



# EM SSAB NATIONAL CHAIRS MEETING

Deer Creek State Park, Mt. Sterling, Ohio

*November 5-7, 2013*



## Discussion of DOE's National Recycling Policies

Impacts on Portsmouth of Potential Changes to DOE Policies

*Jeremy Harley, PE*

*Subject Matter Expert, Portsmouth Gaseous Diffusion Plant*



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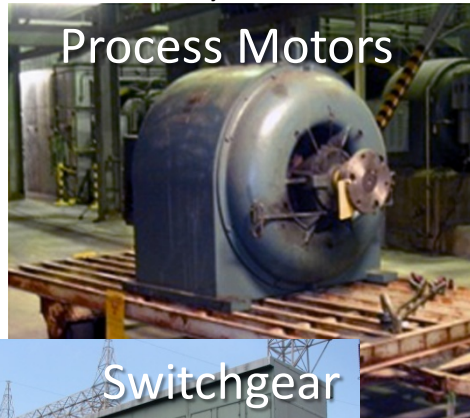
## Potential For Recycle?

Mixed steel,  
copper, aluminum  
50,000 tons



Towers

1,740 motors  
10,000 tons



Process Motors

190 miles  
2,000 tons



Cable



Switchgear



Transformers

Transformers  
8,000 tons

## Potential for reuse?



5,000+ tons



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## Potential For Recycle?



**Structural Steel**

**225,000 tons**





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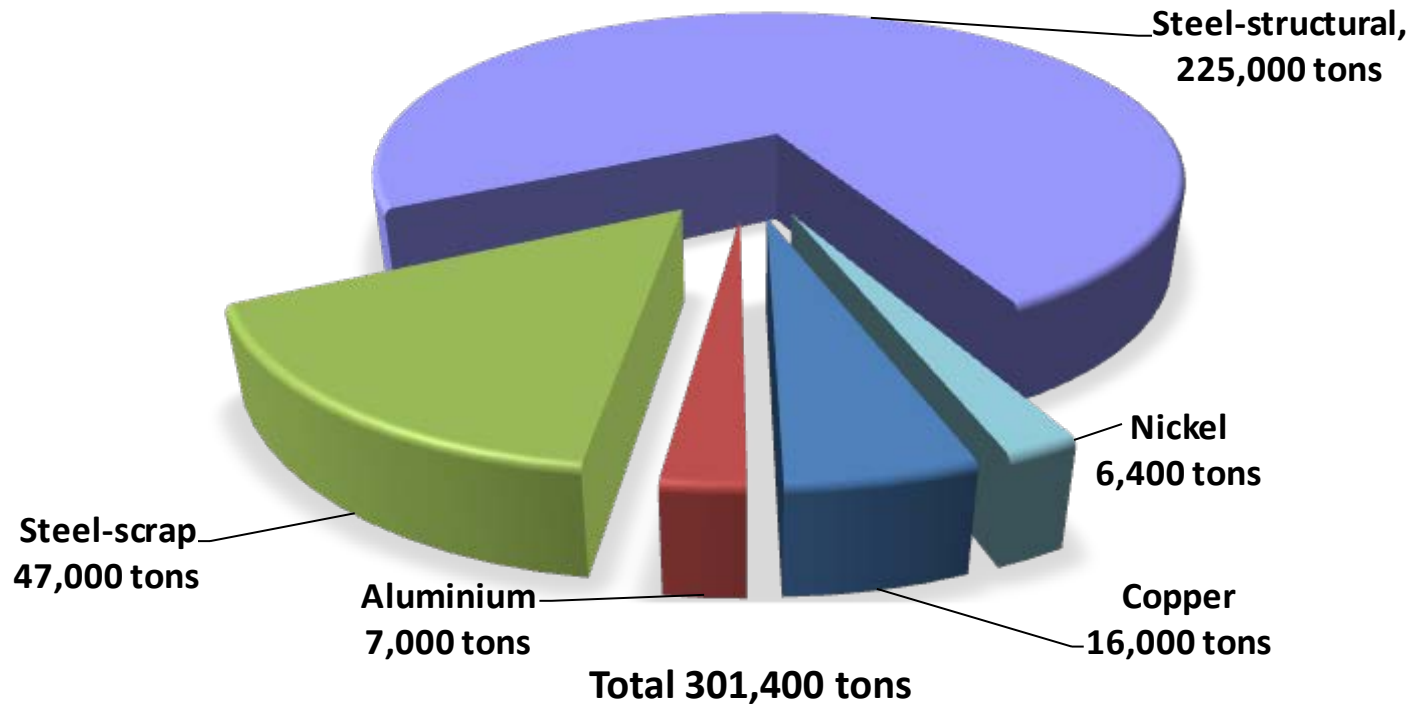
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## Asset Recycle & Reuse

