

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 262**

[FRL-6408-4]

**Project XL Site-Specific Rulemaking for University Laboratories at the University of Massachusetts Boston, Boston, MA; the Boston College, Chestnut Hill, MA; and the University of Vermont, Burlington, VT****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Proposed rule; request for comments and draft final project agreement.

**SUMMARY:** The Environmental Protection Agency (EPA) today is proposing this rule to implement a project under the Project XL program that would provide regulatory flexibility under the Resource Conservation and Recovery Act (RCRA), as amended for the University of Massachusetts-Boston, Boston, MA, Boston College, Chestnut Hill, MA and the University of Vermont, Burlington, VT (the Universities). The principal objective of this Laboratory XL Project is to pilot a flexible, performance-based system for managing laboratory waste. To achieve this, today's proposed rule would provide regulatory flexibility to allow the participating laboratories at the Universities to replace existing requirements for hazardous waste generators with a comprehensive Laboratory Environmental Management Plan designed for each University. The terms of the overall XL project are contained in the draft Final Project Agreement (FPA) on which EPA is also requesting comments. The draft Final Project Agreement (FPA) is available for public review and comment at the EPA Docket in Washington DC, in the EPA Region I library, at the Universities, and on the world wide web at <http://www.epa.gov/projectxl/>. Following a review of the public comments and appropriate changes, the FPA would be signed by delegates from the EPA, the Massachusetts Department of Environmental Protection (MADEP), the Vermont Department of Environmental Conservation (VTDEC) and the Universities.

**DATES:** Public Comments: Comments on the proposed rule and/or FPA must be received on or before August 26, 1999. All comments should be submitted in writing to the address listed below.

Public Hearing: Commenters may request a public hearing by August 10, 1999 during the public comment period. Commenters requesting a public hearing

should specify the basis for their request. If EPA determines that there is sufficient reason to hold a public hearing, it will do so by August 17, 1999, during the last week of the public comment period. Requests for a public hearing should be submitted to the address below. If a public hearing is scheduled, the date, time, and location will be available through a **Federal Register** notice or by contacting Ms. Gina Snyder or Mr. George Frantz at the Region 1 office.

**ADDRESSES:** Request to Speak at Hearing: Requests for a hearing should be mailed to the RCRA Information Center Docket Clerk (5305G), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460. Please send an original and two copies of all comments, and refer to Docket Number F-1999-NEUP-FFFFF. A copy should also be sent to Ms. Gina Snyder at U.S. EPA Region I. Ms. Gina Snyder may be contacted at the following address: U.S. Environmental Protection Agency, Region I (SPE), 1 Congress St., Suite 1100, Boston, MA, 02114, (617) 918-1837.

Comments: Written comments should be mailed to the RCRA Information Center Docket Clerk (5305W), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460. Please send an original and two copies of all comments, and refer to Docket Number F-1999-NEUP-FFFFF.

Viewing Project Materials: A docket containing the proposed rule, draft Final Project Agreement, supporting materials, and public comments is available for public inspection and copying at the RCRA Information Center (RIC), located at Crystal Gateway, 1235 Jefferson Davis Highway, First Floor, Arlington, Virginia. The RIC is open from 9:00 am to 4:00 pm Monday through Friday, excluding federal holidays. The public is encouraged to phone in advance to review docket materials. Appointments can be scheduled by phoning the Docket Office at (703) 603-9230. Refer to RCRA docket number F-1999-NEUP-FFFFF. The public may copy a maximum of 100 pages from any regulatory docket at no charge. Additional copies cost 15 cents per page. Project materials are also available for review for today's action on the world wide web at <http://www.epa.gov/projectxl/>.

A duplicate copy of the docket is available for inspection and copying at U.S. EPA, Region I, 1 Congress Street, Suite 1100 (LIB), Boston, MA 02114-2023 during normal business hours. Persons wishing to view the duplicate docket at the Boston location are

encouraged to contact Ms. Gina Snyder or Mr. George Frantz in advance, by telephoning (617) 918-1837 or (617) 918-1883.

**FOR FURTHER INFORMATION CONTACT:** Ms. Gina Snyder or Mr. George Frantz, U.S. Environmental Protection Agency, Region I (SPE), Assistance and Pollution Prevention Division, 1 Congress Street, Suite 1100, Boston, MA 02114-2023. Ms. Snyder can be reached at (617) 918-1837 and Mr. Frantz can be reached at (617) 918-1883. Further information on today's action may also be obtained on the world wide web at <http://www.epa.gov/projectxl/>.

**SUPPLEMENTARY INFORMATION:** The development and implementation of an Environmental Management Plan would be piloted at these three Universities in their laboratories at areas that are currently managed as satellite accumulation areas (see 40 CFR 262.34(c)). Hazardous waste managed at all other areas of each University would continue to be subject to current RCRA regulations. This pilot is intended to test the effectiveness of an integrated, flexible, performance-based approach for managing hazardous waste in university laboratories to determine whether this approach promotes better management of laboratory wastes than the current standards.

In an effort to more efficiently manage hazardous waste and minimize the volume of waste generated in the university laboratory setting, the proposed rule would provide for a "temporary conditional deferral" from two specific RCRA requirements that apply to generators of hazardous waste, 40 CFR 262.11—Hazardous Waste Determination, and 262.34(c)—Satellite Accumulation, which includes requirements for container management. Instead, laboratory waste would be managed in accordance with a Laboratory Environmental Management Plan until it reaches each University's on-site hazardous waste accumulation area where a determination would be made by Environmental Health and Safety personnel as to whether the waste can be redistributed and reused at the University or whether it must be managed as a RCRA hazardous waste. The proposed rule would define laboratory waste as a hazardous chemical that results from laboratory scale activities and includes the following: excess or unused hazardous chemicals that may or may not be reused outside their laboratory of origin; hazardous chemicals determined to be RCRA hazardous waste as defined in 40 CFR part 261; and hazardous chemicals that will be determined not to be RCRA

hazardous waste pursuant to the new proposed rule at 40 CFR 262.106. Making a solid and hazardous waste determination at a central location would allow professionals within the Universities' Environmental, Health and Safety program to more easily manage the laboratory waste and to increase reuse opportunities.

