractors from the responsibility to comply with any additional safety and health requirements that are necessary to protect the safety and health of workers.”

Title 29 C.F.R. Part 1926, Subpart C, *General Safety and Health Provisions*, § 1926.28, *Personal Protective Equipment*, subsection (a), states that “[t]he employer is responsible for requiring the wearing of appropriate personal protective equipment in all operations where there is an

exposure to hazardous conditions or where this part indicates the need for using such equipment to reduce the hazards to the employees.”

Title 29 C.F.R. 1926, Subpart E, *Personal Protective and Life Saving Equipment*, § 1926.95, *Criteria for Personal Protective Equipment*, subsection (a), states that “[p]rotective equipment , including...respiratory devices...shall be provided, used, and maintained...wherever it is necessary by reason of...chemical hazards...encountered in a manner capable of causing injury or impairment in the function of any part of the body through...inhalation...” Section 1926.103, *Respiratory protection*, states, “Note: [t]he requirements applicable to construction work under this section are identical to those set forth at 29 C[.F][.R.] 1910.134 of this chapter.” Title 29 C.F.R. § 1910.134, *Respiratory protection*, subsection (d), *Selection of respirators*, states that “[t]his paragraph requires the employer to evaluate respiratory hazard(s) in the workplace, identify relevant workplace and user factors, and base respirator selection on these factors. The paragraph...limits the selection and use of air-purifying respirators.” Title 29 C.F.R. § 1910.134, subsection (d)(1), *General requirements*, at (i), states that “[t]he employer shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.”

Title 29 C.F.R. Part 1926, Subpart AA, *Confined Spaces in Construction*, § 1926.1204, *Permit-required confined space program*, subsection (c), requires employers to “...implement the means, procedures, and practices necessary for safe permit space entry operations, including, but not limited to, the following:...(4) ventilating the permit space as necessary to eliminate or control atmospheric hazards.”

Title 29 C.F.R. Part 1926, Subpart AA, *Confined Spaces in Construction*, § 1926.1209, *Duties of attendants*, provides that “[t]he entry employer must ensure that each attendant “(g) [s]ummons rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.”

Title 29 C.F.R. Part 1926, Subpart AA, *Confined Spaces in Construction*, § 1926.1210, *Duties of entry supervisors*, states that “[t]he entry employer must ensure that each entry supervisor:...(b) [v]erifies, by checking that...all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.”

DUF6-PLN-074, *MCS Worker Safety and Health Program*, Revision 6, November 2, 2022, section 5, *Safety and Health Methodology*, states that “[t]he WSHP [Worker Safety and Health Program] and...implementing documents...ensure that...requirements are...in project documents, [and that] hazards are identified and appropriately mitigated....All persons performing work...(including...subcontractors) are subject to the requirements of this WSHP....MCS documents and safety and health procedures (SHP)...are contractually flowed down to the subcontractor.” Section 5.6.1.1, *Place of Employment Free of Recognized Hazards*, states that “[t]he 10 C[.F][.R.] 851, Worker Safety and Health Program, requires MCS and its subcontractors to provide a place of employment that is free from recognized hazards.” Section 9, *Hazard Identification and Assessment*, states that “[f]or routine and non-routine O&M [operations and maintenance] activities, as well as construction type work, hazard identification

and assessment will be performed in accordance with DUF6-U-SHP-0211, *Hazard Analysis...*” Section 12.1, *Construction Safety*, states that “[t]he project performs construction-like activities...through the established work control/planning and hazards analysis processes.” Section 12.6, *Industrial Hygiene*, states that “[t]he primary documents...that implement the industrial hygiene program include...DUF6-U-SHP-0601, *Hazard Communications*; DUF6-U-SHP-0512, *Confined Space Program*; and DUF6-U-SHP-0210, *Personal Protective Equipment*.”

DUF6-U-GFP-0108, *Control of Work*, Revision 13, September 28, 2022, section 1, *Purpose*, states that “[t]his procedure defines the process for planning and executing work at DUF6 Conversion Project facilities.”

DUF6-U-SHP-0210, *Personal Protective Equipment*, August 7, 2019, section 5.3, *Selecting PPE*, states that the “ES&H [Environment, Safety and Health] Manager or designee...(5) [p]erform PPE [personal protective equipment] evaluation and selection as follows: (a) [e]nsure the type of PPE selected for use reflects the potential exposure at the time and location the task will be performed....(f) Consider the following in the PPE Level selection process: [r]espiratory and skin protection required.”

DUF6-U-SHP-0211, *Hazard Analysis*, Revision 3, May 11, 2022, section 5.2.2, *Formal Walk-down*, states that the “Work Planner/Procedure Owner...(3) [p]rovide the HA [Hazard Analysis] Team with the following information:...[a]pplicable planning documents to assist in determining potential hazards and/or identifying appropriate controls:...[c]hemical data (e.g., safety data sheets)....”

