



## Site Procedures Approved Terminology Replacement List

Approved Terminology Replacements	
Terminology to be Replaced	Substituted Verbiage
AGSC	M&O Contractor or MOC
Boeing	M&O Contractor or MOC
Construction Management Services or CMS contractor	M&O Contractor or MOC
DynMcDermott or DM or Company	M&O Contractor or MOC
DM Contract No.	M&O Contract
<b>Organizational Changes</b>	
William Gibson or "Hoot"	DOE Project Manager or DOE PM
Robert (Bob) McGough or DM Project Manager or CEO	MOC Project Manager or MOC PM
Randy Sutton (Acting) or DM General Counsel	MOC General Counsel or MOC GC
Scott Landry or DM APM, O&M and COO	MOC APM, O&M
APM, Cavern Integrity	Senior Director, Cavern Integrity
Colleen Yates or DM APM, Business Operations and CFO	MOC APM, Business Operations and CFO
APM, Security and Emergency Preparedness or Director, Security and Emergency Preparedness Division	Senior Director, Security & Emergency Preparedness
Henry Schmidt, Jordan Jones, or Duane Johnson	Senior Director, Security & Emergency Preparedness
Leslie Williams or APM, Data Systems or Data Systems Director	Senior Director, Data Systems
William Bozzo or DM APM, ES&H	MOC APM, ES&H
Walt Newcomb or DM Director, Energy & Sustainability	Director, Environmental
J.P. Martinez or DM APM, Engineering	MOC APM, Engineering

### ACRONYMS

AGSC	ASRC Gulf States Constructors
APM	Assistant Project Manager
ASRC	Arctic Slope Regional Corporation
CAS	Contractor Assurance System
CFO	Chief Financial Officer
COO	Chief Operating Officer
ES&H	Environment, Safety, and Health
GC	General Counsel
M&O	Management and Operating
MOC	Management and Operating Contractor
O&M	Operations and Maintenance
PM	Project Manager

## 43. SCAFFOLDING

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### 43.1. GENERAL REQUIREMENTS

This section is designed to ensure that safe working conditions exist prior to, during, and after work activities at elevated heights involving the use of scaffolding. This section applies to all scaffolds used on the SPR. Note the following general requirements:

- a. **Scaffolds shall only be erected or modified by a competent person.**
- b. Scaffolds shall be erected for persons engaged in work that cannot be done safely from the ground, from solid construction, or a manlift or other similar equipment.
- c. Ladders used for scaffolding must conform with 29CFR 1910.25 and 1910.26.
- d. The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling and displacement.
- e. Guardrails should all be 2 x 4 inches or the equivalent, installed no less than 36 inches or more than 42 inches high, with a midrail, when required, of 1 x 4-inch lumber or equivalent.
  1. Supports should be at intervals not to exceed 10 feet.
  2. Toeboards shall be a minimum of 4 inches in height.
- f. Scaffolds and their components shall be capable of supporting at least four times the maximum intended load without failure.
- g. Scaffolds and other devices shall be maintained in safe condition.
- h. Scaffolds shall not be altered or moved horizontally while they are in use or occupied.
- i. Scaffolds shall be inspected daily by a competent person prior to use. Any alteration(s) made to the scaffolding after its inspection shall be re-inspected and approved by a competent person prior to use.
- j. Any scaffold identified as damaged or weakened from any cause shall be red tagged and shall not be used until repaired and inspected by a competent person.
- k. Scaffolds shall not be loaded in excess of the working load for which they are designed.
- l. All load-carrying timber members of scaffold framing shall be a minimum of 1,500 f. (Stress Grade) construction grade lumber.
- m. All dimensions are nominal sizes as provided in the American Lumber Standards, except that where rough sizes are noted, only rough and undressed lumber of the size specified will satisfy minimum requirements.
- n. All planking shall be Scaffold Grade as recognized by grading rules for the species of wood used. The maximum permissible spans for 2 X 9-inch or wider planks are shown in 29CFR 1910.28(a)(9).
- o. Nails or bolts used in the construction of scaffolds shall be of adequate size and in sufficient numbers at each connection to develop the designed strength of the scaffold. Nails shall not be subjected to a straight pull and shall be driven full length.

**NOTE**

Where nominal sizes of lumber are used in place of rough sizes, the nominal size lumber shall be such as to provide equivalent strength to that specified in 29CFR 1910.28, tables D-7 through D-12 and D-16.)

- p. All planking or platforms shall be overlapped (minimum 12 inches) or secured from movement.
- q. An access ladder or equivalent safe access shall be provided.
- r. Scaffold planks shall extend over their end supports not less than 6 inches nor more than 18 inches.
- s. The poles, legs, or uprights of scaffolds shall be plumb, and securely and rigidly braced to prevent swaying and displacement.
- t. Materials being hoisted onto a scaffold shall have a tag line.
- u. Overhead protection shall be provided for personnel on a scaffold exposed to overhead hazards.
- v. Scaffolds shall be provided with a screen between the toeboard and the guardrail, extending along the entire opening, consisting of No. 18 gauge U.S. Standard Wire, one-half-inch mesh or the equivalent, where persons are required to work or pass under the scaffolds.
- w. Employees shall not work on scaffolds during storms or high winds, as determined by the competent person
- x. Employees shall not work on scaffolds that are covered with ice or snow, unless all ice or snow is removed and planking sanded to prevent slipping.
- y. Tools, materials, and debris shall not be allowed to accumulate in quantities on the scaffold.
- z. Only treated or protected fiber rope shall be used for or near any work involving the use of corrosive substances or chemicals.
- aa. Wire or fiber rope used for scaffold suspension shall be capable of supporting at least six times the intended load.
- bb. The use of shore, lean-to, or ladder cross piece scaffolds is prohibited.
- cc. Scaffolds shall be secured to permanent structures through use of anchor bolts, reveal bolts, or other equivalent means. Window cleaners' anchor bolts shall not be used.
- dd. Special precautions shall be taken to protect scaffold members, including any wire or fiber ropes, when using a heat-producing process.