The deferral of specified RCRA requirements is "temporary." It remains in effect only for the four-year term of this Laboratory XL project. The four-year term is based upon the date of promulgation of the final rule when the Universities will commence the development of their Laboratory Environmental Management Plans (EMP). Following review of its EMP, each University would notify the applicable state agency and EPA in writing of the date on which it intends to implement its EMP. The proposed rule would become effective in the designated participating laboratories only after such written notification. Section III.D.2. and IV.F.1. discuss the aspects of state implementation of the proposed rule.

The deferral of the specified RCRA requirements is also "conditional." It is conditioned upon each University's implementation and compliance with the Laboratory Environmental Management Standard set forth in 40 CFR part 262, subpart J of this proposed rule. The Laboratory Environmental Management Standard includes specific requirements for the management of laboratory waste that ensure protection of human health and the environment while providing some flexibility to encourage chemical reuse and waste minimization. These requirements are termed Minimum Performance Criteria. They are enforceable in the same way as current RCRA standards are enforceable to ensure that handling of laboratory waste would be protective of human health and the environment. During this XL project, the proposed requirements set forth in the proposed Subpart J (including the Environmental Management Plan requirements) would also be enforceable under RCRA section 3008.

The Environmental Management Standard (EMS) in subpart J contains requirements for each University to create and implement an Environmental Management Plan (EMP) to cover all of its participating laboratories. The elements of the EMP in the proposed rule are expected to function as an outline of the procedures that must be in place to manage laboratory waste in order to both minimize the amount of waste generated, while allowing for the maximum reuse of the waste that is

generated. Although the EMP must describe how each laboratory will comply with the specific Minimum Performance Criteria, the Minimum Performance Criteria are requirements that stand on their own. The proposed deferral of the hazardous waste determination is conditioned on compliance with all of the requirements of the EMS, including the Minimum Performance Criteria. These criteria ensure that the handling of laboratory waste would be protective of human health and the environment by establishing how laboratory waste would be managed within the laboratory, and in transit to the on-site hazardous waste accumulation area for each University.

EPA has agreed to allow the Universities to undertake this XL project with the requested regulatory flexibility to determine if the proposed performance-based Environmental Management Plan approach would result in superior environmental performance and significant cost savings to the universities.

Today's proposed rulemaking, and the state actions described in section IV.F.1. of this preamble that parallel today's action, will not in any way affect the provisions or applicability of any other existing or future regulations.

EPA is soliciting comments on this rulemaking. EPA will publish responses to comments in a subsequent final rule. The XL Project will enter the implementation phase when, in addition to promulgation of the final rule, all signatories to the XL Project sign the Final Project Agreement. Implementation of the Environmental Management Plan(s) will occur after the individual EMPs have been developed by each university, and reviewed by EPA and the appropriate State agency to ensure adherence to the Environmental Management Standard, prior to commencement of the new system.

#### Outline of Today's Document

The information presented in this preamble is organized as follows:

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#### I. Authority

EPA is publishing this proposed regulation under the authority of sections 2002, 3001, 3002, 3003, 3006, 3010, and 7004 of the Solid Waste Disposal Act of 1970, as amended by the Resource Conservation and Recovery Act, as amended (42 U.S.C. 6912, 6921, 6922, 6923, 6926, 6930, 6937, 6938, and 6974).

## II. Overview of Project XL

The draft FPA sets forth the intentions of EPA and the Universities with regard to a project developed under Project XL, an EPA initiative to allow regulated entities to achieve better environmental results at less cost. The proposed regulation would facilitate implementation of the project. Project XL—"eXcellence and Leadership"—was announced on March 16, 1995, as a central part of the National Performance Review and the EPA's effort to reinvent environmental protection. See 60 FR 27282 (May 23, 1995). Project XL provides a limited number of private and public regulated entities an opportunity to develop their own pilot projects to provide regulatory flexibility that will result in environmental protection that is superior to what would be achieved through compliance with current and reasonably anticipated future regulations. These efforts are crucial to EPA's ability to test new strategies that reduce regulatory burden and promote economic growth while achieving better environmental and public health protection. EPA intends to evaluate the results of this and other Project XL projects to determine which specific elements of the project(s), if any, should be more broadly applied to other regulated entities for the benefit of both the economy and the environment.

Under Project XL, participants in four categories—facilities, industry sectors, governmental agencies and communities—are offered the flexibility to develop common sense, cost-effective strategies that will replace or modify specific regulatory requirements, on the condition that they produce and demonstrate superior environmental performance.

The XL program is intended to allow EPA to experiment with potentially promising regulatory approaches, both to assess whether they provide benefits at the specific facility affected, and whether they should be considered for wider application. Such pilot projects allow EPA to proceed more quickly than would be possible when undertaking changes on a nationwide basis. As part of this experimentation, the EPA may try out approaches or legal interpretations that depart from or are even inconsistent with longstanding Agency practice, so long as those interpretations are within the broad range of discretion enjoyed by the Agency in interpreting statutes that it implements. The EPA may also modify rules, on a site-specific basis, that represent one of several possible policy approaches within a more general statutory directive, so long as the

alternative being used is permissible under the statute.

Adoption of such alternative approaches or interpretations in the context of a given XL project does not, however, signal EPA's willingness to adopt that interpretation as a general matter, or even in the context of other XL projects. It would be inconsistent with the forward-looking nature of these pilot projects to adopt such innovative approaches prematurely on a widespread basis without first determining whether or not they are viable in practice and successful in the particular projects that embody them. Furthermore, as EPA indicated in announcing the XL program, EPA expects to adopt only a limited number of carefully selected projects. These pilot projects are not intended to be a means for piecemeal revision of entire programs. Depending on the results in these projects, EPA may or may not be willing to consider adopting the alternative interpretation again, either generally or for other specific facilities.

EPA believes that adopting alternative policy approaches and interpretations, on a limited, site-specific basis and in connection with a carefully selected pilot project, is consistent with the expectations of Congress about EPA's role in implementing the environmental statutes (provided that the Agency acts within the discretion allowed by the statute). Congress' recognition that there is a need for experimentation and research, as well as ongoing re-evaluation of environmental programs, is reflected in a variety of statutory provisions, such as section 8001 of RCRA.

