From: **e-SafetyPro.com** vladimir@e-safetypro.com
Subject: Your AI-Drafted JHA — e-SafetyPro
Date: November 8, 2025 at 7:10 PM
To: ivensky@me.com

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e-SafetyPro JHA Generator

Disclaimer: This AI-generated JHA is provided for planning and discussion purposes only. It does not replace a site-specific Job Hazard Analysis. All content must be reviewed and approved by a qualified Safety Professional prior to use in the field.

Dear Vladimir Ivensky,

Thanks for using the e-SafetyPro generator. Your **AI-drafted JHA** is below. Please review and approve before field use.

Job Hazard Analysis (JHA)

Doc ID: JHA-20251109-000935 | Date: Nov 09, 2025 | Version: Draft AI v4.4-FACE+

User-Provided Input (verbatim)

Title	Excavation
Description	Excavation of contaminated soil
Location	Utah
Industry	Construction
Major Steps (as entered)	Surveying the site, mobilization of equipment, setting up exclusion zone, excavating test pits, collecting soil samples, decontamination
User Hazards	HAZWOPER, proximity to construction equipment, excavations, proximity to traffic
Project Role	Lower Tier Contractor with Subs
Comments	
Prepared by	Vladimir Ivensky (ivensky@me.com)

Job Hazard Analysis (JHA)

Doc ID: JHA-20251109-000935 | Date: Nov 09, 2025 | Version: Draft AI v4.4-FACE+

Purpose

This JHA covers the hazards associated with the excavation of contaminated soil in Utah, specifically for the role of Lower Tier Contractor with Subs. Understanding these hazards and implementing effective controls is crucial to ensure the safety of

personnel, compliance with regulations, and the successful completion of the project.

Project-Level Hazards & Controls

1. **Chemical Exposure**
- Contaminated soil may contain hazardous substances, leading to potential health risks for workers.
- **Controls:**
- Conduct a site-specific risk assessment to identify contaminants (OSHA 29 CFR 1910.120).
- Use appropriate personal protective equipment (PPE), such as gloves and respirators, to minimize exposure.

2. **Physical Hazards from Excavation**
- Excavation activities can lead to cave-ins, falls, and equipment-related injuries.
- **Controls:**
- Implement protective systems such as trench boxes or shoring (OSHA 29 CFR 1926.652).
- Ensure proper training for workers on excavation safety practices (ANSI/ASSP Z490.1).

3. **Proximity to Heavy Equipment**
- Workers may be at risk from moving machinery, which can lead to serious injuries.
- **Controls:**
- Establish a safe work zone and ensure clear communication among operators and ground personnel (OSHA 29 CFR 1926.601).
- Utilize spotters when operating heavy equipment in congested areas.

4. **Traffic Hazards**
- Work near roadways presents risks from vehicular traffic.
- **Controls:**
- Set up adequate signage and barriers to direct traffic away from the work zone (DOT 49 CFR 392.2).
- Conduct traffic control training for all personnel involved in site activities.

Tasks, Hazards & Controls

Task: Surveying the Site

Typical Hazards (observable vs managed):
- Uneven terrain leading to slips and falls.
- Presence of hazardous materials.
- Poor visibility conditions.
- Proximity to traffic.

Controls & Safe Work Practices (why these matter):
- Conduct a thorough site assessment to identify potential hazards before work begins (reduces risk of accidents).
- Use appropriate surveying tools and techniques to ensure accuracy and safety (prevents missteps).
- Maintain clear communication among team members regarding site conditions (enhances situational awareness).
- Utilize reflective vests and high-visibility clothing (OSHA 29 CFR 1926.95; increases visibility to traffic).

Task: Mobilization of Equipment

Typical Hazards (observable vs managed):
- Injuries from lifting and moving equipment.
- Equipment failure during transport.
- Traffic incidents during mobilization.

Controls & Safe Work Practices (why these matter):
- Conduct pre-operation checks on all equipment to ensure functionality (prevents equipment failure).

- Train personnel on proper lifting techniques and the use of dollies or forklifts (reduces risk of musculoskeletal injuries).
- Use dedicated routes for equipment transport to minimize traffic exposure (enhances safety).

