

<b>SCAFFOLDING</b>	<b>Manual</b>	<b>ESHQ</b>
	<b>Document</b>	<b>TFC-ESHQ-S_IS-C-01, REV A-17</b>
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## **1.0 PURPOSE AND SCOPE**

This procedure establishes the basic safety requirements and safe work practices for the erection, use, inspection, and/or dismantling of scaffolding. This procedure applies to all Washington River Protection Solutions, LLC (WRPS) and subcontractor employees.

This procedure works in combination with the site-wide fall protection program, DOE-0346; safety inspection; work control; and pre-job briefing processes, which are governed by their own procedures (listed in Section 7.2). This procedure does not cover the following:

- Personnel hoists or man lifts
- Powered platforms for exterior building maintenance
- Crane suspended or forklift supported work platforms
- Elevating work platforms/aerial lifts
- Suspended scaffolding
- Vehicle mounted vertical lifts
- Fire-fighting apparatus.

## **2.0 IMPLEMENTATION**

This procedure is effective on the date shown in the header.

## **3.0 RESPONSIBILITIES**

### **3.1 Operations/Construction Management and Industrial Safety Staff**

Perform periodic surveillances during the erection, use, and dismantling of scaffolding.

### **3.2 Competent Person for Scaffolding**

Responsibilities include but are not limited to determining scaffolding rating requirements and scaffold type to best support the planned activities. (7.1.1, 7.1.2, 7.1.3, 7.1.4)

Types:

- Tube and Coupling Scaffold
- Welded Frame Scaffold
- System Scaffold.

Ratings:

- Light Duty
- Medium Duty
- Heavy Duty.

## **4.0 PROCEDURE**

### **4.1 Scaffold Erection and Dismantling**

NOTE 1: WRPS and TOC subcontractor Field Work Supervisors and Safety Professionals who have completed the required training may be designated as competent persons for the purpose of performing scaffold inspections.

NOTE 2: Scaffolding erectors and dismantlers working at elevations above 10 feet shall have fall protection, as prescribed in DOE-0346 and 29 CFR 1926, Subpart L, and shall be documented on the Fall Protection Work Permit (FPWP).

NOTE 3: Required walk-downs and pre-job briefings are conducted in accordance with TFC-OPS-MAINT-C-01 and TFC-OPS-MAINT-C-02.

- |                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Requesting Organization                                                    | <ol style="list-style-type: none"> <li>1. Determine the need for scaffolding.           <ol style="list-style-type: none"> <li>a. Identify special job needs (e.g., type of work activity, special configurations, location of access, scope of work, material handling, type of material being handled)</li> <li>b. Determine if scaffolding will be built over or around, above ground safety significant components (e.g., DST exhausters). If so, scaffolding must be evaluated by engineering or the manufacturer for seismic and wind loading in accordance with TFC-ENG-STD-06.</li> <li>c. Contact engineering, as necessary, to assist in making the determination in step 1.b.</li> <li>d. Request that scaffolding be erected.</li> </ol> </li> </ol> |
| Field Work Supervisor/Crane and Rigging Supervisor/Construction Management | <ol style="list-style-type: none"> <li>2. Ensure a competent person is assigned to oversee all phases of scaffolding activities in accordance with TFC-ESHQ-S-STD-29.</li> <li>3. Document this assignment and retain in the applicable manager's files.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Field Work Supervisor                                                      | <ol style="list-style-type: none"> <li>4. Ensure the scaffold is properly erected, safe to use, and properly dismantled.</li> <li>5. If scaffolding components are used to create a structure that will contain electrical equipment, ensure that proper grounding is established.</li> <li>6. Ensure scaffold erection includes manufacturer design specifications for seismic and wind loading if determined applicable in accordance with Section 4.1, Steps 1 b and c.</li> </ol>                                                                                                                                                                                                                                                                            |
| Field Work Supervisor/Crane and Rigging/Construction Management            | <ol style="list-style-type: none"> <li>7. Before beginning the work activity, ensure assigned scaffold workers have successfully completed the applicable courses or approved content equivalent course for subcontractors in compliance with 29 CFR 1910, Subpart D, Section 28, "Safety Requirements for Scaffolding. And 29 CFR 1926, Subpart L, Scaffolds.           <ul style="list-style-type: none"> <li>• Scaffold Erectors/Dismantlers - "Scaffold Erectors Training Course."</li> </ul> </li> </ol>                                                                                                                                                                                                                                                    |

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- Scaffold Users - “Scaffold Users Training Course,” before they are allowed to work on the approved scaffold.
- Scaffold Inspectors - “Scaffold Safety for Inspectors.”

