

# Challenges in Manufacturing of Radioactive Material Packages and Containers

CONTAINER PRODUCTS CORPORATION

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# Container Products Corporation

- Established in 1981- introduced B25 container
- In-house Engineering with P.E. on Staff
- Onsite Design Testing
- >200 years experience in key staff
- International Business
  - >20 countries

# Product Line

- Custom IP and Type A Containers
  - Waste
  - Reusable
  - Shielded
- Decontamination Systems
  - Over 100 worldwide
  - Kelly II introduced 2013
- Compactors

# 1 ft<sup>3</sup> Aluminum Sample Container 7A Type A Liquid



# Shielded Pump Impeller Box IAEA Type A 70,000 Lb Tare wt



# Maintenance of Production Capability in Changing Federal Budgets

- Has always Been Nature of Business
- Blend between DOE, DOD, and Commercial
- Commercial Outages – planning is key
- Provide Inventory Containers for Standard Designs
- Thousands of proven CPC designs to offer customers

# Commercial vs. DOE Procurements

- DOE sites: Contracts and specifications
- Commercial: Close Engineering involvement with end-user
  - Design from concept

# QA Requirements/Supplier Evaluation

## DOE vs. Commercial

- Commercial NUPIC process - “Super”
- DOE made major in-roads with sharing audits in past 3 -4 years
  - Past: As many as six DOE audits in one year
  - Current: 2 – 3 sites per year
- NQA-1 Checklist



# Customer Specific Requirements Beyond Regulatory Requirements

- Keystone to Getting Repeat Business
- Outage Containers
  - Unique Design needs
  - Long Term Durability

# Meeting Regulatory Requirements

- CPC placing special emphasis in this area
  - Consulting experts in regulations
  - Drop Testing
- DOT vs. IAEA Differences
- Manufacturers Interpretation of the Rules

# Improving DOE Procurement Process

- Quote process
  - Short time frame
- Specifications
  - Potential to limit manufacturer's efficiency
  - Consider similar designs with options for site specific features
- Domestic materials
  - Scarcity of some Stainless and Aluminum