

**Proposed regulatory
concepts-
Disposition Options for
CRTs and CRT glass**

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9/26/2011

What are the issues?

- California's universal waste rules provide only two recycling options for CRT glass
 - These options are disappearing
- Confusion about how to determine whether CRT panel glass is hazardous waste

What are the objectives?

- Expand disposition options while promoting recycling
- Establish appropriate management requirements CRT panel glass destined for disposal
- Allow recycling and disposal of CRTs and glass under existing HW rules
- Ensure standards are practical, effective and enforceable

Who is impacted?

- Universal waste handler who treats CRTs and CRT glass including
 - CRT removal (.72(b))
 - Yoke removal (.72(c))
 - CRT processing (e.g. CRT to CRT glass) (.73)
- More disposition options

Disposition Options

- A universal waste handler who determines:
 - The CRTs or CRT glass is destined for disposal (i.e., Class I, II or III landfill)
 - The CRTs or CRT glass is destined for recycling (other than glass to glass or smelting)

Who is not (as) impacted?

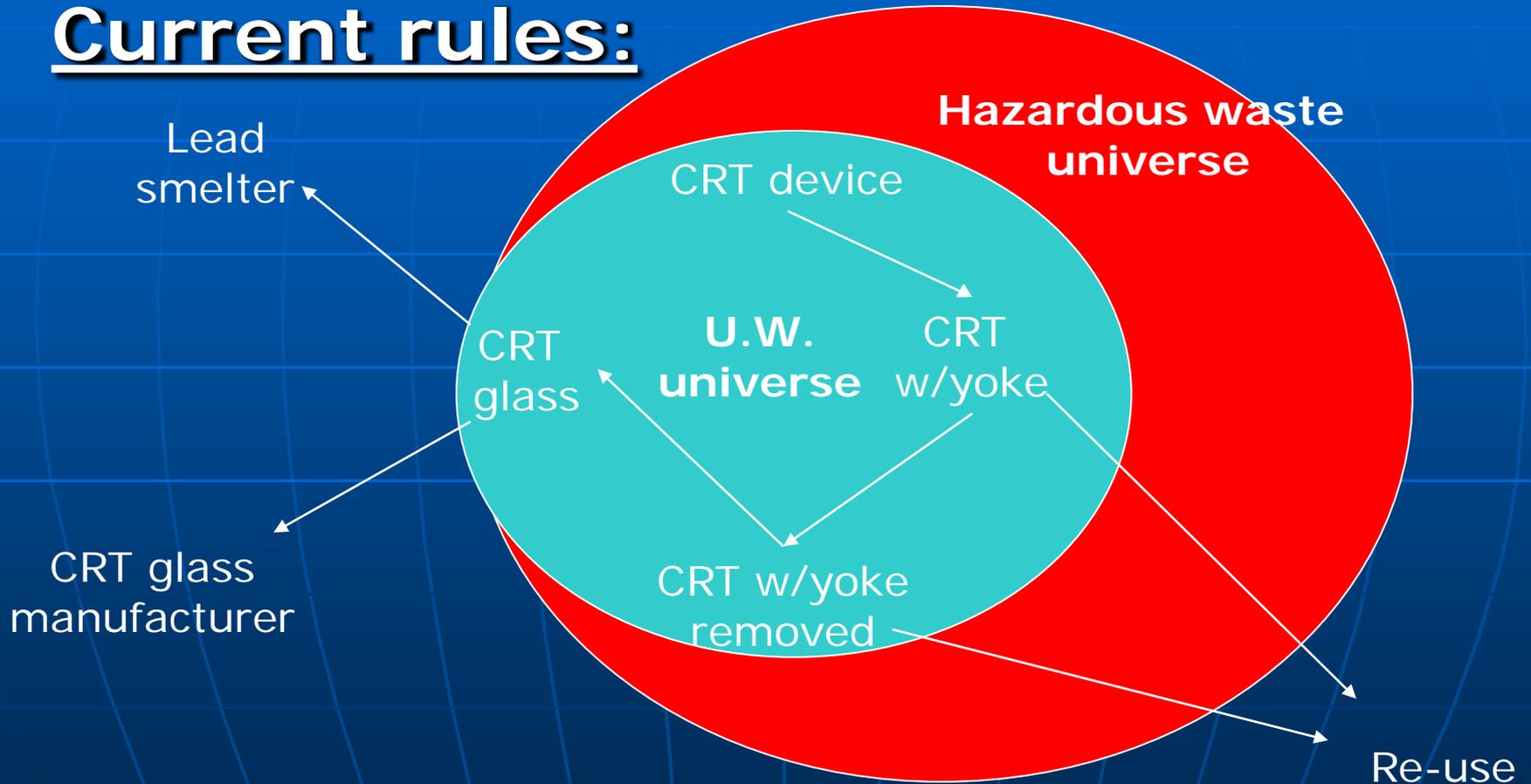
- Universal waste handlers that treat CRT devices, CRTs or CRT glass that is sent to:
 - Another universal waste handler (e.g., one who subsequently treats CRTs destined for disposal)
 - A CRT glass manufacturer
 - A primary or secondary lead smelter
- Must ensure the CRTs and CRT glass gets to one of these destinations.

