

ORNL HOISTING AND RIGGING PROGRAM

CRITICAL LIFT PLAN

The following applies on all critical lifts:

- Requires review and approval by the Hoisting and Rigging Review Team and Level 2 Managers.
- Only trained and qualified personnel will be used when making critical lifts.
- Requires rigging sketches/drawings or revisions.
- A pre-lift meeting will be conducted involving all participants to review the approved lift plan and resolve any questions.

Presented by: _____ Date: _____ Phone: _____

1. Item(s) to be lifted:

Scheduled lift date: _____ Location of lift: _____

Describe lift, including weight, key dimensions and center of gravity; develop and attach rigging sketches in detail appropriate to the complexity of the lift. (Add attachments as necessary.)

Is a trial lift required? Yes No

Does the lift consist of a hazardous, radioactive, or contaminated material? Yes No

If Yes, identify:

2. References:

OSHA 29 CFR 1910.178, .179, .180, .184

3. Hoisting equipment:

Type: _____

Manufacturer: _____

Model: _____

Capacity: _____

Serial: _____

Date of latest annual inspection: _____

Latest calibration date of instruments: _____

4. Rigging and below the hook hardware: *

Note: Prior to use, hardware must be labeled with the manufacturer's name, lifting device, weight, serial number, and rated capacity.

Type of slings: _____ Rated capacity: _____ Weight: _____

Shackles: _____

Lifting rings/eyebolts: _____

Rigging hooks: _____

Load block/jib: _____

Spreader bars/Below the hook lifting devices Rated capacity: _____ Weight: _____

Total weight (Rigging equipment, below the hook hardware, & crane attachments):

Weight load to be lifted: _____

Total weight: _____

*Equivalent or greater rigging may be substituted by professional riggers.

5. Equipment and lift relationship:

- A. Maximum operating radius: _____ D. Ratio of lift to allowable load:

- B. Planned operating radius: _____ E. Clearance between point sheaves and
load: _____
- C. Allowable load at maximum lift radius
F. Clearance to surrounding facilities/utilities: _____ anticipated (from load chart): _____
- G. Clear path for load movement: _____

6. Stability of ground area:

- A. Soil bearing capacity has been evaluated to be adequate:

- B. Evaluation Method Visual Other:

- C. Mats required Size & number:

- D. Reviewed Underground Construction location:

7. Weight of item obtained by:

- A. Certified weight scale:

- B. Calculated independently by more than one source:

1. Source: _____ Weight: _____
2. Source: _____ Weight: _____
- C. If lift is an existing item (being removed or demolished), the weight must be recalculated, taking into account all modifications, including internal, as well as an allowance for scale, sediment, sludge, and insulation. Calculation work sheets SHALL be included in the LIFT PLAN and have a Professional Engineer stamp or be signed off by a QUALIFIED PERSON. **(When weights are calculated, a 10% tolerance margin shall be added. This value may be increased at the discretion of the Hoisting and Rigging Team.)**
- D. Shippings manifests weight: _____ Manufacturer data weight: _____

8. Task Specific Job Hazard Evaluation Completed: Yes (Required) Attach copy

9. Safety Considerations:

- Communication utilized during lift (i.e., hand signals, radio):
 Yes No
- Tag lines to be used: Yes No

10. Special instructions: Yes (list below) No

11. Approvals:

Hoisting and Rigging Team--signatures and date

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

Level 2 Manager: _____ Date: _____

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Pre-lift inspection to be completed before beginning the lift:

•Total weight of lift including rigging and below the hook hardware:

•Pre-use inspection of hoisting equipment (documented) :

•Pre-use inspection of rigging and below the hook hardware:

•Dimensions, center of gravity, and arrangements in accordance with attached rigging sketches:

(COG will be marked on load and a drawing included showing how it was determined.)

•Footprint area for crane setup has been reviewed for underground hazard:

•Mobile crane set up with outriggers fully extended, pads on solid footing, tires clear of ground and crane level: _____

• Trial lift complete (when specified in Section 1):

Comments:

Person-In-Charge: _____ Initials: _____ Badge: _____ Date: _____

***PIC must be present during entire critical lift and be qualified to resolve any questions or problems that may arise during the lifting operation.**

The following hoisting and lifting personnel (HLP) have attended the pre-lift meeting, reviewed the approved lift plan, and understand the procedure and equipment to be used:

HLP signatures: (Attach additional signature sheet if necessary)

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Person-In-Charge Signature: _____ Date: _____

Following approval of this lift plan, forward an electronic copy to the ORNL Hoisting and Rigging Program Manager.

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