8. Conduct walk-downs and pre-job briefings in accordance with TFC-MAINT-C-01 and TFC-OPS-MAINT-C-02 with the scaffolding competent person and assigned scaffold erectors to identify scaffold location and component parts required to erect the scaffold.
9. Determine the feasibility, safety, and appropriate means of providing a safe means of access and fall protection for the scaffold erector/dismantler, working at elevations above 10 feet. Fall protection, as prescribed in DOE-0346 and 29 CFR 1926, Subpart L, shall be documented on a Fall Protection Work Permit (FPWP). ( 7.1.4)

Competent Person  
for Scaffolding

10. Oversee all activities related to scaffold erection, inspection, movement, and dismantling.
11. Attach the appropriate Hanford Scaffold Status Tag near the access point of the scaffold. The appropriate tags will be attached to the scaffold at all times. New tags are located at area tool cribs. Permanent marker will be used to complete tags. All tags will be used once and then removed from the scaffolding and destroyed.

NOTE: A RED Status Tag shall be affixed to the scaffold at onset of scaffold erection, alteration, or dismantling activity.

- Red Tag – **Keep Off/Do Not Use** (see Figure 1). Scaffold is being erected, dismantled, or is not in compliance.

OR

- Yellow Tag – **Special Conditions/Additional Controls** (see Figure 2). Scaffold has been built to specification with certain exceptions noted on tag (e.g., lack of toe boards, handrail not of specified height).

OR

- Green Tag – Scaffold Is Erected To Code/Approved For Use (see Figure 3)

AND

- Inspection Tag (required with yellow or green tag) – **Scaffold Inspection Tag** (Date and Shift/Time of Inspection and no color requirement) (see Figure 4).

12. Perform required scaffold inspections once scaffold erection has been completed and complete Scaffold Inspection Tag.
  - a. Use Site form A-6002-119 for scaffold inspection criteria.
  - b. For Construction Use scaffold inspection frequency, inspect once scaffold has been erected and before each shift scaffold is to be used. (7.1.1, 7.1.2, 7.1.4)
  - c. For Maintenance/Operations/Surveillance/Modification Use scaffolds inspection frequency, inspect once scaffold has been erected and at a frequency to ensure scaffold is maintained in safe condition. User organization with concurrence from competent person, determines inspection frequency and documents the frequency on the inspection tag. (7.1.1, 7.1.2, 7.1.4)
  - d. Also inspect all scaffolding after any modification or event that could render the scaffold unsafe. (7.1.1, 7.1.2, 7.1.3, 7.1.4)

#### 4.2 Scaffold Use

Field Work  
Supervisor/First Line  
Manager

1. Ensure all scaffold users have successfully completed the training course "Scaffold Users Training Course."

Users

2. Check for the presence of a scaffold Status Tag and Scaffold Inspection Tag; note any special conditions and comply with special instructions before accessing the scaffold. The User Scaffold Checklist (Attachment A) is available for guidance on the proper use of scaffolding.
3. Work only from a GREEN or YELLOW-tagged scaffold with a current inspection tag.
4. Ascend/descend a scaffold only with the knowledge and expertise to do so safely using approved access provided.

Competent Person  
for Scaffolding

5. Oversee scaffold erection, movement, alterations, and dismantling.

#### 5.0 DEFINITIONS

Competent person. One who is capable of identifying existing and predictable hazards in the surroundings or working conditions, which are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. The competent person will be designated field work supervisors, safety professionals, or hoisting and rigging personnel who have completed scaffold inspectors training. Construction Subcontractors will designate a competent person for scaffolding. The competent person will have scaffold inspectors training or an equivalent training course approved by Training. Construction & Commissioning forces will maintain a list of designated competent persons for scaffolding.

Construction Use. Scaffold that is erected solely for Construction activities such as the installation of new equipment.

Maintenance Use. Scaffold that is used for “like for like” replacement of existing equipment or observation/maintenance activities of existing equipment.

Periodic. Frequently enough so that there is a good likelihood that problems will be found before they pose a hazard to employees or for their detrimental effects to occur.

