Enhancing Safety During Construction and Impairments with Temporary Fire Pump Systems

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American Fire Sprinkler Association

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Travis Montembeault is the Director of Commercial Development within the Fire Business at Peerless Pump. Travis is widely considered to be an industry leading subject matter expert on innovation, remote monitoring and testing, and smart fire within fire protection. He is a Principal member on the NFPA 25 Inspection, Testing and Maintenance of Water-Based Fire Protection Systems Technical Committee and an Alternate on the NFPA 20 technical committee, using his expertise as a thought leader in remote monitoring and testing to drive the industry toward a safer and more reliable world. Travis has presented across the largest stages at the largest conferences, discussing the importance of IOT connected fire protection systems, their impact on safety, and the codes & standards that are driving these developments forward.

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The authority on fire, electrical, and building safety

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Learning Objectives

1. Understand how and where temporary fire pump systems are covered in current editions of NFPA standards
2. Explore the technical components and operational considerations of temporary fire pump systems, including deployment strategies, system integration, and performance expectations
3. Apply recommended best practices and real-world examples to enhance fire safety through ensuring compliance and protection when permanent systems are offline

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Agenda

1. Temporary Fire Pumps in NFPA Code
2. The Business Case for Temporary Fire Pumps
3. Examples of Temporary Fire Pumps in Market
4. How are these deployed and connected
5. System Monitoring

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Major increase in temporary fire pump units
What's driving this growth?

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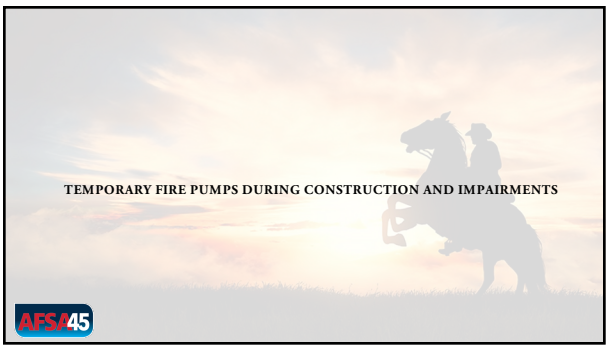
TEMPORARY FIRE PUMPS DURING CONSTRUCTION AND IMPAIRMENTS
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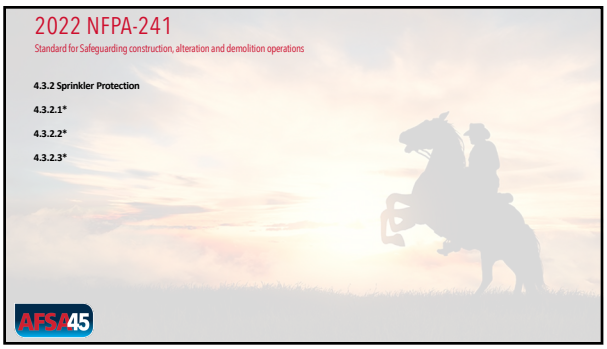
2022 NFPA-241
Standard for Safeguarding construction, alteration and demolition operations
4.3.2 Sprinkler Protection
4.3.2.1*
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4.3.2.3*
AFSA45

