Environmental Compliance for Veterinary Facilities

The Massachusetts Department of Environmental Protection (MassDEP) developed this fact sheet to help animal care and hospital facility operators and employees safely manage waste and wastewater, and minimize their operations’ environmental impacts.

Hazardous Waste

Discarded chemicals, off-specification products, and liquid or solid residues are regulated as “hazardous waste” if they are: corrosive (pH of less than 2 or 12.5 and greater), ignitable (flash point of 140°F), reactive with water or acid, or toxic as determined by a special laboratory test. Veterinary facilities commonly generate several types of hazardous wastes:

- **Spent X-ray film development solutions.** These contain silver, which is a listed hazardous waste. Your facility may install a silver recovery unit and ship spent cartridges to a precious metal recovery facility.

- **Unused medications.** Many of these cannot be disposed with other medical waste or regular trash. They must instead be returned to the places of purchase through approved “reverse distribution” programs or managed as hazardous waste. Of the medications your facility is likely to use most:

  ✓ Chlorambucil, Cyclophosphamide, Diethylstilbestrol, Melphalan, Mitomycin C, Nitroglycerine, Paraldehyde, Reserpine, Streptozotocin, Warfarin and Warfarin Salts are specifically listed or defined as hazardous wastes by state regulation: [http://www.mass.gov/dep/recycle/laws/regulati.htm#hw](http://www.mass.gov/dep/recycle/laws/regulati.htm#hw)

  ✓ Arsenic Trioxide, Epinephrine (excluding Epinephrine Salts), Nicotine and Nicotine Salts must be managed as “acutely hazardous waste” because they are extremely toxic or reactive, and therefore are regulated more strictly than other hazardous wastes.

- **Unused cleaners and disinfectants.** Many of these chemicals may be classified as hazardous waste. Check the Material Safety Data Sheet (MSDS) for each product you use, or see if it contains chemicals listed or defined as hazardous by state regulation.

- **Mercury.** The Massachusetts Mercury Management Act of 2006 requires the collection, management and proper disposal of mercury-containing devices and materials. Many items – including thermometers, other medical measuring devices, thermostats and mercury switches – need to be managed accordingly. To learn more, see: [http://www.mass.gov/dep/toxics/stypes/hgres.htm#doing](http://www.mass.gov/dep/toxics/stypes/hgres.htm#doing)

**Know Your Generator Status & Storage Limits**

Any facility that generates hazardous waste needs to register its status with MassDEP, obtain a site-specific identification (ID) number, store and label wastes appropriately, and arrange for timely off-site shipment of accumulated wastes.

Refer to the following table. Your generator status determines how much waste you may accumulate and for how long before shipping it off-site for recycling or disposal.
Very Small Quantity (VSQG) | Small Quantity (SQG) | Large Quantity (LQG)
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Total Waste Generated Monthly | Less than 220 lbs (27 gal.) | More than 220 lbs. but less than 2,200 lbs. (270 gal.) | Greater than 2,200 lbs. |
Acute Waste | None allowed | Less than 1 Kg. (2.2 lbs) | More than 1 Kg. |
Accumulation Limit | 2,000 lbs. (270 gal.) | 13,000 lbs. (1,600 gal.) | No limit |
Storage Time Limit | Indefinitely | Less than 180 days | Less than 90 days |

To maintain your generator status, you may not accumulate a larger volume of waste on site or store it for longer than allowed.

Register With MassDEP & Obtain a Site-Specific ID Number

- **VSQG and/or SQG:** Submit a Generator Registration Form to MassDEP. Download a form at: [http://www.mass.gov/dep/recycle/approvals/hwforms.htm#gen](http://www.mass.gov/dep/recycle/approvals/hwforms.htm#gen)

- **VSQG:** Self-assign an ID number using the prefix “MV” followed by your ten-digit telephone number. Enter this number on your Generator Registration form.

- **SQG or LQG:** Apply to MassDEP for an ID number. You may use a temporary number – the prefix “MP” followed by your ten-digit telephone number – until MassDEP issues your permanent ID.

- **Change in Status:** Continue using your original ID number, but notify MassDEP of any change your facility’s generator status (using the SQG/LQG Notification of Hazardous Waste Activity Form also found at the link above).

Properly Store & Label Wastes

Regardless of your generator status, your hazardous waste storage area must be secured against unauthorized access and posted with *Hazardous Waste* signs. Storage containers need to be kept in good condition and labeled with the names of the wastes inside them, as well as the associated hazard(s): corrosive, ignitable, reactive or toxic. If you are an SQG or LQG, other requirements also apply:

- **An SQG or LQG** must label each container with the date accumulation began.

