

*Interpretive Memo*  
**P and U Listed Hazardous Wastes:  
Discarded Commercial Chemical Products**

The P and U lists [6 CCR 1007-3 Section 261.33(e) and (f)] designate certain unused chemicals or manufacturing chemical intermediates as hazardous waste. Unused chemicals become wastes for a number of reasons, such as accidental spills, expired shelf life, they are off-specification or can no longer serve the purpose for which they were originally produced.

P and U listed wastes include chemicals in pure form, in commercial grade form or as an active ingredient in a chemical formulation. Manufacturing chemical intermediates that have the generic name of the chemical are also considered to be commercial chemical products.

An active ingredient is defined as a component or mixture that performs the function of the product, even if it is present in very low concentration in the product. For example, a pesticide made for killing termites may contain poisons such as heptachlor and chlordane as well as various solvent ingredients which act as carriers or lend other desirable properties to the poison. Although all of these chemicals may be capable of killing insects, only the heptachlor and chlordane serve the primary purpose of the insecticide product. The other chemicals involved are present for other reasons, not because they are poisonous. Therefore, heptachlor and chlordane are the "active" ingredients in such a formulation and would cause the formulation to carry the P059 and U036 listings. The solvent ingredients may cause the formulation to be a hazardous waste for other reasons, such as by causing it to exhibit a hazardous waste characteristic like ignitability or toxicity. **NOTE:** EPA's regulations include a footnote to the P and U listing noting that the listed chemical must be the sole active ingredient to meet the listing description. Colorado's hazardous waste regulations [6 CCR 1007-3] do not include the footnote regarding sole active ingredients. In Colorado, formulations may have more than one active ingredient and still meet the listing description.

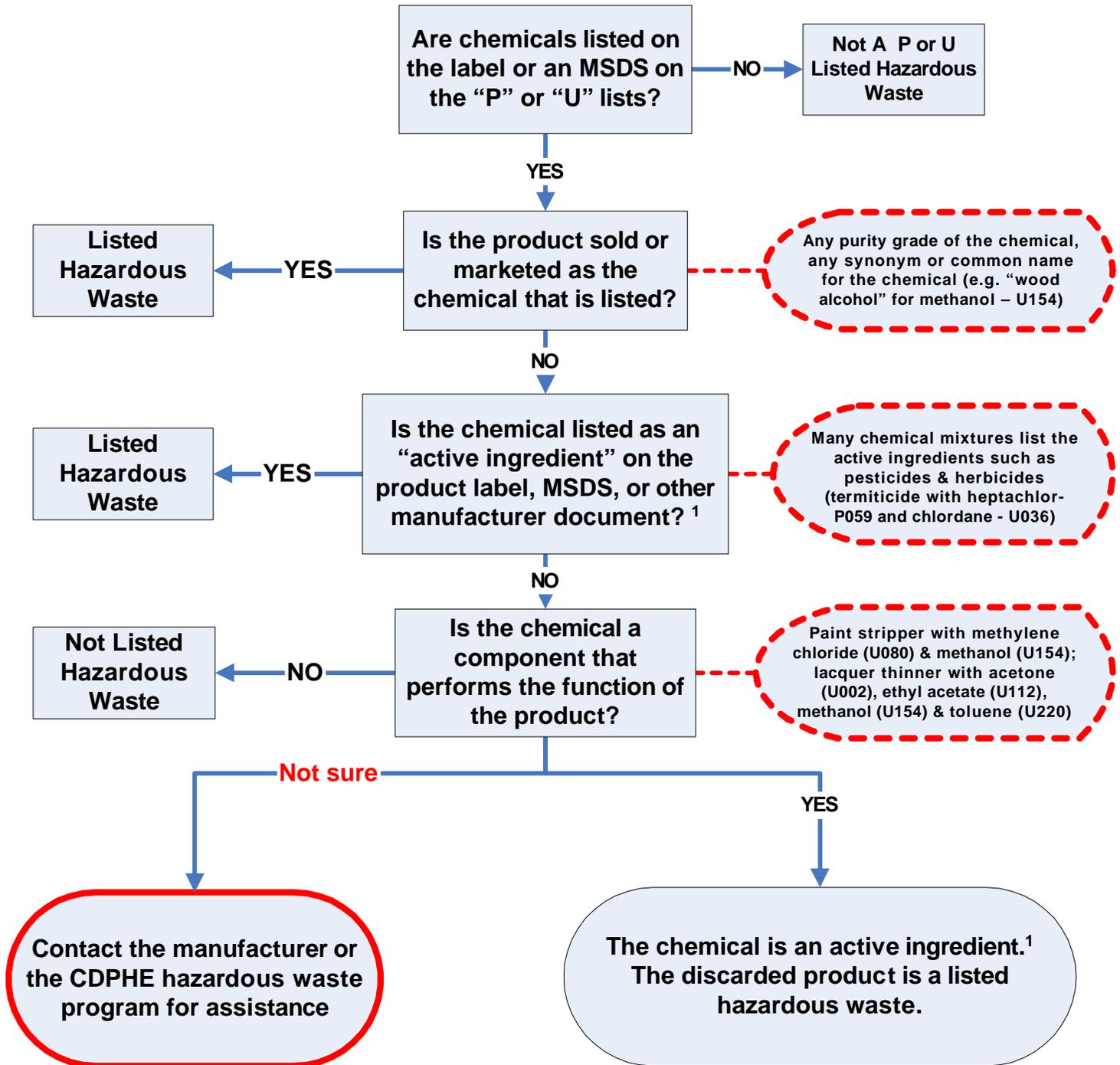
The attached flowchart describes the process to follow when determining if your waste is a P or U listed waste. Whether a particular chemical is an active ingredient or performs the function of the product may be documented on the product label, instructions for use, Material Safety Data Sheet (MSDS) or other manufacturer documentation.

The P-listing also affects how containers that held these chemicals are managed and disposed of because these chemicals are highly toxic and more hazardous than other hazardous wastes. Containers that held P-listed chemicals must be triple rinsed with a solvent capable of removing the chemical or chemical intermediate. The used solvent must then be disposed of as a P-listed hazardous waste. Alternatively, if the container had an inner liner that prevented contact of the chemical or chemical intermediate with the container, the liner can be removed and disposed of as a P-listed waste. The cleaned drum can then be recycled or disposed of as solid waste.

Containers that held U-listed chemicals may be recycled or disposed of as solid waste if all wastes have been removed from the container that can be removed using practices commonly used to remove materials from that type of container (pouring, pumping, aspirating, etc.).

For more information, contact the Customer Technical Assistance Program at 303-692-3320 (888-569-1831 ext. 3320 toll-free) or email [comments.hmwm@state.co.us](mailto:comments.hmwm@state.co.us)

**Does A Discarded Chemical Product Meet The P Or U Listed Hazardous Waste Definition In The Colorado Hazardous Waste Regulations?**



Any purity grade of the chemical, any synonym or common name for the chemical (e.g. "wood alcohol" for methanol – U154)

Many chemical mixtures list the active ingredients such as pesticides & herbicides (termiticide with heptachlor-P059 and chlordane - U036)

Paint stripper with methylene chloride (U080) & methanol (U154); lacquer thinner with acetone (U002), ethyl acetate (U112), methanol (U154) & toluene (U220)

Note: Colorado intentionally did not adopt a comment in EPA regulations regarding "sole active ingredient" in P & U listed hazardous wastes. Colorado regulations are more stringent than Federal regulations in this regard.

<sup>1</sup> An "active ingredient" is a component or mixture that performs the function of the product