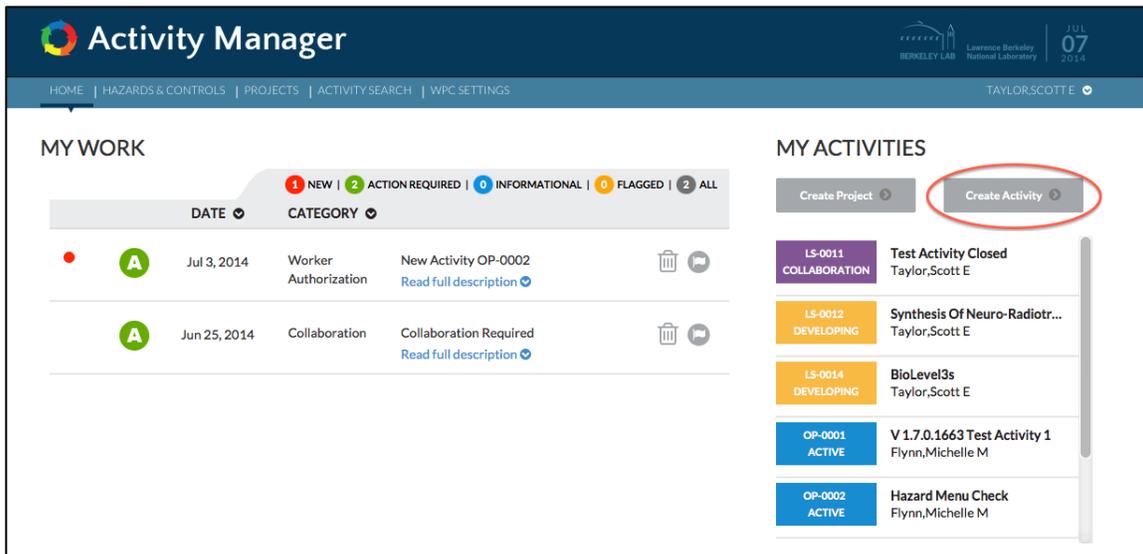


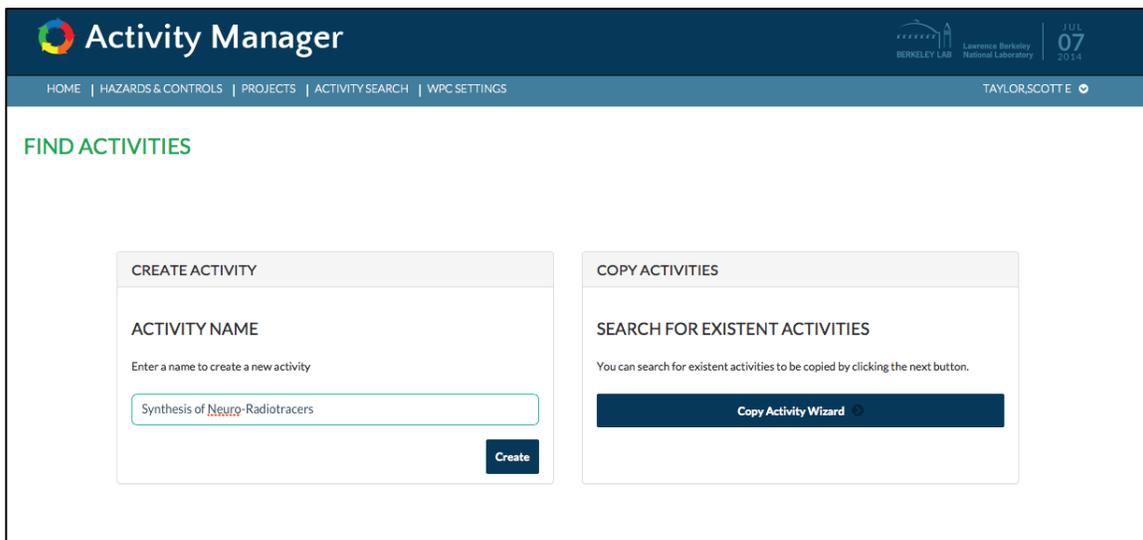
CREATE ACTIVITY

Activity Leads apply the ISM process for each activity within the project, including: preparing 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.

