

TEMPORARY CHANGE REQUEST

TCR NO. **TCR-ENG-021,R5-001**

(e.g., TCR-ENG-021,R0-001)

The Temporary Change Request (TCR) Form is to be used to process urgent or minor changes for PPPL Policies, Organization/Mission Statements and Procedures. The TCR should be used when changes are:
1) urgent, and can not wait the 2-4 week period for Department Head review/comment, or
2) minor, and do not warrant Department Head review.

Person Requesting Change: Mike Viola and Erik Perry **Phone Ext: 3655 and 3016**

Department Name: Facilities and Site Services, Construction Manager

Document Number: ENG-021 **Revision No.: 5**

Document Title: Program for Hoisting & Rigging, Forklifts, Manlifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment

Reason for change:

To allow flexibility and better coverage for SME's duties.

Change description:

Added to both the Lift Manager and the Manlift Manager duties:
May designate a qualified person (as designated in the PPPL SME list http://sportal.pppl.gov/bp/Lists/PPPL%20Experts/OSHA_CP%20ESH_POCs.aspx) to perform Subject Matter Expert duties as necessary. (i.e. reviewing and permitting subcontractor equipment onsite)

1. Does this TCR significantly alter the intent or scope of the document? **YES:** **NO:** **X**

2. Does this TCR significantly impact **ES&H**? **YES:** **X** **NO:**

If 1 or 2 is **YES**, Explain why the changes should not be routed for Department Head review:

Mike Williams
Department/Division Head Approval

10/10/14
Date

John DeLooper
Head, Best Practices and Outreach/designee

10/10/14
Date

Release/Effective date of this TCR: 10/15/2014

Incorporate this TCR into next revision of this document? **YES:** **X** **NO:**

PPPL	PRINCETON PLASMA PHYSICS LABORATORY	PROCEDURE		No. ENG-021,R 5-001
				Page 1 of 7
Subject: Program for Hoisting & Rigging, Forklifts, Manlifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment	Effective Date: 11/20/13	Initiated by: Mike Williams Associate Laboratory Director for Engineering and Infrastructure		
	Supersedes: ENG-021 Rev. 4 and TCR-ENG-021,R4-003	Approved: Stewart Prager Director		

TCR ENG-021,R 5-001

Management System (Primary): 03.00 ENGINEERING (ENG)
Management System Owner: Associate Director for Engineering and Infrastructure
Management Process: 03.04 Engineering Programs and Processes
Process Owner: Associate Director for Engineering and Infrastructure
Sub-Process: 03.04.02 Program for Hoisting & Rigging, Forklifts,
Manlifts, Special Purpose Vehicles, Utility Vehicles
and Portable Equipment
Sub-Process Owner: Head, Facilities and Site Services
Subject Matter Experts (SMEs): Head, Facilities and Site Services; and
PPPL Construction Manager

Applicability

This procedure applies to all PPPL sites and operations, including subcontractors and subcontracted organizations. This procedure covers the PPPL Hoisting & Rigging Program, as well as the maintenance and operations of Hoisting & Rigging, Forklifts, Manlifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment.

Introduction

This procedure describes the responsibilities and authorities for Hoisting & Rigging, Forklifts, Manlifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment program on the PPPL site. Detailed requirements and responsibilities with respect to this equipment are contained in the referenced PPPL Engineering Standards ES-MECH-007, ES-MECH-010, ES-MECH-011, and ES-MECH-012.

An organization chart that depicts the hierarchy of responsibilities and authorities for the Hoisting & Rigging portion of this procedure is shown in Attachment 1.

Only qualified operators may operate equipment at PPPL and only qualified riggers may perform rigging.

Definitions

Subject Matter Expert (SME) An individual with prerequisite background or experience necessary for instructional competency in a specific subject, task, or field of knowledge. Such an individual is qualified by education, training, or experience, and is a recognized expert on a particular subject, task, or system. These individuals are capable of developing training courses and materials, presenting classroom and On-the-Job instruction, and evaluating trainees, within their subject area.