### Recyclable Metals at PORTS (by material type)





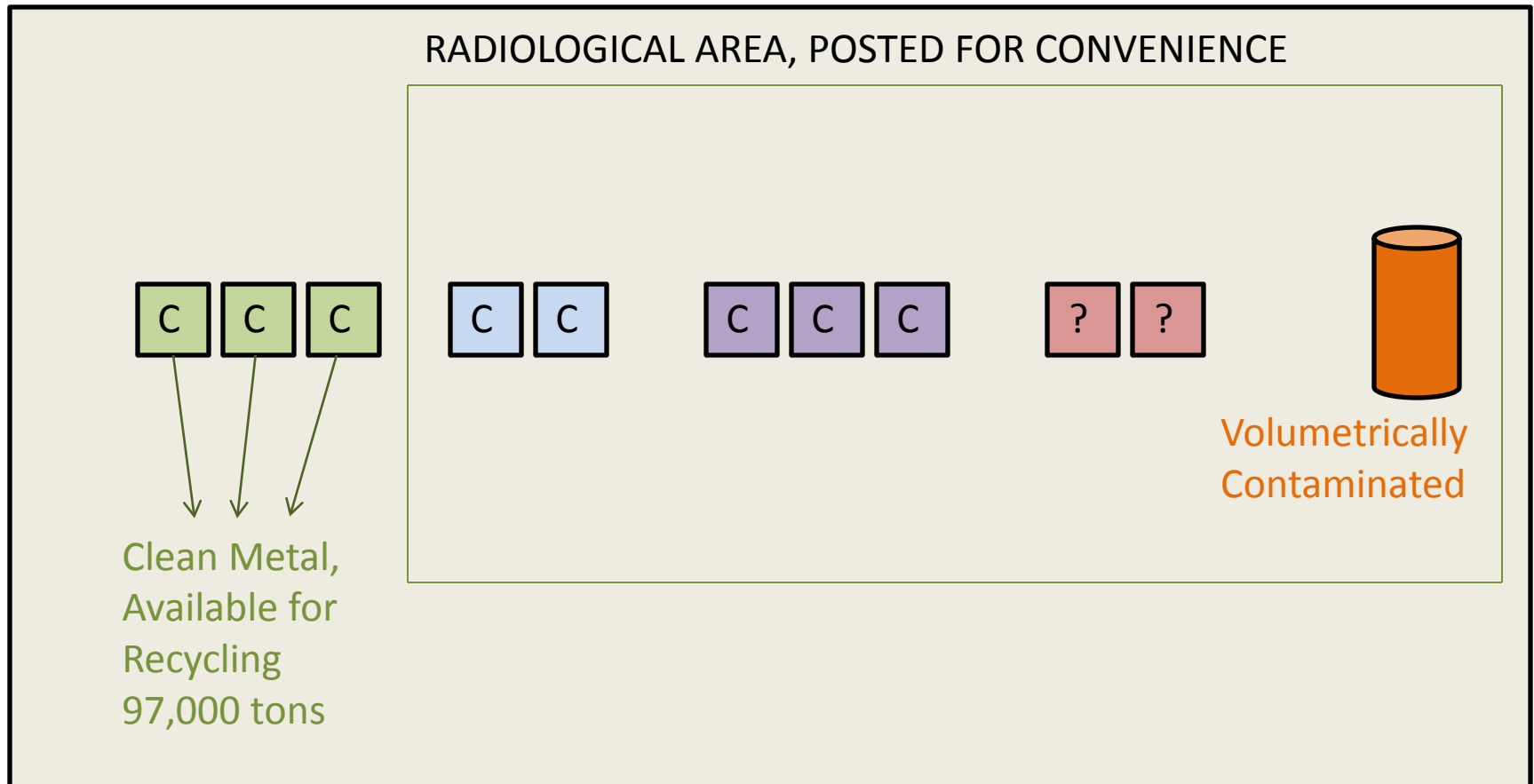
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Deer Creek State Park, Mt. Sterling, Ohio

