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EPA Project XL: New England Universities Laboratories

WHAT IS PROJECT XL?

Project XL, which stands for "e**X**cellence and **L**eadership," is a national initiative that tests innovative ways of achieving better and more cost-effective public health and environmental protection. The information and lessons learned from Project XL will be used to assist EPA in redesigning its current regulatory and policy-setting approaches. Project XL encourages testing of cleaner, cheaper, and smarter ways to attain environmental results superior to those achieved under current regulations and policies, in conjunction with greater accountability to stakeholders. Project XL has committed to a goal of 50 pilot projects. Because of this limited scope, it is vital that each project tests new ideas with the potential for wide application and broad environmental benefits. As of November 1999, fifteen pilot experiments are being implemented, twenty-five additional projects are in various stages of development, and twenty XL pre-proposal ideas are under consideration.

SUMMARY OF THE LABS PROJECT

This pilot allows participating laboratories at the University of Massachusetts-Boston, Boston, MA, Boston College, Chestnut Hill, MA and University of Vermont, Burlington, VT (the "Universities") to implement flexible, performance-based standards for managing hazardous wastes in their laboratories. The site-specific rule enables laboratories at the three Universities to replace existing requirements for hazardous waste generators with a comprehensive Laboratory Environmental Management Plan designed by each University and including certain minimum performance criteria.

The rule defines laboratory waste as a hazardous chemical that results from laboratory scale activities and includes excess or unused hazardous chemicals that may or may not be reused outside their laboratory of origin.

Under the rule, the Universities will not be required to make a RCRA hazardous waste determination with respect to laboratory waste until it reaches a central on-site location. This should allow the Universities' Environmental Health and Safety professionals to more effectively manage the laboratory waste at the institutional level and increase reuse and recycling opportunities. The New England Laboratory final project agreement, EPA's 15th XL project, was signed on September 28, 1999.

SUPERIOR ENVIRONMENTAL PERFORMANCE

This XL Project is designed to achieve environmental results that are superior to what these Universities currently achieve in laboratories under the current RCRA regulatory system. A primary aim of the project is to allow the Universities to develop and implement an Environmental Management Plan that defines the policies and procedures for managing all hazardous chemicals, including laboratory wastes under a logical, integrated scheme. Under the EMP, environmental professionals at the Universities will determine, at hazardous waste accumulation areas, whether there are any opportunities throughout the University for reuse of laboratory waste or whether the laboratory waste is a solid waste that is hazardous. The elements of the

Environmental Management Plan are defined in the rule. The Universities will monitor environmental management system effectiveness for laboratories, and collect data to measure improved environmental performance with respect to the minimization of unused or virgin hazardous chemicals that when disposed are currently required to be disposed as hazardous waste. They will also monitor the reuse or recycling of used hazardous chemicals formerly managed as waste.

The Laboratory XL project is expected to result in increased pollution prevention. The Universities have set specific pollution prevention goals including a 10% reduction in the overall amount of hazardous waste generated from participating laboratories (from baseline), and a 20% increase (from baseline) in reuse of laboratory waste over the life of the project. The Universities participating in this XL project will report each year on their progress in meeting their goals. The Universities will also conduct environmental awareness surveys and training for all laboratory workers.

FLEXIBILITY

The Laboratory XL pilot provides the Universities with a temporary conditional deferral from two specific RCRA regulations dealing with Hazardous Waste Determinations Satellite Accumulation Provisions. The regulatory changes set forth are conditioned upon the Universities' compliance with the Minimum Performance Criteria and the Laboratory Environmental Management Plan.

STAKEHOLDER INVOLVEMENT

The university and research communities are diverse and active. Stakeholder involvement at both national and local levels has been extensive. As this XL project is implemented, the stakeholder involvement program will ensure that: (1) interested parties are apprised of the status of project implementation and (2) national and local stakeholders have access to information sufficient to judge the success of this pilot.

APPROACHES TO BE TESTED

- Will the use of performance-based standards as part of the EMP enhance environmental results beyond those achieved by existing regulatory requirements in the laboratory setting?
- Will the integration of OSHA-based health and safety requirements for hazardous chemicals with the RCRA generator requirements and elements of ISO 14001 environmental management system voluntary standards result in a more consistent and resource efficient scheme for regulating laboratories?
- Will the use of an Environmental Management Plan result in the increased implementation of pollution prevention and waste minimization activities and more environmentally informed students and researchers?

CONTACTS

EPA Region I:	George Frantz	617-918-1883
EPA HQ:	Sherri Walker	202-260-4295
State:	Jim Miller (MADEP)	617-292-5574
	Steve Simoes (VT DEC)	802-241-3878
Sponsor:	Thomas Balf (Nexus Environmental Partners)	617-951-1181

FOR ELECTRONIC INFORMATION

More information about Project XL is available on the Internet at http://www.epa.gov/ProjectXL, or via Project XL's Information Line at 202-260-5754. For further information on the Universities XL project, go to the University of Vermont's Lab XL project web page at http://esf.uvm.edu/labxl.