



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | | | | | | | | | | | |
|---|--|---|--|--|--|--|--|----------------------|--|--|--|--------------------|--|-----|--|
| JHA NO.: | | JHA-00747 | | REV: | | 0 | | ISSUE DATE: | | 5-1-24 | | | | | |
| JHA TITLE: | | | | Glovebox Pressure Testing | | | | WORK PACKAGE NUMBER: | | N/A | | SPECIFIC LOCATION: | | N/A | |
| Activity | | Sub-Activity | | Hazard | | Control | | | | | | | | | |
| Hand & Power Tools | | Hand, Air and Electrical Tools | | Improper Use of Tools & Equipment Laceration & Grinding Wheel Failure Fire Electric Shock Inhalation of Carbon Monoxide, Nitrogen Dioxide, and/or Other Combustion Gases, Chemical Asphyxiation Struck-by Abrasion | | Review the applicable work activities and implement the associated work controls listed in JHA-00721, Hand and Power Tools | | | | | | | | | |
| Jacks--Lever, Screw, Hydraulic, and Ratchet | | Jacks--Lever, Screw, Hydraulic, and Ratchet | | Potential Energy Release (Mechanical) | | When using jacks, perform the following: | | | | | | | | | |
| | | | | | | · Verify the manufacturer's rated capacity is marked legibly on each unit | | | | | | | | | |
| | | | | | | · Verify the presence of a positive stop to prevent over-travel on all jacks | | | | | | | | | |
| | | | | | | · When the potential exists for slippage from the metal cap of the jack, establish a firm foundation during a lift by setting in place blocking and cribbing at the base of the jack and a wood block between the cap and the load | | | | | | | | | |
| | | | | | | · Crib, block, or otherwise secure a load immediately after it has been raised | | | | | | | | | |
| | | | | | | · Lubricate jacks at regular intervals and inspect them frequently, but not less frequently than the following: | | | | | | | | | |
| | | | | | | | | | | o Once every six months for constant or intermittent use | | | | | |





UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | | | |
|--------------------------|--------------------------|---|---|----------------------|-----|--------------------|--------|
| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| | | | o When jacks are sent out of shop for special work or when returned | | | | |
| | | | o When a jack is subjected to abnormal load or shock, immediately inspect before and after use | | | | |
| | | | · Examine repaired jacks and associated replacement parts for possible defects | | | | |
| | | | Tag defective jacks and take out of service until repaired | | | | |
| Manual Material Handling | Pallet Jack Use | Muscle Strain/Sprain Ergonomics Pinch Points Crushed By Struck By Caught Between | · Do not overload the machine. Be aware of dynamic loading! Sudden load movement may briefly create excess load causing product failure | | | | |
| | | | · Use as intended only. Do not use machine to support personnel | | | | |
| | | | · Always load the machine evenly and centrally | | | | |
| | | | · Keep clear of fork and load while raised | | | | |
| | | | · Only use on flat, level surface able to withstand weight of machine and load | | | | |
| | | | · Never leave a loaded machine unattended the load must always be lowered when not in use | | | | |
| | | | · Inspect before every use do not use if parts are loose or damaged. | | | | |
| Manual Material Handling | Manual Material Handling | Muscle Strain/Sprain Ergonomics Pinch Points | · Supervisors will be trained in the basics of manual material handling, hazards and basic controls, and conducting basic risk assessments for material handling work | | | | |
| | | | · Where manual handling is unavoidable, the supervisor will conduct an informal risk assessment as part of the FLHA process and follow up with employees before work starts | | | | |
| | | | · Inspect for shifted loads, stored energy, or loose items prior to unloading | | | | |
| | | | · Keep hands and arms clear when stacking material | | | | |
| | | | · Remove/protect sharp edges with “softeners” prior to lifting | | | | |
| | | | · To understand safe lifting limits during manual material handling, refer to OT-SH-801768-A128, <i>UPF Ergonomics Lifting Guidelines</i> | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
|------------------------|---|--|--|-----------------------------|------------|---------------------------|---------------|
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| Hazardous Material Use | Hazardous Material Storage | Improper Storage of Hazardous Materials | · Hazardous materials must be stored in containers compatible with the material and in a way that protects human health and the environment from unintended exposure to the hazards associated with the materials | | | | |
| | | Spill | · A "first in, first out" storage strategy must be used to help Ensure material does not expire and become a waste product | | | | |
| | | Fire | · Storage must be performed in accordance with the completed UCN-23353 and SDS requirements, paying attention to storage temperatures, to prevent product degradation and thus waste generation | | | | |
| | | | · Storage areas must be kept organized so materials can be properly inspected, inventoried, and segregated considering their compatibility | | | | |
| Hazardous Material Use | Labeling of Hazardous Materials | Inadequate Hazard Communication | · Labeling of hazardous materials shall be in accordance with Appendix B, <i>Container Labeling Instructions</i> | | | | |