The Activity Lead creates a new project by selecting **CREATE ACTIVITY** from the Activity Manager Home page,



and entering the name of a new activity or searching for an existing activity to copy.



The Activity Description page includes

- Activity Name
- Activity Lead
- Activity Lead Division (auto-fill based on Activity Lead)
- Activity Start Date

- Parent Project (the Activity Lead selects from the project to which he/she has been assigned the Activity Lead role)
- Parent Project Division (auto-fill based on Project)
- Basic Description (this is not the complete statement of work)
- Locations where work will be performed.
 - Location (Hill, Leased) –Lab main site and all leased locations, e.g. JGI, JBEI, Potter Street, etc.
 - Various - if the Activity is a site-wide function such as Facilities maintenance select “Various” and enter the location description.
 - Infrastructure – e.g. roadways, rooftops, sewer system, etc.
 - Off-site - work locations other than those described above, e.g. private businesses and fieldwork.

Click **Add Location** for each entry.

The screenshot shows the 'CREATE ACTIVITY: ACTIVITY DESCRIPTION' form in the Activity Manager interface. The form is divided into several sections:

- Activity Name:** A text input field containing 'Synthesis of Neuro-Radiotracers'.
- Activity Lead:** A dropdown menu with the text 'Select an Activity Lead...'.
- Parent Project:** A dropdown menu with the text 'Select a Project...'.
- Sponsor Division:** A text input field.
- Planned Start Date:** A date input field showing 'July 07, 2014' with a calendar icon.
- Brief Description:** A large text area for entering details.
- Location:** A section with a 'Building' input field, a 'Room' input field, and an 'Add Location' button.
- Location Options:** Three buttons labeled 'Various (e.g., site-wide)', 'Infrastructure', and 'Offsite (e.g., field)'.
- Locations:** A section for listing specific locations.

At the top of the form, there is a progress bar with five steps: 1. Description, 2. Define Work, 3. Select Hazards, 4. Review Hazards, and 5. Review Controls. A risk level indicator shows '0'. Navigation buttons for 'Continue' and 'Save' are located at the bottom right of the form.

Divisions can use Activity Manger to provide detailed off-site work information such as location details, off-site participants, and emergency response.

Activity Manager BERKELEY LAB Lawrence Berkeley National Laboratory FEB 02 2014

HOME | HAZARDS & CONTROLS | MY PROJECTS | REFERENCES | SAFETY NEWS | CONTACT | HELP | YOSHIHARA, JAMES Y

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NON LBNL LOCATIONS

↶

Offsite Location **Offsite Participants** Emergency Response

Site Name

Work Location
Address
City Country State or Province

Owner
 Lawrence Berkeley National Laboratory.
 Other Owner or Managing Agency.

Owner or Managing Agency
Name
Contact Name
Contact Phone Contact E-Mail

Map Coordinates
Map Coordinates

Save And Continue

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NON LBNL LOCATIONS

↶

Offsite Location **Offsite Participants** Emergency Response

Offsite Participants
LBNL Offsite Participants

Site Safety Officer
Name
Mobile Phone

Emergency Contact
Emergency Contact Name
Contact Phone 1 Contact Phone 2

Add LBNL Participant

Collaborating Offsite Participants

Name
Institution or Organization
Mobile Phone

Emergency Contact
Emergency Contact Name
Contact Phone 1 Contact Phone 2

Add Collaborating Participant

Save And Continue

The screenshot shows the 'NON LBNL LOCATIONS' form in the Activity Manager interface. The form is divided into several sections:

- Emergency Response:** Includes fields for 'First Aiders at Site Location' (Name, Contact Phone, E-Mail), 'LBNL Team First Aider' (Name, Contact Phone, E-Mail), 'Primary Emergency Contact' (Name, Contact Phone 1, Contact Phone 2, E-Mail), and 'Alternate Emergency Contact' (Name, Contact Phone 1, Contact Phone 2, E-Mail).
- Closest Hospital or Clinic With Emergency Facilities:** Includes fields for Hospital Name, Address, City, Country, State or Province, County, and Hospital Phone.
- Emergency Evaluation Route:** A text input field.
- Emergency Evaluation Meeting Area:** A text input field.
- Nearest Land line Telephone Location:** A text input field with a note: 'If side facility or mobile service is unavailable'.

