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1-3 RESPONSIBILITIES

1-3.1 Scope

This Hanford Site Hoisting and Rigging Manual (HSHRM) chapter provides guidance in delineating the responsibilities of personnel and organizations directly involved in hoisting and rigging (H&R) activities at the Hanford Site.

NOTE: *Job classification terms used in this HSHRM (e.g., rigger, operator, and inspector) refer to the function performed and in no way relate to a classification in any union or bargaining unit.*

1-3.2 Personnel Responsibilities

1-3.2.1 Contractor Responsibilities

Hanford Site contractors shall establish programs based on equipment manufacturers' specifications and limitations for operation, maintenance, and inspection of equipment addressed by this HSHRM. Where manufacturers' specifications are not available, operation limitations and maintenance and inspection requirements assigned to the equipment shall be based on determinations of a qualified person competent in this field and such determinations shall be appropriately documented and disseminated to equipment operators and maintenance and test personnel.

1-3.2.2 Supervisor or Manager, Hoisting and Rigging Operations

A supervisor or manager shall be responsible for each H&R operation and shall ensure that:

- a. Qualified personnel are assigned to operate equipment and perform hoisting and rigging tasks.
- b. Equipment is operated safely.
- c. Preplanned and approved H&R instructions are used when necessary and always for critical lifts.
- d. Equipment found to be unsafe or requiring restrictive use is properly tagged.
- e. The equipment custodian is notified of equipment problems.
- f. A designated leader (DL)/lift director shall be assigned to hoisting and rigging operations that require more than one person. See Sections 1-3.2.4 and 1-3.2.5.

1-3.2.3 Equipment Maintenance Supervisor or Manager

- a. Equipment is properly inspected, maintained, tested, and repaired by qualified personnel.
- b. Inspection, maintenance, and repair personnel have the tools to safely accomplish their work.
- c. Ensure that records of the maintenance, repair, inspection, and testing are available for audit in a maintenance file.

- d. Responsible inspection, maintenance, and test personnel have access to the following information, as applicable:
 - Operating instructions
 - Maintenance, repair, and parts information furnished by the manufacturer or the responsible maintenance/engineering organization
 - The manufacturer's recommendations as to points and frequency of lubrication, maintenance of lubrication levels, and types of lubricant to be used
 - Maintenance or repair procedures from the manufacturer or responsible maintenance/engineering organization
 - Wiring diagrams
- e. Inspection, maintenance, and repair activities are documented in accordance with the requirements of this HSHRM.
- f. Personnel responsible for inspection or maintenance are familiar with the applicable contents of all equipment manuals.

1-3.2.4 Designated Leader (DL)/Lift Director for Critical Lifts

Management shall assign a DL/lift director for critical lifts. The DL/lift director may be a crew member or any qualified person. (See Chapter 1-4, *Personnel Qualifications and Training Requirements*, for DL/lift director qualifications.) The DL/lift director for critical lifts shall perform those activities listed in Section 1-3.2.5 as well as ensuring that:

- a. A critical lift procedure is prepared.
- b. The critical lift procedure is properly approved before implementing (refer to Chapter 1-5, Section 1-5.5.1, *Critical Lift Plan Approval*).
- c. A documented pre-lift meeting is held and personnel understand how the job will be done.
- d. Management provides qualified personnel (e.g., operators, riggers, flagman, DL/lift director).
- e. Proper equipment and hardware are identified in the critical lift procedure.
- f. The lifting operation is directed by a DL/lift director to ensure that the job is done safely and efficiently.
- g. Involved personnel are familiar with, and follow, the critical lift procedure.
- h. After the critical lift is completed, critical lift documentation is transmitted to the manager for whom the lift was done. The DL/lift director should advise responsible personnel that this documentation is subject to audit for one year. (See Chapter 1-5, Section 1-5.7, *Critical, Special, and Engineered Lift Documentation and Record Retention*).

1-3.2.5 Designated Leader

A designated leader shall be appointed to H&R activities that involve more than one person. Normal forklift truck material handling operations are not considered H&R activities and do not require a DL/lift director. The DL/lift director may be the operator, a crew member, or any qualified person. (See Chapter 1-4, *Personnel Qualification and Training Requirements*.) The DL/lift director shall:

- a. Ensure that a flagman or signaler, if required, is assigned and identified to the hoist/crane/equipment operator.
- b. Ensure that management provides qualified personnel and personnel understand how the job is to be done.
- c. Ensure that the weight of the load is determined, that the proper equipment and hardware are selected and inspected, and that the capacity of the lifting device is not exceeded.
- d. Ensure that the equipment is properly set up and positioned.
- e. Examine the work area for hazardous or unsafe conditions.
- f. Direct the lifting operation to ensure that the job is done safely and efficiently.
- g. Ensure that the job is stopped when any potentially unsafe condition is recognized.
- h. Be present at the jobsite during lifting operations.
- i. Stop operations if alerted to an unsafe condition affecting those operations.
- j. Ensure that the preparation of the ground conditions needed to support crane operations has been completed before crane operations commence when mobile cranes are used. If the operator, DL/lift director, or AD director have concerns pertaining to ground conditions they shall notify the controlling entity.
- k. Ensure swing radius hazards are addressed, when applicable, per OSHA [29 CFR 1926 Subpart CC](#), Section 1926.1424, *Work Area Control* (see Chapter 3-7) and only authorized personnel are allowed in identified hazard areas.
- l. Ensure only authorized personnel enter the fall zone to perform or conduct activity that cannot be performed other than when a load is suspended or being landed.
- m. Use hoisting routes that minimize the exposure of employees to hoisted loads where available.
- n. Ensure necessary traffic controls are in place to restrict unauthorized access to the crane's work area.

If an injury or accident occurs, ensure that the emergency is promptly reported. (Call 911; call 1-509-373-0911 if using a cellular phone.) Take charge of the accident scene pending arrival of emergency services personnel.

1-3.2.6 Operator

The operator shall perform the following activities:

- a. Safely operate equipment.
- b. Follow the equipment operating guidelines and the load charts.
- c. Perform the pre-use and frequent equipment inspection.
- d. Ensure that the load will not exceed the rated capacity of the equipment.
- e. Abide by any restrictions placed on the use of the equipment.
- f. Ensure inspections are current via inspection sticker, other documentation, or verbal confirmation from the equipment custodian.

1-3.2.7 Rigger/Signal Persons

The rigger shall perform the following activities:

- a. Ensure that the rigging equipment and materials have the required capacity for the task.
- b. Ensure the load's weight and center of gravity are determined.
- c. Ensure that all rigging equipment and materials are in good condition, have up-to-date inspections, and are properly attached and protected from damage.
- d. Rig the load to ensure balance and stability according to good rigging practices, including the use of a tag line when needed.
- e. Verify that rigging equipment and materials comply with the procedure, if applicable.
- f. Confirm that the load path is clear of personnel and obstacles prior to moving the load and throughout the task.
- g. Use standard/special signals to communicate with the operator, from the operator's perspective.

1-3.2.8 Equipment Custodian

Management shall designate an individual who shall have custodial responsibility for each crane, hoist, lift truck, or other H&R equipment that requires scheduled maintenance, inspection, and record keeping. (The custodian may be thought of as the equipment "owner.") The custodian can be assigned by facility, geographical area, individual equipment item, or other method as deemed appropriate by management. The custodian shall perform the following activities:

- a. Verify that operating equipment is maintained and maintenance, inspection, and testing of the equipment remain current.
- b. Verify that equipment is properly tagged and, if necessary, removed from service when discrepancies are found during inspection or operation.

NOTES:

1. It is important that equipment users know how to contact the equipment custodian. A method should be devised so that equipment users can easily identify and contact the equipment custodian.
2. See Chapter 3-1, Section 3-1.5.2, *Forklift Truck Custodian*, for specific duties of a forklift truck custodian.
3. Duties listed in Section 1-3.2.8 are considered a summary of an equipment custodian's responsibility. It is important to recognize that more specific, and possibly additional, responsibilities are stated in individual chapters.

1-3.2.9 Assembly/Disassembly Director

The Assembly/Disassembly Director (A/D Director) is responsible to direct both the assembly and/or disassembly of equipment (cranes) covered under OSHA [29 CFR 1926 Subpart CC, *Cranes and Derricks in Construction*](#) (see Chapter 3-7), and ASME B30 standards. With regard to tower cranes, “erecting and climbing” replaces the term “assembly,” and “dismantling” replaces the term “disassembly.” Regardless of whether the crane is initially erected to its full height or is climbed in stages, the process of increasing the height of the crane is an erection process. See Chapter 1-4, *Personnel Qualifications and Training Requirements*, and Chapter 3-7.

1-3.2.10 Approvers of Hoisting and Rigging Lift Plans

The following personnel's approvals on a hoisting and rigging lift plan indicate endorsement of the subject and content of the plan and fulfillment of the signer's area of responsibility.