| | | | · Labels shall have the Product Identifier and words, pictures, symbols, or a combination thereof that can provide employees with the specific information regarding the physical and health hazards of the hazardous chemical | | | | |
| | | | · Project Personnel may transfer hazardous materials from a bulk container to a suitable portable container for immediate use during their shift only | | | | |
| | | | · Individual stationary containers (e.g., storage tanks) must have signs, placards, or other appropriate signage attached to them that contain the same information as a manufacture's original label | | | | |
| Hazardous Material Use | Use and Disposal of Hazardous Materials | Contact with Chemicals (adsorption, inhalation, ingestion, Asphyxiation) | · Contact IH or ES&H Representative if UCN-23353 SDS Evaluation Form is not completed for the specific chemical/product that you are working with | | | | |
| | | | · Review UCN-23353 and the Safety Data Sheet (SDS) of the chemical/product prior to starting the work | | | | |
| | | | · Follow the assigned work controls specified in the SDS Evaluation Form | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
|-------------------------------------|--|--|--|-----------------------------|------------|---------------------------|---------------|
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| | | Improper Disposal of Hazardous Materials | <ul style="list-style-type: none"> Disposal of hazardous materials shall be in accordance with the completed UCN-23353 for the given product/chemical and in accordance with PL-SH-801768- A002, <i>Construction Waste Management Plan for the Uranium Processing Facility</i> | | | | |
| Dropped Object Prevention | General Requirements | Dropped Objects | Review the applicable work activities and implement the associated work controls listed in JHA-00715, Dropped Object Prevention. | | | | |
| Personal Protective Equipment (PPE) | Hearing Protection - Noise Levels Between Eighty-Five (85) and Ninety-Nine (99) dBA. | Noise | <ul style="list-style-type: none"> Refer to ML-SH-801768-A011, <i>Sound Levels of Common Construction Power Tools.</i> | | | | |
| | | | <ul style="list-style-type: none"> Wear approved single hearing protection devices with a minimum NRR of 21 | | | | |
| | | | <ul style="list-style-type: none"> Barricade and Signage: <ul style="list-style-type: none"> Install caution sign, or caution barricade tape with caution signs or tags requiring hearing protection on the barricade to establish the eighty-five (85) dBA boundary around the work area | | | | |
| | | | <ul style="list-style-type: none"> Contact Industrial Hygiene to evaluate noise levels for new/changed work activities or when working in enclosed areas. | | | | |
| Personal Protective Equipment (PPE) | Hearing Protection - Noise Levels over One-Hundred (100) dBA | Noise | <ul style="list-style-type: none"> Reference ML-SH-801768-A011 Sound Levels of Common Construction Power Tools | | | | |
| | | | <ul style="list-style-type: none"> At a minimum, wear single hearing protection devices with NRR of 33 (i.e. red, white and blue foam earbuds) AND ear muffs | | | | |
| | | | <ul style="list-style-type: none"> Contact IH or ES&H Representative if the anticipated noise levels are greater than 114dBA prior to engaging in the activity | | | | |
| | | | <ul style="list-style-type: none"> Use employee and or job rotation to reduce the time of exposure. When performing activities in enclosed spaces such as enclosed cells, pits, vaults or other similar spaces that may adversely affect noise levels or where multiple noise sources are present contact ES&H for further evaluation | | | | |
| | | | <ul style="list-style-type: none"> Barricade and Signage: | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | | | | | | | |
|--|---------------------|----------------------------------|---|-----------------------------|--|------------|--|---------------------------|--|---------------|--|
| JHA NO.: | | JHA-00747 | | REV: | | 0 | | ISSUE DATE: | | 5-1-24 | |
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | | N/A | | SPECIFIC LOCATION: | | N/A | |
| Activity | Sub-Activity | Hazard | Control | | | | | | | | |
| | | | <ul style="list-style-type: none"> o Install danger barricade tape with danger signs or tags to identify the one hundred (100) dBA boundary area o Identify area outside of danger barricade with caution single hearing protection required signs. Contact IH to evaluate size of these boundaries o Contact IH to evaluate noise levels for new/changed work activities or when working in enclosed areas. | | | | | | | | |
| Fire Prevention and Protection | Fire Occurrence | Fire | In the event of a fire, personnel are primarily responsible for evacuating themselves and others safely from the fire area. The discoverer of the fire shall perform or direct the following three immediate actions: | | | | | | | | |
| | | | · Step 1 – Yell "FIRE" to notify those in the immediate vicinity. | | | | | | | | |
| | | | Step 2 – Notify the Y-12 Operations Center (OC) by: | | | | | | | | |
| | | | o Activating a fire alarm (pull box), if available | | | | | | | | |
| | | | o Calling 911 from a Y-12 landline | | | | | | | | |
