ENVIRONMENTAL SAFETY FACILITY

Questions about Project XL and Hazardous Waste at UVM

What is the Problem?

UVM has over 400 teaching, research and service laboratories, using a wide variety of hazardous chemicals. These include flammable, toxic, corrosive and explosive materials. Because these chemicals are used in small quantities on a limited basis, they present little danger. After they have been used, their disposal is carefully managed by the staff of UVM's Environmental Safety Facility. However, we are concerned that the EPA may still find regulatory problems with the handling of hazardous waste on campus.

How does the EPA regulate Universities?

EPA regulations affect various aspects of University operations. One of its largest impacts is on the handling of hazardous waste generated by laboratory work. In addition, EPA inspectors and enforcement personnel have become more strict in interpretating the hazardous waste regulations in laboratory settings during the 1990's. Enforcement actions taken at Stanford, Yale, UConn and Boston University have resulted in fines of over $300,000 at each institution.

At UVM, there have been two enforcement actions pursued since 1987. The first resulted in the building of the $2.2 million Environmental Safety Facility (ESF), a state of the art hazardous waste storage building, which opened in 1994. The second fine, in 1992, was resolved by the paying a $4000 fine.

What is Project XL?

Project XL is one of the EPA's efforts at regulatory reform, part of the Clinton-Gore initiative to "reinvent government". The concept behind Project XL is that organizations that can identify specific regulations which prevent them from achieving improved environmental performance can propose revised regulations and test those regulations for a period of time. If the improved performance is achieved, the regulation may be used to cover other organizations as well.

Why is UVM involved?

UVM currently operates a state-permitted Part B facility (the ESF), which allows us more flexibility and control over management of our hazardous waste. However, waste handling within laboratories themselves might not pass detailed regulatory scrutiny. We feel that the environmental management standard developed by the LCEE will enable us to meet the spirit of the regulations without increasing the stress on lab resources.

What will UVM have to do?

As a Project XL participant, UVM will develop an Environmental Management Plan, which will identify the environmental responsibilities of lab personnel. This plan will require upper level support and lab worker commitment in order to implement successfully. UVM will also have to identify and measure various Environmental Performance Indicators to determine whether its environmental performance has been improved by the XL. In return, UVM and the other pilot schools will not have RCRA regulations enforced within laboratories on campus.

What are the benefits?

Participation in the XL will have a variety of benefits for UVM. In addition to the change in regulatory structure that XL represents, participation in the project has significantly improved UVM's relationship with the federal and state hazardous waste regulators. It has established UVM as a national leader in environmental health and safety thinking. And it has opened new opportunities for faculty and student involvement in the health and safety program.

Where can I get more information about XL and UVM?

Contact either Ralph Stuart or Milly Archer at 656-5400 with questions or comments. Detailed information about the Project XL for Labs effort is available at **http://esf.uvm.edu/labxl**

Context (1)

- UVM has about 400 teaching, research and service labs in 11 buildings.
- Laboratories are concentrated in buildings on main campus.
- They use a wide variety of small amounts of hazardous chemicals, in addition to biological agents and radioactive materials.

Context (2)

- ESF staff collects hazardous waste from laboratories and transports it to the Given Bunker for packaging.
- Drums of hazardous waste are brought from the bunker to the ESF within 90 days. At the ESF, the wastes are bulked and repacked for shipment off campus.
- Since the ESF went into operation, state inspections have found no violations in this process which were not corrected immediately.

Context (3)

- The EPA has been regulating hazardous waste since 1980 under the Resource Conservation and Recovery Act (RCRA). These regulations are based on industrial models.
- In the 1990's, the EPA has started to enforce RCRA regulations in laboratory settings much more strictly.
- This has resulted in fines of $300,000 and over to Yale, University of Connecticut, Boston University among others.

Project XL

- The EPA has established the Project XL program to test new regulations which may improve environmental performance.
- UVM is one of three pilot schools which will test a new hazardous waste regulation for laboratories (Boston College and UMass - Boston are the others).
- Stakeholder involvement is very important to the EPA as part of the XL process.

Project XL at UVM

- ESF staff will develop an Environmental Management Plan which will describe specifically how laboratory chemicals will need to be handled and disposed of at UVM.
- Laboratories will be held to Minimum Performance Criteria for proper handling of hazardous waste.
- UVM will monitor the environmental performance of its laboratories to see if it improves. Environmental performance involves pollution prevention, environmental awareness and regulatory compliance.

Other Information

- Detailed technical review has been conducted by national health and safety people from colleges and Universities and the federal and regional EPA. Vermont DEC has been involved all along as well.
- There is a web site with many details at http://esf.uvm.edu/labxl