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## Recovering Clean Material





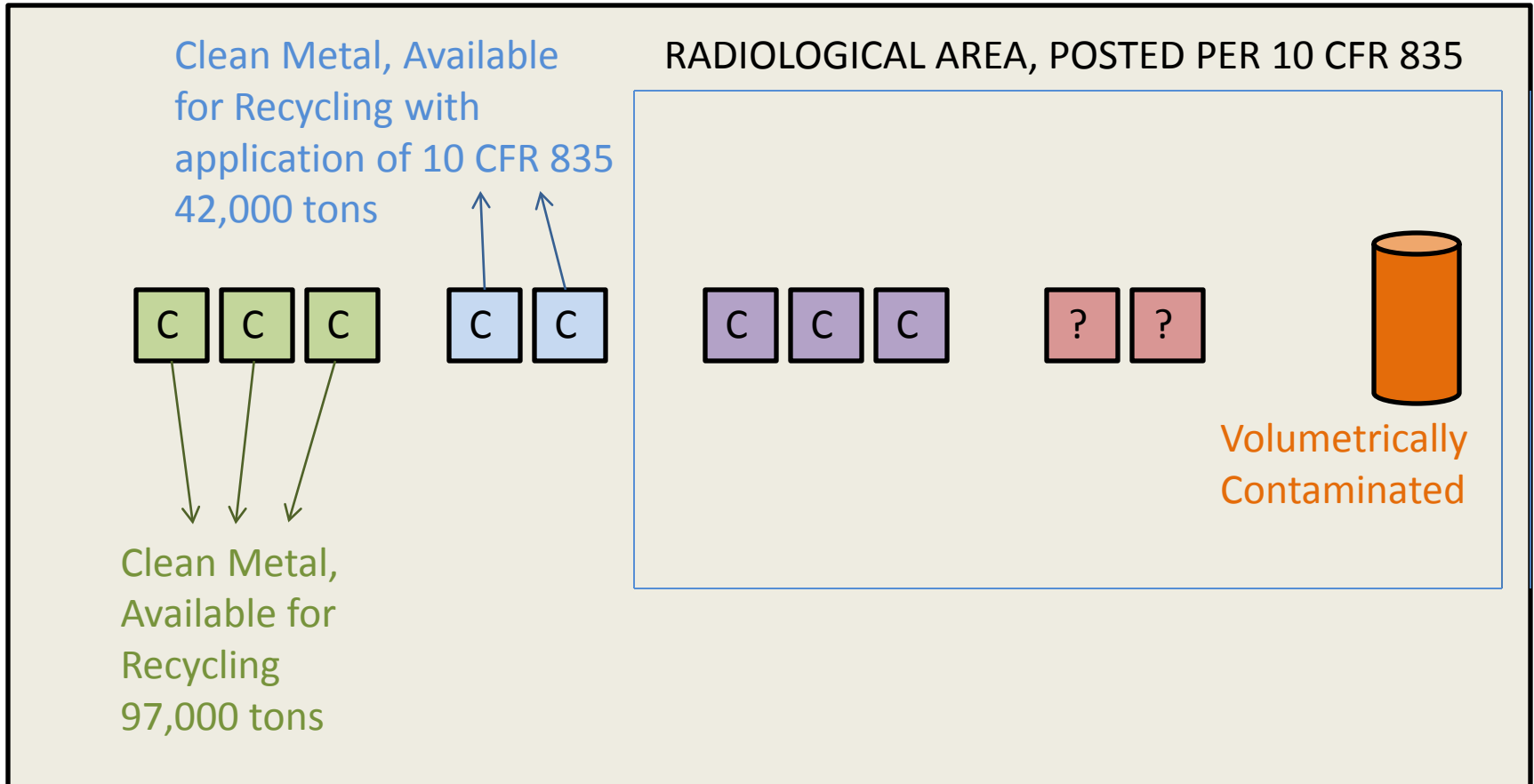
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## Recovering Clean Material





