7 Building Inspection Office Review Triggers

The triggers below are intended for quick reference. Modifications to science or experimental equipment, devices, or systems do not require Building Inspection Office (BIO) review and authorization, except that attachment/support and interface of the equipment and devices to building structures and building systems. For additional guidance, see the BIO Project Review and Authorization Manual (SLAC-I-730-2A24Z-001) and/or contact BIO (ext. 4113).

General Aspects of a Project That Trigger BIO Review

1. Construction, enlargement, alteration, moving, or demolishing a building or structure
2. Any element under review that has a known code violation (as an existing condition)
3. A change of character, use or occupancy of a space, building, parking lot, road, or structure
4. Tents, temporary structures, and membrane structures, including construction trailers and fences
5. Excavations, grading, and fill, or other earth moving activities
6. Partitions greater than 5’9”
7. Installations or modifications of science and experimental equipment as follows: BIO review and authorization required for the attachment/support/interface of the equipment and devices to building structures and building systems
8. Installation or alteration of a chemical or biological laboratory
9. Installation, alteration, repair, or replacement of pressure vessel, cryogenic, vacuum, or compressed gas systems
10. Initial installation or modification of piping or tubing used to deliver highly toxic or reactive (for example, unstable, pyrophoric, water reactive) fluids (gaseous or liquid) from a source container to the process/research equipment
   Depending on the specific hazards, ESH may request that a formal process hazard analysis be conducted on the design of the system, before acquisition and installation of the hardware. During the initial installation, a procedure must be developed with BIO input for further modification and testing (for example, pressure testing, leak checking). Subsequent modifications falling within the scope of this procedure may be carried out and documented by the line organization without further review by ESH.
11. Installation, alteration, repair, relocation, or replacement of a hazardous materials storage, delivery, or use system
12. Work in or adjacent to a vehicular way

Structural Aspects of a Project That Trigger BIO Review

13. Installation, alteration, repair, or replacement of a structural element; any change that would affect loading or seismic resistance of a structure
14. Equipment/objects weighing 400 lbs or more will require engineered seismic restraints and consequent BIO review
15. Equipment/objects less than 400 lbs attached to the walls, ceilings, or floors may require seismic restraints and therefore BIO review. Please contact BIO for determination.

Electrical Aspects of a Project That Trigger BIO Review

16. Installation, alteration, relocation, or replacement of conventional facilities electrical distribution or utilization equipment (except cord-and-plug connected equipment)
17. Any change that would affect the electrical loading of the conventional facilities power distribution system

Applicability: applies to conventional facilities electrical distribution systems (premises wiring), both permanent and temporary, or standalone electrical distribution systems powered by a generator, UPS, photovoltaics, or similar (includes construction temporary power)

Exception: installation or relocation of 120/208 VAC receptacle outlets and replacement of like-for-like utilization devices such as light fixtures and receptacles does not require BIO review.

Mechanical (Piping, Plumbing, HVAC) Aspects of a Project That Trigger BIO Review

18. Installation, alteration, repair, relocation, or replacement of a mechanical element; any change that would affect loads on a system
19. Any facilities equipment change affecting quantities of air flow or a reduction in outside air
20. Repair or alteration of facilities piping, (e.g. steam, air, water, sewer, storm, process piping, process effluent, etc.) exceeding a materials value of $500

**Exception:** equipment maintenance or replacement of like-for-like does not require BIO review.

**Fire Aspects of a Project That Trigger BIO Review**

21. Installation, alteration, repair, relocation, or replacement of
   - Fire-resisting building elements (fire barrier walls)
   - Egress system components (aisle ways, corridors, exit doors, exit signs, emergency lighting, etc.)
   - Fire suppression, alarm, detection or reporting systems

22. Increases in fire loading beyond that typical for the existing building, structure, or area in question

23. Changes to fire department access (examples include narrowing of roads; alteration of trestles; installation of bollards; placement of anything that may block fixed fire response equipment such as fire hydrants, sprinkler risers or fire department connections)

**Exception:** equipment maintenance or replacement of like-for-like does not require BIO review

**Environmental Aspects of a Project That Trigger BIO Review**

24. Generation of significant and large quantities of hazardous waste that will have an immediate effect on fees/taxes imposed by the state and county and/or impact Waste Management labor and resources (such as waste drums and bins), or requires special disposal/treatment

25. Installation of equipment/containers that hold 55 gallons or more of oil

26. Removal of asbestos-containing material, and/or working where asbestos-containing material is, or may become, friable

27. Use of hazardous materials on a project during construction or operation

28. Proposed operations/experiments that may result in airborne emissions and/or liquid effluents

29. Operation of portable equipment powered by fossil fuel (for example, a standby generator)

**Americans with Disabilities Act Aspects That Trigger BIO Review**

30. Additions to or alteration of any accessible element, including paths of travel, ramps, walkways, doors, restroom facilities, exit paths, parking lots, sidewalks, stairs, required signage, elevators, break rooms, kitchenettes, or new elements