Work Planning and Control (WPC)

BRIEF

Policy Summary

At Lawrence Berkeley National Laboratory (Berkeley Lab), all work must be authorized before it is performed. Work authorization has two distinct components. The work itself must be planned, reviewed, and authorized before it may proceed. Individual workers must then be properly trained and authorized before they can proceed with their assigned work activities. This dual-step authorization process helps ensure work is performed safely by authorized staff.

Berkeley Lab uses Activity Manager, the database supporting the Work Planning and Control (WPC) program, to:

- Define the scope of work that will be performed
- Identify the hazards associated with this work
- Identify the controls necessary for the hazards
- Authorize work
- Assign and authorize workers to perform work activities

Work may not proceed until authorized by management, and workers may not perform work until they are assigned to one or more work activities and have been authorized by line management. This includes unpredictable, short-term, or unusual work, all of which must be reviewed and authorized.

Work is authorized following a risk-based approach. Work involving low or moderate hazards is authorized by line management. Work involving higher hazards requires concurrence of the Environment/Health/Safety (EHS) Division in addition to line management authorization and supervisor approval.

Workers are authorized at a level commensurate with their knowledge and skill level given the particular hazards associated with work. This is a decision made by line management.

Work is reviewed and the authorization renewed periodically based on the hazards associated with the work or when the work, hazards, or controls change significantly. Worker authorization must be renewed on the same schedule.

Equivalent work authorization systems are allowed, but these must be approved by the EHS Division Director.

Who Should Read This Policy

This policy applies to all Berkeley Lab employees, visitors, affiliates, and subcontractors.

To Read the Full Policy, Go To:

The POLICY tab on this wiki page

To Read the ES&H Program Details, Go To:

http://www2.lbl.gov/ehs/pub3000/CH06.html

Contact Information

WPC Subject Matter Expert
EHS Division

Policy

<table>
<thead>
<tr>
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<th>Work Planning and Control (WPC)</th>
</tr>
</thead>
<tbody>
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POLICY

A. Purpose

At Lawrence Berkeley National Laboratory (Berkeley Lab), all work must be authorized before it is performed. Work authorization has two distinct components. The work itself must be planned, reviewed, and authorized before it may proceed. Individual workers must then be properly trained and authorized before they can proceed with their assigned work activities. This dual-step authorization process helps ensure work is performed safely by authorized staff.

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Equivalent work authorization systems are allowed, but these must be approved by the EHS Division Director.

B. Persons Affected

This policy applies to all Berkeley Lab employees, visitors, affiliates, and subcontractors.

C. Exceptions

An exception to this policy may be allowed as follows:

1. Those performing only work commonly performed by the public, or not performing work
2. An employee or affiliate who works exclusively under a separate work authorization system such as the Subcontractor Job Hazards Analysis (sJHA) process or the Construction Safety process
3. An employee or affiliate who works only at a site not managed by Berkeley Lab, and who has existing work authorization processes
4. An employee or affiliate who works only on the UC Berkeley campus
5. For certain specific applications, a worker who is a Berkeley Lab affiliate may use an alternate authorization process that is equivalent to the Berkeley Lab institutional WPC program. The determination of equivalence is made by the Environment/Health/Safety (EHS) Division Director after evaluating the information submitted, per Appendix A, Work Planning and Control Equivalence Worksheet, of the WPC program.

D. Policy Statement

1. All work beyond what is "commonly performed by the public" must be planned, reviewed, and authorized before it may proceed. Berkeley Lab uses formal Work Planning and Control (WPC) processes such as Activity Manager, radiological work authorizations, construction job hazards analysis, subcontractor job hazards analysis, and in some cases facility-based authorizations to achieve this goal. Work may not be conducted unless the applicable and authorized work authorization(s) exist.
2. Workers must only perform work for which they are authorized. Each worker must be assigned to one or more work activities, all of which must be reviewed and authorized.
3. Workers are authorized at a level commensurate with their knowledge and skill level given the particular hazards associated with work. Workers may be authorized to work, authorized to work under direct supervision, or not authorized to work. The worker authorization level is determined by line management.
4. Equivalent work authorization systems are allowed, but these must be approved by the EHS Division Director per the requirements in Appendix A, Work Planning and Control Equivalence Worksheet.
### E. Roles and Responsibilities