**43.2. PROCEDURES****43.2.1. General**

- a. Erection, modification, and changes of scaffolding will be performed under supervision of the competent person.
- b. The competent person and supervisor will verify that scaffolding meets OSHA and manufacturer's requirements.
- c. Scaffolding that does not meet OSHA requirements will be tagged out as unsafe. DM's tagout system for scaffolding is explained in 43.2.1.
- d. The competent person will verify the condition of scaffolding daily prior to the start of each shift during which the scaffold will be used and update the tag. They will re-inspect any scaffolding that has been modified or altered prior to its use.

**43.2.2. Tags Used on Scaffolding**

- a. Green Tagged Scaffold: (Scaffolding that meets all OSHA requirements)

1. Handrails and midrails are installed on all sides
  2. All scaffold feet on solid footing. (No rolling scaffolds.)
  3. All elevated work platforms are fully decked
  4. Toeboards are installed on all outside edges of scaffold deck
  5. Ladder is provided, extending from bottom of scaffold to a minimum of 3 feet above work platform
  6. Scaffold is properly braced.
- b. Yellow Tagged Scaffold:
1. Caution must be exercised when using yellow tagged scaffolding because the scaffolding is missing one or more of the requirements listed under the green tag category.
  2. Yellow tagged scaffolding can be used on the SPR, when additional hazard controls are in place. An example of its use would be scaffolding for which the guard rail has yet to be installed. Its use would require approved fall protection.

**NOTE**

Scaffolding with structural deficiencies will not be used on the SPR.

- c. Red Tagged Scaffold: Red tagged scaffolding is incomplete and will not be used.

**DANGER**

**DO NOT USE RED TAGGED EQUIPMENT.**

- d. Missing Tags: Any scaffold missing its tag because of wind, bad weather, or other conditions shall be considered Red Tagged (incomplete) and cannot be used until it has been inspected by a competent person.
- e. Reference section 41 for examples of the tags used.

### 43.3. REQUIREMENTS FOR TYPES OF SCAFFOLDING

The OSHA requirements for specific types of scaffolding are contained in the following sections:

- a. Wood Pole Scaffolding, 29CFR 1910.28(b)
- b. Tubular and Coupler Scaffolds, 29CFR 1910.28(c)
- c. Tubular Welded Frame Scaffolds, 29CFR 1910.28(d)
- d. Outrigger Scaffolds, 29CFR 1910.28(e)
- e. Boatswain's Chair, 29CFR 1910.28(j)

### 43.4. TRAINING REQUIREMENTS

Employees who build scaffolds will be trained in their construction by a competent person. Instruction will include classroom and hands-on instruction and training on the erection and dismantling of scaffolds, both tube type and welded forms.

- a. Initial training for a competent person shall be 8 hours.
- b. For recertification, employees shall retake the training every 3 years.
- c. Initial training will be repeated if the procedures change or when an employer has reason to believe there are deviations from or inadequacies in the employee's knowledge.
- d. Additional training may be required if a new type of scaffolding is introduced.

The training will include the following at a minimum:

1. Terminology applied to scaffold parts
2. How to properly erect scaffolds
3. Proper use and maintenance of scaffold parts
4. Proper dismantling and storage of scaffold parts
5. Familiarity with surfaces that require additional footing to support scaffolds
6. Understanding tag requirements on scaffolding.

**43.5. TABLES: SAFETY TAG AND SIGN REQUIREMENTS**

<b>TABLE 43.1. SCAFFOLDING RESPONSIBILITIES</b>	
<b>Position or Department</b>	<b>Responsibility</b>
Site Director	a. Ensure scaffolding being erected meets the requirements of 29CFR1910.28 and this section of the Accident Prevention Manual. b. Designate site personnel who are competent persons for scaffolding.
Supervisor	a. Assign a designated competent person when scaffolding is used. b. Inspect scaffolding with a competent person when scaffolding has been erected, moved, or modified. c. Ensure employees understand the requirements of this section. d. Submit a list of trained competent personnel to the site director for designation.
Competent Person	a. Receive training as a competent person. b. Ensure that scaffolds erected or modified meet the requirements of this section and OSHA requirements. c. Inspect scaffolding daily, looking for damaged or missing components of the scaffold. d. Tag scaffolding with a green, yellow, or red tag depending on its condition. If scaffold is yellow tagged, specify the reason and acceptable alternative hazard controls (like fall protection) if any.
Employee	a. Before climbing onto scaffolding, make sure scaffolding has a tag that provides the condition of the scaffolding. Review information provided on the tags and make sure it has been updated. b. Report when conditions of the scaffolding change to supervisor or competent person. c. Do not use scaffolding that is red tagged out. d. Do not use scaffolding that is yellow tagged unless additional hazard controls are in place.
Site Safety Specialist	a. Provide technical support for scaffolding when requested. b. If qualified, provide competent person training when requested. c. Periodically monitor scaffolding that is erected on site to ensure that it meets the requirements of this section and OSHA.
New Orleans Safety	a. During the annual assessment, inspect scaffolding erected on site. b. Provide the scaffold training requirements and review subcontractor scaffolding training provided to the sites.
Site Construction Managers	a. Ensure sub-contractors meet the expectations of this APM.