
Brookhaven National Laboratory Fire Safety Updates ES&H Coordinators' Meeting

December 2006

Joe Levesque

Emergency Services Division

Subject Area

■ Fire Safety

- One subject area, 16 sections
- Updated previous ESH Standards
- Adds several topics

Management System: [Facility Safety](#)

Subject Area: **Fire Safety**

[VIEW/PRINT ALL \(No Exhibits and Forms\)](#)

Effective Date: **Oct 31, 2006** | Periodic Review Due: **Oct 31, 2011** | Subject Matter Expert: [Joseph Levesque](#) | Management System Steward: [James Tarpinian](#)

Introduction

This subject area contains procedures for the following:

- Preventing fires in all areas of the Laboratory.
- Assessing the risk from fire within individual Fire Areas of a facility to minimize the potential for a fire;
- Ensuring safe egress from facilities to protect staff from fire and smoke;
- Installing, inspecting, and maintaining fire suppression, fire detection, fire walls and fire doors;
- Designing, installing, modifying, and documenting fire detection and suppression systems;
- Minimizing the chance of a fire started by or accelerated with the use of flammable or combustible liquids, pyrophoric materials and combustible metals, hydrogen, and oxidizers.

It also describes procedures for gas and electric cutting and welding operations to prevent loss of life and property from fire, and personal injury from molten globules, intense light, sparks, noise, and exposure to fumes, vapors, gases, and particulates. This subject area also establishes requirements for levels of fire protection that must be present in areas with electronic equipment values exceeding \$100,000 or systems vital to the programmatic or infrastructure processes at BNL. Additionally, the subject area describes procedures for obtaining portable fire extinguishers, moving or removing them, and inspecting, testing, and maintaining them.

Contents

Section	Overview of Content (see section for full process)
1. Controlling Ignition Sources	<ul style="list-style-type: none">• Ensure users are instructed on the space heater's safe operations.• If working with open flames is required, assess hazards.• Do outdoor cooking (such as BBQs) in approved units such as grills, hibachis, and fixed grills.• Do not use smoking materials inside of ENL facilities or BNL vehicles.• Install electrical installations according to codes and requirements.• Ensure design and operation of oil-fired and gas-fired boiler and heating systems meet codes and requirements.
2. Cutting and Welding	<ul style="list-style-type: none">• Assess hazards.• Complete, review, post, and adhere to permits.• Use PPE.• Use fire watch, if needed.

Subject Area Sections

1. Controlling Ignition Sources (new – general interest)
2. Cutting and Welding
3. Preventing Fires Caused by Combustible Materials (new – general interest)
4. Portable Fire Extinguishers (new – new general interest)
5. Analyzing Fire Hazards (new – safety documentation)
6. Fire Walls and Doors (new – facility design)
7. Fire Detection, Suppression, Hydrant, and Standpipe Systems (new – facility design)
8. Means of Egress and Life Safety
9. High-valued Electronic Facilities (Computer and Experimental)
10. Temporary and Experimental Gas Systems
11. Portable Structures, Trailers, and Tents
12. Wildland Fire Safety (new – multiple groups in/along the woods)
13. Oxidizers (new – chemical workers)
14. Pyrophoric Materials and Combustible Metals (new – chemical workers)
15. Hydrogen Systems
16. Flammable and Combustible Liquids

Subject Area

- Workshops will be conducted starting in January of 2007
 - Same topic twice a week (Tuesday/Thursday)
 - Sections will be grouped by category
 - Generally applicable material
 - Working with Chemical
 - Facility design
 - Safety documentation
 - Purpose: Review content; discuss drivers, purpose and application; accept comments for improvement

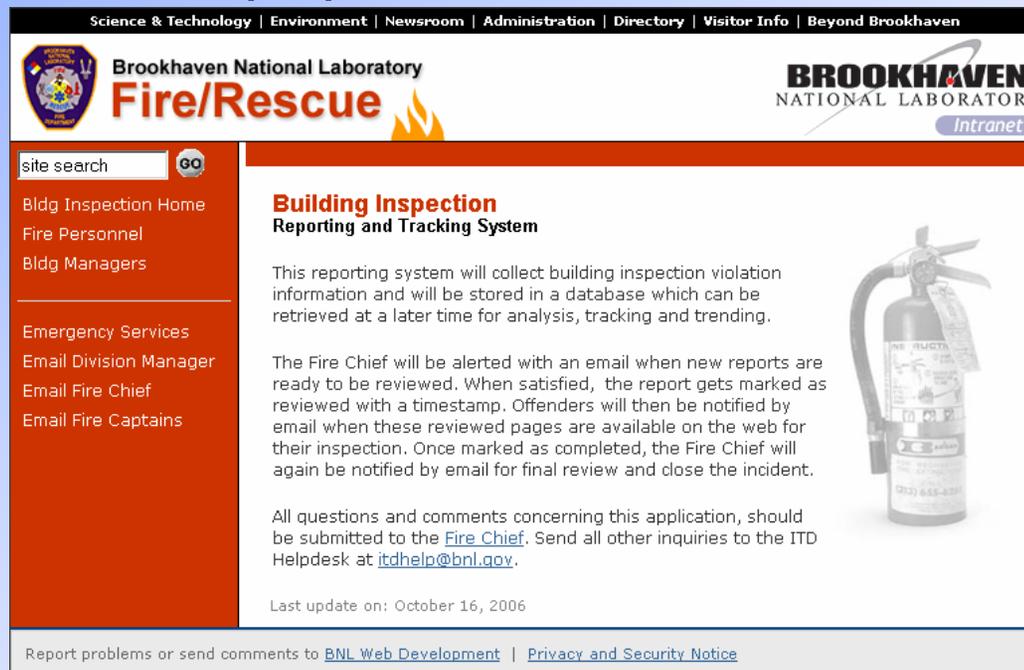
Subject Area – Public Accessible Defibrillators

- PAD/AED Subject Area being initiated
- Over 25 AEDs on-site that we know of
- 263 people trained

Note: A request was made this month for Building Managers to report to Fire Captain Marcel Rosenfeld if an AED is present in their building.

