



UPF PAGE/PROCEDURE CHANGE NOTICE (PRCN)

PRCN Number:	PRCN-UPF-CP-227-R08-02	Effective Date:	11/02/23
NOTE: PRCN Effective Date cannot precede effective date of associated document.			
<input checked="" type="checkbox"/> Intent Change		<input type="checkbox"/> Non-Intent Change	
Associated Document Number:	UPF-CP-227	Rev:	8
Associated Document Title: UPF Safety Watches			
Justification for Change:	Adding and clarifying procedural requirements for traffic flagging to address issues found in CR: 25774-000-GCA-GAM-04502, Y-12 APMO M&O Finding (F-1) - Procedural Requirements for Traffic Flagging Less Than Adequate (ASM-5.30.2023-6408)		
Identify the scope of the change, including mark-up (i.e., strike-through for deletions, colored text for additions) of any new, removed, or changed content.			
Change in Sections 3.0, bullet 3: From: <ul style="list-style-type: none"> Traffic Watch (flagman) To: <ul style="list-style-type: none"> Traffic Watch (Flagger) 			
Update Section 3.3: From: 3.3 Traffic Watch (Flagman) When a Traffic Watch has been deemed necessary, the following requirements apply for use of Traffic Watch personnel: <ul style="list-style-type: none"> A Traffic Watch is any person assigned the responsibility of directing, guiding, or otherwise advising the flow of traffic via the use of visible hand signals or other means. Training will be provided for use of standard hand signals as applicable for traffic control (see Appendix C, Standard Hand Signals). The construction project will provide substantial physical protection measures capable of withstanding vehicle impact (e.g., concrete barriers, earthen barriers) for personnel who are involved with directing/guiding vehicles on roadways with posted speed limits in excess of 20 miles per hour. The construction project will provide appropriate lighting arrangements for night work (when applicable), including adequate flashlights or other handheld lighting device for each Traffic Watch personnel. Where the Traffic Watch will direct traffic around obstructions in normal thoroughfares, the construction project will attempt to eliminate any need for reverse driving when vehicles are being guided by personnel on the ground. Flags, stop/slow signs, and/or other traffic signals will be used to direct traffic safely. Traffic watches shall wear orange vests, in accordance with UPF-CP-205. Traffic watches may only leave the work area when work has stopped and/or they are replaced with another traffic watch. Construction management will ensure that all areas where Traffic Watch personnel are used are monitored on a regular basis to ensure proper placement of Traffic Watch locations. Construction management will also modify arrangements as needed and/or eliminate the use of Traffic Watches when conditions no longer warrant the need. For Traffic Watch personnel having routine long term assignments at stationary locations, the construction project will provide suitable and appropriate shelter to protect these personnel from exposure to extended weather extremes (e.g., rain, extreme sun/heat, snow). Use of mobile phones by Traffic Watch personnel is prohibited while guiding vehicles, except where two-way Project radio communication is needed for the control of traffic. 			

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To:

3.3 Traffic Watch (Flagger)

The Project does not anticipate the use of Flaggers to control traffic under normal conditions. In the event a traffic pattern is altered due to construction activities, MUTCD, Manual on Uniform Traffic Control Devices for Streets and Highways – 2009 Edition, guidance will be applied for the use of signage and Flaggers.

The hazard identification and mitigation for these tasks will be done in accordance with Y17-95-64-823, *UPF Field Level Hazard Assessment/Job Hazard Analysis Program (FLHA/JHA) Process*.