- **Manager** – Verifies the lift plan approvers are qualified in the area they approved and authorizes the plan's implementation.
- **Qualified Rigging Engineer** – Verifies the lift plan calculations are accurate for capacities based on rigging and the configuration of the item to be lifted, design and dimensions, load description, weight and field conditions. The condition of the item to be lifted including the lift points are confirmed by the Rigging Engineer or his designee.
- **Qualified Safety Representative** – Verifies the lift plan addresses and provides applicable administrative and physical controls to mitigate potential and identified hazards.
- **Technical Approver** – Verifies the lift plan, as a minimum, addresses and contains the appropriate information that complies with the technical requirements applicable to the personnel, equipment, and activity covered by the plan as required by this HSHRM.

1-3.3 Organizational Responsibilities**1-3.3.1 Responsible Safety Organization**

The responsible safety organization shall monitor H&R operations to ensure that they are performed safely. In addition, vendor-owned and operated equipment shall be monitored in the following manner:

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- a. Vendor-Owned or Operated Equipment—The safety organization in the company that initiates the contract is responsible for ensuring that the vendor equipment and personnel meet *pertinent* H&R safety requirements (e.g., OSHA 29 CFR 1910, *Occupational Safety and Health Standards*, and OSHA 29 CFR 1926 Subpart CC, *Cranes and Derricks in Construction*).
- b. Vendors Directly Contracted by the U.S. Department of Energy Hanford Field Office (DOE-HFO)—Compliance with *pertinent* H&R safety requirements shall be coordinated by the cognizant DOE-HFO Division.

1-3.3.2 Responsible Training Organization

The responsible training organization shall provide training to ensure that personnel qualifications meet requirements of this HSHRM and shall ensure that the following activities are completed:

- a. Training provided is documented (see Chapter 1-4, *Personnel Qualifications and Training Requirements*).
- b. Training and evaluation is provided in accordance with the contractor’s qualification program for instructors.
- c. Evaluation methods and standards are established.

1-3.3.3 Controlling Entity

The controlling entity shall:

- a. Ensure that ground preparations necessary to ensure ground conditions are firm, drained, and graded to a sufficient extent so that, in conjunction (if necessary) with the use of supporting materials, the equipment manufacturer’s specifications for adequate support and degree of level of the equipment are met. The requirement for the ground to be drained does not apply to marshes/wetlands.
- b. Inform the user of the equipment and the operator of the location of hazards beneath the equipment set-up area (such as voids, tanks, utilities) if those hazards are identified in documents (such as site drawings, as-built drawings, and soil analyses) that are in the possession of the controlling entity (whether at the site or off-site) or the hazards are otherwise known to that controlling entity.
- c. Establish a system to coordinate operations when any part of a crane is within the working radius of another crane.

1-3.4 DOE-HFO Roles and Responsibilities**1-3.4.1 DOE-HFO Hoisting and Rigging Program Manager**

The DOE-HFO H&R Program Manager (PM) shall:

- a. Ensure consistency in implementation and interpretation of this HSHRM across the Hanford Site.
- b. Be the DOE-HFO authority having jurisdiction over interpretation of this HSHRM.

- c. For H&R events:
 - Help ensure that the pertinent H&R issues are identified during subsequent investigations or critiques.
 - Help ensure that identified H&R issues are adequately addressed in corrective actions or lessons learned issued.
 - Help ensure that any Occurrence Reporting and Processing System (ORPS) report or official lessons learned issued adequately addresses the H&R aspects, corrective actions, and lessons learned for the event.
- d. Periodically assess line management implementation of the H&R program at the Hanford Site.
- e. When requested, assist DOE-HFO program or line organizations with matters relating to H&R (This could include H&R surveillances, reviews of critical or major lift procedures or work packages, hostile environment plans, participation in the H&R aspects of Readiness Assessments, Operational Readiness Reviews, etc.).
- f. When requested, assist Hanford Site contractors with addressing issues related to compliance with, implementation of, or interpretation of this HSHRM.
- g. Represent DOE-HFO on the Hanford H&R Committee.
- h. Maintain the HSHRM.
- i. Be the DOE-HFO authority for the review and approval of revisions to this HSHRM. Ensure the DOE-HFO program and line organizations are kept up to date with the latest HSHRM changes, bulletins, or important issues applicable to their organizations.

1-3.4.2 DOE-HFO Program/Line Organization

The DOE-HFP program and line organizations shall:

- a. Notify the PM as soon as possible after an H&R event, preferably before any critique or investigation. Notification as soon as possible will enable the PM to better carry out his duties and responsibilities of Section 1-3.4.1.c.
- b. Contact the PM in matters of the HSHRM interpretations or application where there is a conflict between program or line organizations and the contractor.
- c. Contact the PM when DOE-HFO personnel have a question concerning the application or interpretation of the HSHRM.
- d. Per the *Functions, Responsibilities, and Authorities Manual (FRAM)*, verify that Hanford Site contractors are implementing the Manual effectively.

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