### *XL Criteria*

To participate in Project XL, applicants must develop alternative pollution reduction strategies pursuant to eight criteria: superior environmental performance; cost savings and paperwork reduction; local stakeholder involvement and support; test of an innovative strategy; transferability; feasibility; identification of monitoring, reporting and evaluation methods; and avoidance of shifting risk burden. They must have full support of affected Federal, state and tribal agencies to be selected.

For more information about the XL criteria, readers should refer to the two descriptive documents published in the **Federal Register** (60 FR 27282, May 23, 1995 and 62 FR 19872, April 23, 1997), and the December 1, 1995 "Principles for Development of Project XL Final Project Agreements" document. For further discussion as to how the University Laboratories XL project

addresses the XL criteria, readers should refer to the Final Project Agreement available from the EPA RCRA docket or Region 1 library for this action (see **ADDRESSES** section of today's preamble).

### *XL Program Phases*

The Project XL program is compartmentalized into four basic phases: the initial pre-proposal phase where the project sponsor comes up with an innovative concept that they would like to consider as an XL pilot, the second phase where the project sponsor works with EPA and interested stakeholders in developing an XL proposal, the third phase where EPA, local regulatory agencies, and other interested stakeholders review the XL proposal, the fourth phase where the project sponsor works with EPA, local regulatory agencies, and interested stakeholders in developing a Final Project Agreement and legal mechanism. After promulgation of the final rule (or other legal mechanism) for the XL pilot, and after the Final Project Agreement has been signed by all designated parties, the XL pilot proceeds into the implementation phase and evaluation phase.

### *Final Project Agreement*

The Final Project Agreement (FPA) is a written agreement between the project sponsor and regulatory agencies. The FPA contains a detailed description of the proposed pilot project. It addresses the eight Project XL criteria, and the expectation of the Agency that this XL project will meet those criteria. The Final Project Agreement identifies performance goals and indicators (monitoring schedule) which will enable the laboratories to clearly illustrate the baseline quantities. The draft FPA specifically addresses the manner in which the project is expected to produce superior environmental benefits. The FPA also discusses the administration of the agreement, including dispute resolution and termination. The Final Project Agreement is available for review in the docket for today's action, and also is available on the world wide web at <http://www.epa.gov/projectxl/>.

## III. Overview of the University Laboratories XL Project

EPA is today requesting comments on the draft FPA and proposed rule to implement key provisions of this Project XL initiative. Today's proposed rule would facilitate implementation of the draft FPA (the document that embodies EPA's intent to implement this project) that has been developed by EPA, Massachusetts Department of

Environmental Protection (MADEP), Vermont Department of Environmental Conservation (VTDEC), the Universities, and other stakeholders. After comments on the draft FPA have been considered, EPA, MADEP, VTDEC, and the three Universities expect to sign a final FPA. Today's proposed rule would not be effective in Massachusetts and Vermont until those states have made conforming changes.

*A. To What Laboratories Would the Proposed Rule Apply?*

The Proposed Rule would apply only to participating laboratories at the following three Universities:

- University of Massachusetts Boston, Boston, MA
  - Boston College, Chestnut Hill, MA
  - University of Vermont, Burlington, VT
- Boston College is classified as a Small Quantity Generator (SQG). The University of Massachusetts Boston and the University of Vermont are classified as Large Quantity Generators (LQG). The University of Massachusetts Boston is an LQG solely as a generator of acute wastes in excess of the one kilogram per month threshold. Additionally, the University of Vermont operates a part B permitted facility for the storage of hazardous wastes. Participating laboratories at all the Universities

currently generate and manage hazardous waste and the Universities fully expect that some of the laboratory wastes that would be generated and managed under the Environmental Management Plans would meet the definition of a RCRA hazardous waste.

The University laboratories that would be affected by this project are used for research and teaching purposes. A breakdown of the individual Universities' laboratories is shown in Table 1 below. The table also identifies each Universities' on-site hazardous waste accumulation areas which would continue to be regulated under existing federal and state RCRA regulation:

TABLE 1.—LABORATORY XL PROJECT PARTICIPANT INFORMATION

Institution	Student body	Number of labs	Departments participating	Location of current hazardous waste accumulation areas <sup>1</sup>
Boston College Chestnut Hill, MA ....	14,000	120	Chemistry, Biology, Geology, Physics, Psychology.	Merkert Chemistry Building, 2609 Beacon St., Boston MA; Higgins Building, 140 Commonwealth Ave., Chestnut Hill MA.
University of Massachusetts Boston Boston, MA.	13,000	150	Chemistry, Biology, Psychology, Anthropology, Geology and Earth Sciences, and Environmental, Coastal and Ocean Sciences.	Science Building (Bldg. #080); McCormack Building (Bldg. #020); and Wheatley Building (Bldg. #010) 100 Morrissey Blvd., Boston MA
University of Vermont Burlington, VT	10,000	400	Colleges of: Agriculture and Life Sciences; Arts and Sciences; Medicine; and Engineering and Mathematics; and Schools of: Nursing; Allied Health Sciences; and Natural Resources.	Given Bunker, 89 Beaumont Ave., Burlington VT.

<sup>1</sup> **Note:** These accumulation areas would still be fully covered by the current federal and state RCRA regulations. This XL project, for example, would not allow any increased air emissions that would otherwise be controlled under the current RCRA regulations such as the subpart CC hazardous waste organic air emission standards that apply to large quantity generators who accumulate hazardous waste on-site.

*B. What Problems Have the University Laboratories Identified?*

To understand the problems faced by the Universities and the purpose behind the proposed rule, it is necessary to understand the context in which the proposed rule has arisen and to consider the experience of university laboratories as regulated entities under both the Occupational Safety and Health Act (OSHA) and RCRA. While both statutes have the common objective of protecting human health, RCRA makes a clear distinction between hazardous waste and hazardous chemicals in a laboratory setting. There are specific handling and management requirements for "hazardous wastes" under RCRA which do not apply to the larger universe of "hazardous chemicals" regulated by the Occupational Safety and Health Administration. Researchers are familiar with the specialized system developed for laboratory work by OSHA, which includes the requirement to develop and implement a Chemical Hygiene Plan

(CHP). This systematic approach, incorporating a specific plan, can also be applied to the management of hazardous waste that sometimes results from the use of hazardous chemicals in the laboratory. However, under the current system, laboratories are required to implement and to track two parallel, and not always consistent chemical management systems within the laboratory setting.

