



UPF PROJECT PROCEDURE

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Revision History

Revision	Reason/Description of Change
6	This revision is a complete rewrite, therefore revision bars are not shown. This revision further provides guidance for the operational requirements and controls necessary for safe operation and care of vehicles, heavy equipment, and utility/golf carts.
5	Adopted initial issue from Bechtel Core Process 229 at its current revision 5.

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Vehicle Safety Management

1.0 PURPOSE

The purpose of this procedure is to provide guidance for the operational requirements and controls necessary for safe operation and care of vehicles, heavy equipment, and utility/golf carts.

2.0 GENERAL**2.1 Applicability**

This procedure applies to Uranium Processing Facility (UPF) project employees and subcontractor personnel for support and construction activities, where the operation, care, inspection, and maintenance of vehicles, heavy equipment, and utility/golf carts takes place.

2.2 Acronyms/Definition

Acronyms

CM	Construction Management
DS	Discipline Superintendent
FSM	Field Safety Manager
FSR	Field Safety Representative
STR	Subcontract Technical Representative

Definitions

Designated Parking Area	The area set aside at any UPF facility or building and marked with parking curbs, stripes, or signs designating it for parking.
Driver	The driver is the authorized operator of the motor vehicle/equipment or utility/golf cart. The driver controls the vehicle/equipment/cart and by virtue of skill and training, transports cargo/people between two points.
Heavy Equipment	Powered by internal combustion engines (diesel, gasoline, or LPG), Self-propelled or mobile construction equipment, such as dozers, scrapers, excavators, graders, semi-trailer trucks, and dump-bed trucks (single, dual, and tri-axle), equipment designed to move or lift heavy loads or supply heavy driving force.
Unattended	A condition where a vehicle or heavy equipment is not under constant supervision from within the vehicle, or within the vicinity of the vehicle, and is not within clear eye sight. For the purpose of warming up the vehicle during cold weather conditions, one individual may supervise, or attend, multiple vehicles within close proximity of each other.
Vehicle	A vehicle powered by internal combustion engines (e.g., diesel, gasoline, or LPG) or battery powered. Vehicles designed to haul passengers or light loads over public access roads and highways. Vehicles are licensed and approved for public road transportation. Examples of such equipment include passenger vehicles, vans and light duty "pick-up" trucks, or service and vendor trucks.
Utility/Golf Cart	A small type of vehicle powered by an internal combustion engine or battery powered. Vehicle is designed to transport personnel, equipment, and material within the UPF Site boundaries.

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Vehicle Safety Management System (VSMS) The VSMS is comprised of the procedures, education/training, and site-specific requirements developed and implemented on a project to achieve suitable controls and minimize personnel exposure and property damage relating to vehicles and road transportation. A 360 degrees walk around inspection of the vehicle/equipment/cart is mandatory and is to include inspection of the vehicle's surroundings to ensure there are no obstructions that will impede access or egress of the vehicle in and from its current location.

3.0 RESPONSIBILITIES

3.1 Construction Manager (CM)

The CM has the overall responsibility for ensuring the implementation of this procedure – defining, establishing, and maintaining requirements for safely separating heavy equipment from vehicles, carts and site personnel.

3.2 Field Safety Manager (FSM)

The FSM has the overall authority for interpretation of the regulations associated with the procedure and the interpretation of the procedure as to intent and application.

3.3 Field Safety Representative (FSR)

The FSR has the responsibility of assisting construction supervision in complying with this procedure, performing routine monitoring and inspection of vehicle/equipment/carts, and participating in accidents/near miss event investigations when vehicles/equipment/carts are involved.

3.4 Discipline Superintendent (DS)

The DS is responsible for being thoroughly familiar with this procedure regarding compliance and implementation, ensuring all those that directly report to them have completed all the required training to operate vehicle/equipment/carts.

3.5 Supervisor

The Supervisor is responsible for ensuring the applicable safety controls and processes are incorporated into planning and execution of the work and that the workers are implementing and complying with this procedure within their area of responsibility.

3.6 Subcontract Technical Representative (STR)

The STR is responsible for the following:

- Ensuring subcontractors comply with this procedure.
- Ensuring subcontractor-owned or rented equipment is inspected by the subcontractor and certified to be in safe operating condition prior to being placed in service on the construction site, in accordance with subcontractor requirements documents.
- Ensuring subcontractors conduct or have conducted equipment inspections at the frequency recommended by the manufacturer.
- Ensuring the subcontractors inspection records are maintained by the subcontractor at the site and available upon request.

