

# SAFETY WORKS FOR EVERYONE

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**OSHA Visit Update**

**ESH Coordinator Meeting**

**10/03/03**

Otto White

Safety and Health Services

# OHSA DOE Audit Objectives

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- Identify instances of non-compliance with current OSHA Standards with enough detail for DOE to determine abatement methods and costs
  - Standards
  - General Duty Clause (5)(a)(1)
  - Recommendations
  - Feasible abatement suggestions
  
- “Snapshot-in-time” of compliance status

# OSHA Site Visit to BNL

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Dates: October 21 – November 7

Inspection Team: ~ 20 Persons + Team Leaders

Logistic Support: Independent Oversight & F&O  
Directorate

BAO POC: Maria Dikeakos

BNL POC: Otto White

Inspection Type: Wall to Wall

# Facilities to be Inspected

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- All Work Areas: Shops, Labs, Industrial Type Facilities
- Office Areas: Subject to quick walkthroughs
- No Residential Areas, except laundry rooms and HVAC/Utility Spaces

# OSHA Team – Building 129

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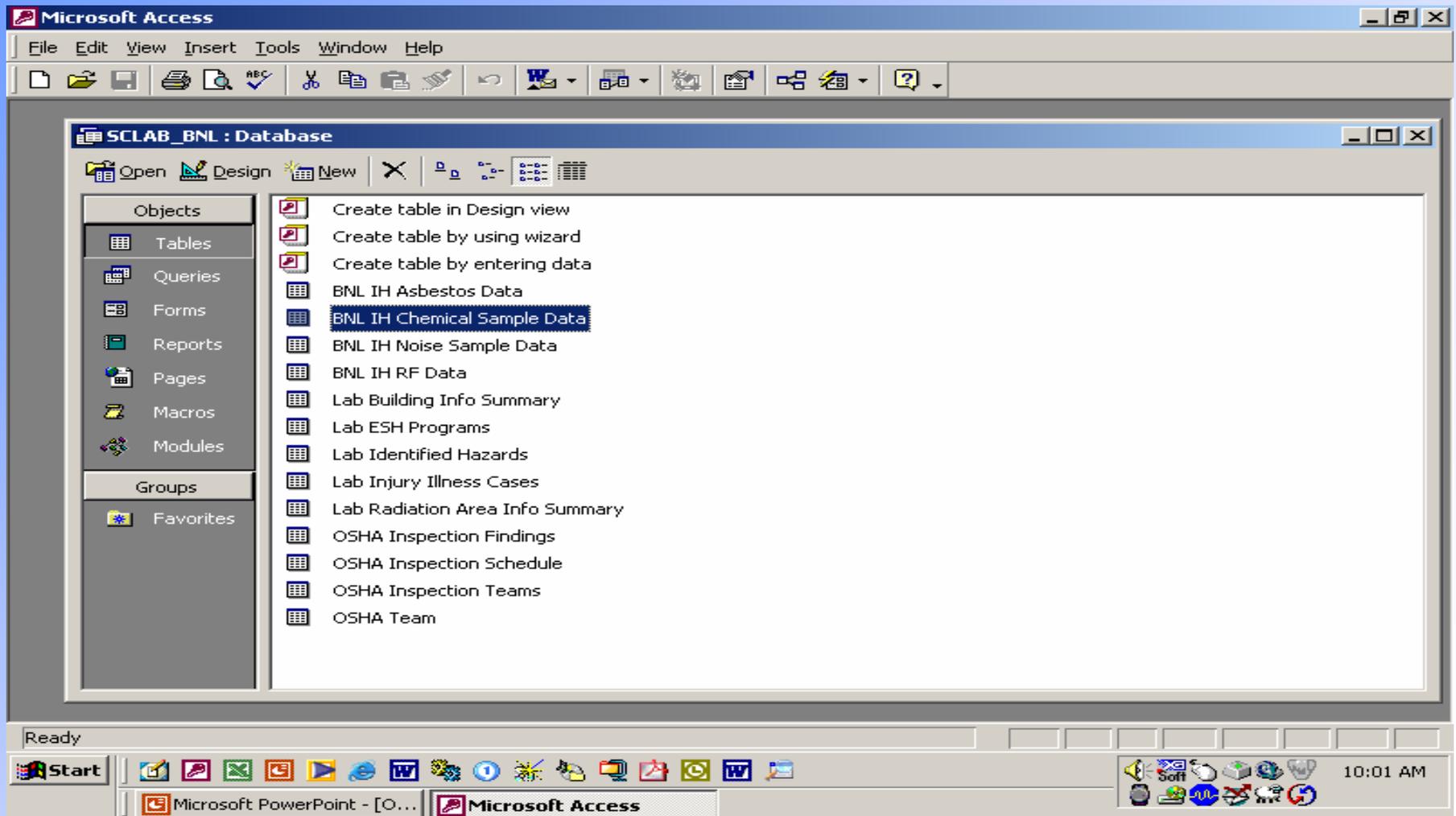
- OSHA Team Leaders:
  - David Barnhill
  - Trese Louie
- No Daily De-briefing by OSHA Team
- Yes Daily BNL De-Briefing
- Opening Conference on 10/21/03 – Location: TBD

