

Risk Information in the Regulation of Materials and Waste Disposal



Case Study on Uranium Recovery

June 13, 2001

U.S. Nuclear Regulatory Commission

Meeting Objectives

- Communicate Status of Case Studies
- Solicit Comments and Recommendations

Meeting Agenda

- Opening Remarks L. Kokajko
- Objectives and Format P. Rathbun
- Background M. Bailey
- Case Study Presentation R. Bari
- *Break*
- Feedback Session ALL
- Closing Remarks L. Kokajko

Background and Overview



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Office of Nuclear Materials Safety and Safeguards
U.S. Nuclear Regulatory Commission

Outline

- Purpose of Case Studies
- Case Study Approach
- Case Study Schedule

Purpose of Case Studies

- Test Draft Screening Criteria
- Examine Feasibility of Safety Goals
- Gain Insights on Risk-Informing Processes

SECY 99-100

Five-Step Process

- Identify Candidate Applications β
- Decide How to Modify Approach
- Change the Approach
- Implement Risk-Informed Approaches
- Develop or Adapt Risk-Informed Tools

Screening Criteria

- Decision-Making Tool
- Promote Consistency in Selecting Areas to be Risk-Informed
- Draft Screening Criteria Developed Through a Participatory Process

Draft Screening Criteria

- Maintain or Improve Safety
- Improve Efficiency or Effectiveness
- Reduce Unnecessary Regulatory Burden
- Help Communicate a Decision/Situation
- Availability of Sufficient Information
- Implementation at a Reasonable Cost
- Existence of Other Precluding Factors

Case Study Approach

- Retrospective Look at a Spectrum of Activities
- Illustrate What Has Been Done in the Materials and Waste Arenas

Purpose of Case Studies

- To Test Draft Screening Criteria
- To Examine Feasibility of Safety Goals

Case Study Plan

- Published in October 2000*
- Case Study Structure
- Draft Screening Criteria
- Case Study Areas
- Case Study Questions

*Available in www.nrc.gov/NMSS/IMNS/riskcasestudyplan.htm

Case Study Areas

- Gas Chromatographs
- Static Eliminators
- Fixed Gauges
- Site Decommissioning
- Transportation
- Uranium Recovery β
- Storage
- Gaseous Diffusion Plants

Case Study Questions

- Screening Criteria/Risk Analysis Questions
- Safety Goal Analysis Questions
- Questions Upon Developing Safety Goals

Case Study Timeline

Completed Activities

- April 25-26, 2000 – Workshop
- September 21, 2000 – Draft Case Study Plan
- October 27, 2000 – Final Case Study Plan
- November 2000 – Begin Case Studies
- February 9, 2001 – Gas Chromatographs,
Static Eliminators,
Fixed Gauges
- May 11, 2001 – Decommissioning,
Transportation

Case Study Timeline

Upcoming Activities

- June 13, 2001 – Uranium Recovery
- Late July 2001 – Storage, Part 76
- September 2001 – Draft Reports
- October 2001 – Integration Meeting
- December 2001 – Final Reports
- March 2002 – Final Consolidated Report
- Summer 2002 – Draft Safety Goals, if Feasible