DUF6-U-SHP-0301, *Accident/Incident Reporting*, Revision 1, October 19, 2022, section 2, *Scope*, states that “[t]his document applies to...subcontractors...” Section 3, *Terms and Definitions*, states that an event is “[a]n unplanned situation, condition...that has or could have reasonably resulted in...injury/illness, unexpected personnel exposure(s)...fire/explosion...” Section 5.1, *Responsibilities After an Event Occurs*, states that personnel “[i]mmediately report emergencies to the...Plant Shift Superintendent (PSS) by phone 270-441-6333 or plant emergency radio (Channel 16), then report to the FM [Facility Manager] and/or Immediate Supervisor.”

DUF6-U-SHP-0504, *Respiratory Protection Program*, Revision 2, January 29, 2020, section 5.2, *Equipment Selection*, states that the “RPPA [Respiratory Protection Program Administrator] (1) [s]elect respiratory protective equipment based on the following: [w]orkplace respiratory hazards...” Section 5.1, *General Requirements*, states that “All Personnel: (9) [c]omply with required respiratory equipment identified in the following, as applicable: [w]ork package, [w]ork control document...[d]ocumented hazard control or other identifying document.”

DUF6-U-SHP-0512, *Confined Space Program*, Revision 4, May 18, 2022, section 5.6, *Conduct Pre-Entry Activities for Confined Spaces (Both Permitted and Non-Permitted)*, states that the “Entry Supervisor/STR [Subcontract Technical Representative]...(2) [e]nsure specified engineering controls (e.g., ...ventilation...systems) are available and in proper operating condition. (3) [e]nsure PPE specified in the activity hazard analysis (AHA)...procedures, permits, and/or other technical work documents are available.” Section 5.7, *Conduct Pre-Job Briefing for Confined Space Entries*, states that the “Entry Supervisor...(4) [e]nsure...all specified equipment is available before allowing entry to begin.” Section 5.8, *Perform Permit-*

Required Confined Space Entry/Exit and Work Tasks, states that the “Attendant or Entry Supervisor or STR...(22) [i]mmediately call the site Plant Shift Superintendent (PSS) to request emergency response personnel....”

DUF6-U-SHP-0601, *Hazard Communication*, Revision 1, July 27, 2022, section 5.1, *General Requirements*, states that the “[s]upervisor...(19) [e]nsures that personnel are provided the appropriate PPE as identified on the hazard analysis, procedure or other applicable work control document(s)...[and] (32) [f]ollows the identified safety controls including wearing of PPE specified in the work control documents (i.e., [.] work package, procedure, or similar work control documents).”

DUF6 Hazard Controls Identification Checklist (HCIC), *Tank 55n reline, waste collection/disposal*, HCIC-C-21-0133 R3, February 18, 2023, *Hazard Controls*, item #20, states to “[r]eview the chemical's Safety Data Sheet [SDS] and comply with all chemical handling/PPE sections.”

DUF6 Activity Hazard Analysis, *Tank 55n reline, waste collection/disposal*, HCIC-C-21-0133 R3, February 18, 2023, task/step: *Solvents/ Adhesive/ Flammable Rubber Waste*, item: *PPE*, requires “...[d]isposable coveralls (e.g., [.] quantumwear/Tyvek with hood/booties)...” and item: *Work Area Control*, states that “[t]he solvents/cleaners/paints/adhesives/etc. all are very volatile...NAMs [negative air machines] will be used to remove solvent vapors whenever personnel are applying the adhesive/paint until it has cured.” Task/Step: *Painting, priming, cleaning, applying rubber liner*, states that “[a]ppropriate body and respiratory protection will be worn while painting/applying adhesive” and item: *PPE*, states that “NAM will be used to capture volatiles by placing it [hose] at the bottom of the tank (e.g., [.] ~7 valve location) to pull vapor away from entrant.”

DUF6 *Confined Space Entry Permit*, number HFS 23-3-9-90, starting March 9, 2023, at 7:00 a.m. and ending March 10, 2023, at 7:00 a.m., for C-1305 HFS [hydrofluoric acid storage] Tank Farm Area Tank #552, *Special Instructions*, states that “NAM [is] used in...the bottom seven valve area [hose connection] and is required during all tank entries....”

DUF6 *Work Order 2201436*, Revision 2, February 18, 2023, attachment A, page 10, states that “[t]he following controls apply for performing [p]ainting, [p]riming, [c]leaning, applying [a]dhesive to the interior of [t]ank 55n/[l]iner...[for the][t]ank entrant...NAM will be used to capture volatiles by placing it [the hose] at the bottom of the tank (e.g., [.] ~7 valve location) to pull vapor away from entrant.”

Lord Corporation Material Safety Data Sheet, *Chemlok® 286*, September 14, 2007, section 3, *Hazards Identification*, states, “Effects [o]f Overexposure – Skin Contact: [m]ay be absorbed through the skin in harmful amounts. May cause skin irritation. May cause dermatitis. Effects [o]f Overexposure – Inhalation: [m]ay cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma.” Section 8, *Exposure Controls / Personal Protection*, states, “Respiratory Protection:...for...confined space...use an approved air-supplied respirator. Skin Protection:

[u]se neoprene, nitrile, or rubber gloves to prevent skin contact. Other Protective Equipment: [u]se disposable or impervious clothing....”