# OSHA Document Request

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1. Provide Off-site access to SBMS
2. Site maps that include all BNL Buildings.
3. Union Contact List.
4. List of all subcontractors who will be on site during OSHA visit.
5. Industrial Hygiene Sampling Data
6. BNL Training required.
7. BNL POC for each main OSHA Program
  - *ESH Coordinators, Building Managers*
8. Building List.
9. Inspection Schedule - TBD

# OSHA Database



Microsoft Access - [BuildingGenInformation]

File Edit View Insert Format Records Tools Window Help

**BNL Building Information Summary**

Building Number:  Building Contact:  Building Contact Phone:

Building Name:

Useage:

Oragnizations Using or Present in Building:

Are the following operations/hazards present in the building (answer Yes or NO)?

Chemicals:	<input type="text" value="Yes"/>	Confined Spaces:	<input type="text" value="No"/>	Machine/Fab Shop:	<input type="text" value="No"/>	Storage:	<input type="text" value="No"/>	Of	
Compressed Gases:	<input type="text" value="No"/>	Cranes & Hoists:	<input type="text" value="No"/>	Vehecal/Equipment Shop:	<input type="text" value="No"/>	Material Handling:	<input type="text" value="No"/>	Food Se	
Lead Shop:	<input type="text" value="No"/>	Robotics:	<input type="text" value="No"/>	Welding Shop:	<input type="text" value="No"/>	Powered Industrial Vehicles:	<input type="text" value="No"/>		
RadiationAreas:	<input type="text" value="No"/>	Lasers:	<input type="text" value="No"/>						

Operating Status:  Square Footage:  Percent Office:

Estimated Inspection Time - Hours:

Comments:

Record:  of 477

Form View

Start | Microsoft PowerPoint - [O...] | SCLAB\_BNL : Database | BuildingGenInformation | 10:10 AM

# Inspection Format

- 2 OSHA SMEs/Team (typically Industrial Hygienist and Safety Engineer)
- 1 BNL ESH POC (ESH&Q + Dept/Div)
- 1-2 Building POC's \*
  - (ESH Coordinator/Building Manager)

\* *BNL POC's will be responsible for taking notes of OSHA findings for BNL OSHA Database and Daily De-briefing.*

# BNL OSHA Support Site

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1. OSHA Document Requests
2. OSHA Standards website link
3. Most Cited OSHA Violations website link
4. Building Manager List
5. ESH Coordinator List
6. BNL Telephone Directory
7. ESH&Q Directorate
8. SBMS
8. ANL OSHA Findings
9. ORNL OSHA Findings
10. TJNAF OSHA Findings
11. BNL 2002 OSHA Type Findings
12. BNL OSHA Trained Staff
13. Facility Use Agreements
14. Material Safety Data Sheets
15. Chemical Management System
16. BNL OSH Program POCs