The Universities have proposed streamlining the management of chemicals in the laboratory by having a single system addressing hazardous chemicals that will result in both better management and a reduction in the quantity of laboratory wastes that have to be disposed. This streamlining will result in a number of changes, which when combined in a single systematic approach to chemical management, are expected to provide results that are superior to those provided by the current regulatory framework.

An example of one area that will be streamlined is the process for training laboratory workers. OSHA's chemical standard requires that the employer provide employees with information and training on the hazards of chemicals present in their area. RCRA requires large quantity generators to ensure that facility personnel complete classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with applicable requirements. RCRA requires small quantity generators to ensure that all employees are familiar with proper waste handling and emergency procedures relevant to their responsibilities. The new system proposed in this rule would require the same standardized training for all laboratory workers, including: students, personnel in positions related to hazardous waste management, and laboratory employees. This systematic training approach can cover both safety

and environmental concerns when performed through the integration of chemical hygiene planning and environmental management planning. This is expected not only to streamline but also to upgrade existing training, and to provide students—the laboratory workers of the future—with a better understanding of the environmental impacts of their work and how to minimize those impacts.

The university laboratory setting is decentralized, with various departments funding diverse types of research. The university community is also diverse and subject to the regular turnover of students and researchers. This decentralized setting, when combined with rules that vary from state to state (as discussed in sections D.2. and E., below) and between federal RCRA and federal OSHA standards, often leads to the unnecessary and premature disposal of chemicals after an individual laboratory has no use for them. This is true even for unused chemicals that may be reusable elsewhere at the University. A more centralized system should result in more effective decision making with regard to chemical disposition and should result in increased chemical reuse. Therefore, one of the larger changes to result from this proposed project would be the centralization of the system for managing chemical wastes. This would allow decisions regarding chemical disposition to more easily occur at a centralized area where knowledge of campus-wide needs for chemicals can be factored into decisions as to whether unused or used chemicals (formerly disposed as waste) can be reused within the University.

The implementation of the current system is further complicated by the structure of university laboratories which is different from industrial settings where RCRA has been quite effective. Industrial settings commonly have ongoing processes which generate a single waste at a fairly regular rate of generation. With potentially hundreds of small laboratories within one university, each producing small amounts of multiple wastes on a noncontinuous basis, the overall management of hazardous wastes becomes more difficult. For example, it can be difficult for universities to comply with the current requirements that result in 3 day removal timeframes for hazardous waste in excess of 55 gallons at their satellite areas (managed under 40 CFR 262.34(c) or equivalent state provisions). Waste generation in manufacturing settings is generally more uniform and continuous than it is in university research laboratories where the rate of waste generated is often

unpredictable. This uncertainty makes it difficult for a university to predict when satellite accumulation limits may be exceeded and to arrange for removal of the waste within the required amount of time. This proposed alternative system for university laboratories attempts to address their atypical circumstances by allowing them to set up a monthly pick-up schedule for laboratory waste. With the ability to be proactive in setting up schedules for waste pickups, EH&S professionals at the Universities would be able to avoid a reactive mode of operation, to proactively develop a systematic approach for re-use of chemicals on-site, and to operate that system based on the schedule they could develop under this proposal.

The difficulty of managing laboratory wastes has been the subject of nationwide discussions within the university and research community throughout the past decade. Many organizations including the Campus Safety, Health and Environmental Management Association, the National Research Council, and the American Chemical Society have all sought a better way to properly manage and handle hazardous chemicals in the laboratory, and to comply with the requirements of both OSHA and RCRA. In the New England area, the Laboratory Consortium for Environmental Excellence (LCEE) was formed to explore viable alternatives to the current parallel regulatory scheme and to promote best management practices for laboratories. As a result of exhaustive reviews and interviews with universities and research organizations across the country, a consensus was reached regarding the need to harmonize the RCRA and OSHA regulatory systems through a performance-based management system that would actively promote prudent practices, encourage chemical reuse and recycling, minimize costs, and increase efficiency.

The central purpose of this Laboratory XL project is to test the effectiveness of an integrated, performance-based environmental management system which is consistent with the objectives of RCRA and which would complement the applicable OSHA regulations.

### *C. What Solutions Are Proposed by the University Laboratory XL Project?*

#### **1. A New Integrated Performance-Based System**

The University Laboratory XL project proposes to test the effectiveness of an integrated, flexible, performance-based system for managing hazardous wastes in laboratories which (1) would result in pollution prevention and streamlined

procedures for managing hazardous wastes and hazardous chemicals at universities, (2) would meet the objectives of both the RCRA and OSHA regulatory programs combined and (3) would be at least as protective of human health and the environment as the current system.

This project would pilot an alternative approach to hazardous waste management in University laboratories which is more systematic and more centralized than the approach implemented by Universities under the current system. At the same time, the pilot integrates some of the current RCRA hazardous waste regulations with current OSHA regulations by proposing that universities develop a plan similar to the CHP but designed for the management of environmental aspects of their activities to facilitate the creation of an integrated and consistent system for managing laboratory waste in laboratories. As a result of the efficiencies gained from the harmonization of the OSHA CHP and the RCRA-oriented Laboratory Environmental Management Plan, the new system is expected to provide a better management approach for laboratories and to result in increased pollution prevention while still ensuring protection of human health and the environment.

To achieve this objective, the Universities would like to pursue a regulatory model of a Laboratory Environmental Management Standard (EMS) that identifies both the elements for the effective management of laboratory wastes, and the minimum performance requirements for handling wastes in each individual laboratory. The proposed Laboratory EMS sets out all the requirements for the proposed alternative system of managing laboratory waste. First and foremost, the Laboratory EMS would include Minimum Performance Criteria for the management of laboratory wastes within the laboratory and en route to the on-site hazardous waste accumulation area. These criteria are the requirements that would be an alternative to 40 CFR 262.34(c) in the laboratory. The Minimum Performance Criteria are a set of measurable requirements that are similar to the current RCRA requirements. Each of the elements of the Minimum Performance Criteria is described in full in today's proposed rule and is briefly explained below. In addition, the Laboratory EMS would also require the development of a Laboratory Environmental Management Plan (EMP). The EMP would be written by each University to document its specific procedures for how it would

conform with the Laboratory EMS. The EMP would also describe the procedures each laboratory would follow in order to meet the Minimum Performance Criteria. The elements of the EMP are summarized below in Table 2.

