Fire Protection Office (FPO) Division of Responsibilities (DOR) for Construction

V = verify W = witness

This table clarifies the assigned duties and responsibilities for new construction and significant modification inspections associated with the IBC, IEBC, NFPA, DOE O 420.1C, and the LANL ESM. This table represents the minimum expectations; additional witnessing and observation can be performed by either party indicated.

All materials, equipment, installation, etc. cited in this document shall be installed and tested in accordance with the approved construction/design documents. The verification and witnessing outlined in this documents does not waive the responsibility for procuring the inspections required in IBC Section 110.

BI = IBC Inspector (LBO) - **FP** – Fire Protection Inspector (FPO)
EI = Electrical Inspector (OSHISH) - **STUP** = Start-Up & Commissioning (LANL)

V = Verify: The act of checking by an independent qualified person that an installed SSC, feature, test result, or process conforms to established criteria. In this context this would typically be performed by review of test documents, installation records, or other supporting information required to be generated by the Project.

W = Witness: The act of on-site observing (inspection) by an independent qualified person of an installation and/or testing of an SSC, feature, or process to verify conformance with established criteria. In this context it would require physical presence and visual observation of the activity while it is taking place. If a physical presence is not possible or safe, alternative means can be used if feasible and approved.

V, W, or V/W		INSPECTION	BI/EI Insp.	FP
		Fire Protection Water Supply Systems		
V	1.	Underground piping materials, size and routing	**BI**	
V	2.	Restraint methods (thrust blocks, restrained joint systems)	**BI**	
V	3.	Appurtenances (hydrants, valves, etc.) and locations During installation: At final:	**BI**	 **FP**
W	4.	Hydrostatic (leak) testing of piping	**BI**	
V/W	5.	Flushing of underground piping	**BI**	
V	6.	Hydrant flushing, dry barrel drainage, and fire flow verification	**BI**	
V	7.	Backfill and compaction	**BI**	
V	8.	Review/Approve NFPA 24 Contractor's Material and Test Certificate for Underground Piping During installation: At final:	 **BI**	 **FP**
		Fire Sprinkler System Installation		
V	1.	Pipe materials, routing, and size	**BI**	
V	2.	Piping is properly supported	**BI**	
V	3.	Piping is properly braced (sway bracing, seismic restraints, flexible couplings, etc.)	**BI**	
V	4.	Anchor bolt installations for supports	**BI**	
V/W	5.	Flushing of underground piping connections	**BI**	

V, W, or V/W		INSPECTION	BI/EI Insp.	FP
V	6.	Proper clearances between piping and adjacent commodities During installation: At final:	**BI**	 **FP**
V	7.	Sprinkler heads are properly installed (type, orifice size, orientation, coverage, temperature rating, etc.) During installation: At final:	**BI**	 **FP**
V	8.	Proper installation of system components (valves, alarm valves, trim, alarm devices, supervisory air, backflow prevention, drains, gauges and other appurtenances, stock of spare Sprinklers) During installation: At final:	**BI**	 **FP**
V	9.	Proper signage, labels and flow arrows on piping and components During installation: At final:	**BI**	 **FP**
V	10.	Proper methods for freeze protection (anti-freeze loops, dry and preaction configurations, etc.) During installation: At final:	**BI**	 **FP**
V/W	11.	Testing of system components (Hydrostatic, Main Drain, Waterflow Devices, Control Valves, Pressure-Reducing Valves, Backflow Prevention Assemblies Forward Flow, etc.)	**BI**	
V/W	12.	Pneumatic (leak) test of Dry Pipe system	**BI**	
V/W	13.	Backflow Prevention Assembly backflow testing	**BI**	
V/W	14.	Supervisory Signal Initiating Device testing		**FP**
V	15.	Review/Approve NFPA 13 Contractor's Material and Test Certificate for Aboveground Piping During installation: At final:	**BI**	 **FP**

Fire Pump Installation

V	1.	Pipe materials, routing, and size	**BI**	
V	2.	Piping is properly supported	**BI**	
V	3.	Piping is properly braced (sway bracing, seismic restraints, flexible couplings, etc.)	**BI**	
V	4.	Anchor bolt installations for supports	**BI**	
V/W	5.	Hydrostatic (leak) test of piping	**BI**	
V/W	6.	Flushing of suction piping connections	**BI**	

V, W, or V/W		INSPECTION	BI/EI Insp.	FP
V	7.	Proper clearances between piping and adjacent commodities During installation: At final:	**BI**	 **FP**
V	8.	Pump appurtenances are properly installed During installation: At final:	**BI**	 **FP**
W	9.	Fire Alarm testing of system devices		**FP**
V	10.	Normal AC power wiring conforms to NFPA 70	**EI**	
V	11.	Fire alarm low voltage wiring conforms to NFPA 72 & NFPA 70	**BI**	
W	12.	Sequence of operation testing of system		**FP**
W	13.	Flow testing of fire pump, comparison to shop curve		**FP**
W	14.	Testing of pump engine / motor		**FP**
V	15.	Proper signage, labels and flow arrows on piping and components During installation: At final:	**BI**	 **FP**
V/W	16.	Backflow Prevention Assembly testing	**BI**	
V	17.	Review/Approve NFPA 20 Contractor's Material and Test Certificate for Fire Pump Systems During installation: At final:	**BI**	 **FP**