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3.7 Vehicle/Equipment/Cart Operator

The vehicle/equipment/cart operator is responsible for the following:

- Receiving the required physical exams and training requirements for the type of vehicle/equipment being operated.
- Participating in driver-training programs, as applicable.
- Notifying direct supervision upon suspension or revocation of a state driver's license, or upon any driving restrictions placed by local, state, or federal agencies.
- Reporting use of prescription medication that may affect the ability to operate equipment.
- Conducting pre-use inspection(s) prior to daily use, as applicable.
- Ensuring that lights, signals, horn, and brakes are in proper working order prior to use.
- Reporting immediately, safety defects or vehicle/equipment/cart problems.
- Ensuring vehicle/equipment/cart occupants use seatbelts prior to movement.
- Operating company vehicles/equipment/carts in a safe, responsible manner, obeying all traffic laws and site requirements while driving on or off of the project.
- Yielding to pedestrians at designated crossings and other areas indicated by signs.
- Maintaining a safe distance between vehicles/equipment/carts. A safe distance means having enough time and distance between vehicles/equipment/cart to allow for emergency braking to avoid an accident/incident.
- Reporting immediately, all vehicle/equipment/cart accidents/incidents and (or) damages to supervision and FSR.

4.0 PROCESS

4.1 Vehicle, Heavy Equipment, and Utility/Golf Carts

The following subsections are applicable to vehicles, heavy equipment and utility/golf carts as described by the procedure.

4.1.1 General Requirement

- Vehicles, heavy equipment, and utility/golf carts (as applicable) will be equipped with the following:
 - Brakes – Service, emergency, parking brakes
 - Lights – At least two headlights and two taillights.
 - Brake Lights – All vehicle types, including combinations of vehicles and trailers.
 - Horn - Audible warning device at operator's station
- Vehicles, heavy equipment, and golf cart used to support the UPF site will be equipped with an approved fire extinguisher.

4.1.2 Inspections

- Visually inspect assigned vehicle, heavy equipment, and golf carts prior to every trip or use, including:
 - Perform a 360-degree walk around inspection of the exterior for defects and obstructions that impair the operators view and (or) access or egress of the vehicle.
 - Inspect at the beginning of each shift, to assure the following parts, equipment, and accessories (as applicable) are in safe operating condition:
 - Brakes – service, emergency, and parking brakes
 - Tires

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- Horns
- Lights
- Steering mechanism
- Coupling devices
- Seat belts
- Operating controls
- Other safety devices (Lights, reflectors, windshield wipers, defrosters)
- Inspection Documentation
 - For passenger vehicles, commercial vehicles, and construction equipment, perform and document inspections in accordance with Y17-95-64-851, UPF Construction Equipment Maintenance.
 - Golf Cart inspections are not documented. In the event of damage or mal-function, remove the cart from service, perform step 4.1.2 - 3 & 4.
- If an identified defect is determined to cause the vehicle, heavy equipment or utility/golf cart to be unsafe to operate, tag the equipment with a Danger “Defective Tool/Equipment – Do Not Use” tag and report the situation to supervision. Keep vehicle, heavy equipment, or utility/golf cart out of service until service personnel are able to inspect, repair, and validate the repair.
- When the repair is complete, the Service Department removes the tag, and equipment is returned service.

4.1.3 Operator Requirements

- A valid state driver’s license is required for operating vehicles, heavy equipment and golf carts on the site and within the construction areas. The state license signifies that the operator has been trained and tested to operate a vehicle safely and in accordance with all state traffic laws.
- Operators are to be alert to Construction site signage and driving requirements, to include driving for inclement weather conditions. The UPF Construction Site is designed to maintain a safe separation between construction equipment, vehicles, and golf carts as well as separation from site personnel by employing access control routes, speed limits and parking and entry restrictions. These site traffic control rules are updated and posted, as necessary to reflect changing conditions.
- Operators failing to comply with the above requirements, state and site traffic regulations, and/or possess contraband items (including alcohol and prohibited substance possession and use), are subject to disciplinary actions up to and including termination.
- Insurance certification, registration, and a checklist to follow in case of an accident are in each vehicle which travels over public access roads and highways.

4.1.4 General Operating Practices

- Operators are to operate the vehicle, heavy equipment, or utility/golf cart according to his/her skills, training, the manufacturer’s recommendations, and in accordance with applicable traffic control rules.
- Re-fueling vehicles and heavy equipment with the engine running is prohibited. SMOKING or operating mobile/cell phones or radios while refueling or operating vehicles is also prohibited.
- Maintain a safe driving distance between vehicles, heavy equipment, and utility/golf carts.