A 'Save And Continue' button is located at the bottom right of the form.

Statement of Work

Defining work is the first step in the ISM process. The statement of work (SOW) provides the worker with a clear description of the tasks they will be performing while working under this Activity authorization. The detail required in the statement of work depends upon the risk level of the hazards associated with the work.

The screenshot shows the 'CREATE ACTIVITY: DESCRIPTION OF WORK' form in the Activity Manager interface. The form is titled 'OP-0017' and 'ACTIVITY STATUS: DEVELOPING'. It features a progress bar with five steps: 1. Description, 2. Define Work (current step), 3. Select Hazards, 4. Review Hazards, and 5. Review Controls. A 'Risk Level' indicator shows '0'. The form includes a rich text editor for defining the work, with a toolbar containing options like File, Edit, View, Insert, Format, Tools, Table, Add-ons, and Help. The text area contains the placeholder text: 'Activity scope, materials, processes and equipment.' A 'Save' button is visible at the bottom right.

The SOW starts with a brief description of the purpose and breadth of the work involved in the activity. For low-risk activities this can be a broad, general description. For moderate to high-risk activities, the brief description should introduce materials, processes and major equipment.

A more detailed description of moderate to high-risk activities should address:

Materials

- Describe the materials, how they will be used and handled;
- Specific controls for hazards the Activity Lead deems warranting special attention;
- State of biological materials (fixed, fresh, cultures) and radiological materials (dispersible, fixed, sealed sources) associated with the activity's significant tasks;

Processes

- Describe tasks or processes that require specific instructions to be carried out correctly or safely.
- Identify specific steps in procedures that pose a significant safety hazard with details on how to mitigate these hazards
- Consider attaching and referencing standard operating procedures (SOP), protocols or instructional videos if tasks require extensive, detailed instruction.
- Provide specific procedures for waste processing or disposal that go beyond waste handling controls described in the Controls

Equipment

- Provide operating instruction for equipment not covered by OJT or other Activities.

Lastly, the SOW should include use limits, if appropriate. The Activity Lead may also describe restricted tasks; ones that should be considered for higher hazard work where exceeding the safety envelope of the associated controls could have serious consequences.

Hazards and Controls do not need to be addressed within the statement of work summary- they will appear in later sections. However, if the Activity Lead feels that specific hazards or controls should be called out, they can be mentioned in this statement. Emergency Procedures should be included in the Controls section of activity.

The Activity Lead can invite others (e.g. workers, colleagues, subject matter experts) to contribute in the WPC process and review the hazards analysis while under development.

To add a contributor, click on the **Collaboration** tab of the Define Work page, enter the contributor's name, and click **Add Contributor**. Contributors receive a My Work notice requesting their participation. Contributors can edit the scope of work, and can view hazards and controls.

Select Hazards

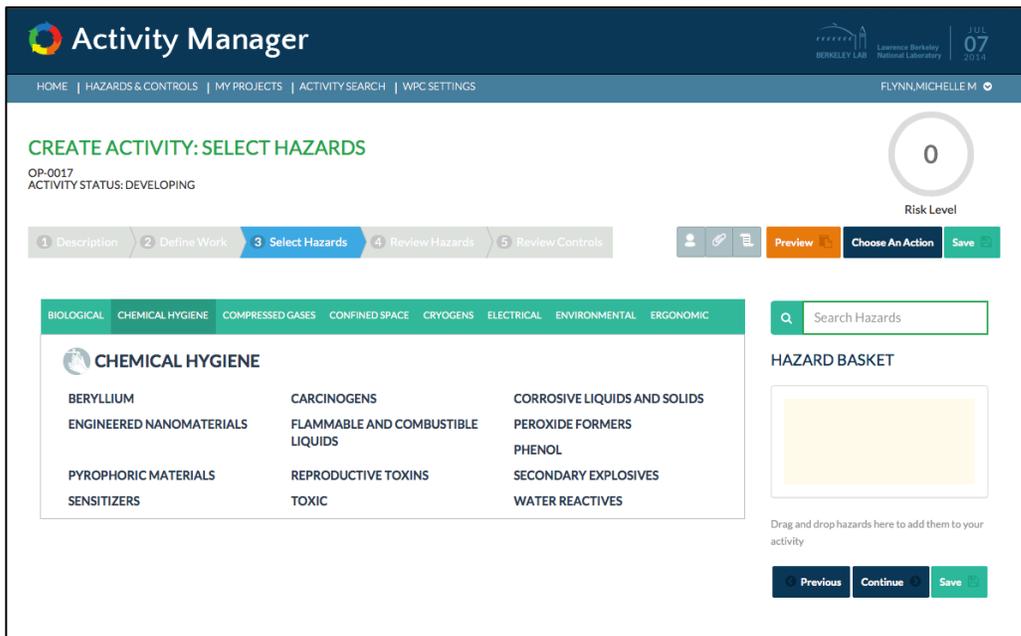
Activities have associated hazards, and the hazards must be identified and evaluated in order to properly prescribe controls. The Integrated Hazard Analysis (IHA) system, accessible via Activity Manager, aids the Activity Lead in the process of identifying hazards and establishing controls to mitigate those hazards.