| | | | o Calling Y-12 OC at (865) 574-7172 from a cell phone | | | | | | | | |
| | | | o Contacting the OC via Channel 1 from a Project radio | | | | | | | | |
| | | | o Contacting the supervisor/superintendent and providing any information regarding the fire and its location (to be forwarded to the Y-12 OC) | | | | | | | | |
| NOTE: Use the phonetic alphabet when calling the OC to avoid confusion identifying the building location. | | | | | | | | | | | |
| · Step 3 – Only after reporting the fire, personnel may voluntarily attempt to fight a small, early-stage fire using an available portable fire extinguisher. This voluntary action should be taken only if personnel believe it is within their capability to safely extinguish or contain the fire, a safe escape route is readily available, and there is no immediate danger. | | | | | | | | | | | |
| Fire Prevention | Use of Flammable | Fire | · USE only approved containers and portable tanks for storage and handling of flammable and combustible liquids | | | | | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
|--------------------------------|--|----------------------------------|---|-----------------------------|------------|---------------------------|---------------|
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| and Protection | and Combustible Liquids | | · USE only approved safety cans or Department of Transportation-approved containers for the handling and use of flammable liquids in quantities of five gallons or less. The only exception to this requirement is for flammable liquid materials that are thick and highly viscid (extremely hard to pour), which may be used and handled in original containers | | | | |
| | | | · IF quantities are one gallon or less, THEN USE the original container or approved metal safety cans for storage, use, and handling | | | | |
| | | | · DO NOT STORE flammable or combustible liquids in areas used for exits, stairways, or areas normally used for the safe passage of people. Aggregate incidental in-use quantities of flammable and combustible liquids for tasks in buildings under construction shall not exceed: | | | | |
| | | | o 25 gallons (95 liters) of Class IA liquids in approved containers | | | | |
| | | | o 120 gallons (454 liters) of Class IB, Class IC, Class II, or Class III liquids in approved containers | | | | |
| | | | · USE Class I flammable liquids within a building under construction or other potentially enclosed space ONLY with an approved and implemented plan. The BNI FPE shall provide one of the approvals of the plan, evaluating whether the atmosphere will be adequately maintained below 25% of the applicable flammables Lower Flammable Limit (LFL)/Lower Explosive Level (LEL) | | | | |
| | | | · PROTECT flammable and combustible liquids being transferred/dispensed from static electricity | | | | |
| | | | · PROVIDE adequate spill preventing and control means | | | | |
| | | | · ENSURE adequate natural or mechanical ventilation | | | | |
| Fire Prevention and Protection | Storage of Flammable and Combustible Liquids | Fire | · USE only Project-approved dispensing devices and nozzles for flammable liquids. | | | | |
| | | | · Designated flammable and combustible liquid storage areas (bulk storage) SHALL be approved by the BNI FPE | | | | |
| | | | · PROVIDE only approved metal storage cabinets that meet the requirements of NFPA 30, Flammable and Combustible Liquids Code, 2012 Edition | | | | |
| | | | · LABEL cabinets with conspicuous lettering "Flammable—Keep Fire Away" | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
|---|----------------------------------|--|---|-----------------------------|------------|---------------------------|---------------|
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| | | | · LABEL portable bulk tanks and containers with the applicable NFPA 704, <i>Standard System for the Identification of the Hazards of Materials for Emergency Response</i> , placard | | | | |
| | | | · STORE no more than 60 gallons of Class I and Class II liquids inside of an unprotected structure. Storage MUST to be in an approved metal storage cabinet | | | | |
| | | | · LOCATE designated flammable/combustible liquid storage areas (bulk storage) 50 feet or greater from buildings under construction. Hot work or open flames SHALL NOT be allowed in approved flammable and combustible liquid storage areas | | | | |
| | | | · KEEP approved flammable and combustible liquid storage areas free from weeds, debris, and combustible materials not necessary to the storage | | | | |
| Barricades and Signs (Life Critical Activity) | General Requirements | Improper Hazard Control and Communication | Review the applicable work activities and implement the associated work controls listed in JHA-00712, Barricades, PPE, FLHA. | | | | |
| Compressed Gas Cylinder; Liquefied Petroleum Gas; and Liquefied Inert Gas Use | General Requirements | Spills Asphyxiation Muscle Strain Ergonomic Cryogenic Burn Fire | Review the applicable work activities and implement the associated work controls listed in JHA-00713, Compressed Gas, LPG, and Inert Gas. | | | | |
| Safety Watch | Process | Emergency | In the event of an emergency, individuals performing Safety Watch duties are to discontinue the assignment and respond to the emergency as required (e.g., Take Cover, Evacuation). | | | | |
