



Renovation and Demolition:

EH&S Requirements You
Should Know About



A Presentation for
The Connecticut Hospital
Environmental Roundtable
(CHER)

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Brought to you by...



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Renovation & Demolition Flyer

- Developed by LRAWG.
- Info on many different EH&S requirements.
- Web links and telephone numbers for more info.
- Aimed at property owners, developers, contractors, consultants, engineers, architects, etc.
- Also useful info for local officials, to hand out in the field, or for office display.

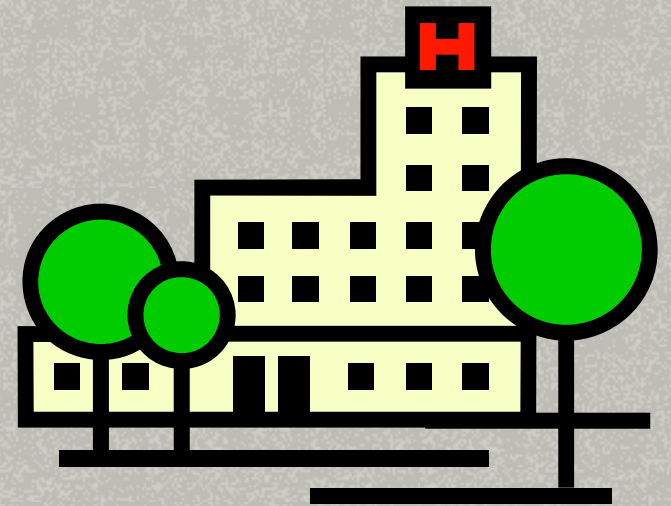


“Red Flag List”



- Developed as a companion to the Flyer specifically for local officials.
- “If you see ... please call” table.
- Telephone numbers of the agencies to contact.
- Brief descriptions of the main issues (more info in Flyer).

Why Hospitals?



- Large, complex facilities.
- Often building, rebuilding, renovating.
- Renovation & demolition raise some unique & unusual issues as compared to other facilities.



Asbestos

■ Found in:

- Pipe, boiler, tank insulation.
- Electrical insulation & components.
- Plaster, siding, roofing, flooring.
- Ceiling tiles, fireproofing materials.
- Wallboard, joint & spackling compounds.
- Lab table tops and fume hood interiors.



- DPH Notification required for demolition & for disturbing > 10 linear or 25 ft^2 .
- Disposal: regulated as a special waste.



Lead



■ Found in:

- Lead paint, window caulking, flashing.
- Lead shielding: sheetrock/doors/glass/aprons.
- Film storage boxes/cabinets.

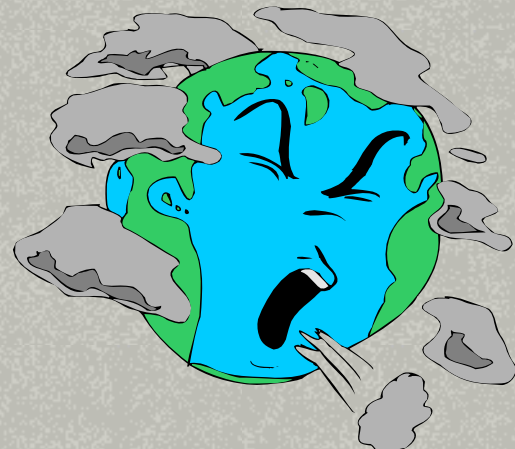
■ Disposal:

- Hazardous waste if > 5 ppm lead (TCLP).
 - Solid waste if < 5 ppm lead (TCLP).
 - Exempt if recycled as scrap metal.
- LPPCRs not applicable, but DPH/LEMU recommends that lead safe practices be used.

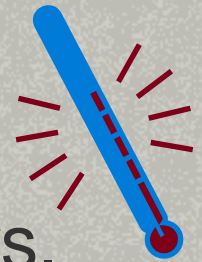
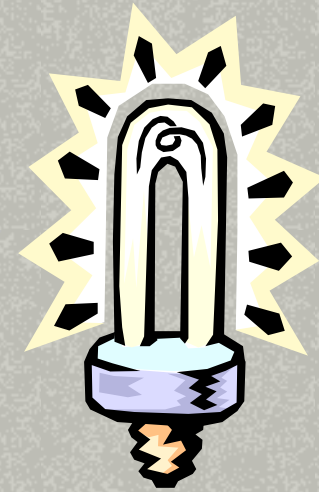
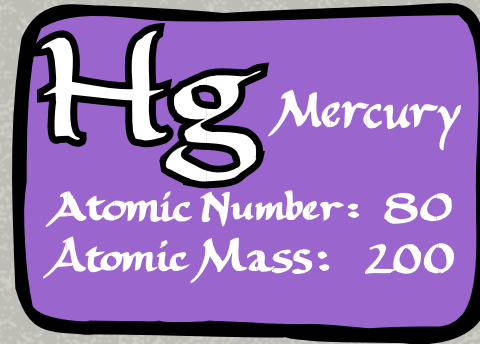


Fugitive Dust & Air Emissions

- Dust emissions must be controlled.
 - Work practices.
 - Physical controls (water spray, shrouding, etc.)
- Cannot cross property line (violation of air regulations).