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- Yield to pedestrians at designated crossings and other areas indicated by signs or established walking paths.
- Use of headlights on at all times is recommended when operating vehicles, heavy equipment and utility/golf carts.
- Use of seat belts is mandatory, where equipped, at all times. Prior to starting the vehicle, the operator verifies that all passengers are equipped with a separate functional seat belt, prior to vehicle movement.
- In snowy or inclement weather, clean vehicle, heavy equipment, and utility/golf cart of ice and snow on rear and front windshields, rear view mirrors and tail and headlights, prior to operating. Ensure windshield wipers are in proper operating order and used as necessary.
- For operation of vehicles or heavy equipment within enclosed structures (e.g., warehouse), contact Industrial Hygiene to perform a hazard evaluation prior to running engines.
- Distraction Avoidance:
 - Operator is to avoid activities that may distract from operating a vehicle, heavy equipment or utility/golf cart safely, such as:
 - Participating in activities with passenger(s) in the vehicle that distract driver attention.
 - Adjusting radios, tape players, and/or CD players while driving
 - Eating or drinking while driving
 - Use of Mobile Communication Devices (MCD):
 - Drivers are not to use any type of MCD (cellular/mobile phones, in-hand or hands-free devices or radios, walkie-talkies, paging or texting devices, personal data assistants or any other hand-held computers or portable electronic device) under any of the following circumstances:
 - Driving a company vehicle using a company-authorized MCD;
 - Driving a company vehicle using a personal MCD;
 - Driving a personal vehicle using a company-authorized MCD;
 - Driving a personal vehicle using a personal MCD for company business purposes;
 - If need arises to use such devices while on the road, pull the vehicle off the road and park in a safe location, and then answer and respond to the call.
 - Operation of other portable electronic devices that cause driver distraction are also prohibited while driving (e.g., operating MP3 players, iTouch, GPS devices, etc., while the vehicle/equipment/cart is in motion).
 - Reading any printed material (newspaper, drawings, books, etc.) while driving is prohibited.

NOTE: Under specific operational controls, two-way radios may be used during work operations where communication is required between the equipment operator and assisting personnel or for traffic control purposes and (or) during emergencies, as determined by management.

4.1.5 General Maintenance and Repairs

Based upon the manufacturer's recommendations, supervision ensures that their assigned vehicles, heavy equipment, and utility/golf carts are returned to the service department for preventative maintenance and scheduled servicing.

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4.2 Vehicles

The following applies to the operation of vehicles (e.g., passenger vehicles, vans, light duty “pick-up” trucks, and service and vendor trucks) in addition to those specified in Section 4.1 of this procedure.

- Do not park vehicles in fire lanes, road ways, next to emergency exit doors to facilities/buildings, or any other locations that would impede access to emergency responders and vehicles.
 - Securing vehicles:
 - When parking inside or outside the confines of the UPF construction perimeter, remove keys and lock government vehicles after the project scheduled work shift and whenever unattended.
 - If not equipped with an automatic backup alarm, sound horn prior to backing up to acknowledge to pedestrians that vehicle is backing up.
 - Vehicles will be shut-off when unattended, the key removed, and parking brake set.
 - Secure equipment and materials being transported in the trunk or cargo bay, including loose and heavy objects that could pose a projectile hazard in the event of a sudden stop or swerve.
 - Personnel are prohibited from riding in truck beds or in utility/golf cart material storage boxes.
- NOTE:** Under emergency conditions where an individual cannot self-rescue, passengers may be allowed to be transported short distances, in order to be **promptly** removed from a dangerous situation (e.g., fire, explosion, chemical release).
- Come to a complete stop prior to loading and unloading passengers.
 - Operators and passengers are to practice safe behaviors when operating or riding in a vehicle.

4.3 Heavy Equipment

The following applies to operation of heavy equipment (e.g., dozers, scrapers, excavators, graders, semi-trailer trucks, and dump trucks) in addition to those specified in Section 4.1 of this procedure.

4.3.1 Heavy Equipment Operator Training

- Construction Training provides employees with training on heavy equipment hazard identification and avoidance of such conditions as pinch points, swinging booms, moving equipment, raised loads, noise, and refueling.
- Heavy equipment operators are to possess a certification and/or union hall designation identifying what types of heavy equipment the employee is qualified to operate. The designation is determined through experience history and/or apprentice training programs.

4.3.2 Heavy Equipment Requirement

- Provide a continuous or intermittent back-up signal alarm.
- Vehicles having obstructed views to the rear shall not be driven unless:
 - The vehicle has a reverse signal alarm above the surrounding noise level or
 - Vehicle is backed up only when a spotter/equipment watch signals that it is safe to do so.
- Vehicle cabs are to be equipped with windshields and powered wipers along with defogging/defrost devices.

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- Haulage vehicles, whose pay load is loaded by means of cranes, power shovels, or similar equipment, shall have a cab shield and/or canopy adequate to protect the operator from shifting or falling materials.
- Ensure guards are in place for equipment that has exposed rotating or reciprocating machinery.

