

# Presentation to the NIST Blue Ribbon Commission on Management and Safety

U.S. Department of Commerce  
Office of Inspector General

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# OIG Review of NIST Safety

- Deputy Secretary requested an independent OIG review to determine whether
  - “NIST has established proper training, safety and response protocols ...”
  - “NIST’s management structure facilitates its ability to ensure incident preparedness and response.”
- OIG had an ongoing survey of NIST hazardous materials policies and procedures in Gaithersburg when the plutonium spill occurred.
- Since the plutonium spill
  - Commerce OIG staff working with NRC
  - Reviewed reports from internal and external reviews
  - Meetings with
    - NIST senior management
    - Safety and security personnel in Boulder and Gaithersburg
    - Researchers in Boulder and Gaithersburg
    - Other radioactive materials licensees



# Reports on Internal and External Reviews

- 5 independent radiation health and safety experts
- NIST's initial report on the plutonium spill and time line of events
- NIST Ionizing Radiation Safety Committee report
- U.S. Department of Energy review
- Common themes point to an absence of a safety culture at NIST



# Visits to Other Licensees

- 4 federal, 4 nonfederal
- Observed differences between other licensees and Boulder
  - Powdered plutonium sources
  - Broad scope vs. special nuclear materials licenses
  - Permitting systems for radioactive materials work
  - Analysis of facilities needs prior to initiating radioactive materials work
  - Coordination and information exchange among research groups
  - Use of automated systems to control hazardous materials acquisitions, use, and training
  - Protocols for safe handling of radioactive materials



# Observed Differences Between Boulder and Gaithersburg

- Approval process for acquisition of radioactive materials
- Dedicated radiation vs. general purpose laboratories
- Scope of existing radioactive materials programs
- Role of IRSC
- Duties of radiation safety officer



# Current Focus

- Examine the extent to which NIST's business model may impact safety at NIST labs.
  - How does NIST prioritize use of resources?
  - How are safety budgets developed?
  - How are safety resources allocated to operating units?
  - To what extent does NIST rely on external funding sources to maintain staffing and activity levels?
  - Do externally-funded projects recover appropriate shares of safety costs?

