

HW-9

2024

Hazardous Waste Identification and Management for Veterinary Facilities

The New Hampshire Department of Environmental Services (NHDES) receives many inquiries regarding the regulatory status of waste veterinary pharmaceuticals and chemicals that may be considered hazardous waste. This fact sheet is intended to help animal care and veterinary hospital facilities (veterinary facilities) safely manage waste and minimize their environmental impacts.

1. What is hazardous waste?

A hazardous waste is any waste that, because of its chemical or physical makeup, may pose a threat to human health or the environment. Discarded chemicals, off-specification products, and liquid or solid residues are regulated as "hazardous waste" if they are: ignitable (flash point of <140°F), corrosive (pH of 2 or less or 12.5 or greater), reactive, toxic (for certain metals and organic chemicals), or specifically listed in the New Hampshire Hazardous Waste Rules (Rules). Veterinary facilities commonly generate hazardous wastes, some of which are discussed below. Additional information on identifying hazardous waste may be found on Fact Sheet HW-11 "Identification of Hazardous Waste." All facilities that generate waste must have documentation to show how the facility determined if their waste is hazardous or not. Please refer to Fact Sheet HW-35 "Documenting Hazardous Waste Determinations" to guide you through this process.

2. What is a hazardous waste generator?

A "generator" is any person who owns or operates a facility where hazardous waste is generated. Generators in New Hampshire are classified as either small quantity generators (SQGs) or full quantity generators (FQGs). The Rules that apply are based on the quantity of waste your facility generates on a monthly basis. SQGs are facilities that generate less than 220 pounds of hazardous waste each month and FQGs are facilities that generate less than 220 pounds of hazardous waste generators must ensure that their wastes are properly managed in accordance with the Rules from the moment they are created. Requirements include, but are not limited to, obtaining an EPA ID number from NHDES (prior to any waste generation, accumulation or disposal) by completing the <u>RCRA C Site Identification Form</u>, documenting hazardous waste determinations, proper waste storage, disposal (using a registered hazardous waste transporter and a uniform hazardous waste manifest) and prevention of releases to the environment.

3. What veterinarian chemicals/materials are considered hazardous waste?

Below are some common wastes created by veterinary facilities that are often regulated as hazardous waste and if hazardous are prohibited from being disposed of as ordinary trash, with infectious waste, into the drain (sewer or septic system), or evaporated:

• Cytology stains:

Cytology stains and fixatives are commonly hazardous wastes because they are ignitable. Safety Data Sheets (SDS) should be kept and reviewed to determine if the waste is hazardous for ignitability or any other hazardous waste characteristic.

• Waste photoprocessing solutions and film:

Non-digital X-ray processes create hazardous waste, specifically used fixer containing silver removed from film during photoprocessing and unused film with silver concentrations above 5 parts per million

(ppm). If a silver recovery unit is used to remove silver from used fixer, the recovery unit and treated fixer may not need to be managed as hazardous waste. To meet this standard, cartridges containing the removed silver must be sent off-site for precious metals recovery and the units must be maintained to adequately remove the silver in the fixer to levels below 5 ppm.

• Formaldehyde/Formalin:

Most unused formaldehyde/formalin solutions are considered listed hazardous wastes, regardless of formaldehyde concentration. Used formaldehyde solutions would not be a listed hazardous waste but could be hazardous if ignitable. The SDS should help you make this determination or have a lab analyze a representative sample of the waste for ignitability in accordance with Env-Hw 403.03(b).

• Pharmaceutical and chemotherapy wastes:

Potential hazardous waste pharmaceuticals include prescription drugs, chemotherapy agents, controlled substances or over-the-counter items that are expired, damaged or otherwise not usable for their intended purpose. A generator may use knowledge of waste ingredients, the process that generates the waste or the results of laboratory analysis of the waste to determine if it is a hazardous waste. Some unused and expired pharmaceuticals can be returned to an approved "reverse distribution" facility and may not require management under the Rules. However, if the waste pharmaceuticals do not qualify for reverse distribution and are hazardous waste, they must be managed in accordance with the requirements of Env-Hw 500 of the Rules.

In some cases, a generator may manage their hazardous waste pharmaceuticals under the alternate standards of Env-Hw 1300, which may be less stringent than Env-Hw 500. For more information regarding identifying hazardous waste pharmaceuticals and Env-Hw 1300, please refer to Fact Sheets HW-38 "Hazardous Waste Pharmaceuticals Rule: Applicability and Resulting Category" and HW-39 "Hazardous Waste Pharmaceuticals Rule: Guidance for Health Care Facilities."

Some practices use pharmaceutical destroyers to treat pharmaceutical waste, but this is not recommended for hazardous pharmaceuticals and should only be used per the manufacturer's recommendations. If a listed hazardous waste goes into the destroyer, the entire unit must be managed as a listed hazardous waste. If the waste is hazardous for any other reason, the material in the unit would need to be tested every time a new destroyer is ready for disposal. If the unit fails testing for any hazardous waste characteristic, it would need to be managed as hazardous waste. If it does not fail, it could be managed as solid waste.

• Lead foils and aprons:

X-ray films packaged using lead foil and lead aprons must be recycled for lead content, not thrown in the trash. If they are not recycled, they must be managed as hazardous waste.

• Cleaners, disinfectants and solvents:

Many used or discarded chemicals from disinfecting or cleaning instruments or work areas could be classified as hazardous waste. Safety Data Sheets (SDS) should be kept and reviewed to determine if the waste is hazardous for any hazardous waste characteristic or listings.

4. How should infectious waste be handled?

All infectious wastes that do not also meet the definition of hazardous wastes must be managed in accordance with Env-Sw 904 of the New Hampshire Solid Waste Rules. Infectious wastes include, but are not limited to, needles, syringes and laboratory cultures. For more information on the regulatory requirements for managing infectious wastes, contact NHDES' Solid Waste Compliance Section at (603) 271-2925.

For more information

Questions regarding this fact sheet should be directed to the NHDES Hazardous Waste Management Bureau at (603) 271-2942 or toll-free within New Hampshire at <u>866-HAZWAST</u> (M-F 8 a.m.-4 p.m.) or send an email to <u>hwcomp@des.nh.gov</u>. For a complete description of the requirements, refer to the New Hampshire Hazardous Waste Rules, Env-Hw 100-1300, available from <u>NHDES' website</u>.