| Safety Watch | Confined Space Watch (Attendant) | Confined Space | · A Confined Space Watch, also referred to as an attendant, is required when personnel must enter a permit-required confined space (e.g., vessel, tank, pit, | | | | |
| | | | excavation). | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | | | | | | | |
|-------------------|---------------------------|----------------------------------|---|-----------------------------|--|------------|--|---------------------------|--|---------------|--|
| JHA NO.: | | JHA-00747 | | REV: | | 0 | | ISSUE DATE: | | 5-1-24 | |
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | | N/A | | SPECIFIC LOCATION: | | N/A | |
| Activity | Sub-Activity | Hazard | Control | | | | | | | | |
| | | | Workers assigned as a Confined Space Watches must wear orange vests in accordance with UPF-CP-205. | | | | | | | | |
| Safety Watch | Equipment Watch (Spotter) | Moving Equipment | <ul style="list-style-type: none"> The sole purpose of a Spotter is to assist an equipment operator in maintaining adequate clearance between the equipment and hazards. The operator and Spotter(s) will jointly identify and discuss responsibilities, method of communication, location of the Spotter(s), blind spots, and resources needed to execute the task successfully leveraging the Field Level Hazard Assessment (FLHA) process | | | | | | | | |
| | | | <ul style="list-style-type: none"> The following practices should be considered when planning the activity: | | | | | | | | |
| | | | <ul style="list-style-type: none"> Achieving eye contact and an acknowledgment from the equipment operator before walking near or around heavy equipment | | | | | | | | |
| | | | <ul style="list-style-type: none"> Never having Spotters stand within the blind spot of equipment operators or truckers | | | | | | | | |
| | | | <ul style="list-style-type: none"> Never allowing personnel to stand within the swing radius of equipment while it is operating | | | | | | | | |
| | | | <ul style="list-style-type: none"> Checking around and underneath trucks and equipment for personnel before operating them | | | | | | | | |
| Safety Watch | Overhead Safety Watch | Dropped Objects | An Overhead Safety Watch is utilized to protect personnel from hazards created during elevated work. Examples include: | | | | | | | | |
| | | | <ul style="list-style-type: none"> Short duration tasks with low-risk for dropped objects or similar hazards (e.g., inspections, moving cords, layout/measurements) | | | | | | | | |
| | | | <ul style="list-style-type: none"> Work activities in remote areas that are not heavily populated or congested with pedestrians/personnel and will not be impacted by concurrent work activities (e.g., parking lots, laydown areas, etc.) | | | | | | | | |
| | | | <ul style="list-style-type: none"> In conjunction with a barricade for elevated work/overhead hazards (e.g., when 2:1 ratio of barricade cannot be achieved) | | | | | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
|---|----------------------|--|---|-----------------------------|------------|---------------------------|---------------|
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| | | | <ul style="list-style-type: none"> · Prior to implementing an Overhead Safety Watch, the task/application must be evaluated by the Responsible Superintendent (Discipline Superintendent) and documented on the applicable FLHA for the activity | | | | |
| | | | <ul style="list-style-type: none"> · When an Overhead Safety Watch is used, the following will apply: <ul style="list-style-type: none"> o The Overhead Safety Watch must be strategically located to control and restrict all non-essential personnel and vehicular traffic from entering the overhead work area. Multiple Watches may be required for activities with a larger hazard area or work areas with blind spots o The Overhead Safety Watch will notify approaching personnel of the overhead hazard and prevent access to areas below overhead work for the duration of the work o The Overhead Safety Watch will perform tasks from a safe location and remain clear of line-of-fire hazards created by the elevated work activities o If access to a work area below the elevated work is required, the Overhead Safety Watch shall stop the elevated work and have it placed in a safe configuration before allowing workers in the area. | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Confined Space Entry (Life Critical Activity) | General Requirements | Engulfment & Entrapment Hazardous Atmosphere Limited Access/Egress | <ul style="list-style-type: none"> · Never enter a confined space unless you are trained and authorized to do so, and an entry evaluation or permit has been completed | | | | |
| | | | <ul style="list-style-type: none"> · Never enter a confined space unless atmospheric testing has been performed | | | | |
| | | | <ul style="list-style-type: none"> · Never enter a confined space without an approved permit | | | | |
| | | | <ul style="list-style-type: none"> · Never enter a confined space without an attendant at the entrance. Even when an attendant is present, do not enter without an effective way to communicate with the attendant from inside the confined space | | | | |
| | | | <ul style="list-style-type: none"> · Confined spaces include, but are not limited to, sewers, tunnels, underground utility vaults, water towers, storage tanks, process vessels, bins, boilers, and ductwork | | | | |
