California Universal Waste Rule

Known as the “UWR”

Permanent Regulations

Title 22, CCR

Division 4.5, Chapter 23

California UWR

An overview of the California Universal Waste Rule

- What is the UWR?
- What wastes are universal wastes?
- How must universal wastes be managed?
- What about…?

California UWR - General

Special management standards - separate from the general hazardous waste standards

For “universally” generated hazardous wastes rather than industrial hazardous wastes

California Universal Waste Rule

Underlying Regulations

Federal: Title 40, Code of Federal Regulations

State:

- –Title 22, Division 4.5 - hazardous waste
- –Title 14 - non-hazardous waste
- –Title 27 – CIWMB and water regulations for disposal of non-hazardous waste to land

California UWR - General

Based on federal law: Title 40, CFR, Part 273

- State regs found in:
  - Title 22, CCR, Division 4.5; and
  - Health and Safety Code sections 25201.16 and 25214.5 et seq.
- Apply to universal wastes in lieu of the general hazardous waste regulations.

California UWR - General

RCRA Authorized Program

- RCRA allows state programs to operate in lieu of the Federal hazardous waste program
- DTSC has been authorized to implement most of the RCRA hazardous waste program in California
- DTSC is applying for universal waste authorization

California UWR - General

Universal wastes are:

- Wastes – they are discarded by disposal or being recycled; and
- Hazardous wastes – They are listed as hazardous wastes or they exhibit a characteristic of a hazardous waste
- Designated as universal wastes in regulation or statute

California UWR - General

"M" listings

- Operate similar to federal listed hazardous wastes
  - Mercury light switch and vehicles with them
  - Mercury switches and products with them
  - Mercury-containing lamps
  - Mercury-containing novelties
  - Apply only in specific circumstances
- M listed wastes are universal wastes

California UWR - General

Criteria for designation as universal waste (1):

- The waste is a hazardous waste.
- A wide variety of generators.
- A large number of generators.
- UWR would provide good stewardship.

California UWR - General

Criteria for designation as universal waste (2):

- Low risk during accumulation and transport.
- Would be managed better under the UWR.
- Would be diverted from solid waste stream.
- Would improve compliance.

California UWR - Wastes

Universal waste batteries

California UWR - Wastes

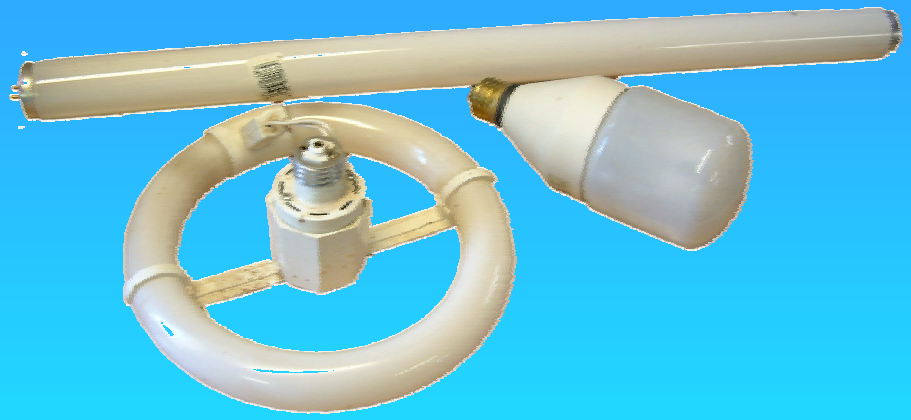
Universal waste thermostats

(Only those that use glass ampoules of mercury)

– Hazardous due to mercury content

California UWR - Wastes

Fluorescent tubes



“Streetlight” type lamps

California UWR - Wastes

M003 listing: Mercury-added lamps

- Lamps that contain any amount of intentionally added mercury
- Products containing such lamps
- Effective 2/9/2004

California UWR - Wastes

Non-empty aerosol cans

- Empty means that all the contents are used that could be used when the delivery mechanism functions properly
- Hazardous due to reactivity (and…)

California UWR - Wastes

Mercury-containing motor vehicle light switches

- Health and Safety Code section 25214.5 et seq.
- Universal waste when removed from vehicles

California UWR - Wastes

Waste cathode ray tubes (CRT)

- Hazardous due to lead content
- Televisions and monitors

California UWR - Wastes

Mercury-containing medical devices

Boogie Tubes

Sphygmomanometer

California UWR - Wastes

Mercury-containing gauges

"Stick" type barometers

Manometers

U-tube manometers

California UWR - Wastes

Mercury-containing gauges

Industrial gas flow meter

Waste gauges

California UWR - Wastes

Mercury-containing rubber flooring

-Gymnasium flooring

-Indoor tracks

-Cured in place

California UWR - Wastes

Consumer electronic devices (CEDs)

- Any electronic device or any component
- Includes (but is not limited to):
  - Computers, telephones, answering machines, radios, stereo equipment, tape players and recorders, phonographs, VCRs, CD players, calculators
  - Some appliances.