## 2. Laboratory Environmental Management Standard (EMS)

Today's proposed rule is called the "Laboratory Environmental Management Standard". It would include a definition section (40 CFR 262.102), the requirements for waste management in the laboratory, or the Minimum Performance Criteria, (40 CFR 262.104) and the specific requirement that each University develop a Laboratory Environmental Management Plan (40 CFR 262.105). Proposed subpart J also contains requirements detailing the organizational responsibilities and the training requirements of each participating University laboratory (40 CFR 262.105). The Laboratory EMS would provide the umbrella framework for an effective system for the management of university laboratory waste. It would contain all the elements, from definitions through waste determination requirements (40 CFR 262.106), that would make up the new systematic approach proposed for university laboratories. The proposed Laboratory EMS was originally modeled after the general structure and format of the OSHA "Occupational Exposure to Hazardous Chemicals in Laboratories" standard which requires a Chemical Hygiene Plan.

## 3. Laboratory Environmental Management Plan (EMP)

The Laboratory EMS would require the development of a Laboratory EMP which would be the mechanism through which the Laboratory EMS is put into practice at each University. The Laboratory EMP, modeled on OSHA's Chemical Hygiene Plan, would be a comprehensive plan to be developed by each University. The EMP would document the procedures, practices and programs to (a) manage laboratory waste in a manner that is protective of human health and the environment and (b) that would be implemented to achieve compliance with the requirements of the Laboratory EMS and the Minimum Performance Criteria. It is through the Laboratory EMP that the Universities would have the opportunity and the obligation to design a performance-based system to complement the OSHA requirements, to encourage waste minimization, and the redistribution and reuse of laboratory waste. The Laboratory EMP would identify specific

elements to be implemented by each University, including requirements for pollution prevention policies and procedures.

One of the objectives of the EMP and the overall XL project is to erase the distinction between unused chemicals and waste chemicals in the laboratory setting, so that the value in reusing chemicals can be realized. This would be accomplished by defining laboratory waste to include hazardous chemicals that result from laboratory scale activities and which may or may not constitute RCRA hazardous wastes. In the proposal, laboratory waste is defined as "a hazardous chemical that results from laboratory scale activities and includes the following: excess or unused hazardous chemicals that may or may not be reused outside their laboratory of origin; hazardous chemicals determined to be RCRA hazardous waste as defined in 40 CFR part 261; and hazardous chemicals that will be determined not to be RCRA hazardous waste pursuant to 40 CFR 262.106." Thus, all "laboratory waste" would be managed under a single standard while in the laboratory. The determination that a laboratory waste could not be reused and would be a RCRA solid waste, and as to whether such solid waste would be a RCRA hazardous waste, would be made at a centralized area, by Environmental Health and Safety professionals.

## 4. Minimum Performance Criteria

The proposed requirements for the laboratory EMP include a requirement that the EMP include procedures to assure compliance with certain Minimum Performance Criteria (MPC) specified in the proposed regulation. The proposed Minimum Performance Criteria set forth minimum requirements for the management of laboratory waste and have been designed to ensure that laboratory waste will be managed in a manner protective of human health and the environment. The requirements in the Minimum Performance Criteria include provisions which are consistent with current RCRA requirements, including labeling and container management. The criteria have a wider application than current RCRA requirements because the definition of laboratory waste includes some materials that are not RCRA hazardous waste.

## 5. How the New System Would Work

This new proposed system would help each University to centralize and coordinate its chemical management practices and demonstrate environmental performance beyond

what would likely be achieved under the existing system.

Currently, there are two potential impediments to such centralization and coordination. The first is the hazardous waste determination requirement under 40 CFR 262.11. If this determination is made in the individual laboratory, decisions with regard to reuse are inevitably decentralized since the hazardous waste determination necessitates a prior solid waste determination. To the extent that these decisions are made by laboratory workers who do not have a complete sense of the chemical needs of the entire university, such decisions are often premature and do not maximize the potential for re-use. The second potential impediment under the current system is the requirement under 40 CFR 262.34(c) that hazardous waste in excess of 55 gallons be removed within three days of reaching the 55-gallon limit. Such a time constraint results in constant, unplanned, episodic pick-ups which are in themselves, time-consuming. In contrast, the extended accumulation period of 30 days should allow for a more coordinated and efficient pick-up and delivery system which would free up staff time, and allow for the development of infrastructure and training designed to increase waste minimization and an organized and coordinated campus-wide chemical reuse system.

The EMP and the Minimum Performance Criteria would work together to form the alternative system for the management of laboratory waste. The following outline presents a step-by-step overview of how the Laboratory Environmental Management Standard would work once this rule is finalized and conforming changes are adopted by Vermont and Massachusetts.

### *Development of the Environmental Management Plan*

Step 1: Within six months, each University would develop its Environmental Management Plan (EMP) addressing all the elements required by 40 CFR 262.105, summarized in Table 2, below. Applicable RCRA requirements would remain in full effect in the laboratories prior to the EMP being written, reviewed, and implemented. For the purpose of this Laboratory XL project, each University would consult with EPA, and the state of Massachusetts (DEP) or Vermont (DEC) in the development of its EMP. The centerpiece of the new system would be the individual Laboratory Environmental Management Plan. The EMP would include detailed specific elements that would have to be

included and implemented by each University. Each University would be expected to craft an Environmental Management Plan that is tailored to the structure and individual needs of the University and its laboratories. A summary of the elements in the Environmental Management Plans is outlined in Table 2. These are more

fully detailed in the proposed rule at 40 CFR 262.105.

Step 2: Once completed, the EMP would be made available on each University's web site. So that EPA can continue to evaluate this XL project, EPA-Region I would review each EMP to confirm that it meets all of the requirements of 40 CFR 262.105. The

relevant state agencies may also review the EMP. Each University would also be working on how it will implement its EMP, which would include training laboratory workers with regard to the requirements of the Minimum Performance Criteria pursuant to the procedures contained in the Environmental Management Plan.