| | | | <ul style="list-style-type: none"> · These spaces share common characteristics that help us understand what a confined space is. | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | | | | | | | |
|-------------------|---------------------|----------------------------------|---|-----------------------------|---|------------|--|---------------------------|--|---------------|--|
| JHA NO.: | | JHA-00747 | | REV: | | 0 | | ISSUE DATE: | | 5-1-24 | |
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | | N/A | | SPECIFIC LOCATION: | | N/A | |
| Activity | Sub-Activity | Hazard | Control | | | | | | | | |
| | | | <ul style="list-style-type: none"> Characteristics of a confined space include the following: <ul style="list-style-type: none"> it is large enough for a worker or workers to enter it has limited means of entry and exit it is not designed for people to enter and work in on a regular basis, and it can contain some form of hazard Some hazards that can be present in confined spaces are oxygen deficiency, flammable or explosive gases, toxic gases, slips and falls, and electrical and mechanical hazards. Contact ES&H for assistance and evaluation of confined spaces on the construction site IF a suspect space is confined AND you cannot confirm that a confined space classification was conducted, THEN DO NOT enter the space Contact supervision to determine if the space was evaluated and classified IF supervision cannot provide a confirmation, THEN request that ES&H classify the space Do not enter any confined space prior to contacting ES&H and completing UCN-23273, <i>Confined Space Entry Evaluation</i> | | | | | | | | |
| | | | Contact IH for specific hearing protection requirements. | | | | | | | | |
| | | | Barricade and Signage: | | | | | | | | |
| | | | <ul style="list-style-type: none"> Install caution signs, or caution barricading tape with caution signs or tags requiring hearing protection at the approximate eighty-five (85) DbA boundary | | | | | | | | |
| | | | List the noise sources and contact information on the sign or tag: | | | | | | | | |
| | | | <ul style="list-style-type: none"> Supervisor's name, phone number, or radio channel | | | | | | | | |
| | | | <ul style="list-style-type: none"> Wear sealed safety glasses or goggles and a face shield OR safety glasses and a face shield when depressurizing pneumatic pressure tests | | | | | | | | |
| | | | <ul style="list-style-type: none"> Secure hoses with properly installed whip restraints | | | | | | | | |
| | | | Pneumatic Pressure Testing | General Requirements | Over Pressurization Unnecessary Exposure/ Inadequate Communication Laceration Noise (Pneumatic Pressure Testing) | | | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: JHA-00747 | | REV: 0 | ISSUE DATE: 5-1-24 |
|--------------------------------------|---|---|---|
| JHA TITLE: Glovebox Pressure Testing | | WORK PACKAGE NUMBER: N/A | SPECIFIC LOCATION: N/A |
| Activity | Sub-Activity | Hazard | Control |
| | | Pressure Release/Flying Particles Unintentional Release of Stored Hazardous Energy (Pneumatic) | · Install danger barricade tape with danger signs or tags at the Minimum Required Test Boundary as defined in the Pressure Test Data sheet |
| | | | · List the contact information on the sign or tag: supervisors name, phone number, or radio channel |
| | | | · When releasing pressure after completion or suspension of the test, keep barricades and signs or tags in place until pressure has been released and the gauges are near zero (0) |
| | | | · Ensure all fittings, connections, and test plugs are secured and/or torqued |
| | | | · When increasing or releasing pressure, slowly open valves to avoid hammering the system. Report leaks as soon as they are identified. Release energy in a direction that will minimize exposure |
| | | | · Do not adjust or tighten pipe or tubing fittings or bolted connections if the pressure is above one hundred and sixty-five (165) psi |
| | | | · Fittings are to be adjusted or tightened only when the pressure is 165 psi or lower |
| | | | · Implementation of Y17-95-64-801, <i>UPF Construction Phase System and Equipment Safety Lockout/Tagout</i> , when pressure test boundary valves are against an energized system |
| | | | · Ensure all required safety tagging is in place |
| Preliminary Leak Detection | Bubble leak, Ultrasonic leak & Gas leak location method | Equipment Damage Over Pressurization Release/Flying Particles | Perform the leak detection in accordance with GU-CM-801768-A001, <i>UPF Glovebox and Other Enclosures Preliminary Leak Testing Guide</i> . <ul style="list-style-type: none"> · Install a relief device and/or bubbler prior to any further steps if positive or negative pressure will be applicable. · Raising the pressure too quickly could cause equipment damage. · If any change is required after pressurization, the system must be drained and vented. |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | | | |
|---|--|--------------------------------------|---|-----------------------------|------------|---------------------------|---------------|
| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| Field Level Hazard Assessment (FLHA) | Field Level Hazard Assessment Process | Unidentified and Unmitigated Hazards | <ul style="list-style-type: none"> FLHA is a pre-task briefing that must be used daily by crews at the beginning of their work shift or when new tasks are undertaken. It is a process of employee participation to identify and mitigate environmental, safety, and health risks and hazards associated with their planned work that day. The JHA process must not replace, or be a substitute for, the daily FLHA process. | | | | |
| Field Level Hazard Assessment (FLHA) | Implementing Field Level Hazard Assessment | Unidentified and Unmitigated Hazards | Prior to beginning work activities each day or after an extended break or interruption (e.g., shift change, weekend), perform the following: | | | | |
| | | | <ul style="list-style-type: none"> Perform a Walkdown and review the work location with involved personnel | | | | |
| | | | <ul style="list-style-type: none"> Review area hazards to ensure they are identified and hazard controls/mitigations are in place to eliminate/reduce them | | | | |
| | | | <ul style="list-style-type: none"> Ensure there are no new hazards unidentified and uncontrolled by the approved JHA | | | | |
| | | | Using UCN-23552, perform the following: | | | | |
| | | | <ul style="list-style-type: none"> Conduct a FLHA briefing with the work crew and support disciplines | | | | |
| | | | <ul style="list-style-type: none"> Resolve any issues/concerns with the work crew | | | | |
| | | | <ul style="list-style-type: none"> List and discuss the scope of work, anticipated hazards, and controls/mitigation measures for the work to be performed | | | | |
| | | | <ul style="list-style-type: none"> Ensure personnel document participation in the "Employee" section of UCN-23552 | | | | |
| | | | <ul style="list-style-type: none"> Conduct appropriate FLHA briefings when any of the following conditions exist: | | | | |
| | | | <ul style="list-style-type: none"> The work area changes | | | | |
| | | | <ul style="list-style-type: none"> Personnel with different classifications will be working in close proximity | | | | |
| | | | <ul style="list-style-type: none"> Differing types of work are performed in close proximity | | | | |
| <ul style="list-style-type: none"> The work activity changes | | | | | | | |
| <ul style="list-style-type: none"> The Responsible Superintendent deems it necessary | | | | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | | | |
|---|---------------------|--|--|-----------------------------|------------|---------------------------|---------------|
| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| | | | <ul style="list-style-type: none"> Turn in completed forms (i.e., UCN-23552, UCN-23464, UCN-23544, CFN-1268) as applicable at the end of each shift at the designated collection points. The end of shift review/de-briefing section must be completed before submitting these forms to UPF DMC. | | | | |
| Scaffold Use (Life Critical Activity) | Scaffold User | Unauthorized Use Fall to Elevation Below Slips and Trips | <ul style="list-style-type: none"> Never access any scaffold without documented evidence of inspection by a designated Competent Person for scaffolding before each work shift | | | | |
| | | | <ul style="list-style-type: none"> Obey the scaffold requirements at all times | | | | |
| | | | <ul style="list-style-type: none"> Never use any scaffold without a proper tag that displays the current day's date. Scaffold requirements include strict adherence to the color-coded tagging system of red (Danger—Unsafe for Use), yellow (Caution), and green (Safe for Use) tags, as appropriate | | | | |
| | | | <ul style="list-style-type: none"> Never access a red-tagged scaffold. Only authorized scaffold builders are permitted to access a red-tagged scaffold, and they are required to wear fall protection | | | | |
| | | | <ul style="list-style-type: none"> Never access a yellow-tagged scaffold without proper fall protection | | | | |
| | | | <ul style="list-style-type: none"> Consider all scaffolds without tags as red-tagged scaffolds | | | | |
| | | | <ul style="list-style-type: none"> Never alter or modify a scaffold, unless you are a designated Competent Person, who is qualified and authorized to do so | | | | |
| | | | <ul style="list-style-type: none"> Touching-the-tag before each use to ensure a scaffold inspection has been completed for the shift | | | | |
| | | | <ul style="list-style-type: none"> Never access any scaffold without a documented and tagged daily inspection. Inspect the scaffold prior to use, looking for holes in the platform, missing handrails and other potential hazards | | | | |
| | | | <ul style="list-style-type: none"> Never access a red-tagged scaffold. Only authorized scaffold builders are permitted, and they must wear required fall protection | | | | |
| | | | <ul style="list-style-type: none"> Never access a yellow-tagged scaffold without 100% tie-off or fall protection | | | | |
| <ul style="list-style-type: none"> Indicating on the scaffold request when intended use will require scaffold capacity greater than light duty (i.e., 25 pounds per square foot [psf]) | | | | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
|--|----------------------|--|--|-----------------------------|------------|---------------------------|---------------|