California UWR - Wastes

Consumer electronic devices (CEDs)

- Does not include:
  - Cathode ray tubes (CRT)
  - Major appliances (PRC 42166)

California UWR - Standards

Entities regulated under the UWR:

- Handlers
  - Generators
  - Intermediate accumulation facilities
- Transporters
- Destination facilities
  - Hazardous waste disposal facilities
  - Hazardous waste recycling facilities

California Universal Waste Rule

Who's who?

Universal Waste Handler:

Universal waste generator

- Households
- Businesses
- Other organizations
- Load check programs

California Universal Waste Rule

Who's who?

Universal Waste Handler(2):

Universal waste consolidator

- Household hazardous waste collection
- Commercial universal waste collection firm
- Lighting contractors (also HVAC etc)
- Load check program storage area

California UWR - Standards

"Handler" includes:

- Generators of universal waste
  - The person that decides to discard the universal waste
- Other accumulators of universal waste
  - Household hazardous waste facilities
  - "Captive" accumulation points
  - Commercial accumulators

California Universal Waste Rule

Who's who?

Universal Waste Transporter:

- –Common carrier
- –Registered hazardous waste hauler
- –Self-transport, business and household
- –Package service (If universal wastes are accepted)

California Universal Waste Rule

Who's who?

Universal Waste Destination Facility:

- –Authorized hazardous waste recycling facility in California
- –Out of state recycler with the appropriate authorization
- –Hazardous waste landfill, if allowed for the specific universal waste

California UWR - Standards

Two classes of universal waste handler:

- Small quantity handlers of universal waste
  - Most handlers
- Large quantity handlers of universal waste
  - Handlers that have >5000kg (5.5 tons) of universal waste onsite at any one time

California UWR – Standards

Standards for Handlers

- Prohibitions
- Notification
- Waste Management
- Labeling/Marking
- Accumulation Time Limits
- Employee Training
- Response to Releases
- Offsite Shipments
- Tracking Universal Waste Battery Shipments
- Exports

California UWR - Standards

Transporters

- Your own vehicle
- Common carrier
- Hazardous waste hauler
- Mail or package service (if they accept the universal waste)

California UWR - Standards

Standards for transporters

- Prohibitions
- Waste Management
- Storage Time Limits
- Response to Releases
- Offsite Shipments
- Exports
- Transporter Reporting Requirements

California UWR - Standards

Destination Facilities

- Must be authorized for hazardous waste
  - Hazardous waste disposal sites
  - Hazardous waste recyclers