Hazards are assigned one of three risk levels:

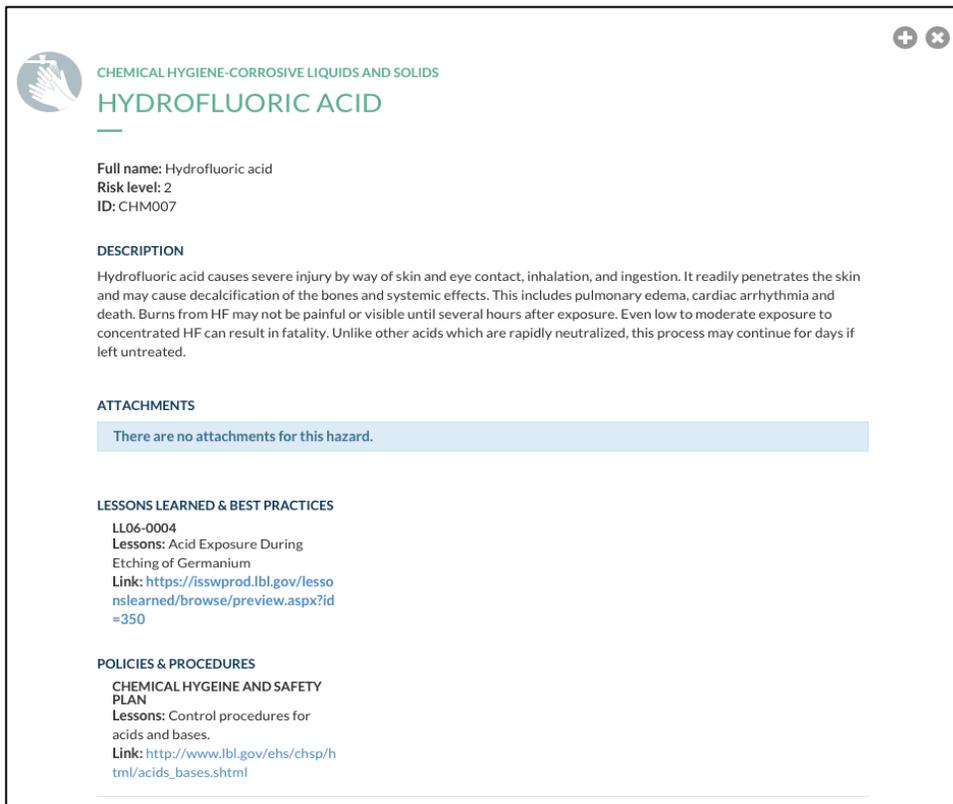
- Level 1- Hazards are straightforward, controls are well documented, and failure to utilize controls may result in (worst case) non-serious and non-debilitating injury (e.g., significant keyboarding; common laboratory chemicals without special hazards used in fume hoods; machine tools; climbing of stepladders; routine facilities maintenance).
- Level 2- Hazards with a higher probability of injury, injury more serious, etc. (e.g., common corrosives or solvents; non-critical lift crane operations; forklift driving). Controls are less straightforward or more situational. Hazards at this level are elevated above those in Level 1 but do not rise to mandatory Subject Matter Expert (SME) review and concurrence.
- Level 3- Hazards at this level are similar to those previously subject to Activity Hazard Document or other formal authorization (e.g., high stored energy, toxic gas, live electrical exposure, Biological Use Notification-Registration-Authorization). Controls are subject to SME concurrence.

