LANL Process Drift

James Bunsen
Overview

• CMR Drum Measuring
  – The Drift
  – The Resolution

• PF-4 Floor Storage
  – The Drift
  – The Resolution

• Lessons Learned
CMR Drum Measuring Operation

- Confinement Vessel Disposition (CVD)
- Removes waste from 6’ diameter orbs
- Rough Measure Drums before storing
- Drums had a combination of DU and Pu
The CMR Process Drift

• Needed a place with low background to measure DU
• LLW drums were previously measured in the Machine Shop
• Drums from CVD were measured in the machine shop containing Pu
• Fissile material was not evaluated in the area
The Drift

• CVD Waste Drums were measured near machine shop
• LLW Drums were measured in the machine shop
• Both drums had DU present and needed a low background
• CVD Drums were then measured inside the machine shop, outside of an allowed boundary
Resolution

• Further FMH Training
  – Training on when Crit needs to be involved with new process
  – Further training on CMR-AP-522
  – More time spent at CMR with operations
• New extension to the current Crit Evaluation
PF-4 Floor Storage

• Items being moved from floor storage to an introduction hood
• Currently over 100 items on the initial floor storage location
• Items were being dispositioned as waste
• Carts were utilized to move the items, each with two locations
PF-4 Item Movement

- Items were moved from one room to another
- Total of six items were being moved
- The room was filled with three large carts and many operators
- There were concerns with radiation protection, fire protection, and ergonomics
The Drift

• Items were moved from the cart to the floor
• Carts were moved out of the room to create space to work
• When paused to check the RWP, realized there was no allowance for material on the floor
Resolution

• Learned this used to be a common occurrence in the far distant past
• Development of floor storage evaluation
• Working on more collaboration between safety disciplines
• Further training on conduct of operations and crit safety rule and TA55-AP-522
Lessons Learned

• More attention to annual reviews
  – Use as a teaching opportunity & to learn more about constant operations
• Conflicting safety disciplines makes it difficult for operations to be compliant
• More time spent with operations helps to catch issues before they arise