

Brookhaven's Waste Management Division is responsible for pick up, transport, storage and off-site disposal of the Lab's hazardous, radioactive and mixed waste.

Waste Management at Brookhaven

As a by-product of the world-class research it conducts, Brookhaven National Laboratory generates a wide range of wastes during the normal course of business. This waste includes materials common to many businesses and industries, such as aerosol cans, batteries, paints, and oils. However, Brookhaven's unique scientific activities also generate waste streams that are subject to additional regulation and special handling, including radioactive waste, reactive chemicals, and solvents.

The Waste Management Division is responsible for the pick-up, transportation, storage, and off-site disposal of site-generated wastes. Wastes are managed at a state-of-the-art facility designed especially for the management of hazardous, industrial, radioactive, and mixed wastes.

The Waste Management Facility complex is actually comprised of three waste-staging areas: a facility for hazardous wastes, regulated by the Resource Conservation and Recovery Act (RCRA); a mixed-waste building for wastes that are both hazardous and radioactive; and a reclamation building for radioactive waste. The RCRA and mixed-waste buildings are managed under a permit issued by the N.Y. State Department of Environmental Conservation.

These buildings are utilized for short-term storage of wastes prior to their being packaged or consolidated for off-site shipment to permitted treatment and disposal facilities.

What types of waste do we manage?

Chemical Wastes

Many research, maintenance, and support activities at the Laboratory generate some type of hazardous or industrial waste. Many wastes produced are similar to those generated as a result of activities around your home, or through goods or services you use. These include:

- Flammable paints and cleansers
- By-products of the photo development process
- Solvents like methanol and acetone (found in nail polish remover)
- Acidic wastes that may contain metals like lead.



Brookhaven's Waste Management Facility

The Lab also generates "industrial" wastes such as waste oils and certain reagents that do not meet the Environmental Protection Agency's definition of "hazardous." These wastes, however, must be managed in an environmentally responsible manner and are sent to appropriate facilities for treatment or disposal.

Radioactive Waste

Brookhaven generates radioactive waste during the production of medical isotopes and during experiments in various areas. Liquid, solid industrial, and mixed radioactive waste are all segregated and processed accordingly. The photo at left shows a "hot cell," which will be used for future processing of waste generated during medical isotope production.

Restoration/Decommissioning Wastes

Brookhaven is currently cleaning up facilities and areas containing radioactive and chemical contamination resulting from historical operations. Waste recovered through restoration and decommissioning activities is managed by the environmental restoration project with oversight by Brookhaven's Waste Management Division.

Protecting the Environment

The Waste Management Division was one of eight Brookhaven organizations to receive registration to the International Organization for Standardization's (ISO) 14001 standard in September 2000. ISO 14001 is a globally recognized standard that defines the structure of an organization's environmental management system (EMS) for purposes of improving its environmental performance.

An EMS allows us to integrate environmental considerations into every facet of the Lab's work. It can help us improve environmental performance, gain community trust, reduce costs, and maintain compliance with the law. We can also manage, control, and measure our environmental impacts, and ensure that we can continue to produce the cutting-edge research that is our hallmark.



The "hot cell" allows remote handling of radioactive waste.