Appendix D. FHA/FPA Checklist

The checklist below is not intended to be all-inclusive; however, it serves to provide guidance and reminders of proper fire-prevention practices. Where items are highlighted in yellow, they represent many of the common deficiencies noted in Berkeley Lab buildings.

ASSESSMENT				REFERENCE	LOCATION/COMMENTS
Occupancy: Group B/F1 (CFC) Business/General Industrial (NFPA)					
SECTION 1 – OUTSIDE THE BUILDING					
			1A. Fire hydrants		
Y	N	N/A	1. Are fire hydrants clear and free of obstructions (3 ft. clearance)?	CFC 507.5.4/5 (2013)	
Y	N	N/A	2. Are fire hydrants properly spaced?	CFC C105.1 (2013)	
		N/A	1B. Fire Department connections (FDC)		
Y	N	N/A	1. Is there an appropriate turnaround on the street for fire trucks by the FDC (150 feet)?	CFC 503.1.1 (2013)	
Y	N	N/A	2. Is the fire lane to the FDC at least 20 ft. wide with a 13 ft. x 6 in. height clearance?	CFC 503.2.1 (2013)	
Y	N	N/A	3. Are the FDCs correctly labeled (i.e., with legible lettering and obvious which building the FDC serves)?	NFPA 14 6.4.5 (2013)	
		N/A	1C. Miscellaneous		
Y	N	N/A	1. Are there bollards around sensitive equipment (natural gas, nitrogen/oxygen tanks, etc.)?	CFC 312.1 (2013)	
Y	N	N/A	a. Are bollards no more than 4 feet apart and filled with concrete?	CFC 312.2 (2013)	
Y	N	N/A	2. Are distances between buildings correct?	NFPA 80A 4.3.8.2 (2012)	
Y	N	N/A	3. Does the building have correct and visible identification?	CFC 505.1 (2013)	

		SECTION 2 – BUILDING			
		N/A	2A. Occupancy		
Y	N	N/A	1. Have there been any changes in occupancy or new construction?	CFC 102.3 (2013)	
Y	N	N/A	2. Is there anything requiring follow-up that was not noted on the last inspection?	CFC 102.3 (2013)	
		N/A	2B. Smoke detectors		
Y	N	N/A	1. Are smoke detector conduits labeled correctly (e.g., labeled "Do Not Paint" and with proper identification)?	NFPA 70 760.30 (2014)	
Y	N	N/A	2. Are smoke detectors free and clear of obstructions?	NFPA 72 17.8.3.1.2 (2013)	
Y	N	N/A	3. Where required, is the building adequately covered with smoke detection?	NFPA 72 17.5.3.1. (2013)	
		N/A	2C. Fire risers		
Y	N	N/A	1. Is the fire riser room labeled on all entrances, including the outside of the building?	NFPA 14 6.3.8.4 (2013)	
Y	N	N/A	2. Are all valves labeled correctly?	NFPA 14 6.3.8.1 (2013)	
Y	N	N/A	3. Are all risers easily accessible?	NFPA 14 A.6.3.6.1.1 (2013)	
Y	N	N/A	4. Do risers have correct bracing and hangars?	NFPA 13 9.1.1.2 (2010)	
Y	N	N/A	5. Do risers have the correct design tag, including design information, pressures, and number of sprinklers (also known as Cal Tag)?	NFPA 14 6.8 (2013)	

			SECTION 2 – BUILDING (CONT'D)		
		N/A	2D. Fire sprinklers		
Y	N	N/A	1. Are there sprinklers below any obstructions greater than 4 ft. x 4 ft.?	NFPA 13 8.5.5.3.1 (2013)	
Y	N	N/A	2. Do hutches/enclosures have appropriate sprinkler coverage?	NFPA 13 8.5.5.3.1 (2013)	
Y	N	N/A	3. Are dry sprinklers labeled with installation dates, and have the dry sprinklers been replaced in the last 10 years?	NFPA 25 5.3.1.1.1.6 (2014)	
Y	N	N/A	4. Are sprinklers blocked by obstructions, such as overhead lighting, ductwork, office decorations, etc.?	CFC 315.3.1 (2013)	
Y	N	N/A	5. Are sprinklers free of paint/tape/decorations?	NFPA 13 6.2.6.2.2 (2013)	
Y	N	N/A	6. Does the sprinkler-head cabinet have the appropriate number of heads and wrenches appropriate for the size of the system (<300 system heads has at least 6 spares, between 300 and 1000 system heads has at least 12 spares, >1000 system heads has at least 24 spares)?	NFPA 13 6.2.9.5 (2013)	
Y	N	N/A	7. If there have been any remodels, is the sprinkler-head spacing still appropriate?	NFPA 25 A.10.2.5 (2014)	
Y	N	N/A	8. Does a fire compartment have sprinklers of one type (all quick or standard response)?	NFPA 13 8.3.3.2 (2013)	
Y	N	N/A	9. Is there a 1-inch clearance above upright sprinkler heads for maintenance?	NFPA 13 8.6.4.1.1.1 (2010)	
Y	N	N/A	10. Are escutcheons properly installed and free of damage?	NFPA 13 6.2.7 (2013)	
Y	N	N/A	11. Are standpipes properly labeled?	NFPA 14 6.3.8.1 (2013)	
Y	N	N/A	12. Is the standpipe system appropriate for the building (required for buildings with more than three stories)?	CFC 1103.6.1 (2013)	
Y	N	N/A	13. Is the standpipe open and supervised?	NFPA 14 6.3.7.1 (2013)	
Y	N	N/A	14. Does the pre-action system have hydraulic data/nameplate?	NFPA 14 8.1.2(17) (2013)	
Y	N	N/A	15. Have the sprinkler systems been tested annually? Every 5 years?		