Update Section 3.4:

From:

~~A Spotter is used to assist the equipment operator in maintaining adequate clearance between the equipment and hazards. When a Spotter is used, the following will apply:~~

- ~~• Spotters must be trained in the proper methods of signaling, as applicable, and directing movement of mobile equipment in order to avoid property damage and injury to personnel (see Appendix C).~~
- ~~• The operator and Spotter(s) will jointly identify and discuss their responsibilities, method of communication between each other, location of the Spotter(s), and blind spots during the Safety Task Analysis and Risk Reduction Talk (STARRT) Card process.~~
- ~~• The Spotter will establish and maintain visual and verbal contact with the operator at all times during the task.~~
- ~~• If visual or verbal contact is lost between the Spotter and the operator, then the operator:~~
 - ~~○ Must stop movement of the equipment.~~
 - ~~○ Resumes operation only after visual and verbal channels are re-established.~~
- ~~• Additional Spotters should be used, as needed, to safely move equipment through congested areas or areas with overhead hazards.~~
- ~~• Spotters are required when aerial man lifts and cranes are traveling and when forklifts operate in and around equipment or pipe racks.~~

To:

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.

The following practices should be considered when planning the activity:

- Achieving eye contact and an acknowledgment from the equipment operator before walking near or around heavy equipment
- Never having Spotters stand within the blind spot of equipment operators or truckers
- Never allowing personnel to stand within the swing radius of equipment while it is operating
- Checking around and underneath trucks and equipment for personnel before operating them

Update Section 3.5, 2nd paragraph:

From:

Prior to implementing an Overhead Safety Watch, the task/application must be evaluated by the Responsible Superintendent (Discipline Superintendent) and documented on the applicable ~~STARRT Card~~ for the activity.

To:

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.

Update Section 5.1, Source References:

~~Nuclear, Security & Environmental (NS&E) ES&H Manual 4SM-6BH-F0001, NS&E-227, Safety Watches~~

Update Section 5.2, Interfacing References:

U.S. Department of Transportation, Federal Highway Administration, Manual on Uniform Traffic Control Devices (MUTCD)



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Update Section 6.0, Supplemental Information:

~~Appendix B, Safety Watch Flowchart~~

~~Appendix C, Standard Hand Signals~~

Update Appendix A, Acronyms:

~~STARTR Safety Task Analysis and Risk Reduction Talk~~

FLHA Field Level Hazard Assessment

Update Appendix A, Definitions:

Flagger – A person who actively controls the flow of vehicular traffic on public streets and highways into and/or through a temporary traffic control zone using hand-signaling devices

Highway – A general term for denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way


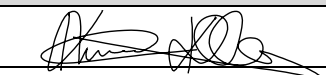
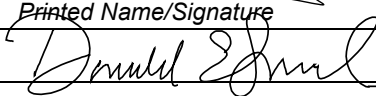
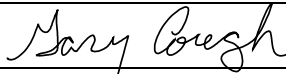
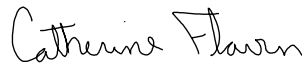
~~**Spotter** – A trained worker identified by the operator (or supervisor) who assists the operator with identifying hazards and obstacles that the operator may be unable to see while operating mobile equipment~~

Spotter – Project personnel identified by an operator (or supervisor) capable of assisting with identifying hazards and obstacles that may be in the operator's blind spot

Street – Refer to Highway

Temporary Traffic Control Zone – An area of a highway where road user conditions are changed because of a work zone or incident by the use of temporary traffic control devices, Flaggers, uniformed law enforcement officers, or other authorized personnel

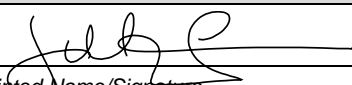
Remove Appendices B and C

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Associated Document Number:	UPF-CP-227			Rev:	08
Associated Document Title: UPF Safety Watches					
Identify the scope of the change, including any new, removed, or changed content. Notate any references, such as Condition Reports, that are driving the change					
<p>From:</p> <p>2.6 Safety Watch</p> <p>The Safety Watch is responsible for understanding and complying with the requirements of this procedure and how it applies to the work performed; identifying emerging hazards during work activities; pausing or stopping work until hazards are addressed and performing the watch responsibilities as the sole function for the protection of workers; and preventing property damage.</p> <p>To:</p> <p>2.6 Safety Watch</p> <p>The Safety Watch is responsible for understanding and complying with the requirements of this procedure and how it applies to the work performed; identifying emerging hazards during work activities; pausing or stopping work until hazards are addressed and performing the Watch responsibilities as their sole function when assigned as a Watch.</p> <p>From:</p> <p>3.5 Overhead Safety Watch</p> <p>An Overhead Safety Watch may be utilized to protect personnel from hazards created during elevated work. Some common applications of an Overhead Safety Watch include:</p> <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) • 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.) • In conjunction with a barricade for elevated work/overhead hazards <p>To:</p> <p>3.5 Overhead Safety Watch</p> <p>An Overhead Safety Watch is utilized to protect personnel from hazards created during elevated work. Examples include:</p> <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) • 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.) • In conjunction with a barricade for elevated work/overhead hazards (e.g. when 2:1 ratio of barricade cannot be achieved) 					