TABLE 2.—SUMMARY OF MAJOR ELEMENTS REQUIRED IN LABORATORY ENVIRONMENTAL MANAGEMENT PLANS

General:

The EMP must include a description of specific measures a University will take to protect human health and the environment from hazards associated with the management of laboratory wastes.

Administration:

1. An environmental policy, including commitments to regulatory compliance, waste minimization, risk reduction and continual improvement of the environmental management system.
2. A description of roles and responsibilities for the implementation and maintenance of the Laboratory Environmental Management Plan.
3. A pollution prevention plan.
4. Provisions for information dissemination and training.
5. Procedures for the development and approval of changes to the EMP.

Waste Management and Conformance Review:

6. Criteria that laboratory workers shall comply with for managing, containing and labeling laboratory wastes.
7. Procedures for inspecting a laboratory to assess conformance with the requirements of the Environmental Management Plan.
8. Procedures to assure compliance with the Minimum Performance Criteria (MPC).
9. Procedures for the identification of environmental management plan noncompliance and the assignment of responsibility, timelines and corrective actions to prevent their reoccurrence.
10. Criteria for the identification of physical and chemical hazards and the control measures to reduce the potential for releases to the environment of laboratory wastes.

Reporting/Recordkeeping:

11. The University's system for identifying and tracking legal and other requirements applicable to the management and disposal of designated laboratory wastes.
12. The University's system for conducting annual surveys of hazardous chemicals of concern.
13. The recordkeeping requirements to document conformance with the EMP.

Removal of Waste:

14. Procedures relevant to the timely and safe removal of laboratory wastes.
15. Procedures and work practices for safely transporting or moving laboratory wastes.

Maintenance:

16. Procedures for conducting laboratory clean-outs.

Emergency:

17. Emergency preparedness and response procedures.

Step 3: Following review of its EMP, each University would notify the relevant state agency in writing of the date on which it intends to implement its EMP. For purposes of this XL project, each University would also notify EPA Region I. The proposed rule would become effective in the laboratories only after such written notification.

*Implementation of the Environmental Management Plan Including Procedures for Meeting the Minimum Performance Criteria*

The EMP would cover the management requirements for laboratory waste until that waste reaches the designated on-site hazardous waste accumulation area, including emergency response requirements in the Minimum Performance Criteria while the waste is in transit to the accumulation area. The following steps outline procedures at a laboratory once the EMP would be in place and operational:

Step 4: Information and training would have been provided to laboratory

workers to comply with the Minimum Performance Criteria as well as OSHA per the University's Laboratory Environmental Management Plan. Hazardous chemicals would be received at the University, distributed to the laboratory and placed in storage in the laboratory in accordance with any and all requirements imposed by OSHA, Fire Codes and/or building permits. If those chemicals pose a new or unique hazard for which a worker has not received prior training, the worker would receive new information and training so that they could understand and implement the relevant elements of the EMP.

Step 5: Hazardous chemicals would be used in the research or teaching laboratory under the direction of a trained individual, and laboratory waste would be generated from those laboratory scale activities.

Step 6: The laboratory waste would be managed in accordance with the Minimum Performance Criteria and the University's specific Laboratory EMP

which would include the University-specific procedures for meeting those criteria. These procedures would include ensuring that the laboratory waste generated as a result of laboratory scale activities in Step 5 is placed in containers and labeled with a chemical name and hazard warning as per the Minimum Performance Criteria and the procedures for meeting those criteria as outlined in the Environmental Management Plan. For example, the Laboratory EMP may specify the type of label the University requires for each type of laboratory waste and how that label must be filled out.

Step 7: Each laboratory would be able to temporarily hold up to 55-gallons of laboratory waste (or up to 1 quart of acutely hazardous laboratory waste) prior to having to put a date on the waste. Upon reaching the 55 gallon or 1 quart limit in the laboratory, the laboratory waste container(s) would be marked with the date. Any laboratory waste held in excess of these limits before the dated laboratory waste is

removed would also be managed as described in Step 6, and the excess would be limited in quantity to an additional 55 gallons (or an additional 1 quart of acutely hazardous laboratory waste). Excess waste accumulated before dated laboratory waste is removed would also have to be marked with the date it reaches the 55 gallon or 1 quart limit and would subsequently be removed from the laboratory as described in Step 8.

Step 8: Once laboratory waste is dated, the University EH&S staff would be immediately informed that the laboratory waste would have to be removed to the on-site hazardous waste accumulation area within 30 days of the label date.

Step 9: The laboratory waste referred to in Step 8 would be picked up (within thirty days of the dates referred to in Step 8) by EH&S department representatives and directly transferred to a designated on-site hazardous waste accumulation area (as defined in the definitions at proposed 40 CFR 262.102). Current hazardous waste accumulation areas at each of the Universities are shown in Table 1. Designated hazardous waste accumulation areas would be listed in the EMP.

Step 10: As soon as the laboratory waste is received at the on-site hazardous waste accumulation area, the University EH&S staff or designated trained professionals, would make a determination as to whether it is a solid waste under RCRA, and if it is a solid waste, the staff would determine whether it is a hazardous waste in accordance with 40 CFR 262.11, as required by proposed 40 CFR 262.106. Once the laboratory waste is received at the on-site hazardous waste accumulation area, the proposed "temporary conditional deferral" would no longer apply, and the laboratory waste that is determined to be hazardous waste would be managed in accordance with current RCRA requirements.

Step 11: If the laboratory waste could be reused, the University EH&S staff would arrange for its redistribution and reuse within the University. If EH&S staff determine that the laboratory waste is a solid waste and it is hazardous, it would be managed in accordance with all applicable RCRA requirements.

#### 6. Comparison of Minimum Performance Criteria with Current RCRA Regulations

EPA intends that laboratory waste be managed safely. The Minimum Performance Criteria contained in proposed 40 CFR 262.104 have been

developed by the University laboratories and EPA to ensure that laboratory waste is managed in a manner that is protective of human health and the environment. The following discussion demonstrates how specific provisions in the Minimum Performance Criteria would compare with RCRA provisions currently in effect. EPA is describing the current RCRA provisions as a point of comparison for the requirements proposed today, but is not proposing any changes to these current RCRA provisions.

