

Important D&D Issues

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Historical Site Assessment

- Nominally a method to obtain historical use data that can guide characterization efforts
- An engineering evaluation of licensed activities, source terms, etc.
- SEC is involved with a private client where the use of the HAS has been “modified” to address stakeholder issues
- Also must address lack of client records

Facility “X”

- 40 year history – manufacturing operations involved hundreds of sealed sources
- Notable exceptions
 - Ci+ level Am-241
 - Breached Ci+ Cs-137 source
 - Ci+ AmBe source (historical)
- Agreement state regulator
- Urban legends

Documentation

- Sparse and sometimes contradictory
- Essentially no surveys
- Source receipt records in logbooks
 - Source IDs changed on resale
 - Transcription errors (decimal points)
 - Puzzles: 400 Ci Cs-137 source and 0.4 Ci Cs-137 source in same calibrator chamber
- No adverse regulatory compliance findings

HSA Objective

- SEC – determine what/where/how to
 - conduct characterization surveys
 - Develop DCGLs, D&D plan criteria
- Regulator – health, safety & politics
 - Rumors of plumes
 - Prepare for public response to D-Plan
 - Political and regulatory closure

HSA Approach

- SEC hired former employee with Rolodex
- Developed interview list
 - State wanted unbiased list via public notice
 - Client wants public input @ State D-Plan mtg
- Developed procedure for developing interview leads through initial interviewees
- In many cases, “biased” names converted to unbiased status
- Interviewed operators before managers

Contradictions #1

- Operators: “C-14 spill” in trailer (hearsay)
 - Trailer now transferred to other licensee
 - No known C-14 use in trailer
 - Manger & supervisor not agree
- Floor and wall surveys (43-68) show bkg
- What would you do?

Contradiction #2

- Operators: waste dumped in storm ditch
 - Hearsay (but adamant???)
 - Managers/supervisors not aware
 - No indication of radioactive waste
 - Ditch now filled in
 - Facility was connected to city sewer
- What would you do?

Revised HAS Objectives

- Project risk management evaluation
- Adopted “all-pathways” characterization
 - MARSSIM methods proves null hypothesis wrong, pathway characterization analogous
 - Collect “defensive samples”
 - Address potential in survey unit classification
 - Remediate before D-Plan submittal
- Treat the HSA as a claimant’s deposition