Implements Quality Requirements (Select One)			
<input checked="" type="checkbox"/> None	<input type="checkbox"/> BNI	<input type="checkbox"/> CNS	<input type="checkbox"/> BNI & CNS
Preparer			
UPF Construction Issues Management Procedure Compliance:	Jill S. Logsdon		04/23/21
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UCN-23182 (10-26-2020)
Y15-95-235

This document has been reviewed by a Y-12 DC / UCNI-RO and has been determined to be UNCLASSIFIED and contains no UCNI. This review does not constitute clearance for Public Release.

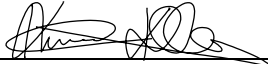
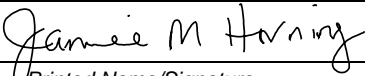
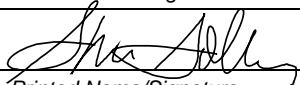
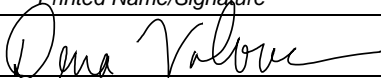
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Page 1 of 2

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04/27/21 11:15



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UPF Safety Watches



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Effective Date

Implements Quality Requirements

☒ None☐ BNI☐ CNS☐ BNI and CNS

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Name:  Date: 08/20/20

REVISION LOG

Revision 8	<input checked="" type="checkbox"/> Major intent <input type="checkbox"/> Minor intent <input type="checkbox"/> Non-intent
<ul style="list-style-type: none">• A periodic review was conducted on Revision 7 of this document and was documented on DPR-UPF-CP-227-07.• This revision incorporates the changes identified in and supersedes PRCN-UPF-CP-227-R07-01.• An evaluation determination has been performed confirming that this Command Media implements no quality requirements as tracked in the Programmatic Requirements Management System (PRMS).• Changes incorporated:<ul style="list-style-type: none">◦ Removed designated color from Section 3.4, Equipment Watch (Spotter).◦ Provided clarity on the application and function of and Overhead Safety Watch in Section 3.5, Overhead Safety Watch.◦ Updated references and acronym list.◦ Editorial changes.	
Revision 7	<input type="checkbox"/> Major intent <input checked="" type="checkbox"/> Minor intent <input type="checkbox"/> Non-intent
<ul style="list-style-type: none">• This revision provides current vest color designation and cosmetic changes to position titles.• An evaluation determination has been performed confirming this Command Media implements no Quality requirements, as tracked in PRMS.	
Previous revisions on record	

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1.0 INTRODUCTION

1.1 Purpose

This procedure establishes guidelines and standards for the duties and responsibilities of personnel assigned to be Safety Watches for a specific activity on the Uranium Processing Facility (UPF) construction site.

1.2 Scope

This procedure applies equally to all UPF construction site personnel, including subcontractors, during the course of the Project. A Safety Watch is a person specifically trained and assigned to warn others of potentially unsafe situations or emergency conditions and to provide safety action as necessary.

2.0 RESPONSIBILITIES

2.1 Site Manager

The Site Manager has the overall responsibility of ensuring the implementation of this procedure, ensuring that all Project personnel actively participate, and providing worker support, facilities, and other resources necessary to effectively carry out this procedure.

2.2 Environment, Safety, & Health Manager

The Environment, Safety, & Health Manager has the overall authority for interpretation of the regulations associated with the procedure and the interpretation of the procedure as to intent and application.

