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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.

Name: *Steven A. Buffalo* Date: 01/08/19

<i>ES&H Orientation, Training, and Development</i>
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REVISION LOG

Revision	Description	Intent	Non Intent
5	<p>Minor changes to Section 2.0, Construction ES&H Orientation, to delete a duplicate recommended training item and to clarify the expectations for submitting completed <i>New Employee ES&H Continuing Education and Development Checklists</i>.</p> <p>Form numbers CFN-1159, <i>Leadership Interview Scoresheet</i>, and UCN-23334, <i>UPF Responsibilities and Expectations</i>, were added to Section 8.0, Records.</p> <p>An evaluation determination has been performed confirming this Command Media implements no Quality requirements, as tracked in PRMS.</p>	X	
4	<p>Reformatted into Command Media and Guidance Document Template. No longer an adopted procedure.</p> <p>Revisions include alignment with Y90-95-027, <i>UPF Training Program</i>, and general update throughout the document to reflect current practices.</p> <p>Based on extent of revision, revision bars are not shown.</p>	X	
Previous revisions	On record		

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1.0 INTRODUCTION

1.1 Purpose

This procedure describes the contents of and the process for Construction Environment Safety & Health Orientation, on-going new personnel Environment, Safety, and Health (ES&H) orientation process, and examples of project specific ES&H training. This procedure complements requirements of Y90-95-027, *UPF Training Program*.

1.2 Scope

This procedure is applicable to the Uranium Processing Facility (UPF) construction site personnel, subcontractors, and vendors during the course of the Project.

2.0 CONSTRUCTION ES&H ORIENTATION

All Project personnel who have been granted or allowed unescorted access to the UPF Construction sites, which include the Y-12 main site, laydown areas, warehousing and fabrication areas will receive, at a minimum, the Construction ES&H Orientation.

The Construction ES&H Orientation is intended to be a formal session that provides an understanding of ES&H and Project requirements. It is designed to:

- Provide the personnel with the knowledge and information necessary to identify the hazards in his/her work environment and apply preventive measures and techniques to eliminate or reduce risk of illness and injury.
- Provide the personnel with the knowledge of environmental requirements, mitigation practices, and ES&H and sustainability policies.
- Promote the “Zero Incident Philosophy” by introducing all personnel to this concept, and how it can be achieved on the Project.

The Construction Manager (CM) or designee participates in each new hire orientation by beginning or closing it with a statement championing the ES&H process and expressing his/her expectations.

A UPF ES&H Handbook that contains environmental, safety, and health information and requirements, or an equivalent document (e.g., Pocket Points), will be issued to all new employees.

Personnel shall confirm receipt of training by signing an acknowledgement page or an equivalent sign-in document for the training session.

The ES&H Orientation will provide a standardized level of awareness training to the new employee. Typical topics discussed at the ES&H Orientation may include:

- Management commitment
- ES&H behavior overview
- General Project/facility rules
- Emergency procedures
- Drug and alcohol policy
- Personal protective equipment
- Fire prevention and protection

- Ladders/safe access to elevated work areas
- Hazard communication
- Housekeeping
- Barricades
- Hand and power tool safety
- Waste management
- Chemical management
- Spill prevention and control
- Erosion and storm water control
- Sustainability
- Incident investigation injury/illness reporting
- Safety Task Analysis Risk Reduction Talk (STARRT)/Job Hazard Analysis (JHA)
- ES&H Toolbox meetings
- Confined spaces
- Compressed gas cylinders
- Back injury prevention
- Fall protection/prevention
- Lock Out/Tag Out (LO/TO)
- Excavations and trenching
- Industrial Hygiene (noise, dust, mist, fumes)
- Where applicable, all training shall be provided in the language spoken by the workforce, and a test (oral or written) given to measure retention.

For the first four weeks BNI construction based employees are assigned to the field, the Supervisor will meet with new personnel and discuss the items listed in the forms UCN-23307A, B, C, and D, *New Employee ES&H Continuing Education & Development Checklists*, which are compiled in the table in Section 8.0 of this procedure. The Supervisor will complete these forms and return them to the Project Training Department.

The Supervisor is responsible for ensuring that all personnel reporting to him/her receive the Construction ES&H Orientation. If the personnel are assigned to the work area prior to the Construction ES&H Orientation, the Supervisor must contact the ES&H Manager/Supervisor to arrange for a condensed version of the orientation. Personnel will be scheduled to attend the next orientation.

In accordance with Y90-95-027, the UPF Training Department will develop a process to verify the training has been understood. Successful completion of the Construction ES&H Orientation requires completion of a knowledge verification.

3.0 SUPERVISORS' LEADERSHIP INTERVIEW

Each construction field-based Supervisor, regardless of level in the organization, will receive a Supervisors' Leadership Interview upon promotion, hire, or transfer. Refer to Appendix B for instructions to the Leadership Interview Questionnaire Handout.