To aid the Activity Lead in selecting hazards, Activity Manager first displays broad hazard categories and guides the user through a series of refinements to select the applicable

hazard. Hazards can also be located using the Search Hazard function. The Activity Lead adds applicable hazards to the Hazard Basket. As hazards are added, Activity Manager updates the Activity Risk Level to reflect the highest hazards present on the activity.



Every hazard includes the risk level, detailed description, links to applicable policy, and may include links to lessons-learned and other reference.

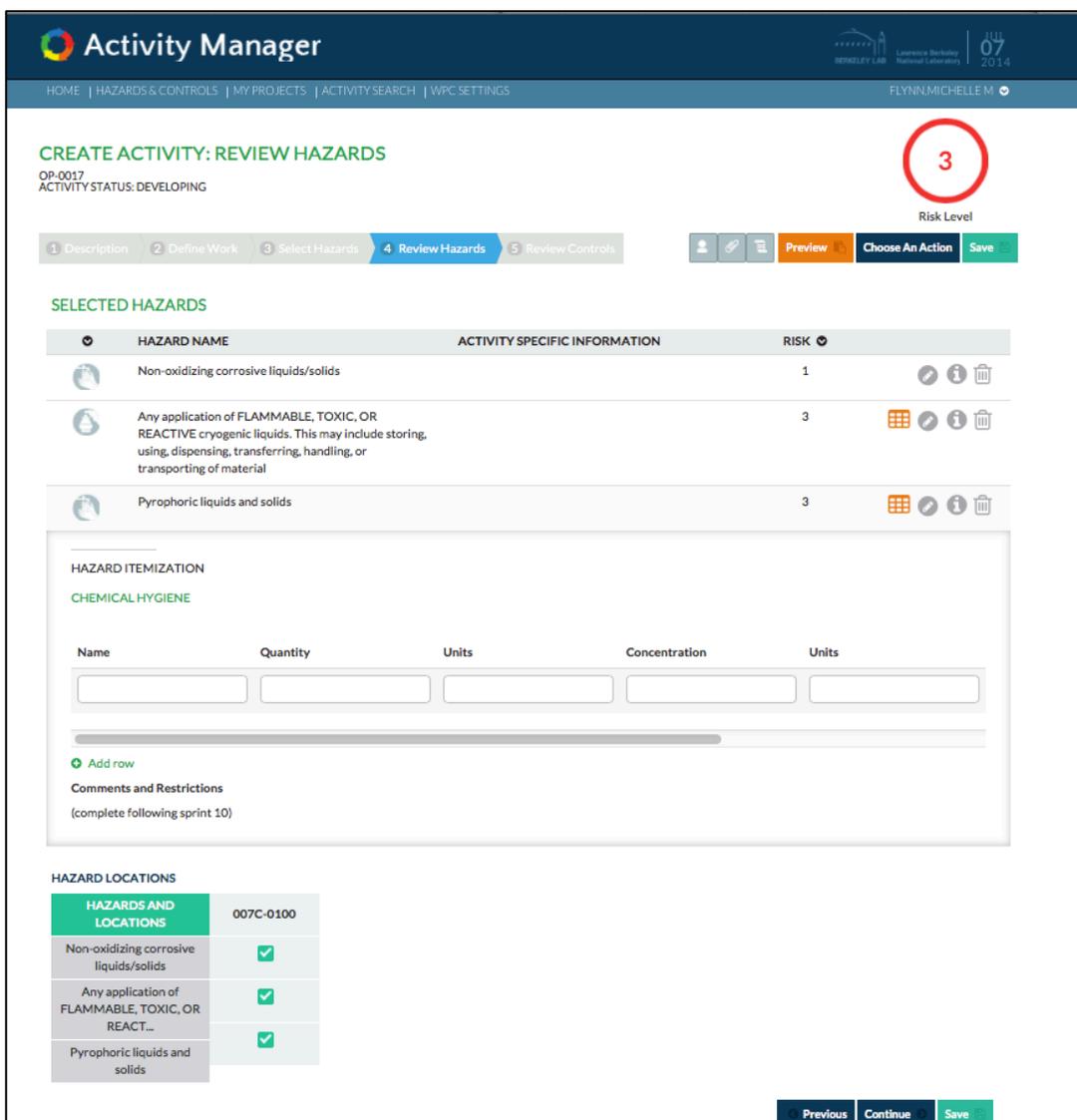


If an activity’s hazard is unavailable from the select hazards menu, contact the Division Safety Coordinator, division EHS liaison, or Health & Safety representative for assistance.