			SECTION 2 – BUILDING (CONT'D)		
		N/A	2E. Mechanical/electrical rooms		
Y	N	N/A	1. Are mechanical and electrical rooms clearly labeled as such from all entrances?	CFC 605.3.1 (2013)	
Y	N	N/A	2. Do all electrical panels have a 36-inch clearance in front of the door?	CFC 605.3 (2013)	
Y	N	N/A	3. Is the room free of combustible material storage not related to the room's function?	CFC 315.3.3 (2013)	
Y	N	N/A	4. Are there dampers in the vents between rated rooms?	PUB 3000 12.9 (2012)	
Y	N	N/A	5. Based on the kVa rating of transformers, is the electrical room properly rated (over 112.5 kVA requires a minimum 1-hour rating)?	NFPA 70 450.21 (2014)	
		N/A	2F. Fire extinguishers		
Y	N	N/A	1. Are hangars securely holding fire extinguishers?	NFPA 10 6.1.3.4 (2013)	
Y	N	N/A	2. Are extinguishers being serviced monthly and annually?	NFPA 10 7.2.1.2/7.3.2 (2013)	
Y	N	N/A	3. Are extinguishers appropriate for the type of building/hazard?	NFPA 10 5.4.2 (2013)	
		N/A	2G. Fire alarms		
Y	N	N/A	1. Is the fire-alarm panel free of any trouble or service warnings?	NFPA 72 14.5.4 (2013)	
Y	N	N/A	2. Are fire-alarm junction boxes labeled?	NFPA 70 760.30 (2014)	
		N/A	2H. Electrical safety		
Y	N	N/A	1. Are all junction boxes (j-boxes) covered?	CFC 314.25 (2013)	
Y	N	N/A	2. Are rooms (especially conference rooms and offices) free of daisy-chained electrical cords?	CFC 605.5 (2013)	
		N/A	2I. Miscellaneous		
Y	N	N/A	1. Do gas-fired water heaters have a 3 ft. clearance with two straps?	CPC 507.2 (2013)	
Y	N	N/A	2. Do structural I-Beams have full fire-retardant coverage (i.e., is all steel covered)?	NFPA 703 5.4 (2015)	
Y	N	N/A	3. Are strobes and horns appropriately placed in conference rooms?	CFC 907.5.2.3.1 (2013)	

