

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH RADIATION CONTROL PROGRAM

March 30, 2001

AGENCY INFORMATION NOTICE 01-01: GUIDELINES FOR ACHIEVING COMPLIANCE WITH REGULATORY REQUIREMENTS FOR DISPOSAL OF WASTE IN ORDINARY TRASH

Addressees

All radioactive material medical use licensees.

Purpose

The Radiation Control Program (the Agency) is issuing this information notice to provide guidance to licensees on meeting acceptance criteria at facilities which receive and process or dispose of waste as non-radioactive trash.

It is expected that recipients will review the information for applicability to their facilities and consider appropriate actions. However, this information notice does not contain any new requirements; therefore, no specific action nor written response is required.

Description of Circumstances

It has recently come to the attention of the Agency that inconsistent methods of monitoring waste containers prior to disposal of the waste as non-radioactive trash are being applied by licensees and waste disposal facilities. This has resulted in an increased number of notifications to the Agency from disposal facilities that licensees are not sufficiently monitoring waste that is to be processed at these facilities.

Each incident in which a shipment is determined to have residual radioactivity is reported to the Agency and the Massachusetts Department of Environmental Protection, which permits such facilities, for investigation and also requires authorization for the waste to be returned to the consignor.

These disposal facilities, which are not licensed to accept radioactive material, have installed state-of-the-art detection systems to ensure compliance on their part. In some instances disposal facilities in Massachusetts must deal with facilities in other states which are also not licensed to accept radioactive material. Current detection systems for monitoring waste can register background radiation levels of 4 $\mu\text{R/hr}$, and acceptance levels set at the regulated medical waste disposal sites are typically 0.5 $\mu\text{R/hr}$ above background. The burden of adhering to these criteria set by the disposal facility is placed on the licensee.

Discussion

Authority to dispose of waste by decay-in-storage is granted in 105 CMR 120.530(A), which states that the radioactive material must be held for ten (10) half-lives and must be monitored at the container surface before disposal with an appropriate radiation detection survey instrument set on its most sensitive scale.

The selection of an appropriate radiation detection instrument should take into account the technology advances which enable new detectors to become increasingly able to detect lower and lower levels of radiation. It is important that monitoring prior to disposal by licensees be performed with instruments with detection capabilities consistent with that of disposal facilities that may have more sensitive detection equipment. Many disposal facilities, including commercial waste and regulated medical waste transfer stations, have recently purchased state-of-the-art detection equipment in order to abide by local laws. The Massachusetts General Laws state that no radioactive material shall be buried within the Commonwealth, and many town ordinances prohibit the incineration of radioactive material as well. The Agency has no jurisdiction over disposal facilities and therefore cannot dictate the acceptance criteria for these facilities.

Requirements

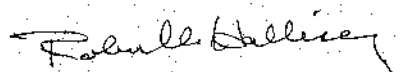
Any disposal facility which detects unexpected radioactive material in a load of trash is required to notify the Department of Environmental Protection, the Radiation Control Program, and in some cases, the town Board of Health. When the trash disposal facility deals exclusively with regulated medical waste, identification of the institution from which the unexpected radioactive material came is an easy task, and is reported to the Agency.

An evaluation by the licensee of its current detection system should be performed to determine compatibility with the systems of disposal facilities. If it is found that the licensee's current detection system is not adequate to monitor waste for disposal at such facilities, steps should be taken to rectify the discrepancies.

As noted earlier, waste disposal facilities contact the Agency when unexpected radioactive material is detected in the waste stream. If a licensee is identified by the facility during the notification, the Agency could consider the incident to be a loss of control of material by the licensee. Loss of control of material is prohibited under 105 CMR 120.235(B), and such instances reported to the Agency could be considered as violations of 105 CMR 120.000.

This information notice requires no specific action or written response. If you have questions about the information in this notice, please contact the Officer of the Day at 617.727.6214.

Sincerely,



Robert M. Hallisey, Director
Radiation Control Program