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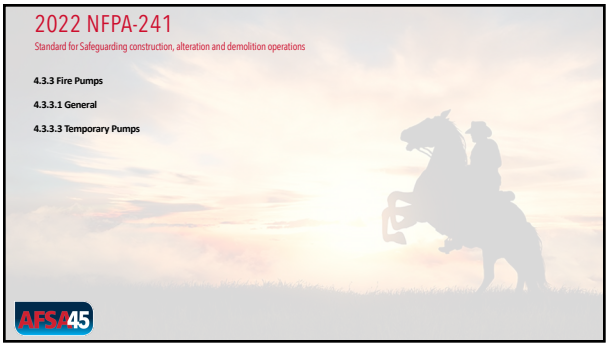
2022 NFPA-241
Standard for Safeguarding construction, alteration and demolition operations
4.3.3 Fire Pumps
4.3.3.1 General
4.3.3.3 Temporary Pumps
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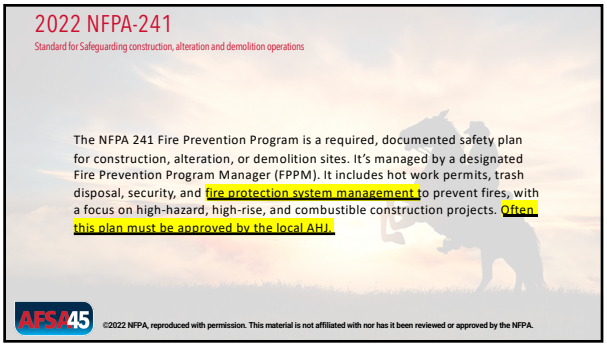
2022 NFPA-241
Standard for Safeguarding construction, alteration and demolition operations
The NFPA 241 Fire Prevention Program is a required, documented safety plan for construction, alteration, or demolition sites. It's managed by a designated Fire Prevention Program Manager (FPPM). It includes hot work permits, trash disposal, security, and fire protection system management to prevent fires, with a focus on high-hazard, high-rise, and combustible construction projects. Often this plan must be approved by the local AHJ.
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2024 NFPA-101
Life Safety Code
3.3.110 Fire Watch
9.11.2 Sprinkler System Impairments
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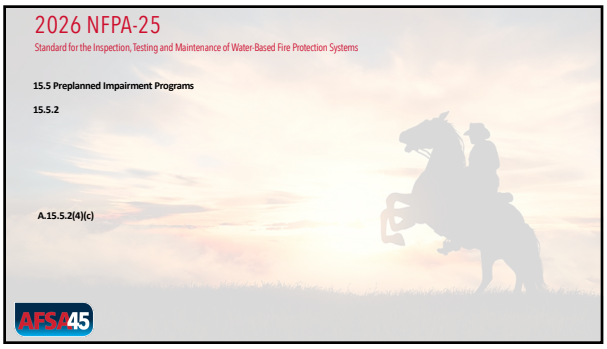
2026 NFPA-25
Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems
15.5 Preplanned Impairment Programs
15.5.2
A.15.5.2(4)(c)
AFSA45

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2026 NFPA-25

Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems

15.6 Emergency Impairments

15.6.1

15.6.2

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2026 NFPA-25

Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems

EXHIBIT 15.2 Temporary Water Supply Connection to FDC

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NFPA Section Summary

- During construction the Fire Prevention Program rules (often created with the AHJ)
- Can setup a temporary fire pump, not NFPA required, but could be required per AHJ/Fire Prevention Program
- System Impairment: per NFPA 25 2026 ed., 10 hours non-consecutive in a 24-hour period = Fire Watch(er) or Temporary Water Supply
- THAT'S IT!

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THE BUSINESS CASE FOR TEMPORARY FIRE PUMPS

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Costs: Firewatch vs. Pump Trailer

SERVICE	COST	ADVANTAGES	LIMITATIONS
Firewatch	$35–$60/hr (standard), $75–$150/hr (emergency)	Immediate compliance, human hazard detection, flexible short-term and quick to deploy	High labor cost, reactive only, increased liability risk
Pump Trailer	$10,000–$30,000+/month	Full NFPA-compliant protection, economical for multi-week outages, automatic start, remote monitoring	Requires setup and logistics planning, not as quick to deploy

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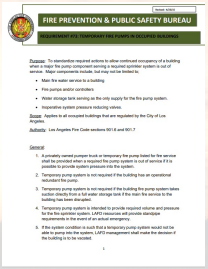
AHJ Requirements – Sometimes Fire Watch Isn't Enough

- AHJ might require establishing a temporary water supply, alternate method of charging sprinkler system or vacating the building.
- For example: Los Angeles Fire Department – Requirement #73 Temporary Fire Pumps in Occupied Buildings
  - Source: https://www.lawa.org/media/14258
- "A privately owned pumper truck or temporary fire pump listed for fire service shall be provided when a required fire pump system is out of service if it is possible to provide system pressure into the system"


FIRE PREVENTION & PUBLIC SAFETY BUREAU

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AHJ Requirements – Listed Temporary Fire Pumps or Appeal for Fire Watch