Qualified person. One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project. As this relates to design, the qualified person is one who has the ability to determine the type of scaffold needed for a particular job, to include safe loading of the scaffold system in accordance with the design requirements of OSHA and the manufacturer.

## **6.0 RECORDS**

No records are generated in the performance of this procedure.

## **7.0 SOURCES**

### **7.1 Requirements**

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910, Subpart D, Section 28, “Safety Requirements for Scaffolding.”
3. 29 CFR 1910.29, “Manually Propelled Mobile Ladder Stands and Scaffolds.”
4. 29 CFR 1926, Subpart L, Sections 451- 454, “Scaffolds.”

### **7.2 References**

1. ANSI-A10.8-2001, “Safety Requirements for Scaffolding.”
2. DOE-0346, “Hanford Site Fall Protection Program (HSFPP).”
3. OSHA CPL 2-1.23, “Inspection Procedures for Enforcing Subpart L, Scaffolds Used in Construction.”
4. TFC-BSM-IRM\_DC-C-02, “Records Management.”
5. TFC-ESHQ-S\_SAF-C-12, “Safety Inspections.”
6. TFC-OPS-MAINT-C-01, “Tank Operations Contractor Work Control.”
7. TFC-OPS-MAINT-C-02, “Pre-Job Briefings and Post-Job Reviews.”
8. TFC-ESHQ-S-STD-29, “Competent/Qualified Persons.”

Figure 1. Red Status Tag (Typical)



Figure 2. Yellow Status Tag (Typical).



Figure 3. Green Status Tag (Typical).



Figure 4. Scaffold Inspection Tag (Typical).

Scaffold Inspection Tag		
<i>Use Sharpie pen to fill out tag</i>		
Date of Inspection	Shift/Time	Inspectors Signature

**Construction**  
A designated competent person performs the inspection prior to use each shift

**Maintenance/Operations/Surveillance/Modification**  
User organization, with concurrence from competent person, determines inspection frequency; check the inspection frequency box that is applicable:

Prior to Use    1 wk.    2 wks.    Other (specify)  
                       

Scaffold built to (check one):

Light Duty     Medium Duty     Heavy Duty  
 25psf            50psf            75psf  
 (Duty Rating x Scaffold Area=MIL dispersed load)

Comments: \_\_\_\_\_

Inspection Items
Completed scaffold status tag attached near the access point
Ladder, Stairway, or special-design framing installed for access
Scaffold unit plum and level, resting on stable footing and firm foundation (including base plate)
Diagonal cross-bracing in place to support legs
Guying, Tying or bracing installed to maintain scaffold unit stability where height to base size exceeds 4:1 ratio
Scaffold unit is stable for the work to be performed where the height to base size ≤ 4:1 ratio
Visual inspection completed for presence of loose, damaged or missing components (e.g., locking pins, planking, access framing, bracing)
Working level platform(s) fully planked between guardrails and secured to prevent movement
Platform free of debris and slipping/tripping hazards
Platform guardrails firmly in place on all open sides/ends, where required
Falling object protection provided by installed toe-boards or screening at the working platform level(s), or use of area barricades or canopy

### **ATTACHMENT A - USER SCAFFOLD CHECKLIST**

Use scaffolds only for their intended purpose.

Do not use unstable objects or makeshift devices to increase the working height of the scaffolds. Use portable ladders as a means of increasing the working height only after the competent person has determined that the stability of the structure has not been compromised, and adequate fall protection is in place.

Do not straddle, stand on, or work outside of the guardrail.

Use mobile scaffolds on firm, level surface. Lock the casters or wheels before using.

Do not "ride" on a scaffold while it is being moved.

Remove or secure any tools or materials before moving or relocating a scaffold.

Use designed access means to descend or ascend a scaffold (stairs, attached ladder, or specially designed end frames). Do not use cross bracing or side rails.

Keep only the tools and materials on the platform that are necessary to perform the task. Control all slipping and tripping hazards by removing or securing the tools/materials.

Use fall protection systems (guardrail systems or personal fall arrest systems) when working six feet or more above a lower level.

Work from tagged scaffolds only. Comply with special conditions/additional controls noted on the access tag. Do not modify or remove a scaffold system/component or status tag. Notify supervision immediately if a scaffold is damaged, weakened, or otherwise deficient.

Do not position yourself or use tools/equipment where there is a possibility of contacting an energized overhead line. Contact Electrical Utilities Operations for additional requirements if any portion on your body, tools, or materials will come within 20 feet of the energized line.