# BNL Preparation Activities

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1. Complete OSHA document request by October 1, 2003.
2. Complete OSHA Visit Project Plan
3. Complete OSHA Database Factual Accuracy Review
4. Prepare/complete communication plan.
5. Complete modification and cleaning of Building 129.
6. Finalize remaining logistics before October 20, 2003.
7. Prepare BNL Points of Contact (i.e., Program POC's, ESH Coordinators, and Building Managers)
8. Complete plans for capturing findings for immediate corrective actions.
9. Inspection of Facilities to remove "low hanging fruit".

# BNL Inspection Strategy

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- Open and responsive.
- Answer questions that you know the answer.
- If you don't know the answer, refer to POC or other knowledge person.
- Correct findings ASAP, if possible
- Apply Lessons Learned to yet-to-be inspected buildings.

# OSHA Review of DOE-SC Laboratories

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## How Have Other DOE Labs Fared?

Oak Ridge National Laboratory

Thomas Jefferson National Accelerator  
Facility

Argonne National Laboratory - East

# ORNL Preliminary Results

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759 audit worksheets were submitted  
1646 hazard instances  
195 OSHA standards cited  
(indicates comprehensive nature of audit)

## Hazard Classification by OSHA Definition

Imminent: 0%  
Serious: 92%  
Other: 8%

OSHA personnel noted that this distribution is a little higher than general industry, but close.

# ORNL Preliminary Results (cont'd.)

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## Number of Findings by Standard

165	1910 (General Industry)
28	1926 (Construction)
24	5(a)(1) General Duty Standard
12	Recommendations

## Number of Instances by Hazard

Electrical - 624
Walking/Working Surfaces - 95
Machine Guarding - 125
Egress - 148

# ORNL Programmatic Observations

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## Health Physics Program

- Overall program found to be very good
- Found a few issues related to labeling

## Health Issues

- Lead (8) - mainly dealing with eating/drinking close to lead areas and negative pressure ventilation in lunchroom
- Cadmium (1) - need exposure assessment
- Formaldehyde (1) - need exposure assessment
- Respiratory protection - voluntary use issues associated with use of dust masks

## Hazard Communication

- Program sound
- Labeling issues (17) throughout lab

# ORNL Programmatic Observations (cont'd.)

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## Bloodborne Pathogen

- Generally sound
- Need to update with latest OSHA standard (Lab Standard, 1910.1450)

## Construction Management

- Fairly effective
- Fall protection
- Electrical

## Confined Space Entry

- Sound
- Space labeling inconsistencies

## Lockout/Tagout

- Sound
- Mainly issues with individual equipment procedures

# ANL Audit Findings

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- ❖ 659 Audit Worksheets Completed
- ❖ 1431 Instances of Hazards
- ❖ 204 Different OSHA Standards
- ❖ 94 General Duty Clause
- ❖ 143 Recommendations

# ANL— E

## OSHA REVIEW 2003

### STANDARDS CITATIONS

#### PART 1910

<b>Subpart D– Walking-Working Surfaces.....</b>	<b>67 Instances</b>
<b>Subpart E-- Exit Routes, Emergency Plans, and Fire Prevention Plans.....</b>	<b>112 Instances</b>
<b>Subpart G– Occupational Health and Environmental Control.....</b>	<b>32 Instances</b>
<b>Subpart H– Hazardous Materials.....</b>	<b>112 Instances</b>
<b>Subpart I– Personal Protective Equipment.....</b>	<b>42 Instances</b>
<b>Subpart J– General Environmental Controls.....</b>	<b>32 Instances</b>
<b>Subpart K– Medical and First Aid.....</b>	<b>112 Instances</b>
<b>Subpart L– Fire Protection.....</b>	<b>111 Instances</b>