Review Hazards

Next, the Activity Lead reviews hazards selected, provides additional customized details, as appropriate, and verifies the locations in which activity hazards are present. Activity Manager assigns all hazards selected to all locations identified in the Activity Description. If all hazards are present in all locations, then no changes are necessary. The Activity Lead deselects hazards from locations where they do exist for that activity. This step is essential for accurate communication of co-located hazards.

Selection of one or more Level 3 hazards triggers hazard-specific requests for additional information, e.g. specific chemical, concentration, concentration, etc.



Activities with Level 3 hazards are routed to the appropriate EHS liaison and SME(s) for review, assistance and concurrence with the hazards analysis.

Review Controls

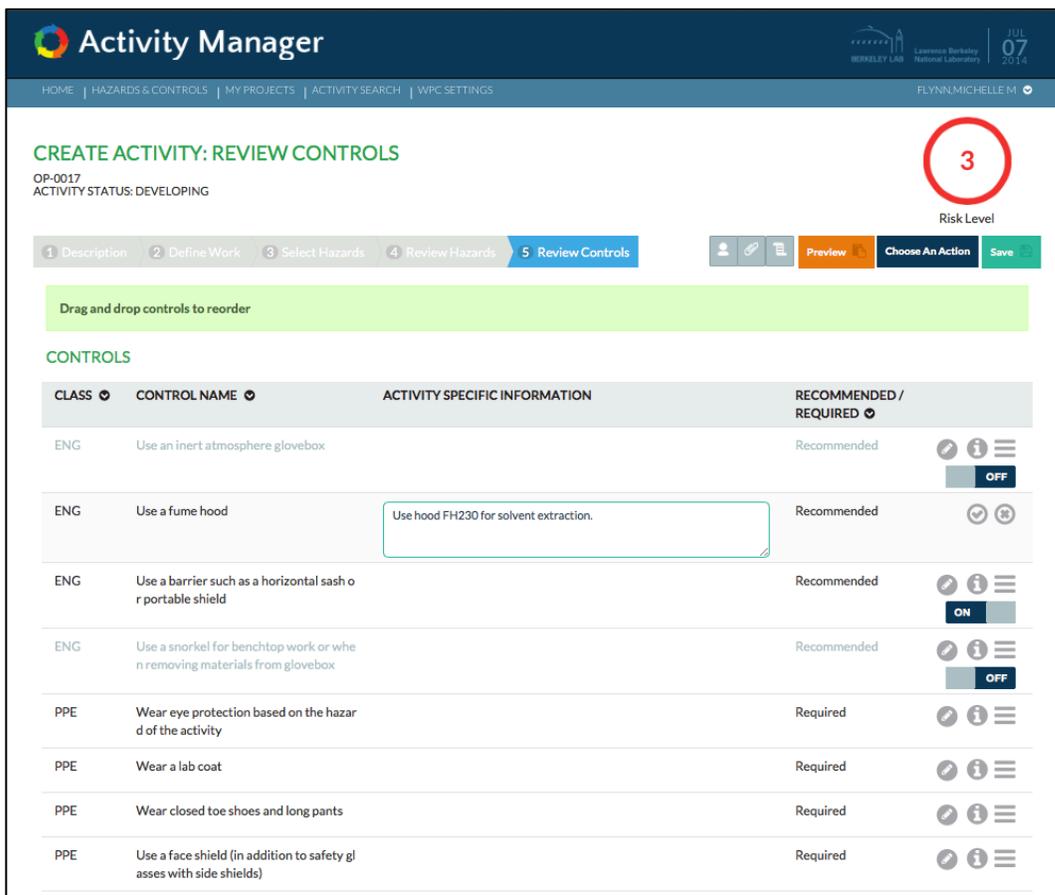
Activity Manager presents controls based on the hazards selected. Controls are either required or recommended:

- Required controls – controls that are required by regulation and/or policy, and cannot be waived by the Activity Lead. They may include training, specific administrative and engineering controls, on-the-job training, safety surveys, and procedure documentation.
- Recommended controls – controls that are generally appropriate for the hazard at that risk level, but are not driven by a regulation or policy. The Activity Lead has discretion to determine if the control is appropriate for the given situation and selects/deselects them by turning them “on” or “off.” EHS may use the Recommended Control option to offer choices among related controls, e.g. fume hood, snorkeled work area, or glovebox.