Temporary Fire Pump Policy Policy

Explanatory Policy – Temporary Fire Pump

- City of Phoenix outlines policy for using Temporary Fire Pumps
- 1) Must be listed for fire
- 2) Must be monitored
- 3) Must have acceptance test
- Otherwise must appeal to Fire Marshal and go on fire watch for duration of impairment.
- Source:

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Costs: Firewatch vs. Pump Trailer

SERVICE	TYPICAL MONTHLY COST
Fire Department pumper on standby	$150K-$250K+
Private Pumper Standby	$80K-$150K+
Fire Watch only (1 guard, 24/7) (often multiple guards required)	$25K-$50K+
Temporary Fire Pump Trailer	$10K- $30K+

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EXAMPLES OF TEMPORARY FIRE PUMPS IN MARKET TODAY

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Temporary Fire pumps – General Duty

Source: https://www.etank.net

22

Temporary Fire pumps – General Duty

Source: https://usfirepump.com

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Temporary Fire pumps – General Duty

Source: https://www.xylem.com/en-us/products--services/pumps-packaged-pump-systems/pumps/self-priming-pumps/automatic-self-priming-pumps/wellpoint/mv-series/wellpoint-mv/

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Temporary fire pumps - CONEX BOX

UL/FM pumps

Source: LinkedIn – Shambaugh & Sons Ltd

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Temporary fire pumps – Enclosed Trailer

UL/FM pumps

Source: https://peerlessmidwest.com/fire-protection/

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Temporary fire pumps – Enclosed Trailer

UL/FM pumps

Source: Peerless Pump Company

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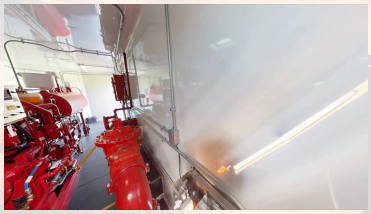
Peerless Trailer walkthrough // Matterport



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DEPLOYMENT AND CONNECTION STRATEGIES

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Deployment and installation

- Identify if temporary fire pump system can solve the issue (i.e. impaired fire pump)
- First call should be to your sprinkler contractor and/or fire pump rep
- They'll source options and identify pricing and timeline
- Installation typically completed by the sprinkler contractor and commissioning completed by the owner (or owner's rep) to ensure fully operational (similar to NFPA 20 new fire pump commissioning and startup)
- Weekly/monthly pump churn requests required as per NFPA25, with occasional ITM and/or mandated visits from owner('s rep)

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Deployment and installation

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MONITORING

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Temporary Fire Pump System Monitoring

It's important to monitor these temporary pumps just as you would a fixed system

Options:
1) Hardwire code mandated alarms into building alarm system
2) Auto-dialer
3) IOT / Cloud Connected Remote Monitoring

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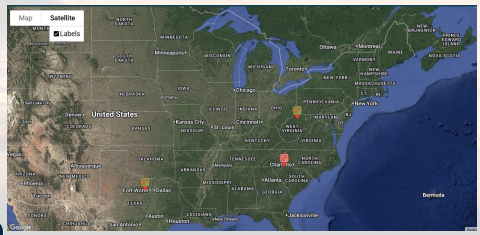
Temporary Fire Pump System Monitoring

GPS Location



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Temporary Fire Pump System Monitoring

Configurable SMS, EMAIL and PUSH Notifications

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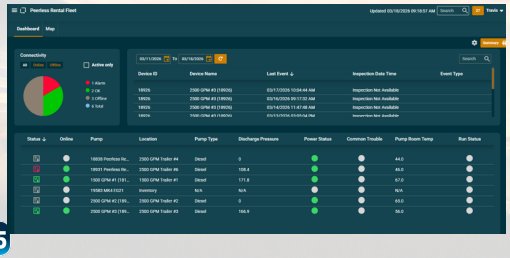
Temporary Fire Pump System Monitoring

Overall Fleet Monitoring



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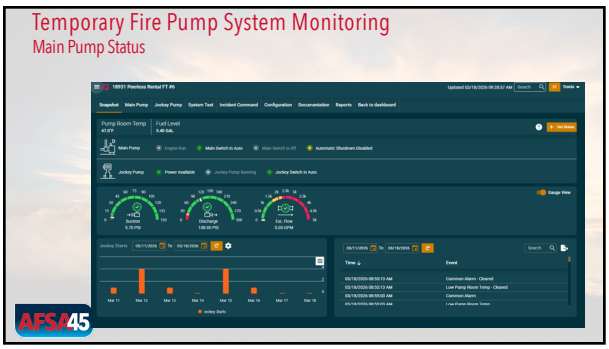