References

- ESHG 5008 PPPL Environment, Safety, and Health Directives Manual
 Section 1.0 - [Construction Safety](#)
 Section 2.0 - [Electrical Safety](#)
 Section 8.0 - [Industrial Hygiene](#)
 Section 9.0 - [Occupational Safety](#)
- ES-MECH-007 PPPL Hoisting and Rigging Engineering Standard
ES-MECH-010 Forklift Engineering Standard
ES-MECH-011 Special Purpose Vehicles and Equipment Engineering Standard
ES-MECH-012 Manlifts Engineering Standard
ENG-006 Preparation, Review and Approval of Specifications & Statements of Work
MC-001 Control of Government-Owned Property
OSHA 1910
 [Subpart A - General](#)
 [Subpart B - Adoption and Extension of Established Federal Standards](#)
 [1910.28 - Safety requirements for scaffolding.](#)
 [Subpart F - Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms](#)
 [Subpart N - Materials Handling and Storage](#)
 [Subpart P - Hand and Portable Powered Tools and Other Hand-Held Equipment](#)
 [1910.269 - Electric Power Generation, Transmission, and Distribution.](#)
- OSHA 1926
 [Subpart A - General](#)
 [Subpart B - General Interpretations](#)
 [Subpart C - General Safety and Health Provisions](#)
 [Subpart G - Signs, Signals, and Barricades](#)
 [Subpart I - Tools - Hand and Power](#)
 [1926.431 - Maintenance of equipment.](#)
 [1926.441 - Batteries and battery charging.](#)
 [Subpart L - Scaffolds](#)
 [Subpart M - Fall Protection](#)
 [Subpart O - Motor Vehicles, Mechanized Equipment, and Marine Operations](#)
 [Subpart P - Excavations](#)
 [Subpart R - Steel Erection](#)
 [Subpart T - Demolition](#)
 [Subpart V - Power Transmission and Distribution](#)
 [Subpart W - Rollover Protective Structures; Overhead Protection](#)
 [Subpart CC - Cranes & Derricks in Construction](#)
- DOE STD-1090 DOE Hoisting and Rigging Standard

Procedure

Responsibility	Action
Associate Director for Engineering and Infrastructure	<ol style="list-style-type: none"> 1. a. Appoints a qualified engineer as PPPL Lift Manager. The Lift Manager serves as PPPL’s subject matter expert, OSHA competent person, and program manager for Hoisting & Rigging, Forklifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment, as covered in ES-MECH-007, ES-MECH-010, and ES-MECH-011. 2. a. Appoints a qualified engineer as PPPL Manlift Manager. The Manlift Manager serves as PPPL’s subject matter expert, OSHA competent person, and program manager for manlifts, as covered in ES-MECH-012. 3. Provides the necessary resources to support the Hoisting & Rigging, Forklifts, Manlifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment programs. 4. Appoints Lift Engineers to support the Lift Manager
Lift Manager	<ol style="list-style-type: none"> 5. Maintains current expertise in the areas of responsibility including applicable DOE, industry, OSHA, and ANSI requirements and standards. 6. Ensures that this procedure and ES-MECH-007, ES-MECH-010, and ES-MECH-011 are current and reflect applicable requirements and standards; and manages these programs by assuring training is developed and provided; providing oversight, guidance, and support for implementation; and assuring compliance. 7. Performs specific duties as documented in ES-MECH-007, ES-MECH-010, and ES-MECH-011, including review and approval of lift procedures for Critical Lifts. 8. May designate a qualified person (as designated in the PPPL SME list http://spportal.pppl.gov/bp/Lists/PPPL%20Experts/OSHA CPs ESH POCs.aspx) to perform Subject Matter Expert duties as necessary. (i.e. reviewing and permitting subcontractor equipment onsite) TCR ENG-021,R 5-001
Manlift Manager	<ol style="list-style-type: none"> 9. Maintains current expertise in the areas of responsibility including applicable DOE, OSHA, ASME, and ANSI requirements and standards. 10. Ensures that this procedure and ES-MECH-012 are current and reflect applicable requirements and standards; and manages these programs by assuring training is developed and provided; providing oversight, guidance, and support for implementation; and assuring compliance. 11. Performs specific duties as documented in ES-MECH-012, including review and approval of equipment purchases. 12. May designate a qualified person (as designated in the PPPL SME list http://spportal.pppl.gov/bp/Lists/PPPL%20Experts/OSHA CPs ESH POCs.aspx) to perform Subject Matter Expert duties as necessary. (i.e. reviewing and permitting subcontractor equipment onsite) TCR ENG-021,R 5-001