Controls initially appear in default order by type:

- Engineering
- Personal Protective Equipment
- Work Practices
- Administrative
- Emergency Response
- HazCom
- Storage/Disposal
- Training
- Medical Surveillance

The Activity Lead may customize required and recommended controls for enhanced specificity. This may include more detail on engineering and administrative controls, modification of controls to fit specific protocols, materials, equipment or space, and the addition of controls not suggested by the hazards selection process. Some controls are intentionally generic, allowing for their application across hazards and in order to minimize redundancy, e.g. “wear chemically resistant gloves.” In these instances the Activity Lead should provide activity-specific details, such as the specific gloves to be work for specific tasks.



The Activity Lead can re-order controls by dragging and dropping them using the 3-bar icon. EHS may also suggest re-ordering controls for Level 3 activities. The revised order is set upon release for line management approval. **NOTE: Selecting the sort by (chevron) icon next to control Class, Control Name, or Recommended/Required reorders the control based on the selected column header. At this time there is no way to revert to the original control class default order.**

Activity Manager interfaces with other LBNL systems to provide information controls are linked to other LBNL systems.

Training – Activity Manager and Berkeley Lab Training to provide two-way communication of activity-required training and workers’ training completion status.

Exposure Assessment – Activity Manager routes Exposure Assessment Survey requirements to Comprehensive Health, Environmental and Safety System (CHESS). EHS works with the Activity Lead to document exposure assessment results in Activity Manager. CHESS does not automatically update Activity Manager with exposure assessment results.

Medical Surveillance - Activity Manager routes Medical Surveillance requirements to CHESS. Completion or declination of medical surveillance is automatically reflected in Activity Manager as “training” credit.

Co-located hazards: The Review Controls step in developing an activity includes a review of co-located hazards. Activity Manager displays risk level 3 and certain other hazards present on other activities in the same location that are not part of the activity under development.

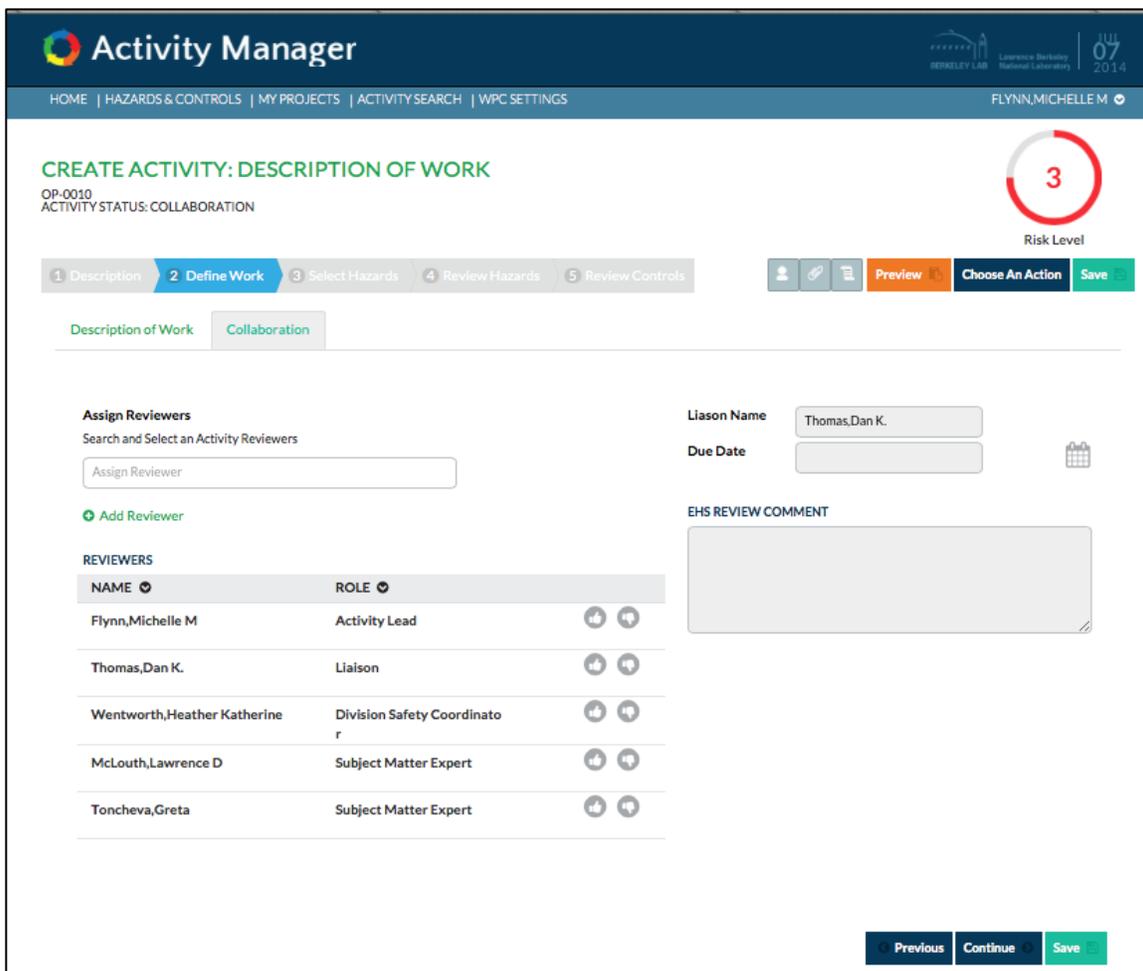
The Activity Lead may choose to customize existing controls and/or include additional controls to mitigate potential risks from co-located hazards, e.g. fire mitigation measures due to the presence of flammable liquids.