This orientation will outline the duties and responsibilities of the Supervisor with regard to ES&H, and provide guidance on how to handle violations of Project work rules.

The Supervisors' Leadership Interview will be conducted by the ES&H Manager/Supervisor or by his/her designee.

The CM or designee will participate in each Supervisors' Leadership Interview by opening or closing with a statement championing the ES&H process and expressing his/her expectations.

Items discussed at the Supervisors' Leadership Interview may include:

- "Zero Incident Philosophy"
- People (behavior) based safety process
- New employee orientation process
- Supervisor ES&H meetings
- Employee ES&H committee
- Emergency procedures
- First aid and medical treatment process
- Incident reporting and investigations
- Safe work practices/areas
- Project procedure familiarization
- Safe work assignments and practices
- Environmental compliance and mitigation
- STARRT and JHA
- ES&H site inspection and documentation
- ES&H performance recognition
- Consequences for violating work rules
- Quality assurance and awareness

UCN-23305, *UPF Supervisor's Orientation Checklist*, CFN-1159, *Leadership Interviewer Score Sheet*, and UCN-23334, *UPF Responsibilities and Expectations* shall be used to ensure that each Supervisor receives the required ES&H information. When completed, these documents will be submitted to the UPF Training group for filing.

4.0 NEW EMPLOYEE CONTINUING ES&H EDUCATION & DEVELOPMENT (WEEKS 1-4)

Continuing education shall be used where the Project incorporates specific high-risk tasks, such as in the nuclear or chemical/refinery industry. The optional continuing education and development process for construction based employees personnel are designed to provide them with the knowledge and information necessary to perform work in keeping with ES&H requirements. It also reinforces comprehension and retention regarding ES&H practices and procedures through the use of multiple contact sessions.

Continuing education shall be used where the Project incorporates specific high-risk tasks, such as in the nuclear or chemical/refinery industry.

The following are steps in implementing the four-week continuing education and development process:

- All BNI employees and direct hire employees will be issued a sticker after receiving the construction orientation. This sticker will be unique to new employees only. The sticker will be placed on the new Project employee's hardhat, where it is visible to other personnel on the UPF construction site.
- Upon satisfactory completion of Week Four of the orientation process, the Supervisor or designee will remove the sticker that signified the employee was new on the Project.

4.1 Buddy System

At any time during the orientation process, the Supervisor may assign the new employee to work directly with a veteran employee to facilitate the transition into the workplace.

This provides the new employee with an opportunity to validate progress, and also an atmosphere in which to build constructive working relationships.

4.2 Assessment/Evaluation

The Supervisor or designee will interview, coach, and mentor the new Project personnel through the ES&H Orientation process. Based on feedback from the worker's Buddy or other veteran employee, the Supervisor and ES&H Manager may recommend further training for the new employee prior to continued employment in the workplace.

The areas needing improvement should be repeated. An evaluation can be done one week later.

5.0 VISITORS & VENDORS

All visitors and vendors must comply with applicable site rules and regulations concerning ES&H. Visitors and non-vendors who are to be in Construction areas as described in PL-CM-801768-A014, *CNS / BNI UPF Construction Work Area Access Requirements for UPF Construction* for more than five days will be required to attend a full Construction ES&H Orientation.

Visitors or vendors who are on site from one to five days will be required to attend the Construction Visitor Briefing described in PL-CM-801768-A014, *CNS / BNI UPF Construction Work Area Access Requirements for UPF Construction*. The Construction Visitor Briefing includes general site JHA briefing with visitors being escorted by qualified personnel.

6.0 SPECIALIZED TRAINING

Personnel at the Project or facility may require special training and certification, where necessary, in addition to the Construction ES&H Orientation. Special training may include:

- Respirator Protection
- Work in Confined Spaces
- Spotter/Flagger for Traffic and Equipment
- Safety/Fire Watch
- Scaffold Operations (Erecting/Dismantling) and Users
- Hazardous Waste Management
- People Based Safety/Human Performance Initiative
- First Aid/Cardiopulmonary Resuscitation/Automatic Electric Defibrillator

- Blood-borne Pathogens (General Employee Training)
- Articulating Work Platforms
- Cranes and Material Handling Awareness
- Drug and Alcohol Awareness (General Employee Training)
- Emergency Response
- Excavations and Trenching
- Forklift Operation
- Hearing Conservation
- LO/TO
- Material Specific Hazard Communication
- Non-Destructive Testing
- Powder-Actuated Tools
- Retraining shall be provided in accordance with the requirements of Y90-95-027.
- Rigging Methods
- Spill Prevention and Control
- Steel Erection
- Suspended Personnel Platforms

7.0 RECORDS

Records generated by this procedure shall be maintained in accordance with Y15-95-800, *UPF Document Management*. Record types for documents submitted to the UPF Document Management Center (DMC) are identified in ML-PS-801768-A001, *Uranium Processing Facility Project Master Document Type List*. Quality Type is listed as Quality-Lifetime (QA-L), Quality-Nonpermanent (QA-NP), or Non-Quality (Non-QA).

