



DOE Policy/Assistance Initiatives

SAWG Annual Meeting,

Idaho Falls

May 22, 2007

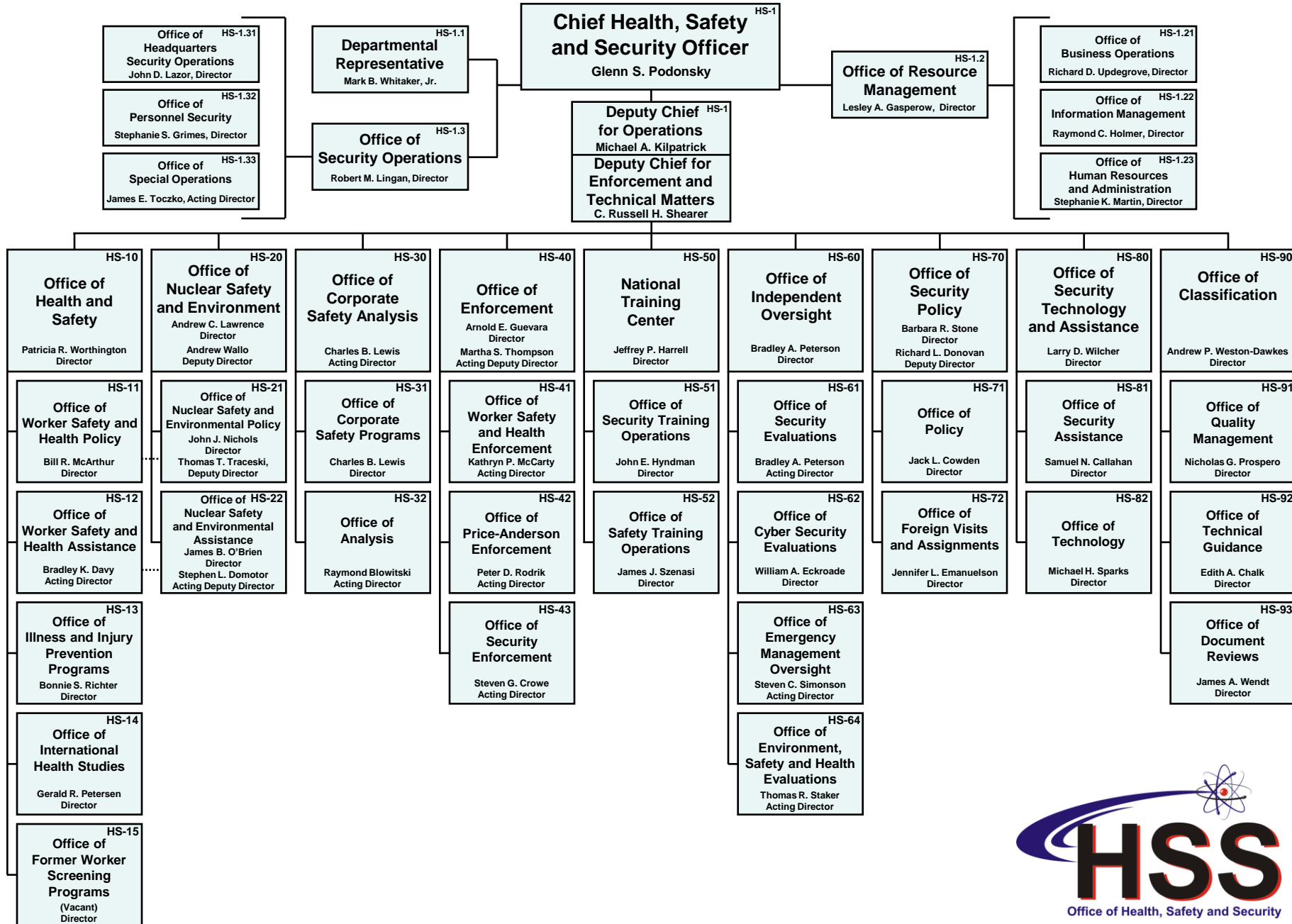
James O'Brien

Director,

**Office of Nuclear Safety and Environmental
Assistance**

Office of Health, Safety and Security

5-2-07





Office of Nuclear Safety and Environment

(HS-20)

Andy Lawrence, Director

202-586-6740



Office of Nuclear Safety and Environmental Policy

(HS-21)

John Nichols, Director

301-903-1018

Office of Nuclear Safety and Environmental Assistance

(HS-22)

