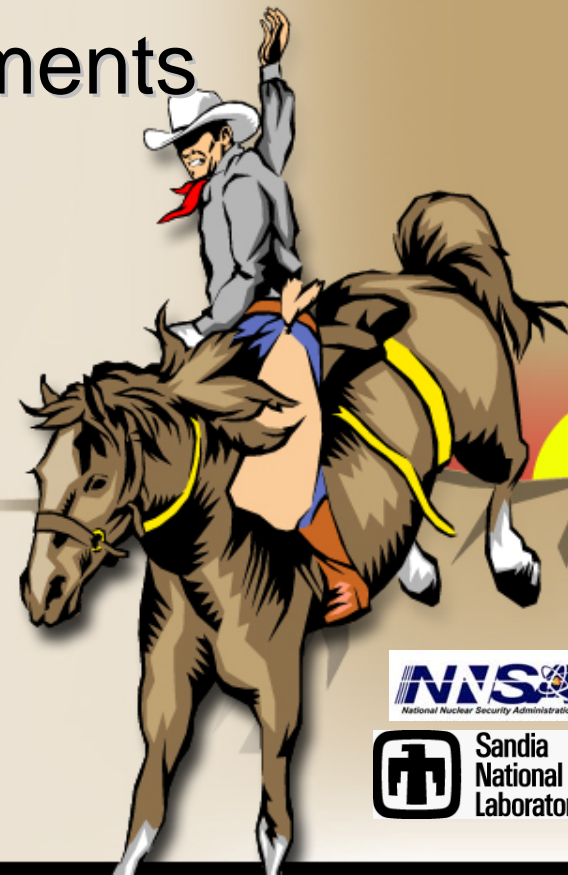


Strategic Hazards Reduction

An Unexpected Benefit of Hazards Surveys & Assessments

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Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.



Introduction

- Hazards Surveys and Assessments used to identify targeted changes
- Specific steps used in process
- Proactive approach
- SNL/CA example
- Challenges and benefits

HS & HA Requirements

- Hazards identified & evaluated through survey or assessment
- Comprehensive audits
- Facility & materials evaluations
- Plan preemptive actions for facilities and materials of interest

FOCUS

- Facilities
 - Borderline or clear concern
- Operations
 - Borderline or clear concern
 - Continuing, inactive or temporary
- Hazardous Materials
 - Numerous or few
 - Dated storage or actively used
 - Stable or varying inventory

Tools for Evaluation

- Inventory systems
- Hazardous material audits
 - Operational reviews
 - Hazardous material procurement & storage
 - Hazardous waste management
- Pollution prevention initiatives

Steps for Improvement

- Material reductions
- Substitutions
- Administrative controls
- Repackaging
- Program restructure

Zoning for Effect

- Segregation of material
- Relocation of larger containers
- Use of separate storage points
- Identify and use mitigation

SNL/CA Overview

- Base level program declared under 151.1B
- Hazard Material program indicated under 151.1C
- Selective reduction and other strategies – return to base program
- Small site –
 - Not highly visible in community
 - Potential GE would raise visibility, public concern, and program cost

SNL/CA Goals & Drivers

- Drivers
 - DOE focus on NFPA Health 3 & 4
 - DOE requirement on Management of Unneeded Materials and Chemicals
 - Sandia ES&H Manual focus on housekeeping, fire protection (IFC), HazComm/Lab Standard, and chemical inventory
 - SNL/CA EMS Goals/Targets (2006 & 2007)
 - 5% site inventory reduction by container (2006)
 - reduce NFPA Health 3 & 4 items to eliminate 2 of 5 EPHA target areas (2006)
 - reduce by 20% > 10 year old NFPA Health 3 & 4 items in *The Physical and Engineering Sciences Center (8700)* (2007)

