Integration: Transfer of Lessons Learned Initiatives

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Objectives for HLW Integration

- Share experience with tank waste storage and treatment facilities
- Jointly develop programs, including technology, for waste storage, retrieval and tank closure
- Accomplish HLW integration through focused meetings, visits, and collaborative execution activities
Current Examples of Complex-Wide Integration

- People
- Functional Area Coordination Teams (FACT)
- Technology Maturation and Management
- System Planning
- Risk and Opportunity Management
- Tank Integrity Programs
- Waste Retrieval
- Waste Treatment
- Waste Characterization
- Performance Assessments (PA)

...long history of integration between SRS and Hanford dating back to 1960's
Functional Area Coordination Teams (FACTs) established across all URS contract sites for many functions (e.g., ES&H, QA, Ops & Maintenance, Engineering, Contractor Assurance)

- Networked approach utilizing benchmarking, regular conference calls and site assist actions
- Exchange and sharing of information including procedures, training packages, lessons learned data, technical bases, best practices, and assessments

Example actions include:

- Shared safety website for exchange of procedures, training packages, and lessons learned data
- Workshop to share technical bases for Documented Safety Analyses (DSA) for enhanced efficiency in development and revisions
- Establishment of complex-wide QA SMEs and development of common supplier list
• Collaborative efforts to ensure integrated and consistent technology maturation and deployment
  – Waste Retrieval and Closure: Tools and Analyses
  – Waste Treatment: Filtration, Small Column Ion Exchange, Solvent Extraction, Vitrification
  – Low-Level Waste Disposition: Alternative Strategies
• Consistent application of the technology maturation processes
• Collaborative effort on DOE-HQ Tank Waste R&D Plan
• Risk Management
  – Exchanged risk registers to help identify risks, and innovative/successful handling strategies
  – Provided training on Risk Management tools developed and piloted by SRR, to other DOE sites through INCOSE, e.g. Pre Mortems, Wild Cards etc.

• Developing a Risk Management Body of Knowledge (BOK)
  – Database updated every three months with input from Hanford and other DOE /URS sites
  – Records with lessons learned, searchable by type, subject, and other technical/ programmatic categories to improve effectiveness of risk identification and mitigation
• Initial Workshop completed
  – Shared approach and lessons learned in preparing and obtaining approval for PAs and maintenance plans
  – Discussed strategy for engagement with the Nuclear Regulatory Commission for consultation and monitoring
  – Discussed lessons learned in obtaining DOE approval of waste determinations and issuance of closure authorization/disposal authorization statements

• Exploring other avenues for collaboration
• On-going integration efforts are resulting in benefits to EM
• Areas of continuing integration efforts include
  – Application of integrated flowsheet operations
  – Streamlining of waste acceptance processes from tank farms, to the Waste Treatment Plant, to waste product acceptance
  – Application of salt/sludge batch preparation experience to Direct Feed Low Activity Waste (DFLAW)
  – At-tank treatment (conditioning) of waste to feed WTP LAW/HAW Vitrification Plants
  – Waste disposition