



# Environmental Fact Sheet

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Waste Management Division  
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<http://www.anr.state.vt.us/dec/dec.htm>

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## Managing Treated Wood Waste

Treated wood products such as telephone poles, railroad ties, and pressure treated lumber can contain toxic constituents in sufficient concentrations to cause them to be regulated as hazardous waste when discarded (i.e., when they first become “waste”). Because of this, the Waste Management Division frequently receives questions about how to best manage these materials. This fact sheet addresses the common questions: “Under what circumstances can treated wood be reused?” and “How should treated wood be disposed of?”

As a general rule, treated wood is easy to recognize. Wood that is treated with creosote or chlorophenolic formulations tends to be dark in color and has a “chemical” or “smoky” odor. Wood that is “pressure-treated” with inorganic preservatives can usually be identified by a characteristic “greenish” color. Depending on the wood treatment method used, arsenic, chromium, cresols (constituents of creosote), or chlorophenols (e.g., pentachlorophenol) can be present in concentrations high enough to exceed regulatory limits.

### How can treated wood be reused?

The Waste Management Division does not consider treated wood to be waste when it is reused appropriately (i.e., in a manner that does not pose an increased risk to human health or the environment). In general, appropriate reuse of treated wood does not increase the amount of surface area available to leaching, involve placement in/near environmentally sensitive areas, or include combustion of any type. Some examples of appropriate reuses include:

- ✓ use as support beams in open-air construction; and
- ✓ use for general landscaping in areas that are not in the vicinity of where food crops are grown (e.g., terracing, fencing, property line demarcation).

An example of *inappropriate* reuse is using ground or shredded treated wood as landscaping mulch.

### How can treated wood waste be disposed of when it is not reused?

The Waste Management Division allows treated wood waste that is not subject to regulation as hazardous waste to be disposed of in *certified lined landfills* provided that it has not been ground or shredded. The Waste Management Division recommends disposing of treated wood in this manner for the following reasons:

- ✓ the hazardous contaminants contained in (intact) treated wood are not readily available to leaching, and exposure to leaching in a landfill is reduced over time since landfill “cells” are capped once full;
- ✓ the leachate generated in lined landfills is collected and sent for proper management;
- ✓ treated wood that is sent for landfill disposal is diverted from being sent for incineration in other states; and
- ✓ the relatively low cost of landfill disposal encourages responsible management.

Treated wood waste that is generated by businesses, and that is not reused, must be evaluated to determine if it is hazardous waste. Waste that is determined to be hazardous must be managed in accordance with the Vermont Hazardous Waste Management Regulations.

Since household-generated waste is categorically exempt from regulation as hazardous waste, only treated wood waste that is generated by businesses is subject to regulation under Vermont's Hazardous Waste Management Regulations. The owner or operator of a business can base whether or not treated wood is hazardous waste on either "generator knowledge" about the wood, or laboratory analysis.

Treated wood waste is considered hazardous waste when certain contaminants are present at or above specified limits. The test method used to make this determination (when the determination is not based on "generator knowledge") is called the Toxicity Characteristic Leaching Procedure, or TCLP. The regulatory levels for the contaminant generally associated with treated wood are specified in the following chart.

Types of Treated Wood / Distinguishing Characteristics	Hazardous Waste Number	Contaminant	Regulatory Level (mg/L)
<b><i>Inorganic Preservatives:</i></b> "greenish" in color, wood is heavy.	D004	Arsenic	5.0
	D007	Chromium	5.0
<b><i>Creosote Formulation:</i></b> brown to dark brown in color; may be coated with tar; has a "smoky", chemical odor.  (Chlorophenolic formulations have similar distinguishing characteristics)	D023	o-Cresol	200.0 <sup>1</sup>
	D024	m-Cresol	200.0 <sup>1</sup>
	D025	p-Cresol	200.0 <sup>1</sup>
	D026	Cresol	200.0 <sup>1</sup>
<b><i>Chlorophenolic Formulations:</i></b>	D037	Pentachlorophenol	100.0

<sup>1</sup> If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200.0 mg/l.

Finally, it is important to note that treated wood (hazardous waste or not) cannot be burned for either energy recovery or disposal unless it is burned in a device that has been approved (permitted) by the Agency for that purpose.

**For Addition Information About...**

...burning wastes, contact the **Air Pollution Control Division** at (802) 241-3840.

...this fact sheet, or other solid or hazardous waste management issues, contact the **Waste Management Division** at (802) 241-3888, or visit the Division web site at <http://www.anr.state.vt.us/dec/wmd.htm>.

...recycling in general, call the **Vermont Recycling Hotline** toll-free (in Vermont) at 1-800-932-7100.

...reducing the amount, and the toxicity, of waste produced, contact Vermont's non-regulatory **Environmental Assistance Division** toll-free (in Vermont) at 1-800-974-9559.