SNL/CA Inventory - 2006

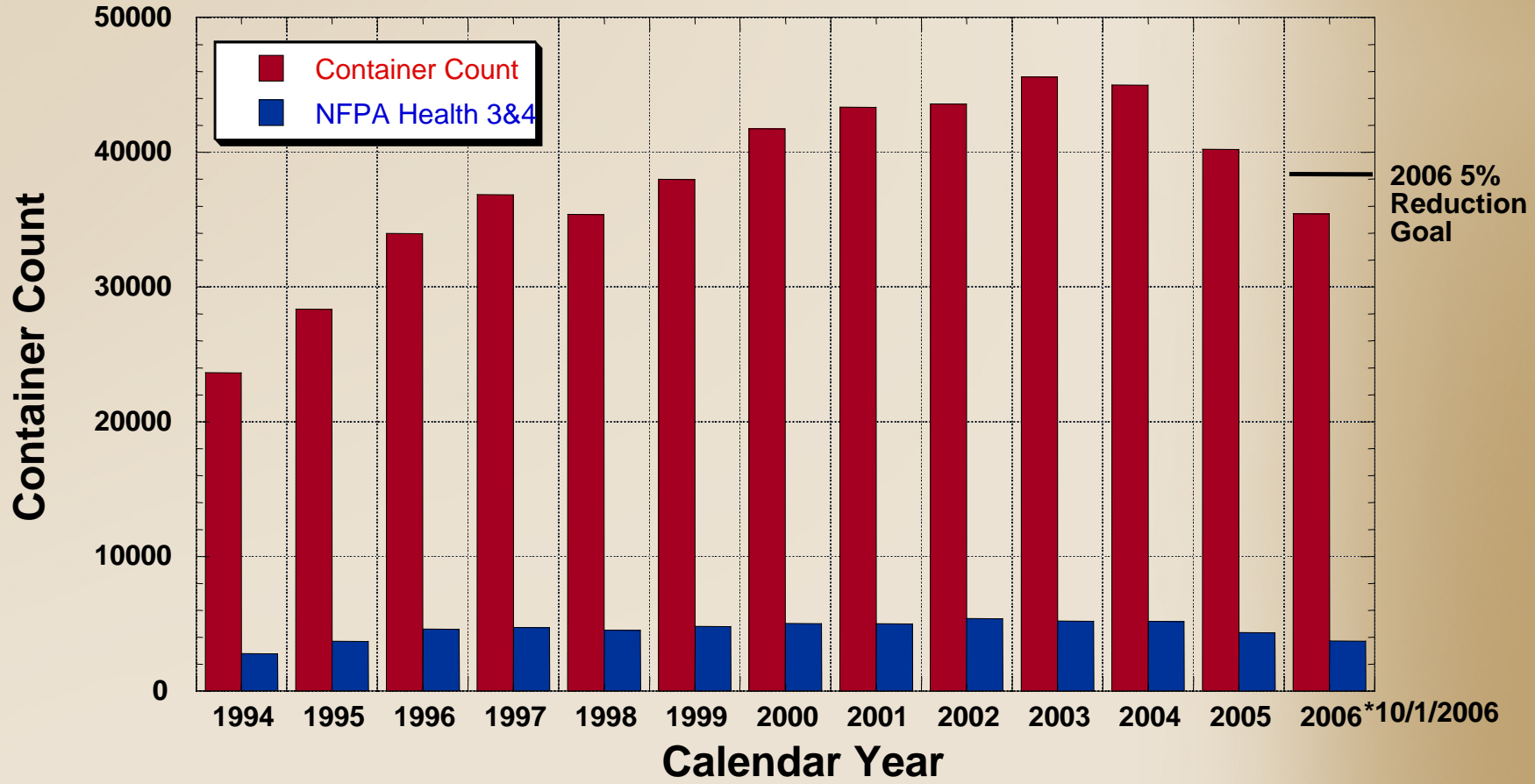
- Hazardous Materials > 10 years old
 - 23% of inventory
 - 24% of NFPA Health 3 & 4 inventory
- Hazardous Materials > 5 years old
 - 45% of inventory
 - 47% of NFPA Health 3 & 4 inventory

SNL/CA Chemical Information System

- Integrated Chemical Inventory and MSDS Container Tracking System
 - 120,000 chemical containers at SNL/NM
 - 35,000 chemical containers at SNL/CA
 - 25,000 unique chemicals/products
 - 1,500 chemical storage locations
 - Dynamic inventory - daily inputs
- MSDS library of over 85,000 materials
 - Available for routine or emergencies 24 x 7
 - Dynamic library - daily inputs