EHS Review and Concurrence (Level 3 only)

Activities with risk level 3 hazards require review by the EHS Division. The Activity Lead initiates the EHS review process by selecting **Initiate EHS Review** from the **Choose An Action** button drop down. Once the Activity Lead releases an activity for EHS review, Activity Manager automatically routes the activity to the assigned EHS division liaison and the risk level 3 hazard SME(s). The DSC is also a collaborator in the risk level 3-activity review process.

The division liaison sets the Collaboration Due Date in consultation with the Activity Lead and based on the Planned Start Date and activity complexity. The liaison and SME(s) review the scope of work, hazards, and controls and request additional information from the Activity Lead as necessary. EHS may inspect the work locations and facilities supporting the activity and make recommendations based on such site visits. EHS collaborators have read/write access to the activity and assist the Activity Lead with customizing controls. Once the SMEs are satisfied with the hazards analysis, they indicate concurrence by selecting the “thumbs up” icon. The EHS liaison is responsible for providing final EHS Review Comments and releasing the activity to the Activity Lead to initiate line management approval.



Line Management Approval

The final step in the activity development process is line management approval. The Activity Lead initiates this process by selecting **Release for LMA** (line management approval) from the **Choose An Action** button drop down. The line management approval process depends upon the activity risk level and division settings.

Approver	Activity Risk Level		
	1	2	3
Activity Lead*	Approve	Approve	Approve
Project Lead	Approve	Approve	Approve
Division Safety Coordinator	Notify	Notify or Approve**	Approve
Division Director (or designated approver)	N/A	N/A	Approve

* Automatic approval when the Activity Lead selects Release for Line Management Approval

** Optional and routed based on division settings.

Approvers select Approve Activity or Reject Activity from the Choose An Action button drop down.

Activity Manager

HOME | HAZARDS & CONTROLS | MY PROJECTS | ACTIVITY SEARCH | WPC SETTINGS

FLYNN, MICHELLE M

CREATE ACTIVITY: ACTIVITY SUMMARY

OP-0003
ACTIVITY STATUS: REVIEWING

Risk Level: 1

Approve Activity
Reject Activity

Project : OPS test project 2
Activity No. : OP-0003
Activity Name: JOCJ - SOW
Activity Lead: JOSE COTA JIMENEZ
Activity Division: Operations
Activity Start Date: July 17, 2014
Activity Locations: 007C-0103 |

Rejecting an activity requires a reason and resets the activity to Developing status.