Task: Setting Up Exclusion Zone

Typical Hazards (observable vs managed):
- Unauthorized personnel entering the work zone.
- Confusion about zone boundaries.
- Environmental contamination spreading beyond designated areas.

Controls & Safe Work Practices (why these matter):
- Clearly mark exclusion zones with barriers and signage (prevents unauthorized access).
- Train all personnel on the importance of the exclusion zone and its boundaries (ensures compliance).
- Regularly inspect zones for breaches and maintain communication about zone status (maintains integrity).

Task: Excavating Test Pits

Typical Hazards (observable vs managed):
- Cave-ins and collapses.
- Exposure to hazardous soil contaminants.
- Equipment-related injuries.

Controls & Safe Work Practices (why these matter):
- Implement trench safety systems as per OSHA regulations (reduces risk of cave-ins).
- Monitor air quality for hazardous vapors using calibrated equipment (protects worker health).
- Ensure operators are trained and certified on heavy equipment operation (prevents accidents).

Task: Collecting Soil Samples

Typical Hazards (observable vs managed):
- Chemical exposure from contaminated soil.
- Improper sampling techniques leading to inaccurate results.
- Cross-contamination between samples.

Controls & Safe Work Practices (why these matter):
- Use appropriate PPE, including gloves and respirators (reduces exposure risk).
- Follow established sampling protocols to ensure integrity (ensures accurate data collection).
- Label samples clearly and transport them in designated containers (prevents cross-contamination).

Task: Decontamination

Typical Hazards (observable vs managed):
- Residual contamination on personnel and equipment.
- Chemical exposure during decontamination process.
- Slips, trips, and falls in decontamination areas.

Controls & Safe Work Practices (why these matter):
- Establish a decontamination station with clear procedures (reduces risk of spreading contaminants).
- Use appropriate decontamination agents and PPE (ensures worker safety).
- Maintain dry and organized decontamination areas to prevent slips (enhances safety).

Training Requirements

1. HAZWOPER Training (OSHA 29 CFR 1910.120)
2. Excavation Safety Training (OSHA 29 CFR 1926.650)
3. Traffic Control and Safety Training (DOT 49 CFR 392.2)
4. Heavy Equipment Operation Certification
5. Chemical Safety and Hazard Communication Training (OSHA 29 CFR 1910.1200)
6. Personal Protective Equipment (PPE) Training (OSHA 29 CFR 1910.132)
7. Confined Space Entry Training (OSHA 29 CFR 1910.146)
8. Emergency Response Procedures Training

Personal Protective Equipment (PPE)

1. **Hard Hats** - Protects against head injuries from falling objects (OSHA 29 CFR 1926.100).
2. **High-Visibility Vests** - Increases visibility in traffic areas (ANSI/ISEA 107).
3. **Safety Glasses** - Protects eyes from dust and flying debris (OSHA 29 CFR 1926.102).
4. **Gloves** - Protects hands from chemical exposure (OSHA 29 CFR 1910.138).
5. **Respirators** - Protects against inhalation of hazardous vapors (OSHA 29 CFR 1910.134).
6. **Steel-Toed Boots** - Protects feet from heavy equipment and falling objects (OSHA 29 CFR 1926.96).
7. **Coveralls** - Provides a barrier against contaminants (OSHA 29 CFR 1910.132).
8. **Face Shields** - Protects face from chemical splashes (OSHA 29 CFR 1910.133).
9. **Ear Protection** - Protects against noise from heavy machinery (OSHA 29 CFR 1910.95).

Regulatory & Guidance References

- OSHA 29 CFR 1910.120 – Hazardous Waste Operations and Emergency Response
- OSHA 29 CFR 1926.650 – Excavation Standards
- OSHA 29 CFR 1926.601 – Motor Vehicles, Mechanized Equipment, and Marine Operations
- OSHA 29 CFR 1926.95 – Personal Protective Equipment
- DOT 49 CFR 392.2 – Safety Regulations
- ANSI/ASSP Z490.1 – Safety Training Standard

Notes / Recommendations

1. Conduct daily safety briefings to review hazards and controls.
2. Implement a stop-work authority policy to empower workers.
3. Maintain a daily