James O'Brien, Director

301-903-1408



■ **Standard 1189: *Integration of Safety Into Nuclear Facility Design***

- Comment period expires on May 28, 2007 with a resolution package due July 2, 2007.
- Implements Safety-in-Design philosophies listed in DOE Order 413.3A, *Project Management* and incorporates facility safety criteria listed in DOE O 420.1B, *Facility Safety*
- The expectations in this Standard ensure that hazards are identified early in the project and that an integrated team approach is used to design safety into the facility.
- The basic Safety-in-Design concepts are that appropriate and reasonably conservative safety structures, systems, and components are included early in project designs



■ Recommendation 2004-2, Confinement Ventilation

- This DNFSB recommendation addresses the confinement of hazardous materials at defense nuclear facilities. The cornerstone of this recommendation was to reduce/eliminate the DOE's reliance on passive confinement systems in favor of active systems.
- Lessons learned based on the pilots has been published, and facilities are now performing evaluations based on the schedules issued by the respective line organizations.
- Independent Review Panel (IRP) has transitioned to the Assistance Team of HS-20



■ Nuclear Safety Risk Assessment Policy and Guidance

- DNFSB requested DOE's plan "to ensure the appropriate use of risk assessment methodologies at defense nuclear facilities"
- A draft policy being developed with a goal to issue the draft for DOE-wide REVCOM review in June 2007. A draft of implementation guidance is in process.
- Ensure consistent and proper use of risk assessment methods in making informed nuclear safety decisions. The policy establishes a framework for determining the formality and rigor needed
- Board request: Actions DOE will take to ensure risk assessments have the appropriate pedigree now and after the risk assessment policy and guidance are issued.



■ **DOE Order 425.1C, *Startup and Restart of Nuclear Facilities***

- HS-21 is working to reinvigorate the Operational Readiness Review (ORR) process. As part of this effort, a working group has been established and is working many initiatives which include:
 - Revision of 425.1C; the most significant proposed change will be the elimination of the Readiness Assurance review in favor of a graded approach to Operational Readiness Reviews.
 - Revision of the 425.1C training program.
 - Revising the format and process of Startup Notification Reports.
 - Anticipated entry into RevCom is August 2007.



■ Justification for Continued Operation

- DNFSB is concerned that JCO's are not being appropriately used.
 - unclear regulatory basis for JCOs and lack of definitive expectations and guidance
 - Some JCOs have excessive durations
 - Some JCOs implemented for planned activities (contrary to the existing guidance);
- NNSA and EM issued data call for site procedures guiding JCOs, and lists and examples of JCOs
- DOE guidance for use of JCOs was included in the 2006 revision of DOE G 424.1-1A, *Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements*



■ Recommendation 2005-1, *Nuclear Materials Packaging*

- DNFSB concern that requirements for nuclear materials packaging are inadequate to assure worker protection.
 - Material being stored longer than anticipated.
 - Packages not specifically designed for stored material, storage conditions, and storage duration.
 - Packages had failed and/or been dropped.
- New Manual Developed (RevCom Comment period ended April 13)
 - Provides requirements for design, surveillances and documentation.
 - Site offices need to develop resource loaded schedule for implementation.
- Workshop being held May 30-31 to discuss comment resolution, packaging design requirements (and design testing), and development of resource-loaded implementation schedules.



- **Standard 1027, *Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports***
 - DNFSB concern that Standard lacks detail in certain areas which has led to inconsistent (and potentially inappropriate) implementation.
 - HS-22 established complex-wide working group (in December 06) that included over 20 DOE and contractors to evaluate the DNFSB concern and other DOE identified areas for improvement.
 - HS-22 issuing supplemental guidance on several areas (e.g., Exclusion of Type B Containers and Sealed Sources).
 - Considering revising Standard 1027 to incorporate guidance and other potential improvements.



■ Other HS-20 Activities

- Update of the DOE Explosives Safety Manual, summer of 2007.
- Update of 5480.20A, *Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities* to begin work summer of 2007.
- Issuance of interim guidance on Worker Fatigue, summer of 2007.
- Update of 5480.19, “Conduct of Operations” to begin work late 2007.
- Fire Protection Implementing Guide for DOE Order 420.1B



■ Other HS-20 Activities (continued)

- Participated on Uranium Processing Facility Design Review
- Supported LANL Waste Characterization and Reduction Facility Safety Basis Review (and will participate in upcoming ORR)
- ATR Design Basis Reconstitution Gap evaluation support
- Cross-cutting issues review
- Ventilation system DP technical justification
- Nuclear Safety Excellence (Define and Measure)