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| | | | <ul style="list-style-type: none"> Ensuring scaffold is not loaded in excess of its duty rating Maintaining housekeeping and accumulation of materials to prevent dropped objects Notifying scaffold erectors when pearlweave, toe board, or other dropped object prevention controls need repair Utilizing barricading, as required, when scaffold dropped object controls (e.g., mesh, toe boards) are incomplete OR when hoisting material outside of the dropped object confines of the scaffold | | | | |
| Scaffold Use (Life Critical Activity) | Scaffold Safety | Unauthorized Use Fall to Elevation Below Slips and Trips | <ul style="list-style-type: none"> Climbing on scaffolding components (e.g., cups, rings, diagonal members) is not allowed Free Climbing scaffold structures in any direction above a height greater than 6 ft without using a Personal Fall Arrest System (e.g., harness and retractable lifeline) tied off to an acceptable anchor point is not allowed Ensure an adequate working surface during erection/dismantlement activities | | | | |
| | | | | | | | |
| | | | | | | | |
| Work at Heights (Life Critical Activity) | General Requirements | Fall to Elevation Below | Review the applicable work activities and implement the associated work controls listed in JHA-00717, Elevated Work | | | | |
| Ladders | General Requirements | Fall to Elevation Below Dropped Objects | All portable ladders purchased or used on the Project shall meet minimum specifications, including: | | | | |
| | | | <ul style="list-style-type: none"> Ladders must be vendor-certified as American National Standards Institute (ANSI) Type 1A or greater Only nonmetallic ladders will be purchased and used on the site (fiberglass ladders are recommended) Tripod ladders (ladders with three legs) are prohibited Straight ladders longer than 20 feet are prohibited Extension ladders longer than 36 feet are prohibited Stepladders and platform ladders longer than 12 feet are prohibited | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: | | JHA-00747 | | REV: | 0 | ISSUE DATE: | 5-1-24 |
|-------------------|---------------------|---|---|-----------------------------|------------|---------------------------|---------------|
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | | |
| | | | · All portable ladders will be equipped with nonskid feet | | | | |
| Ladders | Ladder Use | Fall to Elevation Below Dropped Objects | Inspect ladders prior to use to verify: | | | | |
| | | | · All hardware and fittings are securely attached and the movable parts operate freely without binding or undue play | | | | |
| | | | · Ladder rungs are free from grease, oil, mud, and other materials | | | | |
| | | | · Ladder safety feet and other auxiliary equipment are in good condition | | | | |
| | | | · Ladder does not have any broken or missing steps, rungs, cleats, broken side rails, or any other faulty equipment | | | | |
| | | | When using a ladder: - Do not use ladders in any manner other than their intended purpose - Two or more people will not work from the same ladder unless it is specifically designed for two people - Place portable ladders on a level and stable surface and secure them or have them held by another person to prevent slipping - Personnel shall face the ladder when ascending or descending and use both hands to grasp the ladder - Do not carry materials or tools in hands while ascending or descending ladders - If working from portable ladders, then remain within the confines (side rails) of the ladder - Prevent unauthorized entry in the area below the ladder with barricades or flagging when overhead hazards are present during ladder use - Do not stand on the platform or top step of a stepladder (i.e., top two steps) - Do not sit on or straddle a stepladder to perform work - When accessing another elevation, extend the top of the ladder 36 inches beyond the upper landing surface. If this is not possible because of the ladder's configuration, install a grab rail(s) 36 inches above the landing to help personnel mount and dismount the ladder | | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | | | | | | | |
|---|------------------------------------|---|---|-----------------------------|--|------------|--|---------------------------|--|---------------|--|
| JHA NO.: | | JHA-00747 | | REV: | | 0 | | ISSUE DATE: | | 5-1-24 | |
| JHA TITLE: | | Glovebox Pressure Testing | | WORK PACKAGE NUMBER: | | N/A | | SPECIFIC LOCATION: | | N/A | |
| Activity | Sub-Activity | Hazard | Control | | | | | | | | |
| Ladders | Ladder Inspection | Fall to Elevation Below Dropped Objects | <ul style="list-style-type: none"> Ladders that do not have the current quarterly color code marking shall be tagged out of service at the point of discovery using a "Do Not Use" tag until inspected and color coded Ladders that are damaged or defective shall be immediately tagged out of service at the point of discovery using a "Do Not Use" tag and returned to the Tool Crib | | | | | | | | |
| | | | | | | | | | | | |
| Ladders | Ladder Storage | Fall to Elevation Below Dropped Objects | <ul style="list-style-type: none"> When not in use, store portable ladders to protect them from the elements and direct sunlight store ladders away from excessive heat and in areas with good ventilation Other materials are not to be stored on ladders | | | | | | | | |
