



P-Listed Chemicals and Empty Containers Management and Disposal Guidelines

Hospitals, pharmacies, and other healthcare providers use a variety of products that contain hazardous chemicals including those that are considered acutely hazardous or P-listed chemicals when they become “waste.” Unused or expired P-listed chemicals are managed under the *New Hampshire Hazardous Waste Rules* (Env-Hw 100-1100) if they are the sole active ingredient.

Healthcare facilities that generate over one kilogram or 2.2 pounds per month of P-listed wastes are full quantity generators of hazardous waste in New Hampshire [Env-Hw 503.02 (c)] and must adhere to stringent hazardous waste regulations (Env-Hw 509).

Containers and inner liners that have held acutely hazardous wastes (P-listed) are deemed empty if the containers or inner liners have been triple rinsed with appropriate rinsate and no residue can be removed from the container [Env-Hw 401.03(h)(3)]. The rinsate is considered a hazardous waste mixture and must be managed accordingly. If the container is **not** rinsed out prior to disposal, then the container and the contents must be managed as a hazardous waste but only the weight of the waste (actual piece of gum, actual patch or actual “residual” in the bottle) counts toward your generator status. Facilities cannot dispose of empty P-listed chemical containers that have not been properly rinsed in the medical “red bag” waste or in the solid waste “trash.”

Items such as empty blister packaging, paper cups that delivered a warfarin pill to a patient, or the empty package that held a nicotine patch are considered delivery devices not “containers” and can be managed as non-hazardous. Used nicotine patches or chewed nicotine gum are not hazardous waste (p-listed) as they are considered used.

Healthcare facilities that use P-list chemicals should review current waste management procedures and make appropriate changes in order to adhere to *New Hampshire Hazardous Waste Rules*.

Examples of P-Listed Pharmaceutical Waste (The complete list of P-listed chemicals can be found at Env-Hw 402.04.):

- Arsenic trioxide (P012)
- Epinephrine (P042)
- Nicotine (P075)
- Phentermine (CIV) (P046)
- Physostigmine (P204)
- Physostigmine Salicylate (P188)
- Warfarin >0.3% (P001)

Epinephrine Salts

Any chemical or formulation where epinephrine salt is the sole active ingredient is not a P042 listed hazardous waste when discarded. Please be aware that a chemical or formulation containing epinephrine salt can still be regulated as a hazardous waste if it exhibits a waste characteristic under Env-Hw 403.

Management Example: Products with expired shelf lives

Occasionally, some products' shelf lives expire. Facilities should:

1. Return the product to a distribution company or manufacturer through a "take-back" program. Review the facility's group purchasing organization contract for further information. Some of these services are included in the contract.
2. Create an inventory control program to limit the amount of products that expire before use. Resources spent on the management of expired products are resources lost.
3. Example: When unused physostigmine is the sole-active ingredient, it must be managed as a hazardous waste. The waste code on the manifest should be P204. This amount will also count towards the hazardous waste generation status.

Management Example: Nitroglycerin Formulations

The Department of Environmental Services adopted a nitroglycerine formulation exemption to the *New Hampshire Hazardous Waste Rules*. The exemption reads:

Nitroglycerine, listed as P081 [is exempt], provided that it:

- a. Was to be used for medicinal purposes; and
- b. Does not exhibit a hazardous waste characteristic as set forth in Env-Hw 403.

An explanation of the Characteristic Waste Rules Env-Hw 403 can be found on our website at [Env-Hw 400 Identification & Listing of Hazardous Wastes](#) or a paper copy of the rules can be purchased by calling the Public Information Office at 271-8876.

Pollution Prevention at Healthcare Facilities

Since 1998, the Department of Environmental Services' Pollution Prevention Program (NHPPP) has worked with the healthcare industry to promote pollution prevention opportunities at their facilities. Through a partnership with the New Hampshire Hospital Association, a workgroup entitled New Hampshire Hospitals for a Healthy Environment (NH3E) was formed and continues to meet to share ideas for pollution prevention strategies.

For further information on the *New Hampshire Hazardous Waste Rules*, contact the Hazardous Waste Compliance Section at 271-2942, toll free at 866-HAZWAST or hwcomp@des.nh.gov.