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<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
</tr>
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| **Activity Lead**             | **An Activity Lead is anyone who directs, trains, or oversees the work and activities of one or more workers. Activity Leads provide instruction on working safely and the precautions necessary to use equipment and facilities safely and effectively.** Activity Leads:  
  - Utilize the Integrated Safety Management (ISM) process for each activity they manage, including the preparation of a statement of work outlining the scope of the activity, determining the hazards associated with the work, and designating the controls needed to mitigate the hazards.  
  - Review and approve activities.  
  - Determine the on-the-job training (OJT) needed to prepare staff to safely carry out the scope of work.  
  - Ensure that all supplemental work authorizations are obtained and maintained.  
  - Assign staff to the activity.  
  - Communicate to workers the scope, hazards, and controls for the activity, including any changes affecting the scope and safety of the activity.  
  - Perform the necessary OJT to prepare workers for the tasks associated with the activity.  
  - Determine the appropriate level of authorization (i.e., work supervised, work alone, work unsupervised but not alone) for each worker based on his/her competency and the hazards of the work.  
  - Provide oversight, guidance, and supervision of the activity.  
  - Provide performance evaluation input to the line manager of the worker where applicable.  
  - Stop unauthorized work when hazards and controls change. Do not reinstate work until the work activity has been updated and reauthorized, and the required controls are in place.  
  - Do not allow workers to work on an activity until they are authorized to work on the activity through Activity Manager.  

The Activity Lead may be a direct HR line supervisor or any other staff member assigned by the Project Lead to the position of Activity Lead. This position is not the equivalent of an HR Supervisor position. (Note: Certain representative workers may be barred from acting as Activity Leads because of contract restrictions. EHS will use appropriate forums to communicate restrictions.)

**Note:** For work involving a Risk Level 3 radiological hazard requiring a Radiological Work Authorization (RWA) or X-Ray Authorization (XA), the Activity Lead role is equivalent to the RWA or XA Principal Investigator (PI) role or the PI role.

| **Activity Lead Designee**    | As assigned by the Activity Lead, the Activity Lead Designee:  
  - Assigns staff to the activity.  
  - Communicates to staff the scope, hazards, and controls for the activity, including any changes affecting the scope and safety of the activity.  
  - Performs the necessary OJT to prepare a staff member for the tasks associated with the activity.  
  - Determines the appropriate level of authorization for each worker based on their competency and the hazards of the work.  
  - Provides oversight, guidance, and supervision of the activity.  

The Activity Lead Designee is assigned by the Activity Lead or the Project Lead and may be any staff member. (Note: Certain representative workers may be barred from acting in the full capacity of Activity Lead Designees because of contract restrictions. The EHS Division will use appropriate forums to communicate restrictions.)

| **Division Directors**        |  
  - Assure that the WPC process is implemented within the division.  
  - Assure that all work is authorized by Activity Manager activities or facility-based authorization, as required.  

| **EHS Division Director**     | Manages the operations of the Work Planning and Control program.  
  - Approves equivalent work authorization systems.  

| **EHS Liaisons**              | Act as primary representatives of the EHS Division to the Division Safety Coordinator and Activity Lead when requested by a division or when required by policy.  
  - Act as primary representatives of the EHS Division for assisting with activity development when requested by a division or when required by policy.  
  - Obtain assistance from EHS subject matter experts, as necessary, to properly identify hazards and controls for tasks (including obtaining assistance with exposure assessments) as requested by the Activity Lead or Division Safety Coordinator.  
  - Facilitate the collaboration process for Risk Level 3 activities in Activity Manager.  

| **Facilities Division**       | Reviews construction projects during the project planning phase.  

| **Principal Investigators, Managers, HR Supervisors, and HR Work Leads** |  
  - Ensure that all work performed by staff under their supervision is analyzed in Activity Manager as indicated by the guidelines in this chapter and that the proper authorization is obtained before beginning work.  
  - Ensure that employees under their supervision are assigned to appropriate activities and authorized to work on those activities at a level commensurate with the employee's competency and receive specialized training as required by the ES&H Manual (PUBLIC-3500).  
  - Ensure that those who do not perform work are opted out of the Work Planning and Control process within Activity Manager.  

| **Project Lead**              | The Project Lead is the person with overall responsibility for the safety of a defined set of activities. Project Leads:  
  - Define a project and organize it into one or more activities.  
  - Assign Activity Leads to develop and oversee activities.  
  - Maintain overall control and responsibility for each activity within their project.  
  - Review and approve activities within their projects.  
    - Ensure that all work under their supervision is performed in compliance with the controls specified for that work.  
    - Ensure that authorizations for work under their supervision are reauthorized as required.  

The Project Lead may serve as the Activity Lead and/or assign the role to one or more Activity Leads. Though an assigned Activity Lead can prepare the documentation for a new activity, no new activity can be undertaken without the final approval of the Project Lead.

The Project Lead may be the direct HR line supervisor or any other staff member assigned by division management to the position of Project Lead. This position is not the equivalent of an HR Supervisor position.