Contrary to the above requirements, OMNI failed to comply with applicable requirements of Part 851 and the WSHP in relation to the work planning and control requirements, failed to adequately identify, assess, prevent, and abate confined space atmospheric hazards, and failed to ensure the use of adequate PPE. Specific examples include the following:

1. OMNI failed to fully execute ventilation engineering controls in accordance with the DUF6 work order, activity hazard analysis, and confined space entry permit (CSEP). Specifically, OMNI was required to connect a hose from the NAM to the “7-valve location” of tank 552. On the day of the event, OMNI failed to connect the hose to tank 552. Consequently, the entrant was not provided a safe internal atmosphere before entry or while using adhesive inside the tank.
2. OMNI failed to ensure the tank was monitored for toxic gas/vapor (toluene) while the entrant used adhesive (containing mostly toluene) inside the tank. The CSEP required MCS to perform monitoring for OMNI; however, MCS did not conduct any toxic gas/vapor monitoring prior to the entrant being rescued from the tank. As a result, OMNI’s failure to ensure MCS conducted monitoring to identify and assess confined space hazards put the entrant at risk of overexposure to toluene, creating the potential for serious injury or death.
3. OMNI failed to ensure the entrant wore proper skin protection while using adhesive inside the tank. Specifically, OMNI permitted the entrant to wear permeable clothing and did not follow the SDS PPE requirements and DUF6 activity hazard analysis to prevent dermal exposure to the adhesive. The SDS for the adhesive specifies use of neoprene, nitrile, or rubber gloves and impervious clothing. Consequently, the entrant experienced skin irritation on their abdomen, back, and buttocks.
4. OMNI failed to ensure the entrant wore an approved air-supplied respirator [i.e., supplied-air respirator (SAR)] while using *Chemlok® 286* adhesive inside a confined space as required by MCS DUF 6 tank 552 reline HCIC and specified in the *Chemlok® 286* SDS. Notably, OMNI was directed to follow the MCS respiratory protection program, which included the use of a full-face air purifying respirator (FFAPR); however, this was in contrast to the information specified in the exposure controls/personal protection (section 8) of the safety data sheet (SDS). On the day of the event, the entrant was wearing an FFAPR inside the tank during the uncontrolled release of toluene. Consequently, this put the entrant at higher risk of overexposure to toluene.

Collectively, these noncompliances constitute a Severity Level I violation.

Base Civil Penalty – \$118,000.00

Proposed Civil Penalty (75 percent mitigation granted) – \$29,500.00

II. REPLY

Pursuant to 10 C.F.R. § 851.42(b)(4), OMNI is hereby obligated to submit a written reply within 30 calendar days of receipt of this PNOV. The reply should be clearly marked as a “Reply to the Preliminary Notice of Violation.”

If OMNI chooses not to contest the violations set forth in this PNOV and the proposed remedy, then the reply should state that OMNI waives the right to contest any aspect of this PNOV and the proposed remedy. In such case, the total proposed civil penalty of \$29,500.00 must be remitted within 30 calendar days after receipt of this PNOV. Remittance of payment must be submitted via electronic funds transfer (EFT) or automated clearing house (ACH) transfer to DOE through the U.S. Treasury. The Office of Enforcement must be copied at enforcementdocketclerk@hq.doe.gov when the electronic payment is submitted to the U.S. Treasury. Instructions for remitters sending payments in U.S. dollars via EFT or ACH transfer are enclosed. This PNOV will constitute a final order 30 calendar days from the receipt of the PNOV. If the PNOV becomes a final order, pursuant to 10 C.F.R. § 851.42(e), a copy of the PNOV must be prominently posted, at or near the location where the violation occurred until the violation is corrected.

If OMNI disagrees with any aspect of this PNOV, then as applicable and in accordance with 10 C.F.R. § 851.42(c)(1), the reply must: (1) state any facts, explanations, and arguments that support a denial of an alleged violation; and (2) discuss the relevant authorities that support the position asserted, including rulings, regulations, interpretations, and previous decisions issued by DOE. In addition, 10 C.F.R. § 851.42(c)(2) requires that the reply include copies of all relevant documents.

If OMNI fails to submit a written reply within 30 calendar days of receipt of this PNOV, then pursuant to 10 C.F.R. § 851.42(d), OMNI relinquishes any right to appeal any matter in this PNOV and this PNOV will constitute a final order and the civil penalty must be remitted in the manner described above and as provided in the enclosed instructions.

Please submit your reply to the Director, Office of Enforcement by email to enforcementdocketclerk@hq.doe.gov. A copy of the reply should also be sent to the Manager of the DOE Portsmouth-Paducah Project Office.



Robin M. Keeler
Acting Director
Office of Enforcement
Office of Enterprise Assessments

Washington, D.C.
This 30th day of July 2025