

BE IN THE KNOW ABOUT LEAD WASTE DISPOSAL

ROSS BUNNELL, CT DEEP

CT DPH NATIONAL LEAD POISONING
PREVENTION WEEK WEBINAR SERIES

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TODAY'S TOPICS



- Requirements for the management of lead-based paint debris:
 - “Household Hazardous Waste” exemption.
 - Waste generated by homeowners or by contractors and turned over to the homeowner.
- Testing of lead paint wastes to determine if they are hazardous.
- Management of lead paint wastes.
- Practical issues and tips.
- Other regulated waste constituents that can be found at lead abatement sites.

HOUSEHOLD HAZARDOUS WASTE EXEMPTION



- Generally applies to hazardous wastes that are:
 - (1) Generated by individuals in a “residence”; AND
 - (2) Composed primarily of materials found in the waste generated by consumers in their homes.
- “Residences” include: single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas.
- “Residences” do NOT include other types of structures such as schools, day care centers, offices, or outpatient medical care facilities.
 - HHW Exemption would not apply to lead debris or other hazardous wastes generated in these types of structures.

HHW EXEMPTION: WHAT KINDS OF WASTE ARE ELIGIBLE?



- Lead paint wastes generated by homeowners from work they do on their own home.
- Lead paint wastes generated during work by a contractor that is turned over to the homeowner for management and disposal.
- Limitations:
 - Amount of waste must be less than 10 cubic yards.
 - Does not apply to whole building demolition.
 - Must be disposed of at a properly-permitted facility (located inside or outside of CT).
 - Contractor-generated waste:
 - Homeowner must agree in writing to accept the waste;
 - Contractor must notify the homeowner of the amount and nature of the waste being left behind;
 - The homeowner has the means to properly dispose of it.

IF THE HHW EXEMPTION DOESN'T APPLY, THEN WHAT?



- Must determine if the waste is hazardous waste or not and manage it accordingly.
 - “Hazardous” means 5.0 mg/l by TCLP.
 - Two ways to make a determination:
 - Test the waste.
 - Use “knowledge of process.”
- Various testing approaches are set forth in the [DEEP Guidance Document](#):
 - Screen, sample, and segregate.
 - Screen and segregate.
 - Composite sample and demolish.
 - Remove, cut, and sample.
 - Screen and calculate.

SAMPLING AND CHARACTERIZATION: GENERAL CONCEPTS



- Contractors that perform lead testing for characterization purposes need to be licensed by DPH (unless they are also sampling for constituents other than lead).
- Must use [EPA-approved test methods](#) and [DPH-certified laboratories](#).
- Samples must be representative of the material being disposed of.
- It's the concentration of lead in the waste that matters, not the concentration in the paint.
- If there are multiple waste streams, they must be characterized separately.
- Be careful about mixing waste streams:
 - Mixing could result in a larger amount of waste that needs to be disposed of as HW.
 - Dilution of waste to render it non-hazardous is prohibited.

CAN YOU JUST ASSUME THE WASTE IS HAZARDOUS?

- Yes.
- Factors to consider:
 - Increased disposal cost vs. cost of sampling and analysis.
 - Labor to collect samples and evaluate the results.
 - Liability issues.
 - Generally, it makes sense to sample when the amount of waste is sufficient to justify the time and cost of sampling it and it is likely to be non-hazardous.
 - It doesn't make sense to sample if the amount of waste is small, or if it is very likely to be hazardous (e.g., concentrated lead paint chips).

HAZARDOUS WASTE
FEDERAL LAWS PROHIBIT IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE OR
PUBLIC SAFETY AUTHORITY OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERATOR INFORMATION:
NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
EPA ID NO. _____ EPA WASTE NO. _____
ACCUMULATION START DATE _____ MANIFEST DOCUMENT NO. _____

[_____]

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

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WHAT TYPES OF WASTE STREAMS DO I NEED TO THINK ABOUT?

- Debris: painted wood, doors, windows, trim, flooring, plaster/drywall, siding, etc.
- Metal (windows, siding, etc.).
- Paint stripping waste and encapsulant waste.
- HEPA vacuum waste.
- Contaminated Soil.
- Wastewaters.
- Other: containment plastic, PPE, etc.



MANAGEMENT OF LEAD PAINT DEBRIS

- If HHW exemption applies, homeowner can dispose of it:
 - At [local municipal transfer station](#) (if they accept C&D waste).
 - Through local curbside collections (if the municipality has them).
 - Through a private hauler that the homeowner has hired.
 - [HHW collection event](#) (for small-volume wastes like paint stripping/encapsulation wastes).
- If HHW exemption does not apply:
 - If hazardous, must dispose of via a [licensed hauler](#) and [permitted disposal facility](#).
 - If not hazardous, can be disposed of as regular C&D waste.
 - Haulers do not need permits, but must register with each town in which they operate.
 - For more information, see DEEP [C&D Waste](#) and [Volume Reduction Facility](#) web pages.