(i) *Labeling*: Current RCRA regulations require that containers of hazardous waste in satellite accumulation areas be labeled either with the words "hazardous waste" or with other words that identify the contents. Today's rule would contain a requirement that laboratory waste would have to be labeled or tagged with the chemical name and general hazard class. Where a laboratory container is too small to be effectively labeled or where containers of like wastes are consolidated, such as where test tubes are stored in a rack or where similar wastes are being consolidated in a lab-pack shipping container, the secondary container (e.g. the rack containing the test tubes or the DOT shipping container) would have to be labeled. The Environmental Management Plan would include specific procedures that lab workers would have to follow to carry out the MPC requirements for labeling in the laboratories.

(ii) *Quantity Limitations*: Current federal RCRA regulations for satellite accumulation areas require that any hazardous waste accumulated at any point of generation in excess of 55 gallons (or one quart of acutely hazardous laboratory waste) be removed within three days. Current regulations do not limit the number of points of generation within an individual laboratory as long as hazardous waste is accumulated in accordance with all the requirements of 40 CFR 262.34(c). Thus, a given laboratory could potentially accumulate well over 55 gallons under the current rules. However, under the proposed rule, the Universities would be limited to temporarily holding 55 gallons of laboratory waste per laboratory, and no matter how many points of generation there are within a laboratory, any laboratory would be limited to 110 gallons. While this proposed restriction may prove to be more restrictive than the current system, this approach represents an experiment to be tested under this XL project. Although this approach could result in a limit that is considerably less than what a laboratory might be allowed to

accumulate under current law, today's proposed rule would grant the Universities flexibility on the amount of time allowed to remove excess waste from the laboratory. (See (iv) below.)

(iii) *Quantity Limitation for Excess Laboratory Waste*: Current RCRA regulations do not place specific limits on the amount of "excess" hazardous waste, beyond 55 gallons, that a generator may accumulate in satellite areas during the three days prior to removal of such excess. Today's proposed rule specifically limits such excess in the laboratory setting to an additional 55 gallons of laboratory waste (or an additional 1 quart of acutely hazardous laboratory waste). Thus, the maximum amount of laboratory waste which may be held in a University laboratory at any time under today's proposed rule would be 110 gallons (or two quarts of acutely hazardous laboratory waste). While this requirement may prove to be more restrictive than the current system, this approach represents an experiment to be tested under this XL project, and it would ensure that there would not be excessive quantities of waste in the laboratories during the 30-day timeframe discussed below.

(iv) *Timing Limitations*: Current RCRA regulations state that a generator may accumulate up to 55 gallons of hazardous waste (or one quart of acutely hazardous waste) under 40 CFR 262.34(c) and within three days of exceeding that 55 gallons must comply with the requirements of 40 CFR 262.34(a) or other applicable requirements with respect to the excess over 55 gallons (or one quart). Under the proposed rule, all laboratory waste that has reached threshold amounts would have to be removed from the lab within 30 days, instead of three days. EPA is granting flexibility on the timing of removal to allow for a more efficient pick-up schedule which will in turn allow University staff to devote additional resources to make centralized decisions about the reuse of laboratory waste. As noted above, to ensure that large quantities of waste are not held in laboratories, today's proposal limits the excess to an additional 55 gallons of laboratory waste (or one additional quart of acutely hazardous laboratory waste).

(v) *Dating and Removal Requirements*: Current RCRA regulations require that a generator mark the container holding hazardous waste in excess of 55 gallons of hazardous waste (or one quart of acutely hazardous waste) with the date the excess amount began accumulating. Today's proposed rule would contain a requirement that



when laboratory waste reaches the threshold of 55 gallons (or one quart of acutely hazardous laboratory waste) it must be dated. Once laboratory waste is dated, the laboratory would have 30 days to remove it from the laboratory to the on-site hazardous waste accumulation area.

(vi) *Hazardous Waste Accumulation Areas:* Once satellite accumulation quantity limits are met, current RCRA regulations require generators to comply (within 3 days) with 40 CFR 262.34(a) or other applicable provisions. Under today's proposed rule, the accumulated laboratory waste would be directly transferred to a designated on-site hazardous waste accumulation area. Once the laboratory waste is received at the on-site hazardous waste accumulation area, the proposed "temporary conditional deferral" would no longer apply, and the laboratory waste that is determined to be hazardous waste would be managed in accordance with § 262.34(a) or other applicable RCRA requirements. In this regard, the proposed alternative system is meant to work in the same way as the current system.

(vii) *Container Management:* Current RCRA regulations set forth at 40 CFR 265.173(a), as referenced by § 262.34(c)(1)(i), require that containers of hazardous wastes be closed at all times, except when it is necessary to add or remove wastes. Today's proposed rule would contain the same requirement but allows the University to make exceptions for in-line waste collection containers. Some experiments use a process for the "in-line collection" of waste, which is a system that automatically collects waste while an experiment is running. Such systems may collect waste through a physically connected apparatus, such as, for example, gas chromatographs. Gas chromatographs commonly carry the chemical sample through the instrument using tubing that leads from the instrument to waste collection bottles on the back of the instrument. Each tube commonly runs through a stopper set into each small collection bottle. Other types of equipment use in-line collection systems that, while not physically connected, are nevertheless a necessary part of the apparatus as a means to collect waste, such as distillation equipment. In these types of systems, the waste is collected in an otherwise uncovered container (e.g., waste drips from a tube into the container) while the experiment is running—although the entire apparatus would be covered or hooded to prevent the release of volatile hazardous vapors or fumes. The apparatus set-up provides

the physical control otherwise provided by the laboratory worker, who ensures during an experiment that containers are closed, except when he or she needs to add or remove a chemical. The proposed rule for this XL project proposes that such systems for the in-line collection of waste would be a circumstance in which waste may be added, consistent with the requirement that containers containing waste be kept closed (i.e., when a container is permissibly "open" for the adding of waste). To be considered as in-line waste collection, the University would describe this arrangement for in-line waste collection in their EMP. This part of the proposed rule addresses the need for flexibility around the diverse conditions of research and experimentation that constitute the work of the University laboratories, while at the same time minimizing the potential for release. (Note that this rule does not change the meaning of "release" under RCRA.) This flexibility is limited to specific circumstances in order to address the unique configuration of some research and laboratory instrumentation such as gas chromatographs and DNA synthesizers. The flexibility is being proposed for in-line waste collection due to laboratory scale experimentation.

