### NIST Construction Safety Program

CFMO -- October 6, 2008

### Scope of Construction Program

- In FY2008 approx. 450 contracts totaling over \$150M
- Repairs and renovations
  - > 75 major repair projects averaging \$200-\$500K
  - ▶ 275 smaller repair projects ranging from \$1K \$200K
  - ▶ 265 lab renovation projects ranging from \$1K \$3.5M
- Major Construction of Research Facilities
  - Central Utility Plant and Site Utility Distribution System (\$34.9M)
  - Building I Extension (\$66.0M)
  - ► NCNR Expansion (\$21.5M)

# Construction Safety Management



### Compliance

- All construction contracts require that contractor comply with:
  - OSHA 29CFR1926, Safety and Health Standards for Construction
  - OSHA 29CFR1910, General Industry Occupational and Safety Health Standards
  - ► Federal Acquisition Regulation 52.236-13 on Accident prevention
  - NIST Health and Safety Instructions, as applicable
  - Other job specific code and permit requirements
- Major Project contracts also require that contractor:
  - Submit Project Safety and Health Plan for review and approval by the COTR

### Enforcement

- Pre-construction meetings
  - Review safety requirements
  - Define safety process, roles, responsibilities and expectations
- Daily Field Inspections by CFMO staff
  - Violations documented in the field and aspect of job stopped
  - Violations reported to the Contracting Officer and Project Manager
  - Violations evaluated and follow-up inspections conducted to ensure correction

- Regular meetings between Government & Contractors (weekly for major projects)
  - Discuss safety violations and concerns
  - Review causes and corrective actions taken
  - Monitor Contractor Safety & Health Plan, if applicable
- Construction WarningSignage Posted at Jobsites
  - Keeps non-contractors out
  - List the PPE needed to enter

### Accountability

- Contractor required to manage Safety and Health Plan (Major Projects)
  - Contractor required to have Safety Manager
  - Part-time or full-time Safety Representative required
- Written cause and corrective action required for violations
- Unsafe work practice stops immediately until corrected
- Immediate removal of personnel from the project for life threatening violations
- Removal of personnel from job for repeated violations
- Stop Work orders issued by Contracting Officer

# Pending Improvements

#### Compliance

- More clearly establish requirements and expectations in contract
- Develop contract language to require contractors to implement a written worker protection program as part of their project specific Safety and Health Plan (major projects)

#### Enforcement

- Implement safety checklist to review contractor Safety and Health Plan
- Develop contract language for defaulting contractors based on poor safety performance
- Develop contract language requiring contractor to document safety and job-skill related training and certification for project work activities

# Pending Improvements (cont.)

### Accountability

- Develop contract language for incentives and penalties
- Develop contract language that allows government to stop work if contractor fails to document training or provide certifications
- Document safety performance in "Past Performance Information Reporting System"

### Want to do more...

- Notify contractor's insurance carrier of:
  - All safety violations and incidents
  - Projects completed without violations or incident
- Reference checks with contractors' workers comp insurance company
  - Review experience modification rating
  - Review significant subcontractors
- Direct contractor on safety without financial penalty to government (i.e. claims for change orders)

# Addressing Safety in Facilities Repairs

Α	В	С	D = A x C
Weight (1 to 10)	Rating Categories	Ratings (0 to 5)	Scores (0 to 50)
10	Sequencing (1st Project in		
	Related Series)		
8	Program Effectiveness		
10	Imminent Failure		
10	Personnel Safety		
10	Life Safety		
10	Environmental and Personnel Health		
10	Rules, Codes, or Laws		
10	Energy Efficiency		
5	Asset Protection		
8	System Functionality		
9	System Capacity		
(Total = 100)	Total for each Project		