**Note:** For work involving a Risk Level 3 radiological hazard requiring a Radiological Work Authorization (RWA) or X-Ray Authorization (XA), the Project Lead role is equivalent to the RWA or XA Principal Investigator (PI) role.

| **Workers (Employees, Visitors, and Affiliates)** |  
  - Review and accept conditions of the work authorization.  
  - Perform work only for which they are authorized and qualified.  
  - Perform work per requirements of the ES&H Manual (PUBLIC-3500), Chapter 1.  
  - Accept primary responsibility for performing work in a safe manner.  
  - Do not proceed with work when the tasks, hazards, and/or required controls differ from those authorized in the completed and active activity. Bring this to the appropriate supervisor or Activity Lead's attention. Do not begin work until the activity accurately describes the work and has been re-authorized.  
  - Continually review work, and assure that the activity has been analyzed and authorized appropriately. Engage the activity lead to modify the activity as appropriate.  

### F. Definitions/Acronyms

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<th>Definition</th>
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Lawrence Berkeley National Laboratory. The official or current version is located in the online LBNL Requirements and Policies Manual. Printed or exported versions are not official. Users are responsible for working with the latest approved revision.
### Activity Manager Work Authorization

Activity Manager work authorization requires line management to describe the scope of work for each activity, determine the hazards of that work, and review and refine the controls prescribed for those hazards. The documentation of that analysis and the assigned tasks, once fully approved by line management, serves as work authorization for the individual assigned to perform the work. The work authorization document is maintained as an electronic record in the Activity Manager database.

### Activity

A task involving one or more steps needing to be accomplished by one or more individuals to achieve a goal.

### Activity that is commonly performed by the general public

An activity that people in the general public perform with hazards and environmental impacts accepted by those performing the activity and controls that require little or no guidance or training in order to perform the work safely while minimizing environmental impacts.

### CHESS

Comprehensive Health, Environmental and Safety System

### Control

A device, procedure, or practice that reduces the likelihood of a hazard causing harm, or reduces the severity of the harm. Controls include substitution of materials or methods, engineered barriers, administrative procedures (e.g., training), and personal protective equipment.

### DOW

Description of Work

### DSC

Division Safety Coordinator

### Exposure assessment

The process of defining exposure profiles and judging the acceptability of workplace exposures to environmental agents. These assessments may be quantitative, semi-quantitative, or qualitative. These assessments are generally conducted by an Environment/Health/Safety (EHS) professional, which may include industrial hygienists or safety engineers. These assessments may be conducted for representative employees and are not required for each individual. In all cases, employees have full access to exposure-monitoring information, including situations where an individual’s exposure is not monitored.

### Facility-based authorization

Hazards analyses and controls are based on the facility as a whole rather than on an individual operation. Examples include safety-analysis documents, air and water discharge permits, and NEPA/CEQA analyses.

### Hazard

The potential to cause harm. Hazards are associated with tasks; if hazards are not controlled, they can cause illness or injury.

### Hazard assessment

A preliminary evaluation (or screening) of an activity to determine if a more comprehensive exposure assessment is required. Hazard assessments can be performed by work leads, supervisors, workers, or an EHS professional. Hazard Assessments are one form of Baseline Exposure Assessment.

### OJT

on-the-job training

### Opt-Out Status

The status of an employee or affiliate who is not performing work, and thus is not to be assigned to an activity. The opt-out status is specifically assigned by the supervisor, based on the supervisor's determination that the person will not be performing any work.

### Project

A planned work with specific purpose consisting of one or more activities.

### RWA

Radiological Work Authorization

### sJHA

Subcontractor Job Hazards Analysis is a set of documents that establishes that a subcontractor has adequately identified the hazards of work and defined appropriate controls for those hazards. The sJHA is required for authorization of subcontractor work.

### Task

A discrete element of work.

### Work

An activity or set of activities that can be analyzed using Activity Manager.

### XA

X-Ray Authorization

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**G. Recordkeeping Requirements**

Current activities are maintained electronically on the EHS Activity Manager database.

**H. Implementing Documents**

<table>
<thead>
<tr>
<th>Document Number</th>
<th>Title</th>
<th>Type</th>
</tr>
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</table>
I. Contact Information

WPC Subject Matter Expert
EHS Division

J. Revision History

<table>
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<th>Date</th>
<th>Revision</th>
<th>By Whom</th>
<th>Revision Description</th>
<th>Section(s) Affected</th>
<th>Change Type</th>
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<td>J. Heim</td>
<td>Rewrite for the wiki (brief)</td>
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Document Information

DOCUMENT INFORMATION

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RPM Section (cross-reference) none
Functional Division EHS
Prior reference information (optional) PUB-3000 Chapter 32

Source Requirements Documents
- 10 CFR 851.21, Hazard Identification and Assessment
- 10 CFR 851.22, Hazard Prevention and Abatement

Implementing Documents
Other References

Note: These are past requirements and are no longer in the Laboratory's UC-DOE Prime Contract:

- DOE P 450.4, Safety Management System Policy
- DOE M 450.4-1, Integrated Safety Management System Manual