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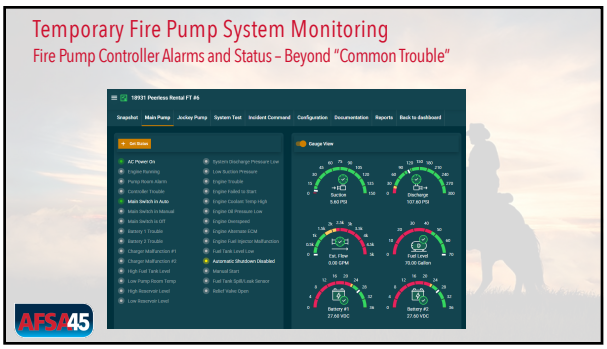

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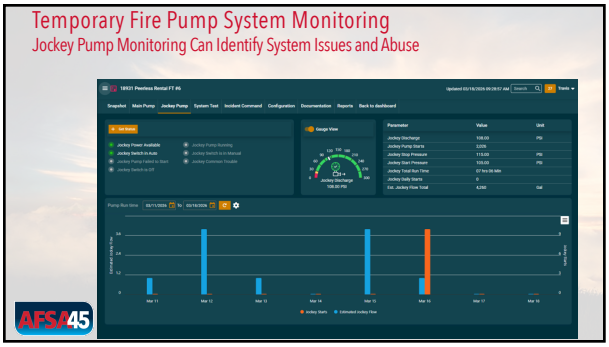

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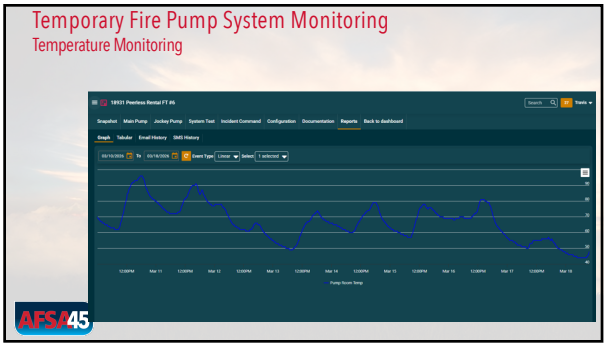

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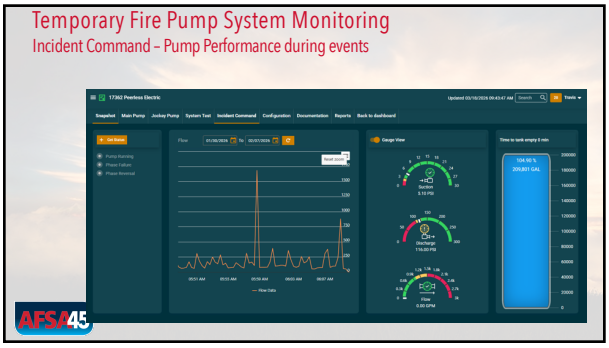

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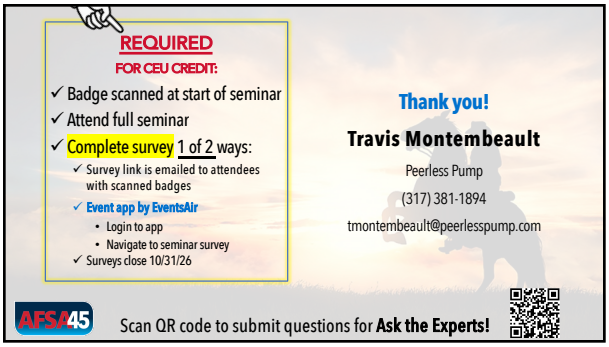
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✓ Survey link is emailed to attendees with scanned badges
✓ Event app by EventsAir
• Login to app
• Navigate to seminar survey
✓ Surveys close 10/31/26
Thank you!
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Scan QR code to submit questions for Ask the Experts!