Note: Lamps and CRTs must be recycled to qualify for universal waste management

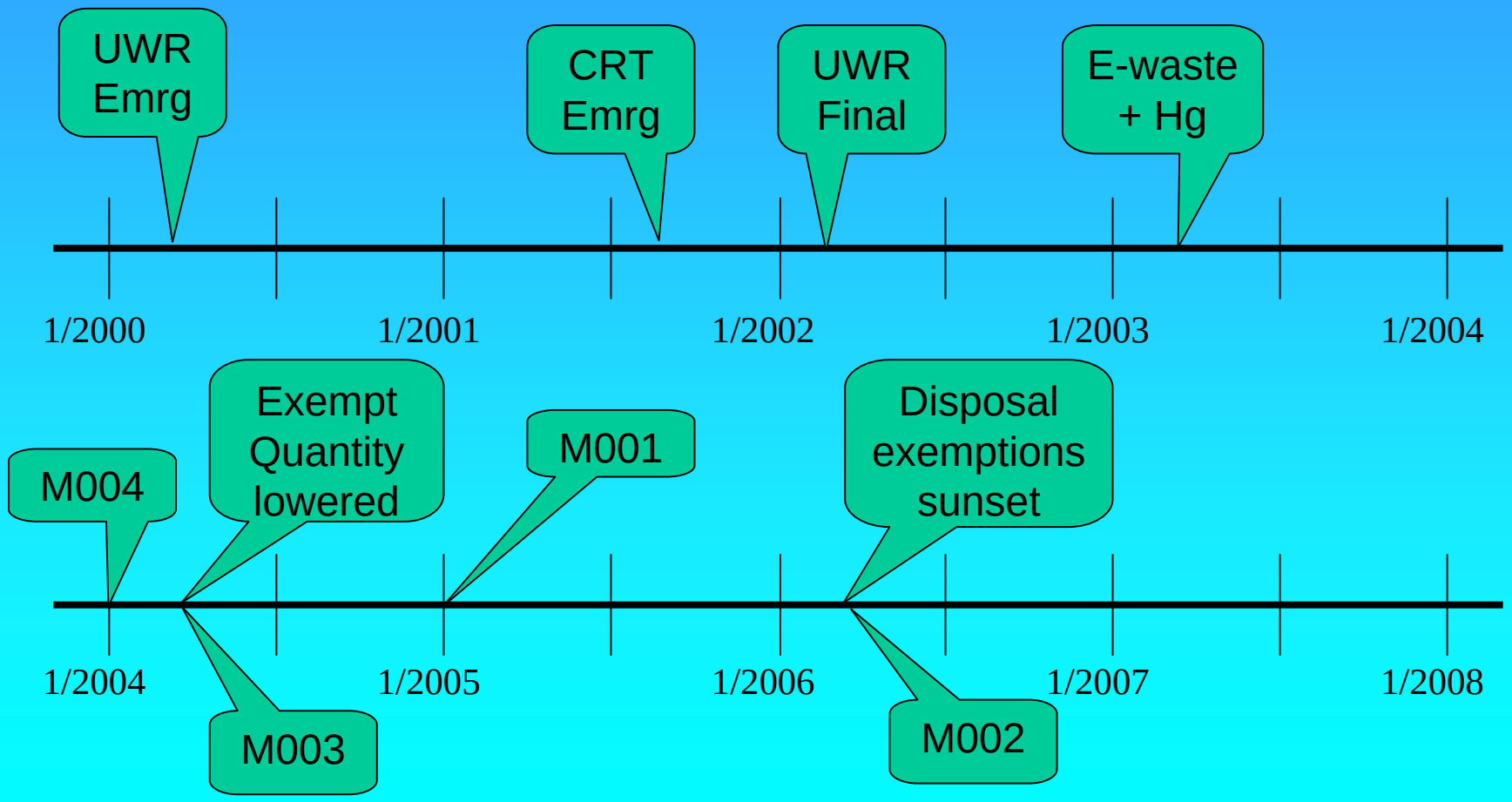
California UWR - Standards

Destination Facility

- In-state: Must have a hazardous waste facility permit or other authorization from DTSC
- Out-of-State: Must have the appropriate authorization for that type waste in that state

California Universal Waste Rule

Critical Dates



California UWR - Standards

Temporary disposal exemption for batteries, thermostats, consumer electronic devices (CED), and lamps

- Household
  - True households only
  - Sunsets 2/8/2006
- Small quantity
  - Higher level until 2/8/2004
  - Lower level until 2/8/2006

California UWR - Standards

Permanent Household Exemption:

- Exempt from all management standards
- Must properly dispose or recycle, as required for specific wastes
- Exemption does not go beyond the householder to subsequent handlers
- True households only

California UWR - Switches

Vehicle light switches – Guidance (H&SC 25214.7)

- Provide guidance on removal and management to repair shops (with local agencies)
- Encourage shops to offer replacement and recycling of switches
- Publicize removal and recycling information

California UWR - CRTs

CRTs:

- Computer monitors and television picture tubes (not flat panels).
- Hazardous due to leaded glass
  - 2 – 3 pounds per monitor
  - Up to 8 pounds lead per TV
- 30% of the lead in solid waste stream

California UWR - CRTs

Designated as a universal waste in California

Special CRT standards are found in the UWR

- Title 22, CCR, Division 4.5, Chapter 23, article 7

California UWR - CRTs

Handlers are subject to title 22, division 4.5, chapter 23, article 7 special CRT handler requirements

Transporters are subject to article 4 general UWR requirements

Destination facilities are subject to article 5 general UWR requirements

California UWR - CRTs

Standards for handlers

- Notification
  - Handlers accepting >5 CRTs or >100Kg of CRT glass from offsite
  - Generators of >5000kg/year
  - Due 2/1/2004 and each year thereafter
  - Emergency rules already required notification by 11/1 of each year

California UWR - CRTs

Standards for handlers

- Treatment of CRTs
  - Handlers may remove CRTs from monitors and TVs
  - Other limited treatment under section 66273.83

California UWR - CRTs

Handler standards

- Prevent release of leaded glass
- Package or containerize to prevent breakage
- Label properly per regulations
- Accumulate one year or less
- Train per regulations

California UWR - CRTs

Standards for handlers

- Offsite shipments
  - Ship CRTs to another handler or destination facility
  - Use a bill of lading
  - Retain records for three years

California UWR - Cans

Non-empty aerosol cans

Standards are in statute in Health and Safety Code section 25201.16.