Records generated during the performance of this procedure include:

Record Number	Record Title	Record Holder	System/ Location	Quality Type
CFN-1159	Leadership Interview Scoresheet	UPF DMC	InfoWorks	QA-NP
UCN-23305	UPF Supervisor's Orientation Checklist	UPF DMC	InfoWorks	QA-NP
UCN-23307A	UPF New Employee Continuing ES&H Education and Development Checklist - Week No. 1	UPF DMC	InfoWorks	QA-NP
UCN-23307B	UPF New Employee Continuing ES&H Education and Development Checklist - Week No. 2	UPF DMC	InfoWorks	QA-NP
UCN-23307C	UPF New Employee Continuing ES&H Education and Development Checklist - Week No. 3	UPF DMC	InfoWorks	QA-NP
UCN-23307D	UPF New Employee Continuing ES&H Education and Development Checklist - Week No. 4	UPF DMC	InfoWorks	QA-NP
UCN-23334	UPF Responsibilities and Expectations	UPF DMC	InfoWorks	QA-NP

8.0 REFERENCES

8.1 Source References

4SM-6BH-F0001, *Bechtel NS&E, ES&H Manual*

Bechtel NS&E 102, *Orientation, Training and Development*

RIM Procedure 1, *Records Retention (2PP-P700-00013)*

8.2 Interfacing References

ML-PS-801768-A001, *Uranium Processing Facility Project Master Document Type List*

PL-CM-801768-A014, *CNS / BNI UPF Construction Work Area Access Requirements for UPF Construction*

Y15-95-800, *UPF Document Management*

Y90-95-027, *UPF Training Program*

9.0 SUPPLEMENTAL INFORMATION

Appendix A, *Acronyms and Definitions*

Appendix B, *Leadership Interview Questionnaire Handout (Optional Scenario Questions for Craft Supervision)*

APPENDIX A

Acronyms and Definitions

ACRONYMS:

CM	Construction Manager
CWP	Construction Work Package
DMC	Document Management Center
ES&H	Environment, Safety, and Health
JHA	Job Hazard Analysis
LO/TO	Lock Out/Tag Out
STARRT	Safety Task Analysis Risk Reduction Talk
UPF	Uranium Processing Facility

DEFINITIONS:

None

APPENDIX B

Leadership Interview Questionnaire Handout (Optional Scenario Questions for Craft Supervision)

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Scenario #1

You were asked to fill in for the Supervisor and will need to get the shift started. Here is a list of issues that arise before the shift begins:

- In the pre-job briefing, people seem not to be paying attention.
- The task you have been assigned will require a lot of coordination with other groups.
 - You have a Lock Out that was required to have been placed during the previous shift.
 - A scaffold had to be erected to allow access.
 - The welder has asked whether anything has changed from yesterday.
 - The welder also said he was putting down a lot of sparks below his work area and was not sure about the effect he was having on others.
 - One of your new crew members acknowledges he/she is not comfortable using the new tool issued to him/her yesterday.
- You get the overall comment from the group: “We know what we are doing. Just sit back and do our timecards.”

Questions

1. Pre-job briefing and STARRT card engagement are key components to a healthy safety culture. How will you ensure that each member of your work staff/crew is engaged in the pre-job process, and how will you address this situation/individuals who seemed to be disengaged? How do you get them engaged?
2. How will you address the coordination issues?
 - a. LO/TO
 - b. Scaffold
 - c. Worksite changes
 - d. Falling sparks
 - e. New tool concerns
3. What do you expect from your staff/crew when they experience changes in the worksite, tools, Construction Work Package (CWP), etc.?
4. Do you evaluate the strengths and weaknesses of the team when you're assigning work? Does this factor in when you assign specific tasks?
5. Now that these concerns have been brought up, how do you provide feedback? How often? Do you encourage a “questioning attitude”?
6. How do you determine whether the issue needs to be elevated? What if the issue doesn't get resolved to your satisfaction? What about the crew's satisfaction?
7. In the situation above, a LO/TO was required. Do you proceed with work “as-is”? What about the welding from heights? Do you allow the work to continue?

APPENDIX B
Leadership Interview Questionnaire Handout
(Optional Scenario Questions for Craft Supervision)

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8. What if the new tool is not covered in the JHA? What if it is, but it requires special training? How do you verify whether the crew is cleared to work with the tool? Could this be a change in CWP scope, and if so, how would you verify that?
9. How often are you willing to coach/correct someone before you elevate it up to your Supervisor? What if the behavior continues? Are there any items in the above scenario that you feel would require elevation? What if the behavior is not in accordance with the site work rules? What are your responsibilities?

NOTE: *This material may be given to the interviewee prior to the interview.*