Human Resources	<p>13. Identifies qualified instructors and arranges for their training. [Instructor qualification requirements are listed in PPPL Procedure TR-005 or the Instructor may be a subcontractor if approved by the Manlift Manager or Lift Manager.]</p> <p>14. Arranges training of equipment operators, crane operators, and riggers and maintains records of training and current listings of qualified individuals.</p>
Qualified Instructor	<p>15. Provides instruction to equipment operators, crane operators, and rigging specialists in the safe operation of specific classes of equipment as recommended by the Manlift Manager or Lift Manager.</p>
Lift Engineers	<p>16. Provide support to the Lift Manager including review and approval of written lift procedures for Critical Lifts and other duties as documented in ES-MECH-007.</p>
All Divisions of the Engineering and Infrastructure Department	<p>17. Carry out responsibilities as defined by this procedure and the Engineering Standards ES-MECH-07, ES-MECH-010, ES-MECH-011, and ES-MECH-012. Cooperates with the Lift Manager, Manlift Manager, and Lift Engineers and provides necessary support.</p> <p>18. Ensures that all equipment under their cognizance has assigned equipment Custodians and Contacts per MC-001.</p>
Princeton Technical Representative (PTR)	<p>19. Accompanies all subcontractor service personnel during their time on site, or designates a technically qualified alternate representative to accompany subcontractor.</p> <p>20. Ensures that subcontractors follow all requirements of applicable SOW/Specifications; and that all forms, training, qualifications and requirements for onsite work are met completely and on time.</p> <p>[The Princeton Technical Representative must either: evaluate and accept subcontractor personnel qualifications; or the personnel must carry approved documentation (e.g., qualification card) and the PTR has evaluated and accepted the subcontractor’s qualification program.]</p>

<p>Cognizant Engineer/ Person in Charge</p>	<p>21. Identifies the need for lift performance or use of Hoisting & Rigging, Forklifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment.</p> <p>22. Works with the Lift Manager, Manlift Manager, Lift Engineer, or Qualified Rigging Specialist to develop and meet requirements: for Hoisting and Rigging in accordance with ES-MECH-007; and use of Forklifts, Manlifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment in accordance with ES-MECH-0010, ES-MECH-011, and ES-MECH-012.</p> <p>23. Maintains responsibility for the safe handling of critical loads and the protection of critical items in spaces around, or below any load.</p>
<p>Qualified Rigging Specialist (QRS)</p>	<p>24. Works with the Cognizant Engineer/Person-In-Charge to direct the performance of critical lifts. Performs other specific duties as documented in ES-MECH-007 including serving as an Area QRS, when appointed.</p>
<p>Qualified Operator</p>	<p>25. Operates specified equipment or specified crane(s) safely and effectively (including the ability to accurately spot and control loads.)</p>
<p>Qualified Inspector</p>	<p>26. Performs inspections, repairs, and maintenance of equipment. [These responsibilities are performed by qualified PPPL personnel (e.g., a PPPL qualified operator) and may also be carried out by qualified subcontractor personnel hired to perform the Qualified Inspector duties as approved by the Manlift Manager or Lift Manager, as appropriate. The PPPL PTR or qualified designee must oversee subcontractor inspections, repairs, and maintenance.]</p>
<p>Quality Control (QC)</p>	<p>27. Performs independent verification of hoisting and rigging activities as specified by ES-MECH-007.</p>
<p>PPPL Operations Center</p>	<p>28. Provides central record archive and distribution for Lift Procedures, Lift Data Sheets, Operator Daily Checklist records, and equipment repairs and periodic inspections.</p>

Training (section required for all procedures)

<p>Head, Facilities and Site Services</p>	<ol style="list-style-type: none"> 1. Ensures the training methods and means below are provided for this procedure. <ol style="list-style-type: none"> a. Target Audience: <ul style="list-style-type: none"> Associate Director for Engineering & Infrastructure Lift Manager Manlift Manager Human Resources Training Specialist Qualified Instructors Lift Engineers Princeton Technical Representatives for applicable equipment Cognizant Engineers/ Persons in Charge Qualified Rigging Specialists Qualified Operators Qualified Inspectors Quality Control PPPL Operations Center <p>Instructor: <u>Online from the Head, Facilities and Site Services</u></p> <p>Training Method: <u>Online at http://hr.pppl.gov/OnlineTrainingList.html</u></p> <p>Frequency: <u>Once only</u></p> b. Target Audience: <u>Supervisors</u> <p>Instructor: <u>Self-guided</u></p> <p>Training Method: <u>Read only via standard Email distribution of procedure updates from Best Practices to all supervisors</u></p> <p>Frequency: <u>Once only upon major revision of this procedure.</u></p> 2. Notifies the Human Resources Training Office of the training so that they will be aware of the training requirements and be able to provide assistance and guidance in the course development, implementation, tracking, and maintenance.
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Records Requirements Specific to this Procedure (section required for all procedures)

The referenced subordinate Engineering Standards contain the nearly all details and related records associated with the program for Hoisting & Rigging, Forklifts, Manlifts, Special Purpose Vehicles, Utility Vehicles and Portable Equipment.

Records Custodians must assure records are maintained as follows:

Record Title	Record Custodian	Location	Retention Time
Training Records	Human Resources	Human Resources Files	Cut off at the time of separation or transfer of the employee. Destroy 4 years after cutoff. (per DOE records schedule A1 29.1.a.1)

Attachments

None