4.3.3 Heavy Equipment Operating Practices

- Do not park equipment in fire lanes, road ways, next to emergency exit doors to facilities/buildings, or any other locations that would impede access to emergency responders and (or) vehicles.
- Provide lighting, reflectors, or barricades to identify equipment left unattended adjacent roadways at night.
- When performing load lifts:
 - Operators are to verify that drifting loads do not traverse over nearby personnel.
 - Ensure that nearby personnel are aware of the operation, kept clear of the area, and never beneath lifted load areas.
 - Ensure a bell man or spotter is present to alert nearby personnel of overhead loads being lifted or being removed in accordance with UPF-CP-227, *Safety Watches*.
- Heavy equipment operators and equipment service personnel shall be aware of overhead and underground utility hazards.
- Use wheel chocks when parking (wheeled) vehicles on an incline.

4.4 Utility/Golf Carts

The following applies to the operation of utility/golf carts (e.g., club car, light utility vehicle, low speed vehicle) in addition to those specified in Section 4.1 of this procedure.

- Utility/Golf carts are intended for transportation of no more than two persons per seat.
- Do not park utility/golf carts in fire lanes, road ways, next to emergency exit doors to facilities/buildings, or any other locations that would impede access to emergency responders and (or) vehicles.
- Come to a complete stop to load and unload passengers.
- Operators and passengers are to practice safe behaviors when operating or riding in a utility/golf cart.
- Keep legs and arms inside the confines of the utility/golf cart.
- Do not overload or stack material above the sides of the cart box.
- Do not transport propane tanks in the golf cart.
- Do not pass other vehicles on the right.
- Do not travel behind larger vehicles while they are backing up.

4.5 Subcontractors

- This procedure applies to subcontractors who bring vehicles, heavy equipment and/or utility/golf carts onto the UPF Site, and as such, required to adhere to the UPF guidelines for operating and maintaining their equipment, including:
 - Providing manufacturer's operating instructions for each type of vehicle, heavy equipment and utility/golf cart, maintained onsite and are to be made available for review by Bechtel, and

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- Ensuring only trained and qualified personnel operate vehicles, heavy equipment, and/or utility/golf carts and it is maintained in proper working order.
- Construction equipment support vendors are to adhere to UPF guidelines for equipment maintenance with regard to the safe work practices outlined in this procedure and other procedures related to safe use and operation of equipment at the UPF project.
- Off-site maintenance shops are to perform technical inspections of subcontractor vehicles/equipment during normal servicing operations.
- Equipment having defects that are determined to be an operational safety hazard, are to be removed from service by placing a “Danger - Defective Tool/Equipment – Do Not Use” tag until repairs have been completed.

4.6 Spotters

Reference UPF-CP-227 for the requirements, duties, and responsibilities for Spotter/Equipment Watch and Traffic Watch (flagman).

Safety vest requirements for Spotters/Equipment Watch and Traffic Watch (flagman) is provided in procedure UPF-CP-205, *Personal Protective Equipment*.

4.7 Construction Phase Assessments

The VSMS should be reviewed throughout the course of the project with both formal and informal assessments. FSR is responsible for leading assessments, in conjunction with a representative from the construction organization, to evaluate the implementation and effectiveness of the VSMS. Lessons learned, through the assessment process are to be shared with project and all other appropriate personnel:

- Project assessments should occur at least once every 6 months, unless otherwise noted by the GBU ES&H Manager.
- Proactive measures should be taken to resolve driver vehicle safety concerns identified through applicable driving observation programs, and should be used during evaluation of a VSMS assessment process.
- Assessments are performed in accordance with CNS 02.03.14.06.05, *Planning, Performing, Documenting, and Reporting a Management Assessment*, where required.

5.0 RECORDS

All records generated as a result of this procedure are maintained in accordance with Y15-101, *Records and Controlled Documents*, and Y15-95-800, *UPF Document Management*.

Records generated during the performance of this procedure include:

None.

6.0 REFERENCES

6.1 Source References

- OSHA 29 CFR 1926.601, *Motor Vehicles*
- OSHA 29 CFR 1926.602, *Material Handling Equipment*
- OSHA 29 CFR 1926 Subpart CC, *Cranes and Derricks in Construction*
- Bechtel ES&H Core Process 229, *Vehicle Safety Management*

6.2 Interfacing References

- Y17-95-64-851, *UPF Construction Equipment Maintenance*.

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- CNS 02.03.14.06.05, *Planning, Performing, Documenting, and Reporting a Management Assessment*

7.0 EXHIBITS / APPENDICES / FIGURES

None.