**ANL— E**  
**OSHA REVIEW 2003**  
**STANDARDS CITATIONS**  
**PART 1910**

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<b>Subpart M— Compressed Gas and Compresses Air Equipment.....</b>	<b>1 Instance</b>
<b>Subpart N— Materials Handling and Storage.....</b>	<b>31 Instances</b>
<b>Subpart O— Machinery and Machine Guarding.....</b>	<b>65 Instances</b>
<b>Subpart P— Hand and Portable Powered Tools and Other Hand-Held Equipment.....</b>	<b>11 Instances</b>
<b>Subpart Q— Welding, Cutting, and Brazing.....</b>	<b>15 Instances</b>
<b>Subpart S— Electrical.....</b>	<b>313 Instances</b>
<b>Subpart Z— Toxic and Hazardous Substances.....</b>	<b>233 Instances</b>

# ANL Industrial Hygiene Issues

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## OSHA Baseline Monitoring Recommendations

ANL Review

August 2003

ARGONNE NATIONAL LABORATORY - EAST  
OSHA PROJECT  
August 2003

*BASELINE MONITORING FINDINGS*

<u>Division</u>	<u>Building/Room</u>	<u>Substance</u>
CHM	200, A174	Cadmium
CHM	200, A182	Mercury (Drop/ETS)
CHM	200, All	All labs baseline data (6)
	201	Formaldehyde
BIO	202, 238	Formaldehyde
BIO	202, B270	Acrylamide
BIO	202, B223	Acrylamide
BIO	202, B322	Chloroform
BIO	202, B305	Cadmium
BIO	202, Bio Lab	Methylene Chloride
BIO	202, Lab	Benzene

ARGONNE NATIONAL LABORATORY – EAST  
OSHA PROJECT  
August 2003

## BASELINE MONITORING FINDINGS – cont'd.

<u>Division</u>	<u>Building/Room</u>	<u>Substance</u>
ECT	222, A056	Lead Soldering
	222, C153	"
	222, A162	"
	222, G157	"
	222, G151	"
	222, C121	"
	222, A229	"
	222, G101	"
Welding	308, B151	Chromium, Nickel
	362, PPT Cage	Noise

ARGONNE NATIONAL LABORATORY – EAST  
 OSHA PROJECT  
 August 2003

*BASELINE MONITORING FINDINGS – cont'd.*

<u>Division</u>	<u>Building/Room</u>	<u>Substance</u>
PFS-CS	362, High Bay	Chromium, Nickel, Niobium–Electron Beam Welder
PFS-IN	368, V102	Silica, Mica Mixing Joint Compound
	368, V101	Arsenic, Chromium Wood Cutting
	368, V127	Arsenic, Chromium Wood Cutting
	371, Cyl. Storage	Lead Solder
Medical	Site	Benzene Monitoring (5) ? For Bioassay List
	Site	Arsenic Monitoring (3) For Bioassay List
	Site	Noise Monitoring (20) For JHQ List of Significant Exposures
	Site	Asbestos Monitoring (5) ? For JHQ List of Users
	Site	Methylene Chloride (10) ? Monitoring for JHQ List

*TOTAL SURVEYS (Approx.) - 74*

# Thomas Jefferson National Accelerator Facilities

## Major Themes for OSHA Inspection

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1. Extension cords in lieu of permanent wiring.
2. Electrical panels blocked by objects anything, even moveable objects
3. Means of egress: Door hardware, door size, aisle width, blockage exit signs (where needed, illuminated).
4. Railings: height on stairs and decks.
5. Medical monitoring, IH exposure assessment data.
6. OSHA recordkeeping (be alert to recent changes in standard).
7. Confined space signs.
8. High-voltage electrical equipment area signs.
9. Fire extinguisher: annual/monthly inspection.  
Wall signs above extinguisher. Be prepared to discuss lab's policy on fire-x use and training.
10. Cords on floor – other trip hazards too.
11. Don't overlook your cafeteria area:  
Guards on mixers, slicers, training, dishwashing products (MSDS, eye-wash?).