| | | | | | | | | | | | |
| Defeating Safety Devices (Life Critical Activity) | Guards / Safety Protection Devices | Unsafe Conditions | Never Disable, bypass, modify, or remove any safety protection devices without written authorization from the Site Manager and ES&H Manager. This includes, but it's not limited to: | | | | | | | | |
| | | | <ul style="list-style-type: none"> Disconnect load indicators | | | | | | | | |
| | | | <ul style="list-style-type: none"> Remove Guards or handles from rotating equipment or tools | | | | | | | | |
| | | | <ul style="list-style-type: none"> Fix or lock triggers and power switches to keep them in the "on" position | | | | | | | | |
| | | | <ul style="list-style-type: none"> Hardwire electrical wires into outlets | | | | | | | | |
| | | | <ul style="list-style-type: none"> Use damaged or defective equipment and/or tools | | | | | | | | |
| | | | <ul style="list-style-type: none"> Skip or bypass required inspections before using equipment and/or tools | | | | | | | | |
| Ergonomic Hazard Activities | Various Activities | Musculoskeletal Disorder Injury | <ul style="list-style-type: none"> Operate equipment without deploying outrigger pads when they are required | | | | | | | | |
| | | | Contact ES&H/IH (Radio: Channel 1) to evaluate your work activity if any of the following risk factors are encountered. | | | | | | | | |
| | | | <i>Risk Factors</i> | | | | | | | | |
| | | | <p>The risk of musculoskeletal disorder (MSD) injury depends on work positions and postures, how often the task is performed, the level of required effort and how long the task lasts. Risk factors that may lead to the development of MSDs include:</p> <ul style="list-style-type: none"> Exerting excessive force. Examples include lifting heavy objects or people, pushing or pulling heavy loads, manually pouring materials, or maintaining control of equipment or tools. | | | | | | | | |



UPF JOB HAZARD ANALYSIS

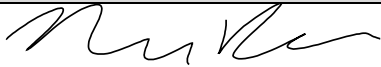

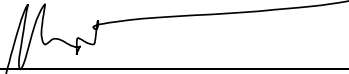
My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| JHA NO.: | | JHA-00747 | REV: | 0 | ISSUE DATE: | 5-1-24 |
|------------|--------------|---------------------------|--|-----|--------------------|--------|
| JHA TITLE: | | Glovebox Pressure Testing | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Activity | Sub-Activity | Hazard | Control | | | |
| | | | <ul style="list-style-type: none"> · Performing the same or similar tasks repetitively. Performing the same motion or series of motions continually or frequently for an extended period of time. | | | |
| | | | <ul style="list-style-type: none"> · Working in awkward postures or being in the same posture for long periods of time. Using positions that place stress on the body, such as prolonged or repetitive reaching above shoulder height, kneeling, squatting, leaning over a counter, using a knife with wrists bent, or twisting the torso while lifting. | | | |
| | | | <ul style="list-style-type: none"> · Localized pressure into the body part. Pressing the body or part of the body (such as the hand) against hard or sharp edges, or using the hand as a hammer. | | | |
| | | | <ul style="list-style-type: none"> · Cold temperatures. In combination with any one of the above risk factors may also increase the potential for MSDs to develop. For example, many of the operations in meatpacking and poultry processing occur with a chilled product or in a cold environment. | | | |
| | | | <ul style="list-style-type: none"> · Vibration, both whole body and hand-arm, can cause a number of health effects. Hand-arm vibration can damage small capillaries that supply nutrients and can make hand tools more difficult to control. Hand-arm vibration may cause a worker to lose feeling in the hands and arms resulting in increased force exertion to control hand-powered tools (e.g., hammer drills, portable grinders, chainsaws) in much the same way gloves limit feeling in the hands. The effects of vibration can damage the body and greatly increase the force which must be exerted for a task. | | | |
| | | | <ul style="list-style-type: none"> · Combined exposure to several risk factors. May place workers at a higher risk for MSDs than does exposure to any one risk factor. | | | |



UPF JOB HAZARD ANALYSIS

My signature on the corresponding CFN-1251, UPF Construction Attendance Sheet, indicates that I have read the JHA and have received answers to any questions I had relative to the JHA. My signature further indicates my willingness to comply with the provisions and requirements of the JHA.

| | | | | | |
|---|--|-----------------------------|------------|---------------------------|---------------|
| JHA NO.: | JHA-00747 | REV: | 0 | ISSUE DATE: | 5-1-24 |
| JHA TITLE: | Glovebox Pressure Testing | WORK PACKAGE NUMBER: | N/A | SPECIFIC LOCATION: | N/A |
| Ensure a new corresponding CFN-1251, <i>UPF Construction Attendance Sheet</i> , is signed and inserted in the CWP to document JHA briefing. | | | | | |
| PREPARER: | Nicholas Prewitt  | | | 05/01/24 | |
| Printed Name/Signature Date | | | | | |
| APPROVAL: | | | | | |
| ES&H: | Anton Panev  | | | 05/01/24 | |
| Printed Name/Signature Date | | | | | |
| SITE MANAGER: (DOA-CM-801768-A214) | Matt Hinders  | | | 5/1/24 | |
| Printed Name/Signature Date | | | | | |