

# A Team Approach to Making Safety Signs Effective

Stephen Gamache – Industrial Safety Professional – [Stephen.Gamache@inl.gov](mailto:Stephen.Gamache@inl.gov)

Charlene Johnson – Industrial Safety Professional – [Charlene.Johnson@inl.gov](mailto:Charlene.Johnson@inl.gov)

Lynne Coe-Leavitt – ESH Manager – [Lynne.Coe-Leavitt@inl.gov](mailto:Lynne.Coe-Leavitt@inl.gov)



# Signs of Confusion



# Signs of Confusion



# Key Elements of Strategy

- Obtained Sponsorship: ES&H Director
- Established an Integrated Team: Crosscutting team to ensure buy in and ownership; included Human Factors Expert
- Developed and used an Interactive Observation Assessment Tool
- Benchmarked other DOE Laboratories
- Developed Plan and obtained Senior Leadership support

# ANSI Design

Signal Word

**! DANGER**



**High Voltage Equipment Hazard**

**Serious Injury or Death  
may result with contact of  
exposed electrical parts.**

**Work Control package  
required prior to working on  
or accessing equipment.**

Consequence

Pictorial

Action Statement



- Safety Alert symbol is required for Personal injury hazards

The use of the appropriate color for each signal word panel is desirable. See ANSI Z535.1.



- **DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury



- **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury



- **CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury



- **NOTICE** is used to address practices not related to personal injury

# Improvement Opportunities

**! DANGER**

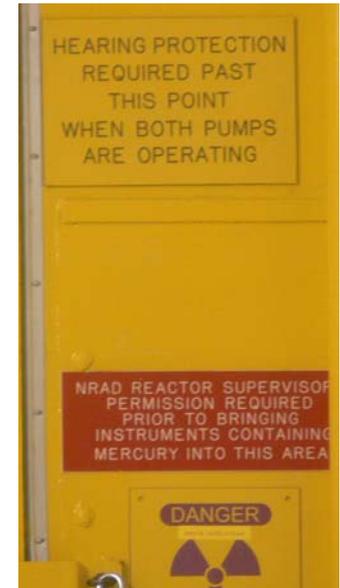


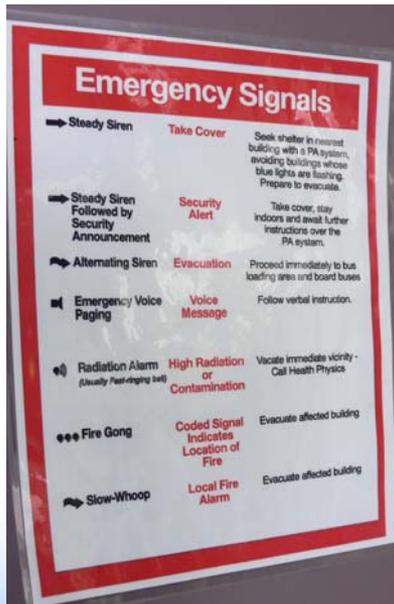
## **Strong Magnetic Field**

**Persons with certain metallic,  
electronic, magnetic, or mechanically-  
activated implants, devices, or objects  
may not enter this area.**

**Serious injury or death may result.**

# It's Your Turn





# Other Standard Drivers

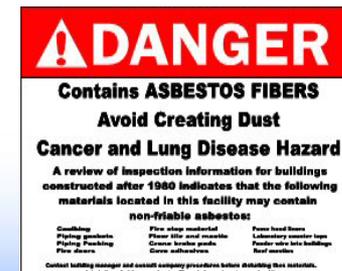
- Lasers –
  - ANSI Z136.1-2007
    - DANGER Class 3R, 3B and 4 Lasers
    - CAUTION Class 2 and 2M Lasers



- Biohazard –
  - OSHA 29 CFR 1910.145(e)(4)
  - OSHA 29 CFR 1910.1030(g)(1)(ii)(A)



- Asbestos
  - OSHA 29 CFR 1910.1001(j)(3)



# Challenges

- Signs provided by manufacturers
  - Eyewash/safety showers
  - Factory warning labels on equipment



# Safety Symbols

- The brain relates quicker to a visual symbol than to words
- Enables viewers to better understand the meaning of the graphics
  - Legible
  - Comprehensible
  - Simple



# NOTICE

## AUTHORIZED PERSONNEL ONLY

Location	Lab Name
REC 603 Lab C-14	Thermal Spray Diagnostics

### ACCESS REQUIREMENTS

To enter this laboratory you must have keycard access or contact the LSC.

Specific PPE requirements can be found in the work control documentation for work approved in this laboratory.

This lab has been designated as an area where Carcinogens, Reproductive Toxins or Highly Toxic Substances are in use.

Safety Glasses with side shields required beyond 5 feet of entrance - chemical hazard.

Hearing protection required when Torch equipment is operating.

### Hazard Warnings

					
---	---	---	--	--	--

Contacts	Name	Phone	Emergency Contact Phone
Lab Space Coordinator	W. Swank (Dave)	6-1698	522-9798
Alternate Contact	DC Haggard (Lonnie)	6-4222	552-4988
Lab Manager	Timothy Roney	6-9712	529-0376

# Signs Not Addressed

- General Way-finding Signs (traffic)
- Exit signs covered under the Life Safety Code
- Piping or Process Labels
- Safety Bulletins or Posters
- Safeguards and Security
- Radiological

# Results = Value Added

- Reduce the footprint of signs
- Eliminate inconsistency between similar sign messages
- Implement actionable signs
- Use the correct signal word for the hazard
- Use a standardize sign format
- Reduce the cost: develop/maintain signage
- Improve employee awareness of hazards

# Contact Information

- **Stephen Gamache – Industrial Safety Professional**
  - Phone: 208-533-4416, Cell: 208-716-3335
  - Email: [Stephen.Gamache@inl.gov](mailto:Stephen.Gamache@inl.gov)
- **Charlene Johnson – Industrial Safety Professional**
  - Phone: 208-526-7106, Cell: 208-521-4337
  - Email: [Charlene.Johnson@inl.gov](mailto:Charlene.Johnson@inl.gov)
- **Lynne Coe-Leavitt – ESH Manager**
  - Phone: 208-533-7079, Cell: 208-521-1592
  - Email: [Lynne.Coe-Leavitt@inl.gov](mailto:Lynne.Coe-Leavitt@inl.gov)

