University of California, Berkeley

Policy Issued: June 1, 2017 Effective Date: June 15, 2017

Supersedes: Facilities Reoccupancy After a Disaster,

June 2010

Next Review Date: June 15, 2022



Post-Earthquake Building Evaluation

Responsible Executive: Vice Chancellor-Administration

Responsible Office: Division of Real Estate, Inspection Services

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Policy Statement

After a damaging earthquake or other disaster, the Campus Building Official or designee has the discretion to close campus facilities and elements of the built environment deemed unsafe, and to restrict access to the contents of unsafe buildings and areas.

Scope of Policy This policy affects everyone at UC Berkeley.

Why We Have This Policy

The University of California, Berkeley has a campus Emergency Operations Plan (EOP) that describes the organizational framework, guidance, and authority for responding to and recovering from an emergency. The purpose of the EOP is to broadly define the procedures UC Berkeley will use in response to emergencies that affect the campus community and disrupt normal campus operations. This policy specifically defines the process for Post-Earthquake Building Evaluation and the protocols for evaluating the structural integrity of buildings and infrastructure following a seismic event. This policy assumes activation of the Emergency Operations Center (EOC), the Infrastructure and Utilities Emergency Support Function (ESF), and allocation of the formal command and control authority outlined in the EOP.

This policy establishes a protocol for effectively evaluating buildings following a seismic event and communicating the evaluation data to campus leadership. The intent of the policy is to ensure that appropriate resources are brought to bear immediately following a seismic event and to shorten the time needed to return to business as usual. Additionally, it will help facilitate decision-making in a timely manner regarding the emergency use of campus facilities following a seismic event.

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Responsibilities

Campus Building Official (CBO):

- Designates who may conduct initial inspections of campus-owned facilities.
 Designees must be certified in ACT-20. These evaluators are not authorized to make final decisions about building safety. That authority rests with the Campus Building Official and/or designees with written delegated authority from the Campus Building Official.
- Trains personnel to serve on Post-Earthquake Building Evaluation (PEBE) teams.
- Maintains emergency communication channels to mobilize trained personnel.
- In coordination with the Office of Emergency Management, determines the need for building inspections after a seismic event and mobilizes resources necessary to respond, including PEBE Teams.
- Coordinates the evaluation of all campus buildings. On an established timeline, confers with the EOC regarding building conditions and related information.
- Makes determinations regarding the safety of facilities (including building contents), and the built environment to protect people and assure rapid recovery.
- Ensures buildings are clearly marked "Safe" (Green Tag), "Restricted" (Yellow Tag) and "Unsafe" (Red Tag) as they are evaluated and coordinates with UCPD through the EOC to restrict access to the latter two categories.
- After the emergency is stabilized and a formal recovery plan has been approved by the Crisis Management Team, works with campus leadership and the recovery team to coordinate repair of damaged campus buildings and infrastructure.

Crisis Management Team (CMT):

- Appoints a recovery manager and approves a campus recovery plan.
- Consults with Campus Building Official and sets priorities for building inspection based on conditions and changing operational needs.

UC Police Department (UCPD):

- Coordinates the cordoning off of buildings with the Campus Building Official.
- Enforces building safety posting and occupancy restrictions.

Residential & Student Services Programs (RSSP):

- Assists PEBE teams in the evaluation of residence halls and other RSSP facilities.
- Assesses the condition of interior utilities of campus residences and other RSSP facilities.
- In an emergency, RSSP staff work under the direction of the Campus Building Official.
- May evaluate non-residential buildings as directed by the Campus Building Official.

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Environment, Health and Safety (EH&S):

- Accompanies facilities inspection teams into all animal facilities and consults on safety and use issues.
- Determines whether hazardous materials present a danger in campus facilities and coordinates clean-up.
- Evaluates fire and other life safety risks.
- Evaluates other health and safety issues as appropriate.
- Provides input on non-structural safety issues to Campus Building Official for postings.
- Campus Fire Marshal may declare any structure unsafe for occupancy based on life safety conditions.

Office of Laboratory Animal Care (OLAC):

 Accompanies facilities inspection teams into all animal facilities and consults on safety and use issues.

Recovery Manager:

• Designates a recovery team and coordinates the development of a written recovery plan which may include alternate uses for campus buildings.

Procedures

- 1. Threshold for Activation: Major seismic events are widely felt and will be widely reported. This policy assumes that the event is large enough that damage to the campus or surrounding environs will be reported to UCPD, Facilities Services (FS) and/or RSSP. In consultation with OEM or other campus leadership, The Campus Building Official activates the Post-Earthquake Building Evaluation Plan, including Zone Leaders and PEBE Teams for earthquakes that result in Intensity Level VII (Very Strong) to X (Extreme) on the Modified Mercalli Intensity Scale as determined by USGS- produced Shake Maps.
- 2. All State of California Office of Emergency Services (Cal OES) Safety Assessment Program (SAP) trained personnel and designated Environment, Health and Safety (EH&S) personnel will report to the West Crescent. Available personnel will form teams of three and begin building evaluations, with a priority on designated emergency facilities (Warren Hall, Sproul Hall, Tang Health Center), buildings that house laboratory animals, mass care and shelter locations, and housing facilities.
- 3. Buildings are evaluated with communication between the team leaders and the Campus Building Official. The Campus Building Official and the EOC discuss, with the CMT, changing priorities and inspection results regularly throughout the immediate response period (first 72 hours) and sustained response period (3-7 days after event).

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Web Site Address for This Policy

http://campuspol.berkeley.edu/policies/eqevaluation.pdf

Glossary

Modified Mercalli Intensity Scale: Seismic scale used to measure the intensity of an earthquake. The scale quantifies the effects of an earthquake on the Earth's surface, humans, objects of nature, and man-made structures on a scale from I (not felt) to XII (total destruction).

PEBE Team: Three-member team consisting of:

- 1. At least one person certified by the Applied Technology Council in Post-Earthquake Safety Evaluation of Buildings (ATC-20);
- 2. A representative of Environment, Health and Safety (either chemical, radiological or fire safety trained) or Real Estate Division (Facilities Services, Construction & Design, Real Estate Services), as appropriate for each building
- 3. A spotter, who remains outside the building and communicates with the evaluators via FRS Radio and communicates results of inspections and other related information to the zone captain.

Post-Earthquake Building Evaluation: Evaluation of structures according to Applied Technology Council in Post-Earthquake Safety Evaluation of Buildings (ATC-20).

Recovery: The period that starts at stabilization of the emergency and ends when the affected area returns to normal campus governance and operational status.

Seismic Event: An earthquake or other seismic event causing major or widespread damage.

Related Documents

University of California Policy on Safeguards, Security, and Emergency Management: http://www.ucop.edu/ucophome/coordrev/policy/PP012506SSEM_Policy.pdf

University of California, Berkeley Emergency Operations Plan: http://oep.berkeley.edu/pdf/OtherDocs/EOP_v51.pdf

University of California, Berkeley Office of Laboratory Animal Care: http://www.olac.berkeley.edu/olac/forms/OLAC_GuideToServices.pdf

Revision History

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