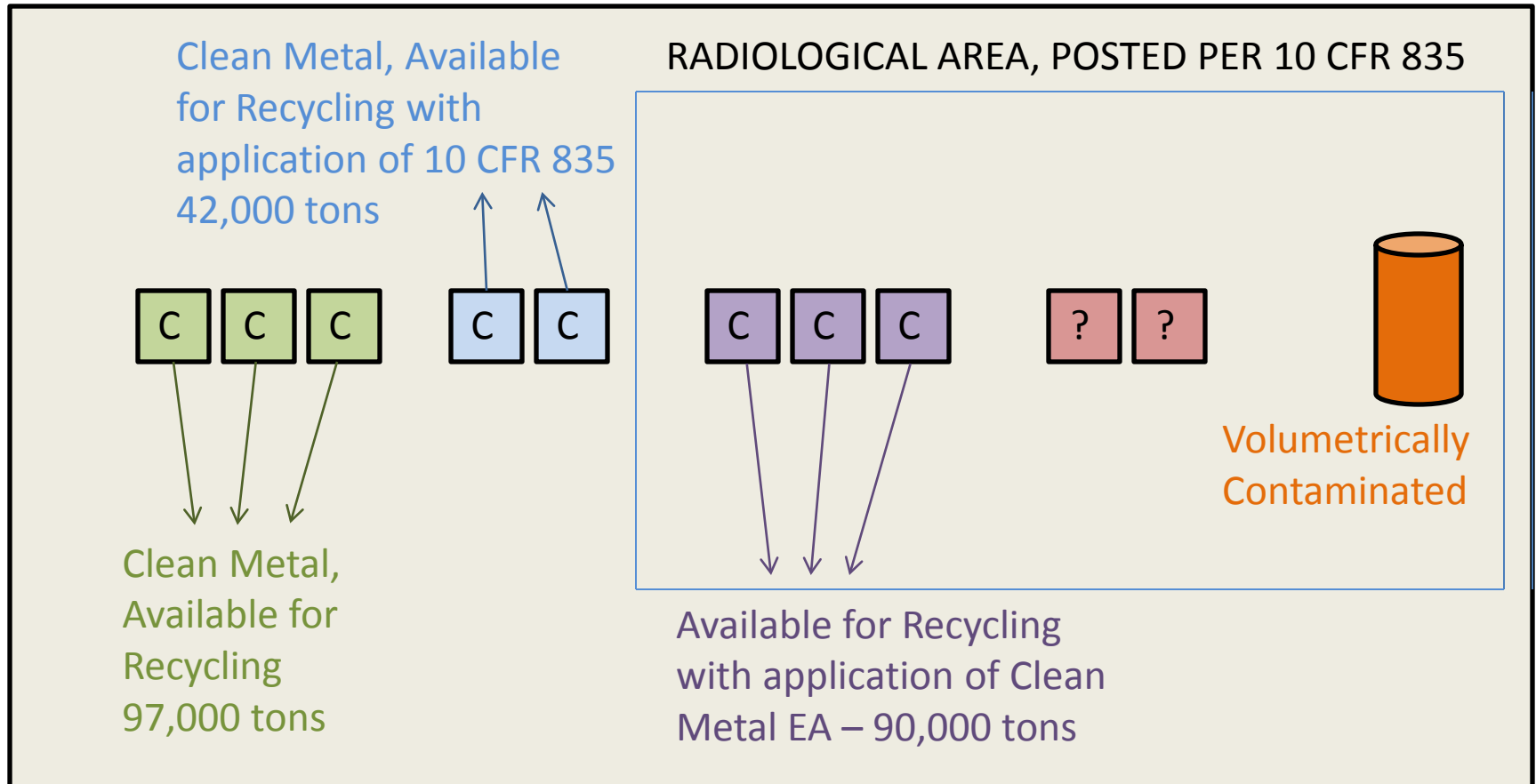
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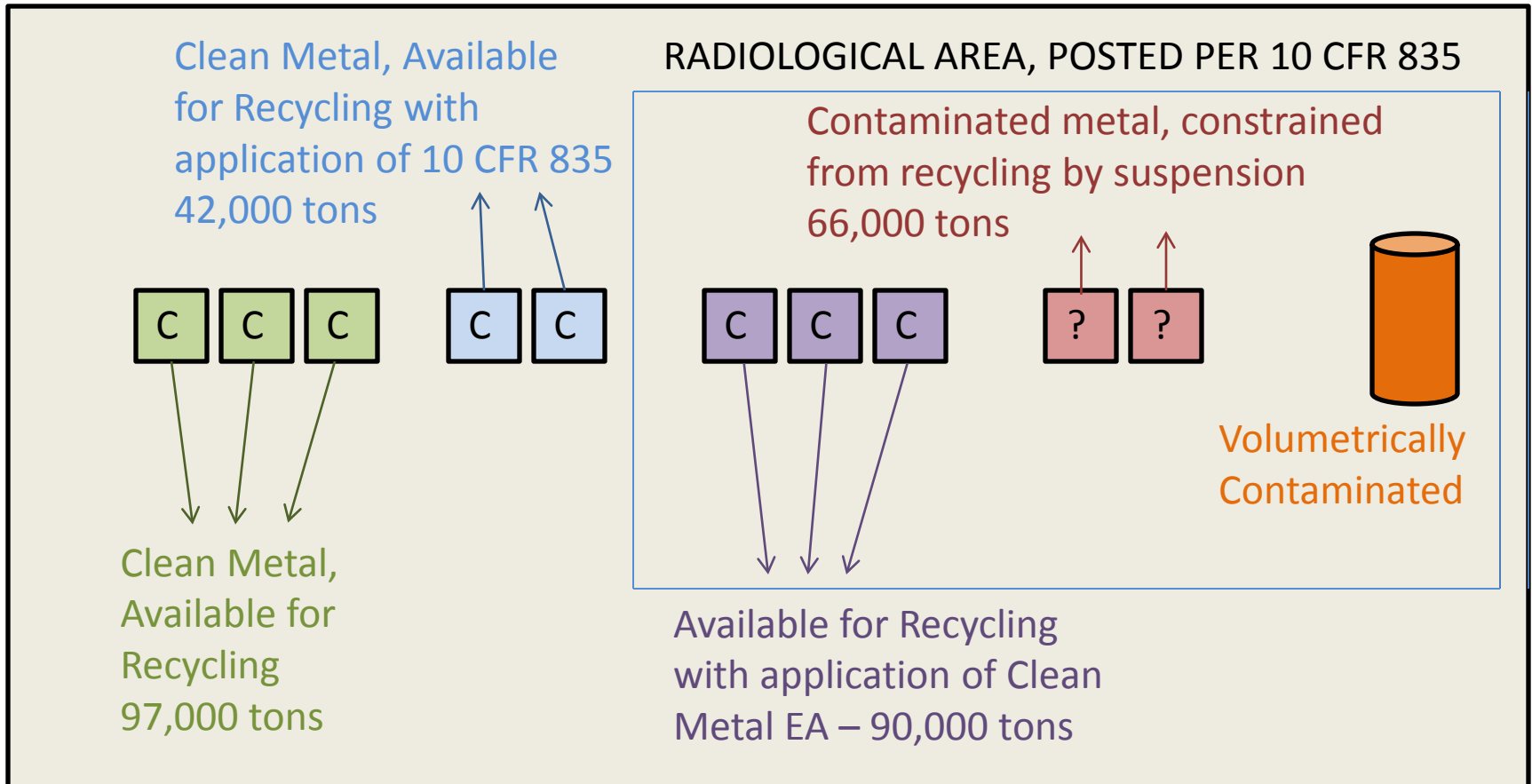
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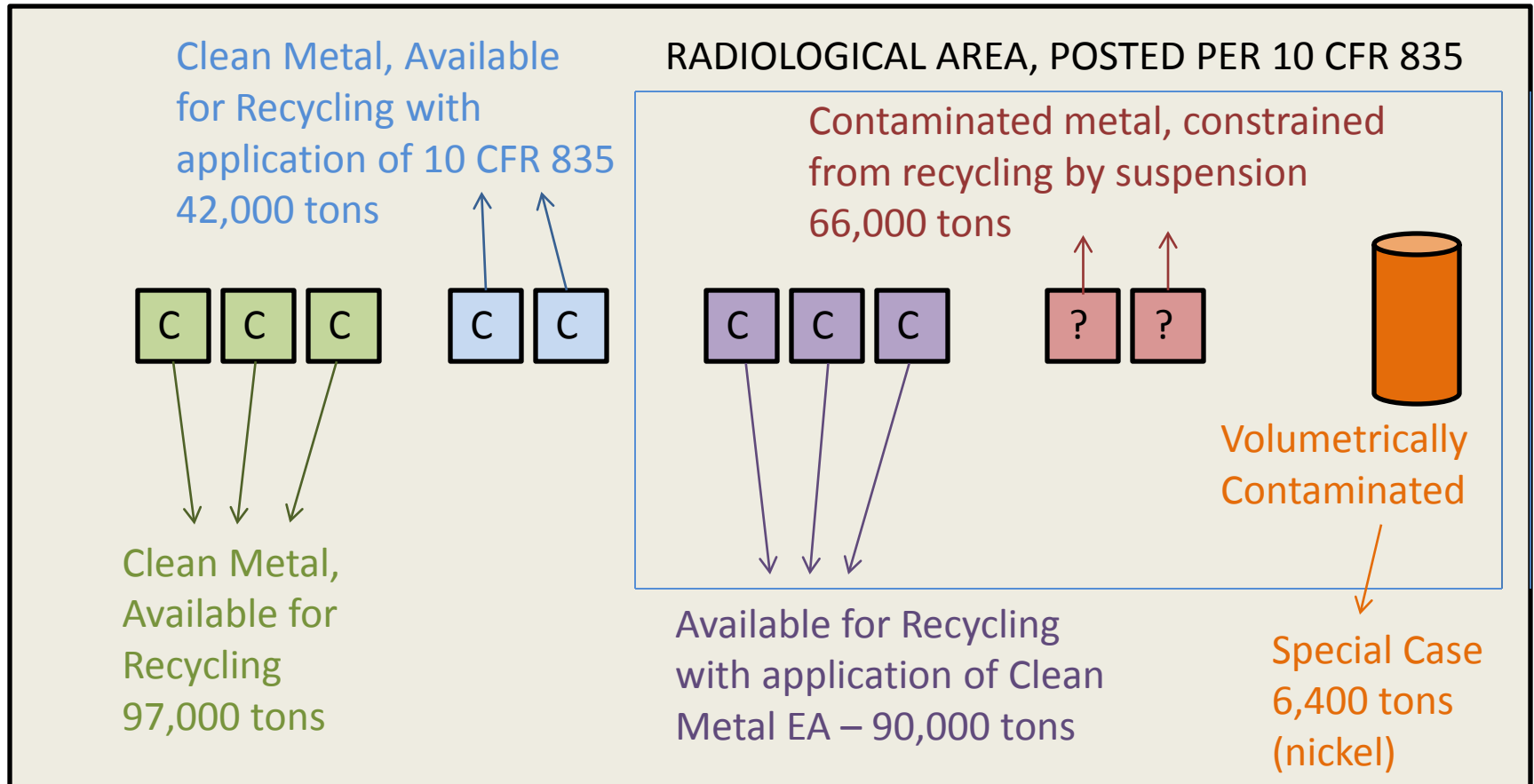