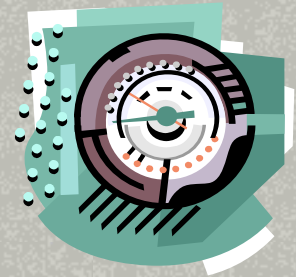


Mercury



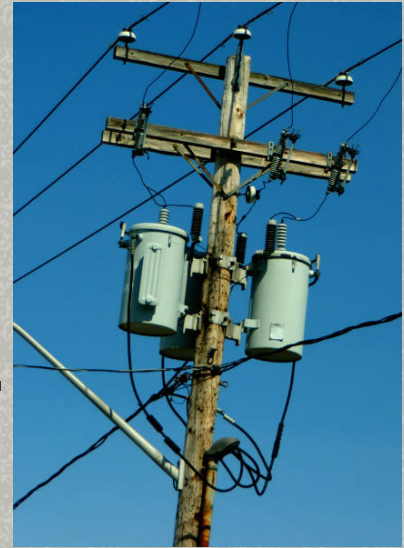
■ Found in:

- Fluorescent lamps.
- Thermometers, sphygmomanometers.
- Thermostats, mercury switches.
- Lamps and thermostats are regulated as Universal Wastes.
- DEP plans to adopt federal UW rule for “mercury containing devices” soon.



PCBs

- Transformers, capacitors, etc.
- Fluorescent light ballasts.
- Building materials:
 - Roofing
 - Flooring
 - Insulation
- Subject to federal TSCA disposal requirements, and CGS 22a-454.



Chemical Products



- Lab chemicals.
- Building maintenance chemicals:
 - Paints, solvents, oils.
 - Cleaners, waxes.
 - Pesticides.
- May be regulated as hazardous wastes.
- If not, most would be Connecticut-regulated wastes (CGS 22a-454).





C & D Waste

- Can be contaminated by lead, asbestos, mercury, PCBs, chemicals.
- DEP strongly encourages recycling.
 - Kim Trella: (860) 424-3234.
 - Frank Gagliardo: (860) 424-3130.
- May be disposed of at a C&D waste landfill if not contaminated above regulatory limits.



Radiation Hazards

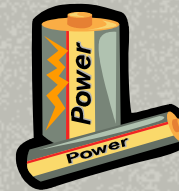


- Radiation-producing machines.
- X-Ray source must be removed & disabled.
 - Send letter to DEP's Radiation program.
- Oncology agents/contamination.
- Disposal:
 - Universal Waste used electronics (RCRA).
 - Low-level radioactive waste (NRC).
 - Mixed wastes (RCRA and NRC).

Used Electronics & Batteries

- Computers.
- Diagnostic equipment.
- Communications systems.
- Emergency lighting systems.
- Regulated as Universal Wastes:

- www.dep.state.ct.us/wst/mercury/uwrule.htm
- www.dep.state.ct.us/wst/recycle/elecrecy.htm



Other Issues

- Underground Storage Tanks.
 - Subject to DEP registration, removal, abandonment, & cleanup requirements.
- Contaminated soil.
- A.C. & refrigeration equipment (Freon[®]).
- Biomedical waste/infectious disease exposure controls.
 - Plumbing/piping.
- Day Care Facilities – DPH license.
- Schools – AHERA.
- Mold.
- Guano.



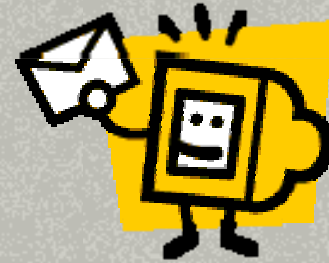
Strategies for



- Include EH&S issues from the very start of the planning stages of the project.
- Have asbestos, lead, PCB, chemical and other surveys done as early in the project as possible.
- Ensure bidding and contracting properly account for all EH&S issues.
- Have knowledgeable oversight staff to monitor all phases of work.

How to Get Copies of Flyer and Red Flag List

- Available electronically:
 - Email me at ross.bunnell@po.state.ct.us.
- Hardcopies available by regular mail.
- Upcoming DEP Web Site.





Questions?