Fire Rescue Building Inspections

- Fire Safety Building Inspections have been conducted by Fire Rescue for years
- Moved from paper to web based



The screenshot shows the Brookhaven National Laboratory Fire/Rescue Intranet website. The header includes navigation links: Science & Technology | Environment | Newsroom | Administration | Directory | Visitor Info | Beyond Brookhaven. The main header features the Brookhaven National Laboratory logo and the text "Fire/Rescue" with a flame icon. A search bar is located on the left side. The main content area is titled "Building Inspection Reporting and Tracking System" and contains the following text:

This reporting system will collect building inspection violation information and will be stored in a database which can be retrieved at a later time for analysis, tracking and trending.

The Fire Chief will be alerted with an email when new reports are ready to be reviewed. When satisfied, the report gets marked as reviewed with a timestamp. Offenders will then be notified by email when these reviewed pages are available on the web for their inspection. Once marked as completed, the Fire Chief will again be notified by email for final review and close the incident.

All questions and comments concerning this application, should be submitted to the [Fire Chief](#). Send all other inquiries to the ITD Helpdesk at itdhelp@bnl.gov.

Last update on: October 16, 2006

Report problems or send comments to [BNL Web Development](#) | [Privacy and Security Notice](#)

On the right side of the page, there is an image of a fire extinguisher.

Building Inspection Work Flow

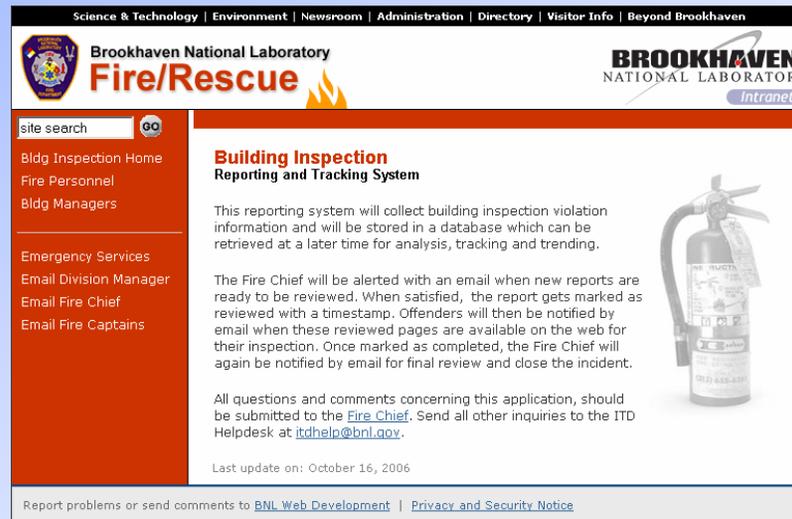
1. Firefighter develops recommendation
2. It is forwarded to the Fire Chief for review/release
3. Recommendation goes to Building Manager by email; Status of recommendation is "pending"
4. Building Manager responds via web interface
5. Closed recommendations are verified by next fire inspection

Building Inspections

- Email notification will provide link to Building Inspection recommendation
- Otherwise

<http://intranet.bnl.gov/emergencyservices/inspection/>

Building
Manager
Link



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Records

- Building Manager Link – view records
- *The “glitch” we discovered (sorry)*

Science & Technology | Environment | Newsroom | Administration | Directory | Visitor Info | Beyond Brookhaven

Brookhaven National Laboratory
Fire/Rescue

BROOKHAVEN
NATIONAL LABORATORY
Intranet

site search

Bldg Inspection Home
Manage/View Reports

Em Services Home
Email Division Manager
Email Fire Chief
Email Fire Captains

Building Manager Console

Full Name: **Levesque, Joseph**
Life Number: 16628
Email Address: levesque@bnl.gov

Username: BNL\levesque

If you are **Levesque, Joseph** and the personal directory entry above is inaccurate or missing, please contact [your departmental representative](#) to get your LDAP Information updated. You **may not** be able to access this system unless your personal directory entry is complete.

Manage/View Reports
Select the number of records to be displayed on each page.

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Last update on: October 20, 2006

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Example



Building Inspection Database

View Record

[Bldg Inspection Home](#)

Items in **red type and noted with an asterisk (*)** are mandatory fields and had to be filled out.

Record ID 1507
Date Created 10/12/2006 12:56:00 PM
Last Modified 10/12/2006 12:56:00 PM

Submitter Information

Last Name *Levesque*
Life Number *16628*
Email Address *levesque@bnl.gov*
Badge Number *000*

Building Information

Bldg Description *Fire House*
Bldg Number *0599*
Floor/Area *First*
Room Number or Other Location *Test*
Violation Priority *Normal*
Violation *A02 - Valve found unsealed or unlocked*
Bldg Manager (BM) *VAZ, JAMES N*
BM Department *EM*
BM Phone *7912*
BM Email *vaz@bnl.gov*

Was this violation corrected? *No*
Was this record closed? *No*

How was this violation corrected

Test recommendation

Comments

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Contact the Fire Chief

- Chief@BNL.Gov; ext. 5476

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Heat Detector Problems

- Original problem 3 years ago
- To date replaced 3,964 units
- The units have a problem
- Restarting the replacement program