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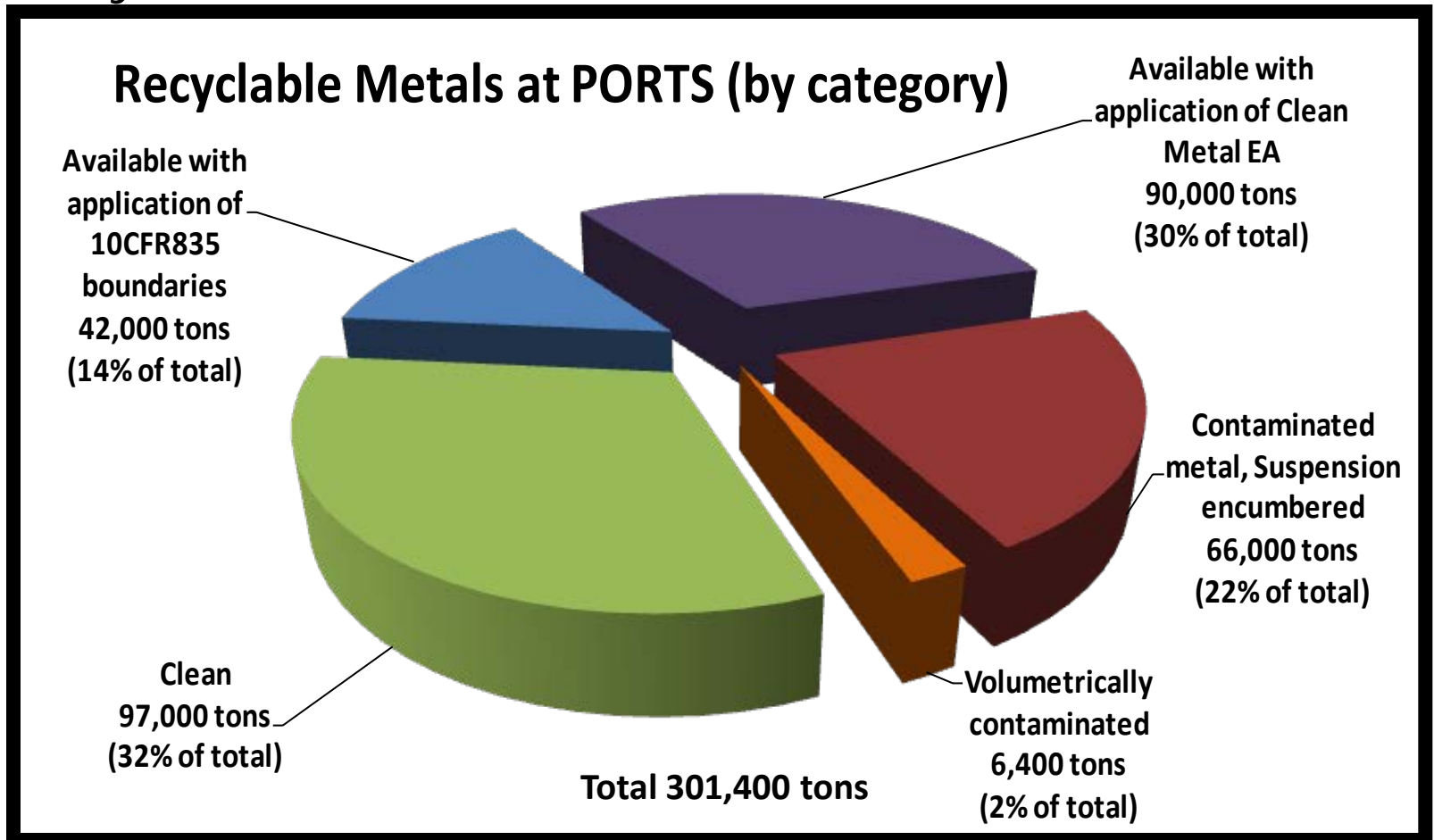
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## Asset Recycle & Reuse





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## Nickel

- Volumetrically contaminated
- Classified
- Up to 30,300 tons
  - PORTS – 6,400 tons
  - ORO – 5,600 tons
  - PAD – 18,300 tons
- Less than 1% of annual global nickel market
- PORTS nickel requires removal from converters (segmentation) and purification
- Segmentation
  - Nickel will be removed from process gas equipment and safely stored
  - Activity incorporated into latest PORTS Lifecycle Cost Baseline
- Purification
  - Bench-scale treatability study for purification technology



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## Questions