Fire Detection and Alarm Systems

V	1.	Proper routing of FA (Fire Alarm) conduit, raceway, etc.	**BI**	
V	2.	Proper support of FA conduit, raceway, boxes, etc.	**EI**	
V	3.	Normal AC power wiring & surge protective devices conform to NFPA 70	**EI**	
V	4.	FA low voltage conductors/cabling	**BI**	
V	5.	FA low voltage wiring conforms to NFPA 72, NFPA 70, & SPECS (e.g., Proper size, voltage rating, color, pairing, etc.)	**BI**	
V	6.	System components (Initiating Devices & Notification Appliances) are installed in proper locations and at proper heights During installation: At final:	**BI**	 **FP**
V	7.	Wiring and termination to control panels and field devices are properly routed and landed During installation: At final:	**BI**	 **FP**
V/W	8.	Continuity testing of FA low voltage conductors/cable in accordance with Project Specifications	**BI**	

V, W, or V/W		INSPECTION	BI/EI Insp.	FP
W	9.	Proper functionality of fire alarm system devices		**FP**
W	10.	Proper functionality of fire alarm system logic and control functions		**FP**
W	11.	Proper fire alarm system control logic, including auxiliary functions		**FP**
W	12.	Proper remote reporting to CAS		**FP**
V	13.	Size and type of batteries During installation: At final:	**BI** 	 **FP**
V	14.	Authorization to Energize issued	**EI**	**FP**
V	15.	Review/Approve NFPA 72 System Record of Completion During installation: At final:	**BI** 	 **FP**

Special Extinguishing Systems

V	1.	Pipe routing and size	**BI**	
V	2.	Piping is properly supported	**BI**	
V	3.	Piping is properly braced (sway bracing., seismic restraints, flexible couplings, etc.)	**BI**	
V	4.	Anchor bolt installations for supports	**BI**	
W	5.	Hydrostatic/ Pneumatic (leak) test of piping	**BI**	
V	6.	Proper clearances between piping and adjacent commodities During installation: At final:	**BI** 	 **FP**
V	7.	Discharge nozzles are properly installed (type, orifice size, orientation, coverage, obstructions, etc.) During installation: At final:	**BI** 	 **FP**
V	8.	Proper signage, labels and flow arrows on piping and components During installation: At final:	**BI** 	 **FP**
V	9.	Proper installation of system components (valves, agent storage containers, alarm devices, supervisory devices, gauges and other appurtenances) During installation: At final:	**BI** 	 **FP**

V, W, or V/W		INSPECTION	BI/EI Insp.	FP
W	10.	System actuation and alarm testing During installation: At final:	**BI**	 **FP**
V	11.	Proper functionality of control system logic and control functions, releasing panel, auxiliary functions (fan shutdown, power shunt-trip, door closure, damper closure, pre-discharge alarms, abort stations, etc.)		**FP**
V	12.	Review/Approve required Contractor's Acceptance Test Documentation During installation: At final:	**BI**	 **FP**
		Building Construction Features, Walls/Barriers		
V	1.	Construction of fire-rated floor and roof systems	**BI**	
V	2.	Construction of roof systems/covering assemblies	**BI**	
V	3.	Construction of fire-rated walls/barriers	**BI**	
V	4.	Fire-rated walls/barriers labeled/stenciled with appropriate rating	**BI**	
V	5.	Through penetration firestop system installations in walls/barriers	**BI**	
		Fire Doors / Fire Windows		
V	1.	Doors/windows, frames and hardware have proper rating, properly close and latch, are labeled	**BI**	
W	2.	Doors/windows properly operate (release, close, latch) when inter-locked with fire detection and alarm system		**FP**
		Fire-Proofing/Coatings		
V	1.	Fire-proofing installed per manufacturer's instructions	**BI**	
V	2.	Patches and repairs to fire-proofing per manufacturer's instructions	**BI**	
		Elevators		
W	1.	Elevators are programmed properly for fire safety (recall floors, shunt-trip power supervision, interlock with fire alarm system)	**STUP**	**FP**
		HVAC		
V	1.	Installation of Fire/smoke dampers and duct smoke detectors	**BI**	
W	2.	Proper setting (fusible link temp) and operation of fire dampers During installation: At final:	**BI**	 **FP**
W	3.	HVAC fan shutdown upon duct smoke detector activation and/or other control requirement via fire detection and alarm system		**FP**
W	4.	Smoke damper controls interlocked with fire alarm system		**FP**

V, W, or V/W		INSPECTION	BI/EI Insp.	FP
		Emergency Lighting/EXIT Signage		
V	1.	Installation (configuration with lighting, mounting, locations)	**BI**	
V/W	2.	Satisfactory testing/commissioning	**STUP**	**FP**
		Portable fire extinguishers		
V	1.	Installation/placement (appropriateness with hazards) During installation: At final:	**BI**	**FP**

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Approved by:	
Elisa Baker (FPO) Elisa Baker Digitally signed by Elisa Baker DN: C=US, E=elisab@lanl.gov, O=ALDFO, OU=Fire Protection, CN=Elisa Baker Date: 2025.09.10 11:48:36-06'00'	Tim Donovan (CBI-LBO) TIMOTHY DONOVAN (Affiliate) Digitally signed by TIMOTHY DONOVAN (Affiliate) Date: 2025.09.03 10:19:04 -06'00'
Felix Sandoval (CEI-OSHISH) FELIX SANDOVAL (Affiliate) Digitally signed by FELIX SANDOVAL (Affiliate) Date: 2025.09.04 15:47:21 -06'00'	Determination: Unclassified - Tobin Oruch TOBIN ORUCH (Affiliate) Digitally signed by TOBIN ORUCH (Affiliate) Date: 2025.09.10 15:59:19 -06'00'