2.3 Environment, Safety, & Health Representative

The Environment, Safety, & Health Representative (ESH-R) has the responsibility of compliance oversight with the procedure through periodic field inspections and is responsible for supplying technical advice and interpretation of the environmental, safety, and health codes included in the procedure.

2.4 Discipline Superintendent

The Discipline Superintendent is responsible for being thoroughly familiar with this procedure and his or her individual responsibilities regarding compliance with, and implementation of, this procedure, pre-planning work activities to identify the appropriate tool/equipment to use, ensuring that only trained personnel are used in Safety Watch assignments, and ensuring workers understand the requirements of the procedure.

2.5 Supervisor

The Supervisor is responsible for ensuring that the applicable safety controls and processes are incorporated into the planning and execution of the work and that the workers are using the correct tool/equipment/personnel for the assigned task.

2.6 Safety Watch

The Safety Watch is responsible for understanding and complying with the requirements of this procedure and how it applies to the work performed; identifying emerging hazards during work activities; pausing or stopping work until hazards are addressed and performing the Watch responsibilities as their sole function when assigned as a Watch.

3.0 PROCESS

Types of Safety Watches include:

- Fire Watch (Hot Work)
- Confined Space Watch (attendant)
- Traffic Watch (Flagger)
- Equipment Watch (spotter)
- Overhead Safety Watch.

Workers assigned duties of a Safety Watch will be trained in accordance with their respective procedures and Y90-95-027, *UPF Training Program*.

NOTE: *More than one Safety Watch may be needed to assist with a specific work task.*

Safety Watches must be fully capable of informing others of emergency conditions and understanding their requirements.

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).

3.1 Fire Watch

A Fire Watch will be identified and signed on to the Hot Work permit when the following conditions exist:

- Hot work is performed outside of a Designated Hot Work Area
- Building construction combustible material or contents are closer than 35-ft. to the point of operation in all directions
- Wall or floor openings/penetrations within a 35-ft. radius of the point of operation expose combustible materials in adjacent areas, including concealed spaces in floors and walls.

Fire Watches will have:

- Training to understand the inherent hazards of the work location and Hot Work.
- Fire Extinguisher(s) positioned to protect the Hot Work area.
- Training in proper use of the equipment.

A worker assigned as a Fire Watch:

- Must wear an orange vest in accordance with UPF-CP-205, *Personal Protective Equipment and Safe Work Apparel*.
- Directly observes Hot Work activities to ensure that fire safe conditions, as specified in the Hot Work permit, are maintained. Such observations will continue

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while Hot Work is in progress or until such a time that the assigned Fire Watch is relieved by another qualified Fire Watch.

- Will remain at the work area for at least 30 minutes after Hot Work activities have stopped to ensure that no smoldering embers or slag exist.

Fire Watches will watch for fires in all exposed areas and notify supervision and other workers in the event of a fire.

The Fire Watch ensures that the Hot Work area is barricaded, if required by the permit, and keeps other personnel from entering the barricaded work area.

More than one Fire Watch is required if:

- Combustible materials that could be ignited by the Hot Work operation and that cannot be directly observed by the initial Fire Watch are present (e.g., when welding or cutting over grating surfaces adjacent to floor and wall openings).
- Fire prevention methods are not sufficient to adequately ensure the prevention of fires. The supervisor responsible for the welding and/or cutting activities then requires additional Fire Watches to guard against fires.

The Fire Watch will have the authority to stop welding and/or cutting work activities if unsafe conditions develop.

In the event of a fire, the Fire Watch:

- May attempt to extinguish the fire.
- Notifies and clears out nearby personnel.
- Ensures that emergency response has been summoned.

The Fire Watch shall notify the ESH-R if any fire extinguishers are discharged so that they may be refilled and appropriate clean up and disposal of the material can be completed.

Upon completion of the job and after it has been determined that no fires or smoldering materials are present, the Fire Watch returns the fire protection equipment to its original location. Workers assigned as Fire Watch must do so in accordance with Y17-95-64-877, *UPF Hot Work Permit*.

