

Chemical Safety Audits

Marilyn Diaz

U.S. Nuclear Regulatory Commission

NMSS/FCSE/FMB

October 12, 2016

Agenda

- Purpose
- Chemical Safety Audits
 - Process
 - Observations
 - Audit Summary Reports
- Next Steps
- Questions/Feedback

Purpose

- Inform industry of the chemical safety audits observations and results.
- Inform industry on staff's path forward and next steps.

Chemical Safety Audits

- Staff conducted audits at 5 fabrication facilities:
 - AREVA-Richland
 - BWXT
 - GNF-A
 - NFS
 - Westinghouse
- The purpose of the audits was to gain a better understanding of the chemical safety program used to identify, analyze and manage chemical hazards and current practice.
- Audits were conducted during a 1 or 2-day site visit between the months of June and July, 2016.

Chemical Safety Audits

- Audit Scope:
 - Operations under NRC's jurisdiction
 - Evaluation of chemical exposures
 - Proposed standards when necessary
 - Worker protection program
- Information reviewed:
 - Sample of chemical safety ISA scenarios
 - Internal and operating procedures
 - Process hazard analyses, ISAs related to chemical hazards.
 - Safety controls and worker protection

Chemical Safety Audits

- Audit topics:
 1. Chemical hazards scope
 2. Phases of operations
 3. Reactive and toxic chemicals
 4. Exposure pathways
 5. IROFS and management measures
- Audit Team:
 - Branch Chief: Robert Johnson/Omar Lopez
 - Technical Lead: Marilyn Diaz
 - Technical Support: James Hammelman

Audit Observations

- No immediate safety concerns.
- Processes, equipment, practices, safety management programs are different for each licensee.
- Two licensee's have chemical safety programs that demonstrate compliance with Subpart H regulations.
- Two licensee's have implemented program changes and are working towards compliance.
 - Event reports declared non-compliance and corrective actions.
- One licensee's ISA methodology does not consider all exposure pathway.
 - Represents a weakness if they were processing licensed material comingled with a non-inhalation hazard (e.g., HF).

Next Steps - Audits

- Audit Summary Reports are expected to be completed by the end of October 2016.
 - One audit summary report has been issued.
- General Summary Report
 - Staff will be developing a general summary report documenting the audits results.
 - Expected to be completed by the end of the 1st quarter FY2017.
- The information discussed in these audit summary reports may be included, fully or in part, in the Commission Paper related to the ISG.

Next Steps – ISG

- Staff is working on the Commission Paper which is expected to be submitted to the EDO by December 31, 2016.
- Commission paper will discuss issuance of the ISG.
- The ISG will improve the quality, clarity and consistency of the staff's review of ISA summaries and the underlying ISAs with respect to chemical hazards.
- Industry feedback

Questions



Contact Information: Marilyn Diaz

Marilyn.diaz@nrc.gov

U.S Nuclear Regulatory Commission

NMSS/FCSE/FMB

301-415-7110