California UWR - Cans

Non-empty aerosol cans

- Household and CESQGUW exemptions do not apply
- Special specific rules for accumulation and shipping containers
  - Accumulation area is impervious and bermed
- Specific labeling rules

California UWR - Cans

Non-empty aerosol cans

- Puncturing and draining allowed for some handlers
  - “Captive” facility
  - Household hazardous waste facility
- Not authorized for offsite commercial treatment

California UWR - Cans

Non-empty aerosol cans - draining

- Specific standards for:
  - Design and operation of the unit
  - Management of the drained contents
  - Area where the cans are drained
  - Written operating procedures and training

California UWR - Cans

Non-empty aerosol cans – draining

- Notify for puncturing activity
  - Notification goes to CUPA or other agency
  - Notify on or before beginning activity
  - Notification contents
    - Identification and location information
    - Type and number of cans
    - Equipment specifications

California UWR - Cans

Non-empty aerosol cans

- Notify for puncturing activity
  - Amend notification for changes in activity
  - Sign according to 66270.11

California UWR - FAQs

Q. Can I use a bulb crusher to consolidate fluorescent tubes?

A. Bulb crushing would require a formal hazardous waste facilities permit.

California UWR - FAQs

Q. How can a person gain approval for simple authorization of a bulb crusher?

A. The crusher can be certified under the DTSC Technology Certification Program

Or: A person can petition DTSC for a regulation change

California UWR - FAQs

Q. How should I manage broken fluorescent tubes?

A. Broken tubes should be cleaned up immediately and the remains put into an airtight container such as a bottle, a Ziploc bag, or a 5 gallon pail with a tight fitting cover.

California UWR - FAQs

Q. Can I dispose of non-hazardous fluorescent tubes in the trash?

A. Non-hazardous tubes may be disposed in the non-hazardous solid waste stream until 2/9/2004. Household and small generator exemptions apply until they sunset.

California UWR - FAQs

Q. What changes can we expect to the UWR?

A. Further wastes may be added to the list of universal wastes. However, DTSC is not currently considering any additional wastes for designation as universal wastes.

California UWR - FAQs

Q. Can companies ship universal wastes from outlying locations to a central location?

A. Yes, provided that the central location complies with universal waste handler standards.

California UWR - FAQs

Q. Where can I recycle my CRT?

A. Use the CIWMB website listings at:

http://www.ciwmb.ca.gov/Electronics/Collection/

California UWR - FAQs

Q. How do I manage universal waste thermostats?

A. Place the thermostat into a well padded container. It can be turned-in to many sellers of HVAC equipment.

www.nema.org/index_nema.cfm/664/

California UWR - FAQs

Q. How can I manage universal waste rechargeable batteries?

A. Universal waste rechargeable batteries may be turned in to many sellers of cordless tools and electronics. See the website below for participating retailers:

www.rbrc.org/rbrc/

California UWR - FAQs

Q. Will DTSC adopt additional standards for managing non-empty aerosol cans?

A. Only if problems in implementing the statutory standards demonstrates a need for further regulations.

California UWR - FAQs

Q. How do I get further information about the UWR?

A. DTSC's duty officers can answer questions:

Sacramento Noel Laverty, (916) 255-3617

Bay Area James Stettler, (510) 540-3739

Glendale Andre Amy, (818) 551-2830

Cypress Suwan Sonkprasha, (714) 484-5400

California UWR - FAQs

Q. How do I get further information about the UWR?

A. DTSC Headquarters

General UWR: Mike Horner, (916) 322-7889

CRTs: Charles Corcoran, (916) 327-4499

California UWR - FAQs

Q. Are there Web resources for the UWR?

A. DTSC Website: http://www.dtsc.ca.gov/

Rechargeable batteries:

www.rbrc.org/rbrc/

Thermostats:

www.nema.org/index_nema.cfm/664/

Lamps and mercury: www.almr.org/

California UWR - FAQs

Web resources for the UWR:

- California Statutes:

  http://www.leginfo.ca.gov/calaw.html

- California Regulations:

  http://ccr.oal.ca.gov/

- Household hazardous waste (and used oil):

  http://www.ciwmb.ca.gov/UsedOil/CrtCntrs.asp

- CRTs and electronic waste:

  http://www.ciwmb.ca.gov/Electronics/Default.htm