3.2 Confined Space Watch (Attendant)

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). Refer to Y73-95-802, *Confined Space Entry Program*, for Confined Space Watch responsibilities.

Workers assigned as a Confined Space Watches must wear orange vests in accordance with UPF-CP-205.

3.3 Traffic Watch (Flagger)

The Project does not anticipate the use of Flaggers to control traffic under normal conditions. In the event a traffic pattern is altered due to construction activities, MUTCD, Manual on Uniform Traffic Control Devices for Streets and Highways – 2009 Edition, guidance will be applied for the use of signage and Flaggers.

The hazard identification and mitigation for these tasks will be done in accordance with Y17-95-64-823, *UPF Field Level Hazard Assessment/Job Hazard Analysis Program (FLHA/JHA) Process*.

3.4 Equipment Watch (Spotter)

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.

The following practices should be considered when planning the activity:

- Achieving eye contact and an acknowledgment from the equipment operator before walking near or around heavy equipment
- Never having Spotters stand within the blind spot of equipment operators or truckers
- Never allowing personnel to stand within the swing radius of equipment while it is operating
- Checking around and underneath trucks and equipment for personnel before operating them

3.5 Overhead Safety Watch

An Overhead Safety Watch is utilized to protect personnel from hazards created during elevated work. Examples include:

- Short duration tasks with low-risk for dropped objects or similar hazards (e.g., inspections, moving cords, layout/measurements)
- 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.)
- In conjunction with a barricade for elevated work/overhead hazards (e.g. when 2:1 ratio of barricade cannot be achieved)

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.

- When an Overhead Safety Watch is used, the following will apply:
- 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.
- 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.
- 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.

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- 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.

4.0 RECORDS

None

5.0 REFERENCES

5.1 Source References

UPF-CP-214, *Barricades and Signs*

UPF-CP-229, *Vehicle Safety Management*

UPF-MANUAL-SH-A001, *UPF Elevated Work Manual*

Y15-101, *Records and Controlled Documents*

5.2 Interfacing References

UPF-CP-205, *Personal Protective Equipment and Safe Work Apparel*

U.S. Department of Transportation, Federal Highway Administration, Manual on Uniform Traffic Control Devices (MUTCD)

Y73-95-802, *Confined Space Entry Program*

Y90-95-027, *UPF Training Program*

6.0 SUPPLEMENTAL INFORMATION

Appendix A, *Acronyms and Definitions*

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APPENDIX A

Acronyms and Definitions

Acronyms

ESH-R	Environment, Safety, & Health Representative
FLHA	Field Level Hazard Assessment
NS&E	Nuclear, Security, & Environmental
UPF	Uranium Processing Facility

Definitions

Combustible Material	A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn
Designated Area	A permanent location designed or approved for Hot Work operations that does not require the use of a Fire Watch
Flagger	A person who actively controls the flow of vehicular traffic on public streets and highways into and/or through a temporary traffic control zone using hand-signaling devices
Gas(es)	Propane, argon, nitrogen, mixed gas, or other gases used with oxygen for cutting and welding activities
Hazardous Areas	Locations or activities identified by Supervision or Environment, Safety, & Health Manager as containing explosive, flammable, toxic, or radiologically contaminated atmospheres or surfaces
Highway	A general term for denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way
Hot Work	Work involving burning, welding, grinding, or a similar operation that is capable of initiating fires or explosions (Does not include Tungsten Inert Gas [TIG] Welding)
Operator	A worker that has manipulation control of mobile equipment (i.e., stop, start, up, down, forward, backward)
Spotter	Project personnel identified by an operator (or supervisor) capable of assisting with identifying hazards and obstacles that may be in the operator's blind spot
Street	Refer to Highway
Temporary Traffic Control Zone	An area of a highway where road user conditions are changed because of a work zone or incident by the use of temporary traffic control devices, Flaggers, uniformed law enforcement officers, or other authorized personnel
Welding/Cutting Operations	Processes such as arc welding, oxy-fuel gas welding, metal inert gas welding, grinding, open-flame soldering, brazing, thermal spraying, oxygen cutting, and arc cutting

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