What will be covered?

1. H.W. vs. U.W.
2. Management requirements
3. The disposition options
4. Disposal/Recycling
5. Next steps

CRT and CRT glass

Current rules:



CRT and CRT glass



Hazardous waste



Subject to Chptr
10-16, 18, 20, 22



Universal Waste



Subject to Chapter 23

H.W. vs. U.W.

Hazardous Waste

vs.

Universal Waste

- 90 day limit
- Manifest
- Biennial Report
- Contingency Plan
- Generator/disposal fees (if applicable)
- Registered H.W. transporter

- 1 year limit
- Shipping document (e.g., bill of lading)
- Annual report
- Response to release
- Paid to recycle
- U.W. transporter

New requirements (for proposed options)

- Generator of H.W.
 - "any person, by site, whose act or process produces a h.w...."
- Upon determination (other types of recycling or disposal) or within 1 year - fully regulated as h.w.
- Subject to Chptrs 10-16,20,22
- Notification (60 days prior) of destination

Management Options for .72 Recyclers

Treatment Activity:

1. Remove CRTs (.72(b))



2. Removes Yokes (.72(c))

Disposition Option:

Disposal

Other types of recycling

Re-use

U.W. handler/
Smelter/CRT
Glass manufacture

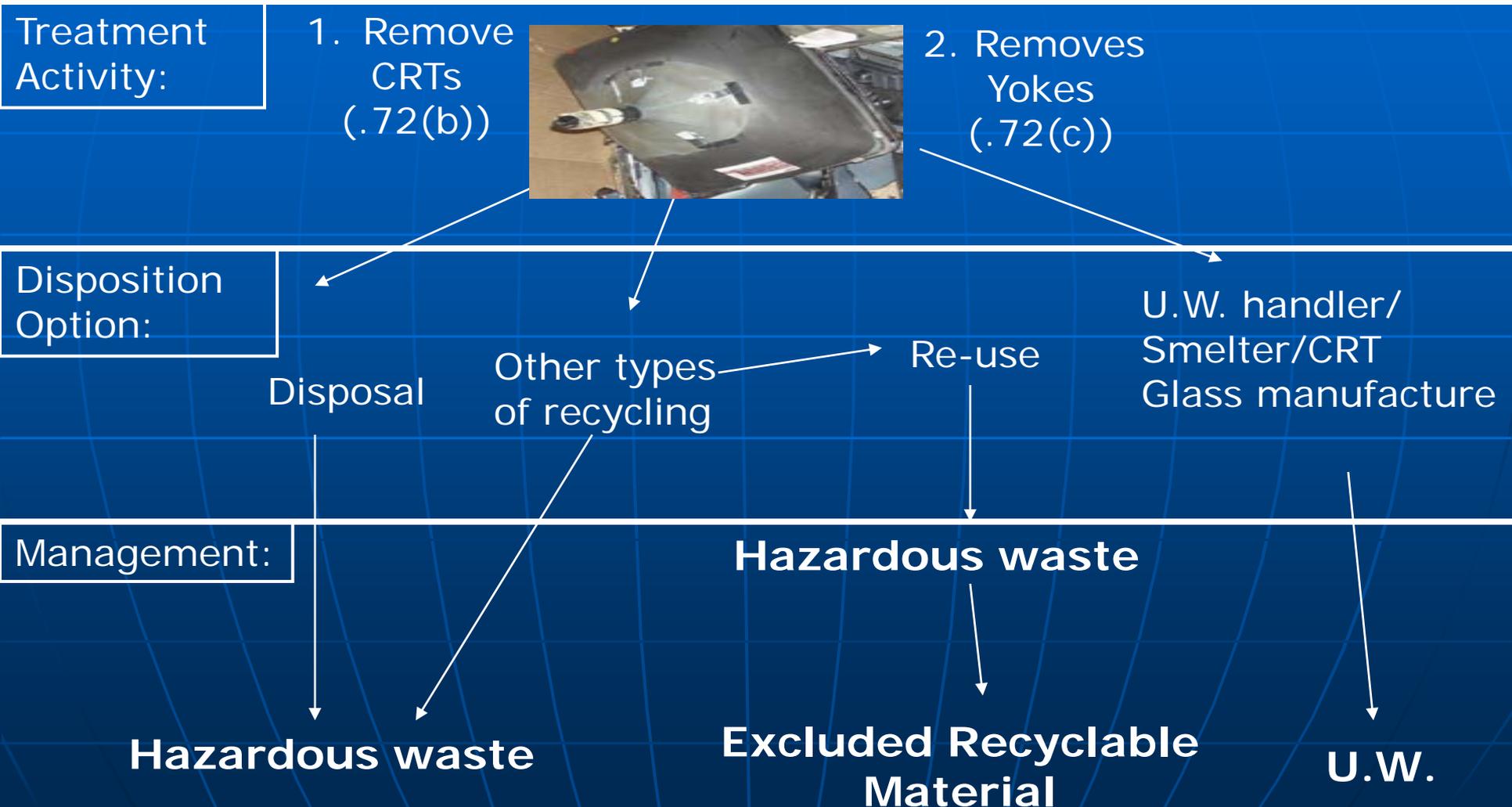
Management:

Hazardous waste

Hazardous waste

Excluded Recyclable Material

U.W.



Managements Options for .73 Recyclers

Treatment Activity:



Treat CRTs –
(into CRT glass)

Disposition Option:

Disposal

Other types
of recycling

Smelter or
CRT glass manufacture

Management:

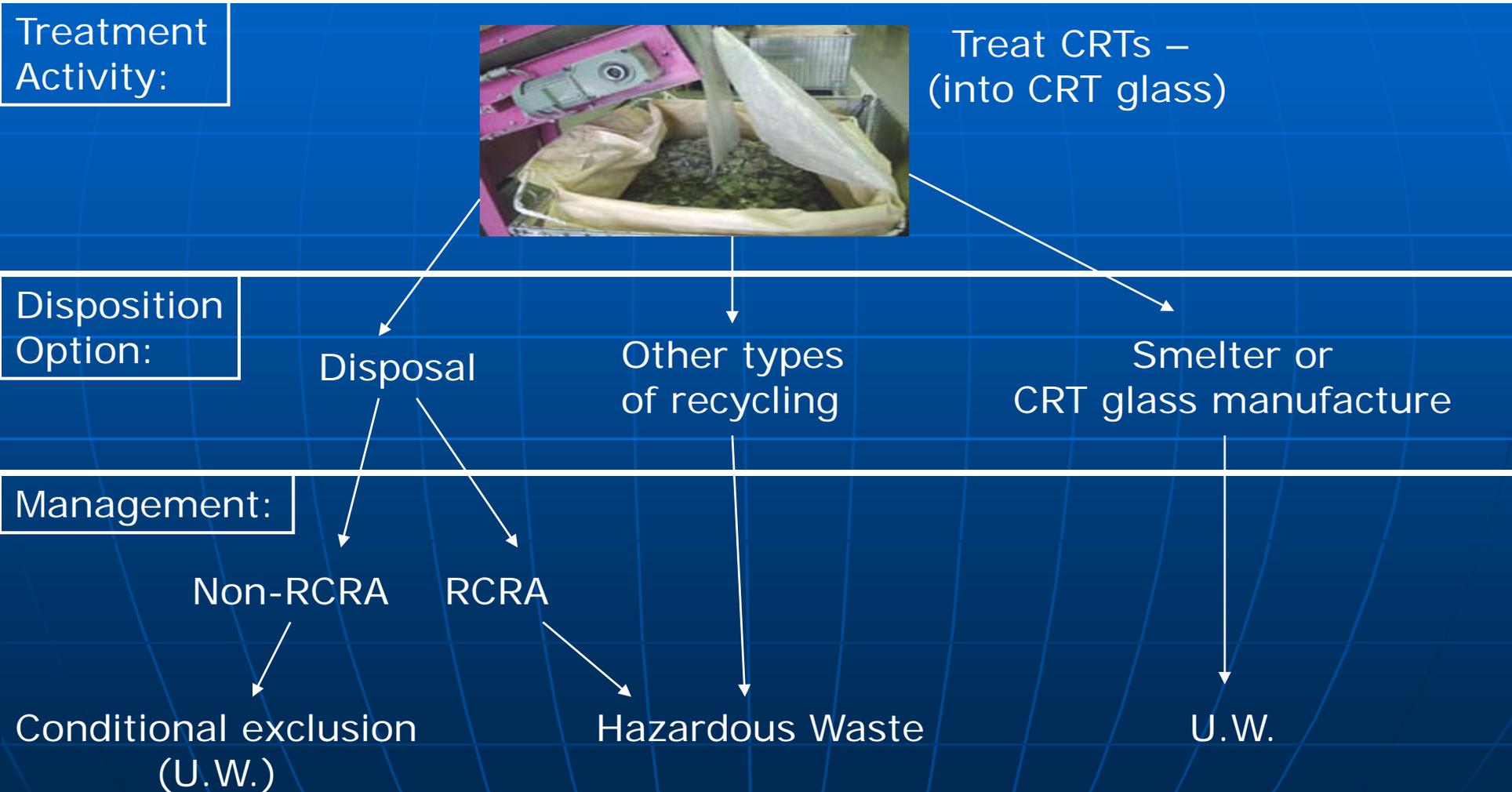
Non-RCRA

RCRA

Conditional exclusion
(U.W.)

Hazardous Waste

U.W.



Disposal Options

- Upon request, demonstration documents (that there are no recycling options)
 - Class I – fully regulated (e.g., LDRs, permitted facility)
 - Class II or III - Conditional Exclusion (from h.w. standards)

Conditional Exclusion

- Non-RCRA (i.e., panel glass) may be excluded from classification as H.W.:
Conditions include:
 - H.W. only because it fails TTLC
 - (H&S section 25141.5)
 - Use Method 3052/1311 (for testing)
 - Notification – Certification
 - Treat to remove phosphor powders)
 - Disposal – Class II or III landfill

Other types of recycling

Other types
Of recycling

Hazardous waste
CRT/CRT glass

Recyclable
material

Use/reuse

Reclamation

Use constituting
disposal

Universal Waste
CRT/CRT glass

CRT glass
manufacturer

Primary/secondary
Lead smelter

Next steps

- Complete emergency reg. process
 - Consider feedback
 - Finalize regulatory language
- Find other viable recycling options
 - 2 year time limit
 - Emergency Regulations = short term fix
 - Long term solution = development of other types of recycling with industry input