	SECTION 3 – Exits				
		N/A	3A. Evacuation plans		
Y	N	N/A	1. Is the evacuation plan correct?	CFC 404.3.1 (2013)	
Y	N	N/A	a. Is the plan correctly oriented?	CFC 404.3.1 (2013)	
Y	N	N/A	b. Does the plan have the correct emergency information, including phone numbers?	CFC 404.3.2 (2013)	
Y	N	N/A	2. Is the evacuation plan placed in the correct areas?	CFC 404.7.1 (2013)	
		N/A	3B. Egress		
Y	N	N/A	1. Are egress and head clearances unobstructed and at least 36 inches wide?	CFC 1017.3 (2013)	
Y	N	N/A	2. Do egress pathways travel through a lesser hazard? For example, egress cannot go through a mechanical room from an office space.	NFPA 101 7.5.1.2 (2015)	
Y	N	N/A	3. Are strobe lights unobstructed by shelving, signage, etc.?	NFPA 72 18.5.1 (2013)	
Y	N	N/A	4. Are egress stairwells free and clear of storage and obstructions?	CFC 315.3.2 (2013)	
Y	N	N/A	5. Are emergency lights on backup power and in good working order?	NFPA 101 7.9.2 (2015)	
Y	N	N/A	6. Are lenses on emergency lights pointing to the floor?	NFPA 101 7.9.1 (2015)	
Y	N	N/A	7. Is the egress distance (measured from the farthest point away) appropriate for the occupancy (e.g., 100 feet with sprinkler system)?	CFC 1014.3 (2013)	
Y	N	N/A	8. Are strobe-light distances appropriate after remodeling?	NFPA 72 18.5.5.4.1 (2013)	
		N/A	3C. Fire doors, corridors, and walls		
Y	N	N/A	1. Do doors opening into egress corridors obstruct less than half of the egress corridor?	NFPA 101 7.2.1.4.3.1 (2015)	
Y	N	N/A	2. Do fire doors latch and coordinate appropriately?	CFC 703.2.3 (2013)	
Y	N	N/A	3. Are roll-down fire doors certified annually?	NFPA 80 5.2.4.1 (2013)	
Y	N	N/A	4. Are smoke seal gaskets on smoke doors in good condition?	NFPA 80 5.2.3.5.2 (12) (2013)	
Y	N	N/A	5. Are stairwell walls free of damage?	CFC 703.1 (2013)	
Y	N	N/A	6. Are all penetrations in fire walls correctly mitigated, plugged, or caulked?	CFC 703.1.1 (2013)	
Y	N	N/A	7. Are egress corridors, including walls and ceilings, free of combustibles?	CFC 315.3.2 (2013)	
Y	N	N/A	8. Are doors in egress corridors closed or installed with automatic closers (i.e., not propped open)?	CFC 703.2 (2013)	
Y	N	N/A	9. Are smoke doors outside elevators certified and in good working order?	NFPA 80 5.2.4.1 (2013)	

		SECTION 4 – Hazardous Materials (HAZMAT)			
		N/A	4A. Gas cylinders		
Y	N	N/A	1. Are cylinders secured by noncombustible straps?	PUB 3000 13.7.5.c.ii	
Y	N	N/A	2. Are cylinders secured at 1/3 and 2/3 of the cylinder height?	PUB 3000 13.7.5.c.i	
Y	N	N/A	3. Is the hazard signage appropriate for the cylinder?	PUB 3000 13.7.4.b	
		N/A	4B. Storage		
Y	N	N/A	1. Are fire storage cabinets self-closing and latching?	PUB 3000 13.7.9.b.ii.2	
Y	N	N/A	2. Are contents appropriate for cabinet?	PUB 3000 12.7.2	
Y	N	N/A	3. Are there fewer than 10 gallons of storage of combustible gases?	PUB 3000 12.7.2	
Y	N	N/A	4. Do racks contain unmixed storage?	PUB 3000 12.7.2	
Y	N	N/A	5. Are oxidizers and flammables separated properly?	NFPA 55 7.1.11.2.2/3 (2013)	
		N/A	4C. Gas cabinets		
Y	N	N/A	1. Are certification stickers up to date (annual)?	NFPA 55 7.6.6.1 (2013)	
Y	N	N/A	2. Are there three or fewer cylinders in the cabinet?	NFPA 55 6.17.4 (2013)	
Y	N	N/A	3. Is the flow rate appropriate for the type of cabinet?	PUB 3000 13.7.9.b.ii.7.b	
Y	N	N/A	4. Is the cabinet securely bolted?	NFPA 55 6.14.2 (2013)	
Y	N	N/A	5. Are sprinklers in good working order?	NFPA 55 6.17.3 (2013)	
		N/A	4D. Battery rooms		
Y	N	N/A	1. Is ventilation appropriate?	CFC 608.6 (2012)	
Y	N	N/A	2. Is there smoke detection in the room?	CFC 608.9 (2012)	
Y	N	N/A	3. Are there caution signs on the outside of the room indicating the hazard?	NFPA 70E 320.3(4) 2012	
Y	N	N/A	4. Are there safety caps on the batteries?	CFC 608.2 (2012)	
Y	N	N/A	5. Is there appropriate spill containment?	CFC 608.5 (2012)	
Y	N	N/A	6. If present, is the hydrogen-detection system certified?	CFC 608.6.3 (2012)	
		N/A	4E. Miscellaneous		
Y	N	N/A	1. Are hazard labels present in hazardous areas?	NFPA 704 4.3 (2012)	
Y	N	N/A	2. Does oil-filled equipment have 110% containment capacity?	NFPA 30 22.11.2.2	
Y	N	N/A	3. Are fume hoods certified annually?	NFPA 45 8.13.1	
Y	N	N/A	4. Are NFPA 704 placard requirements being met?	NFPA 704 9.1 (2012)	
Y	N	N/A	5. Are trash/recycling dumpsters located a minimum of 10 feet away from window openings and combustible wall construction?	CFC 304.3.3 (2013)	