MANAGEMENT OF OTHER TYPES OF WASTE

- Metal: exempt from HW requirements if sent for scrap metal recycling.
- Paint stripping waste and encapsulant wastes:
 - Can be hazardous for more than just lead.
 - Possibly hazardous for ignitability (flash point) or F-listed solvents.
 - Possibly a corrosive hazardous (high pH paint strippers).
 - If not HW, would still be Connecticut-Regulated Waste.
- HEPA vacuum waste: often HW due to very high lead concentrations.
- Contaminated Soil: DEEP letter says it's not HW if contaminated through the normal weathering of exterior paint at a residence. Can be disposed of as a special waste.



MANAGEMENT OF OTHER TYPES OF WASTE (CONTINUED)

- Wastewaters:
 - From decontamination, cleanup, etc.
 - Cannot be disposed of down the drain without a [sewage discharge permit](#).
 - Might be hazardous waste if shipped off-site for disposal.
- Other: containment plastic, PPE, etc.
 - Can be co-disposed with hazardous debris; or,
 - Tested and disposed of accordingly.
 - Can use knowledge of process from the testing of waste from prior projects.



HAZARDOUS WASTE GENERATOR CATEGORY

	Conditionally-Exempt Small Quantity Generator (CESQG)	Small Quantity Generator (SQG)	Large Quantity Generator (LQG)
Monthly Generation Rate (Per Calendar Month)	No more than 100 kg (220 lbs.)	From 100 kg (220 lbs.) To 1,000 kg (2,200 lbs.)	More than 1,000 kg (2,200 lbs.)
Maximum Storage Amount (At Any One Time)	No more than 1,000 kg (2,200 lbs.)	No more than 1,000 kg (2,200 lbs.)	No limit
Maximum Storage Time	No Limit	180 Days	90 Days

HAZARDOUS WASTE GENERATOR REQUIREMENTS

- **CESQGs:** licensed hauler and disposal facility. No HW manifest. See [DEEP CESQG web page](#).
- **SQGs:** EPA ID #, manifest, container management, marking and labelling, inspections, personnel training, emergency coordinator. See [DEEP SQG web page](#).
- **LQGs:** Same as SQGs, plus:
 - Personnel training documentation.
 - Site-specific Contingency Plan.
 - Biennial Report.
 - See [DEEP LQG web page](#).



LEAD WASTE DISPOSAL: PRACTICAL ISSUES



- Different states may regulate lead paint wastes differently.
 - Often have different interpretations of the HHW Exemption.
 - May have different disposal requirements.
 - May not accept wastes that have been determined to be HW in another state (e.g., PA).
- Some municipal transfer stations or bulk pickup programs may refuse to accept waste from lead abatement or that is otherwise known to contain lead paint.
- HW debris: haulers often want to provide 30- or 40-yard containers, but other sizes are widely available. You can also use drums or cubic yard boxes.
- Scrap yards may not want lead-painted scrap even though it is exempt.

LEAD WASTE DISPOSAL: PRACTICAL ISSUES (CONTINUED)



- Contractors cannot take waste from project sites to another location without a permit.
 - This includes locations such as other work sites, or the contractor's place of business.
 - Obtaining a permit is not practical for HW (permits are expensive and difficult to obtain).
 - Solid waste (e.g., C&D debris) is more feasible:
 - DEEP has a [General Permit for the Construction and Operation of a Commercial Facility for the Management of Recyclable Materials and Certain Solid Wastes](#)," also known as the "Commercial GP:"

OTHER REGULATED CONSTITUENTS



- Cadmium: found in some paint pigments (especially yellow paints).
- Chromium: found in some paint pigments (again, especially yellow, but also green and blue paints). Chromates were also used in anti-corrosion paints that were applied as rust-preventing primers on steel and other metals.
- Mercury: was used as an antifungal additive for years in latex paints (although typically not at levels that would exceed TCLP limits). Mercury may also be present in building components such as thermostats, thermometers, manometers, gas meters, etc. Care must be taken to remove and separately dispose of mercury-containing items prior to removing the lead-painted components to avoid cross-contamination.
- Asbestos: can be present in many lead-painted building components. The most common example is asbestos glazing compound in windows.
- PCBs: can be present in certain paints (particularly temperature- and chemical-resistant paints), and in caulk used to seal windows, expansion joints, etc.

LEAD WASTE DISPOSAL: INFORMATION RESOURCES



- [DEEP Lead Testing and Disposal Guidance Document.](#)
- [DEEP Lead Paint Waste Fact Sheet.](#)
- DEEP webpage – [Renovation and Demolition – Environmental, Health and Safety Requirements You Should Know About.](#)
- [DEEP Renovation and Demolition “Strategies for Success” Handout.](#)
- [DEEP Renovation and Demolition Sample Checklist.](#)
- DEEP webpage – [Renovation and Demolition: Red Flag List for Local Code Officials.](#)
- DEEP webpage – [Information Resources for Contractors in the Construction Trades.](#)

QUESTIONS?



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