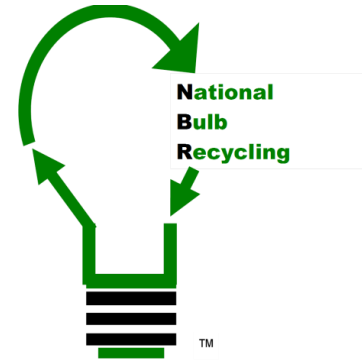




# Recycling Fluorescent Bulbs and Ballasts



Preserving Resources,  
Preventing Waste



Presented by: Joseph Puro  
November 8, 2012

# Contents

- NBR Overview
- Universal Waste – Lamps and Ballasts
- Hazards
- Recycling methods
- Regulatory Landscape
- NBR – Focus on Service

# Universal Waste - Lamps

- Fluorescents
  - Tubes: Straight Circular and U-Bend
  - Compacts fluorescent
- Metal Halide, Bi-ax, High Intensity, Bi Metal
  - Flood
  - Incandescent
  - Halogen
- HID (High Pressure Sodium)
- UV Lamps
- Shatter shield or coated Lamps



# Universal Waste - Ballasts

- PCB Containing Ballasts
- Non-PCB Containing Ballasts

# Environmental Hazards



# Pre-Disposal Storage

- Lamps

Improper



Proper

- Ballasts

Improper



Proper

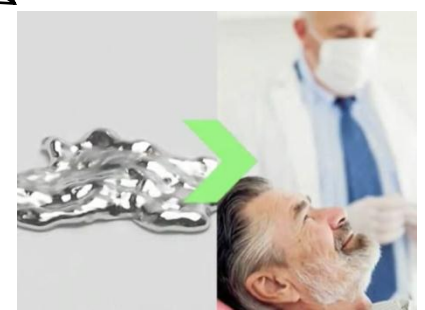
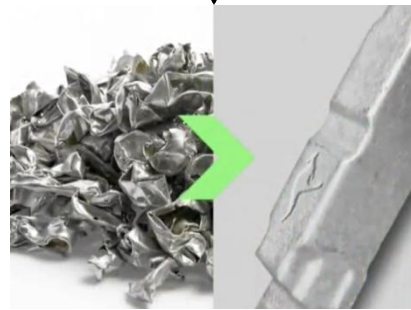


# Recycling of UW Lamps

## LAMP RECYCLING PROCESS FLOW



# Recycling of UW Lamps



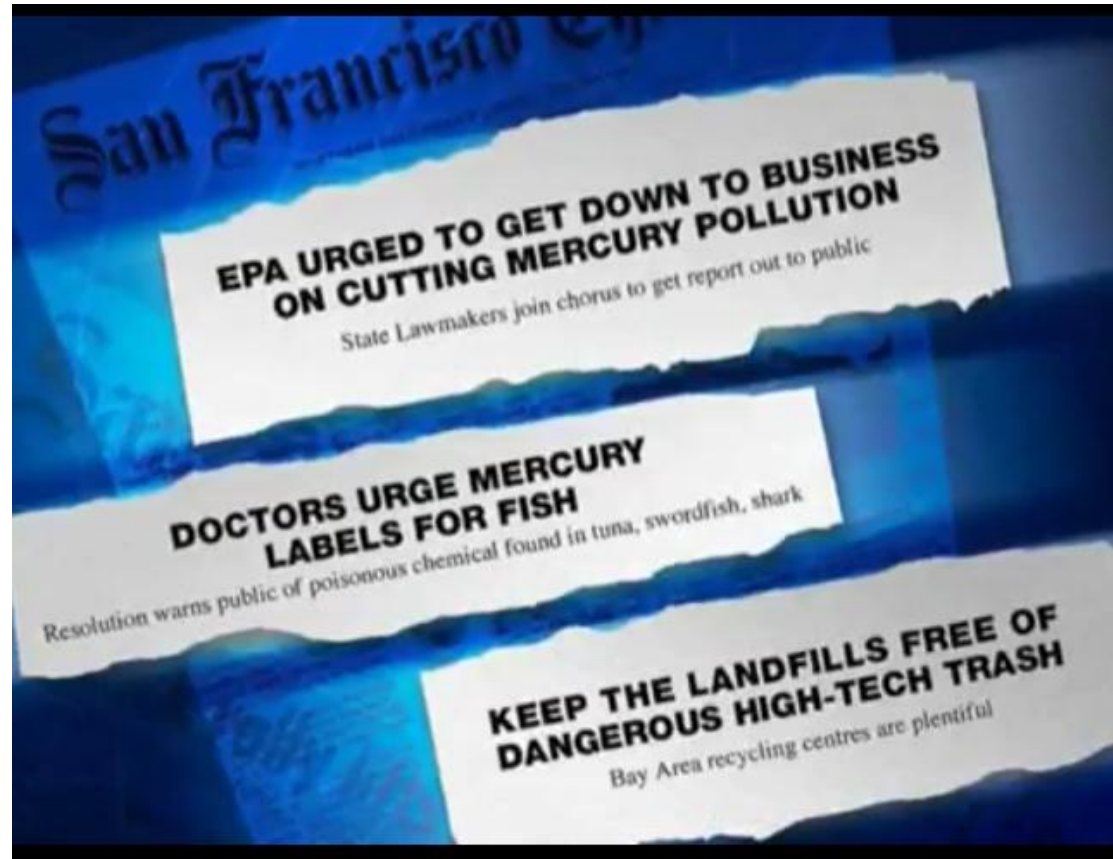


# Recycling of UW Ballasts



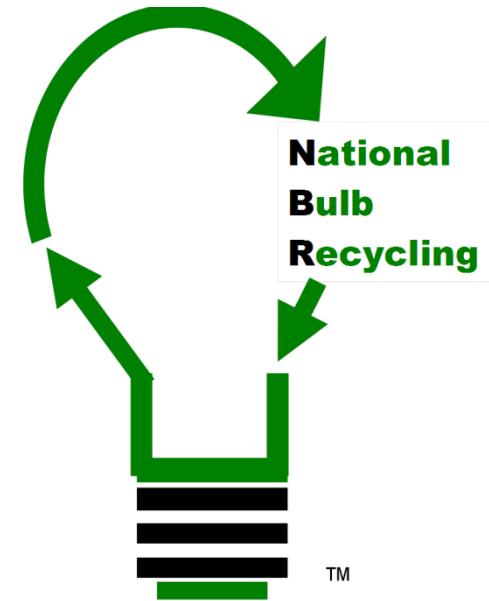
# Regulatory Landscape

- Federal
- State
- Local



# NBR Focus on Service

- Large generator pick-up service
- Small generator container service
- Certified recycling centers
- Certificate and annual log



# Q&A



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