- **An SQG** must train employees in waste handling and emergency procedures, have emergency response equipment and a coordinator, and notify local authorities of all waste(s) generated and accumulated on-site.

Arrange for Timely Shipment

Each shipment of hazardous waste must be transported by a MassDEP-licensed transporter and accompanied by a manifest form. For a list of licensed transporters, see [http://www.mass.gov/dep/recycle/hazardous/transpor.htm](http://www.mass.gov/dep/recycle/hazardous/transpor.htm). Manifest forms are available from transporters.

Under limited circumstances, a VSQG may self-transport wastes to another hazardous waste generator if that facility will be arranging for shipment by a licensed transporter. Check with MassDEP for specific requirements.
Industrial Wastewater

Wastewater from washing animals, equipment, cages and kennels must be properly managed in accordance with all applicable state and local rules, and must also meet effluent limits, which can vary from one municipality or sewer district to another.

Wastewater from fluids used to develop x-ray film can contain silver concentrations of several thousand parts per million (ppm). Any wastewater with silver content of more than five (5) ppm is classified as hazardous waste and may not be discharged to sewers. If your facility generates silver-bearing wastewater, MassDEP recommends that you either install a silver recovery unit and ship spent cartridges to a precious metal recovery facility, or use a compatible pre-treatment system to reduce the silver concentration of your x-ray wastewater to two (2) ppm or less, which the state’s photo processors are required to do and is widely recognized as practical and achievable.

All discharges are subject to MassDEP industrial wastewater regulations found at: http://www.mass.gov/dep/water/wastewater/industri.htm

- **If your facility discharges wastewater to a sewer**, you must obtain municipal or district sewer system operator approval and may be required to pre-treat your wastewater before discharging to a sewer. Depending on the discharge volume from your facility and the type of treatment plant receiving your wastewater, you might also need to file a certification with MassDEP. For additional information, follow the link above.

- **If your facility discharges wastewater to a septic system** (i.e., facility is located in an area without access to sewers), you may not discharge veterinary wastewater – except for sanitary wastewater from bathrooms and kitchens – to the septic system. You must instead store non-sanitary wastewater in a holding tank (see below). To learn more about septic systems, see: http://www.mass.gov/dep/water/wastewater/septicsy.htm

- **If your facility does not have access to a sewer**, you will need to store non-sanitary wastewater in an industrial wastewater holding tank. The tank must be installed and operated according to the requirements of 314 CMR 18.00, and its contents must be periodically pumped and taken to an approved disposal, recycling or treatment facility. Learn more at: http://www.mass.gov/dep/water/laws/factsht.htm

  Note: Most tank installations require the filing of one-time compliance certifications with MassDEP: http://www.mass.gov/dep/service/online/erpforms.htm#holdingt

Medical & Biological Wastes, Including Sharps

Facilities must manage medical and biological wastes, including sharps and animal carcasses, without exposing workers or the public to unnecessary risks. Medical and biological wastes need to be separated from other wastes and transported by medical waste transporters to facilities specifically licensed to destroy these wastes or render them “non-hazardous.” See http://www.mass.gov/dep/recycle/hazardous/inwaste.htm for additional information and links.
Air Quality

If your animal care facility operates a crematory unit, it must have a MassDEP air quality permit (310 CMR 7.00, found at http://www.mass.gov/dep/air/laws/regulati.htm#airregs). If you are operating a crematory unit without a permit, stop using it immediately and contact the appropriate MassDEP regional office to learn what is required to bring the unit into compliance.

Larger facilities may also operate boilers, emergency generators and other equipment subject to MassDEP air quality regulations and approvals. See http://www.mass.gov/dep/air/approvals/aqforms.htm

Radiological Material

Veterinary facilities may generate radiological wastes from X-rays and disease treatment. The Massachusetts Department of Public Health (DPH) regulates the management of these wastes. Follow the “Radiation Control” link at http://www.mass.gov/dph/topics/healthtopics.htm to learn about specific requirements.

For More Information

- Call the MassDEP Business Compliance Division at 617-292-5898.
- Call or visit the MassDEP regional office for your municipality. See the alphabetical listing of cities and towns at: http://www.mass.gov/dep/about/region/findyour.htm
- Follow the “Health Topics Index” link at the web site of the Massachusetts Department of Public Health (DPH): http://www.mass.gov/dph/

Please Note: This fact sheet is a general guide to a variety of MassDEP regulations and requirements that may apply to your facility. Other state and local rules may apply.