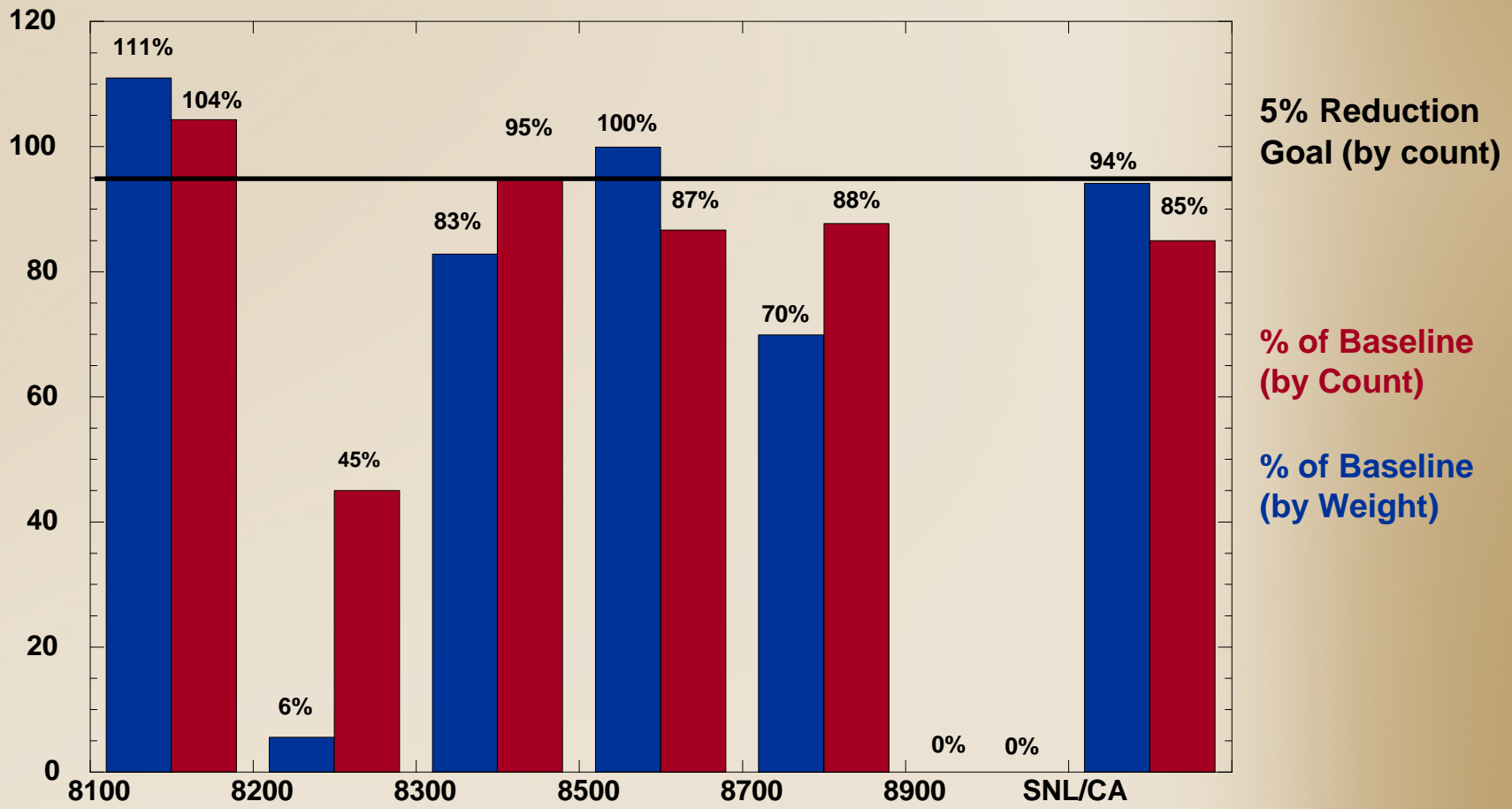
SNL/CA Inventory Profiles

SNL/CA Hazardous Material Inventory Container Count



EXPECT THE UNEXPECTED

SNL/CA Inventory Profiles



SNL/CA NFPA Health 3&4 Inventory Reduction

SNL/CA Implementation

- Removal of unneeded materials
- Reduction of container sizes
- Better control over hazmat purchases
- Better use of available storage facilities
- Development of administrative controls to maintain inventory size

Reduction Challenges

- Procurement controls
- Inventory accuracy
- Inventory reduction frequency
- Inventory ownership & orphaned inventory
- Inventory age profiles
- Inventory shelf life guidelines
- Graded risk-based approach
- Material safety data set
- Location-based material permit limits
- Excess material redeployment - chemical exchange

Benefits

- Reduced hazards
- Reduced EM efforts and costs
- Reduced hazmat program costs
- Reduced visibility and negative perception in local community

Summary

- Opportunities to reduce hazards through focus on Hazards Survey and Assessment results
- Leverage other program efforts in facility and hazmat focus
- Examine facilities and materials that provide the most valued return