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2027 Training Schedule

WEBINARS

1/6	Updates to NFPA 20
1/20	Calculating Pressure Reducing Hose Valves
2/3	Consumer Alert: Nitrogen in Sprinkler Systems
2/17	Reviewing Hydraulic Calculations
3/3	Updates to NFPA 13, 2028 Ed.
3/17	Updates to NFPA 13R & 13D, 2028 Eds.
4/7	Topic Coming Soon
4/21	NFPA 25: Roles & Responsibilities
5/5	Standpipe Flow Test Procedures
5/19	Storage 101
6/2	NFPA Technical Meeting - Voting Guide
6/16	Topic Coming Soon
6/30	Topic Coming Soon
7/7	Updates to NFPA 14, 2027 Edition
7/21	Adjacent Hazards & Design Methods
8/4	Acceptance Testing
8/18	Modifications to Existing Systems
9/22	Topic Coming Soon
10/6	Seismic 101
10/20	Proposed Updates to NFPA 25, 2029 Ed.
11/3	Evaluating Fire Pump Flow Tests
11/17	Top 10 Tech Reviews
12/1	Designing Water Storage Tanks
12/15	Pump Room Layout

PROGRAMS

Feb 9 - Mar 5 Apr 20 - May 14 Aug 3 - Aug 27** Oct 26 - Nov 19	Beginning Design School*
Apr 26 - May 7 Nov 1 - 12	Intermediate Design School*
Feb 8 - 10** Apr 12 - 14 Jul 12 - 14 Oct 11 - 13	Sprinkler Hydraulics Calculations Workshop
Apr 19 - 21 Oct 18 - 20	Advanced Hydraulics Calculations Workshop
Feb 11** Apr 30 Jul 23 Sep 24	Introduction to the Fire Sprinkler Industry
Mar 1 - 3 May 17 - 19 Aug 16 - 18 Oct 18 - 20**	NFPA 25 Essentials Workshop
Jun 7 - 10 Sep 20 - 23	Experienced Inspector Skills Lab
Mar 4 - 5 May 20 - 21 Aug 19 - 20 Oct 21 - 22**	NFPA 25 Fire Pump Workshop
Spring Summer Fall	ITM Inspector Development Program* *This program is 20 months.*

** Hybrid course **At General Air Products Lab, Exton, PA*

AFSA46

September 8-11	Manchester Grand Hyatt San Diego, CA

For More Details Visit:
firesprinkler.org

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Dates subject to change. Programs subject to minimum registrations.

rev 9/14/2026

Virtual Instruction Path (VIP)

for Sprinkler Fitting Apprentices

Level 1 - Begins January 2027

Level 2 - Begins February 2027

Level 3 - Begins January 2027

Level 4 - Begins March 2027

www.firesprinkler.org/VIP

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HANDS-ON WORKSHOPS FOR 2027

FEATURING AFSA'S TRAINING LAB

NFPA 25 Essentials Workshop

Mar | May | Aug | Oct

Description: Understand roles, responsibilities, and NFPA 25 ITM procedures through hands-on testing of wet systems, dry systems, and fire pumps.

NFPA 25 Fire Pump Workshop

Mar | May | Aug | Oct

Description: Develop practical NFPA 25 fire pump ITM skills, including no-flow and full-flow testing, water supply graphing, and performance evaluation.

Introduction to the Fire Sprinkler Industry

Feb | Apr | Jul | Sep

Description: This course is designed for those new to the industry. An introductory, wide-ranging 8-hour course that provides a broad overview of core fire sprinkler industry concepts for those new to the field.

Experienced Inspector Skills Lab NEW

Mar | Sep

Description: Take your ITM expertise beyond the basics. Designed for experienced technicians, this course combines focused classroom instruction with hands-on system lab training to strengthen your application of current NFPA 25 inspection, testing, and maintenance requirements. Refine fire sprinkler testing practices, improve documentation, deliver more consistent service, and help reduce liability while reinforcing knowledge commonly covered on certification exams.

Learn more about AFSA's fire sprinkler lab featuring functional risers, a spray room, fire pumps, and an interactive classroom.

firesprinkler.org/lab