Today's proposed rule also specifies that containers be compatible with their contents, and be in good condition. These requirements are equivalent to the current requirements at 40 CFR 262.34(c)(1)(i) which reference section 265.171 and section 265.172 regulating the condition of containers and compatibility of waste in satellite accumulation areas.

(viii) *Inspections:* Current RCRA regulations require that satellite accumulation areas (those areas regulated by 40 CFR 262.34(c), at or near any point of generation where wastes accumulate) be under the control of the operator of the process. Although in each laboratory, laboratory waste could only be generated under the control of the trained laboratory workers, today's proposed rule would also contain a requirement for regular inspections of containers of laboratory wastes within the laboratory to ensure that the containers are meeting requirements for container management. The frequency of these inspections would be at least once per year and would otherwise be based on laboratory practices. Specific inspection schedules would be specified in the Environmental Management Plan.

Other Minimum Performance Criteria include

(ix) *Posting of Emergency Notification Procedures:* Today's proposed rule would contain a requirement that includes posting of emergency notification procedures and evacuation procedures for laboratory workers. Current RCRA regulations require facilities to include such information in a contingency plan (large quantity generators) or to ensure that all employees are thoroughly familiar with emergency procedures (small quantity generators). Today's proposed rule makes no changes to those requirements. Emergency response and notification procedures, under the proposed rule, would be required for participating laboratories that otherwise could be regulated under 40 CFR 262.34(c), and the EMPs must address all aspects of laboratory waste management, including emergencies (see Table 2 for an outline of EMP requirements and the proposed rule at 40 CFR 262.105).

(x) *Emergency Response:* Today's proposed rule would contain a requirement that emergency response equipment and procedures for emergency response be appropriate to the hazards in the laboratory. Current RCRA regulations require equipment appropriate to the hazards presented at a facility and specify procedures that must be followed for particular emergencies. The proposal also includes a requirement to comply with spill response provisions set forth in 40 CFR 263.30 and 263.31 for spills of laboratory waste that may occur while it is en route to the on-site hazardous waste accumulation area.

(xi) *Training Requirements:* Today's proposed rule would contain a requirement that laboratory workers receive training so that they can implement and comply with the Minimum Performance Criteria. Training under the EMP is required when a laboratory worker is first assigned to a laboratory and when a laboratory waste poses a new or unique hazard for which the worker has not received prior training.

(xii) *General Compliance:* Today's proposed rule would contain a statement that laboratory waste management must not result in the release of hazardous constituents into the land, air and water where such release would be prohibited by federal law.

As noted in Table 2, above, additional requirements for laboratories under this proposed system would be included in

the Environmental Management Plan (EMP).

As previously mentioned, the proposed Minimum Performance Criteria described above would only apply to the management of laboratory waste within laboratories and while en route to an on-site hazardous waste accumulation area. Once received at an on-site hazardous waste accumulation area, the laboratory waste would be subject to all applicable RCRA requirements. A participating University could, for example, accumulate any laboratory waste that is determined to be hazardous waste at the hazardous waste accumulation area in accordance with the current requirements of 40 CFR 262.34 (for 90 or 180 day on-site accumulation). EPA is not proposing any changes to the requirements Universities would have to meet in order to accumulate waste on-site for 90 (large quantity generators) or 180 days (small quantity generators).

#### 7. Comparison of the Proposed Rule With Current OSHA and RCRA Regulatory Requirements

The following discussion demonstrates how specific provisions in the proposal compare with current OSHA and RCRA requirements. EPA is describing the current RCRA provisions as a point of comparison for the requirements proposed today, but is not proposing any changes to these current RCRA provisions.

The OSHA Chemical Hygiene Plan (CHP) set forth at 29 CFR 1910.1450(e)(3) requires that the CHP address: (i) standard operating procedures, (ii) criteria used to determine when to implement control measures, (iii) fume hood functioning, (iv) employee training, (v) circumstances requiring prior approval, (vi) provisions for medical consultation, (vii) designation of responsible personnel, (viii) provisions for protection for work with particularly hazardous substances and (ix) annual review of the plan and its effectiveness.

Although current OSHA regulations may require a Chemical Hygiene Plan for laboratories, there is no parallel requirement under RCRA. No regulations currently require the Universities to implement a Laboratory Environmental Management Plan as would be required by today's proposed rule. Moreover, while many of the Minimum Performance Criteria delineated in the proposed requirements would be similar to current RCRA requirements for satellite accumulation of hazardous waste (in the laboratory areas which are currently regulated under 40 CFR 262.34(c)), some

limitations have been proposed beyond what current RCRA requirements allow, such as limiting each laboratory to 55 gallons of laboratory waste.

Existing RCRA requirements for satellite accumulation (under 40 CFR 262.34(c)) require that containers: (i) be at or near the point of generation, (ii) be under the control of the operator, (iii) be marked with the words "hazardous waste" or the contents, (iv) be in good condition, (v) be compatible with their contents, and (vi) be kept closed except as necessary to add or remove waste. In addition, accumulation is limited to 55 gallons of hazardous waste per point of generation. Any excess waste over 55 gallons must within three days comply with 262.34(a) or other applicable provisions. Existing RCRA regulations also require that a generator make a hazardous waste determination. The current federal regulations do not require management plans for these areas.

The proposed Laboratory Environmental Management Standard has been drafted in an attempt to align RCRA requirements that would apply to hazardous wastes in laboratories with the OSHA requirements for hazardous chemical handling in laboratories, in order to provide for the more efficient management of laboratory waste. This would be accomplished by the crafting of an Environmental Management Plan that would implement standard operating procedures for managing laboratory waste, just as the CHP requires standard operating procedures relevant to safety and health considerations when working with hazardous chemicals.

While the Laboratory Environmental Management Plan proposed in this project is intended to function in the same way as the OSHA CHP, the requirements of the Laboratory Environmental Management Standard would be more effective at managing laboratory wastes. For example, the Laboratory Environmental Management Standard would require procedures for an annual review of high hazard chemicals (defined in the Environmental Management Standard under "hazardous chemicals of concern") in the laboratory, while no such requirement currently exists under RCRA or OSHA. In addition, the Laboratory Environmental Management Standard would require an institutional process that is not required by current regulations for (i) setting environmental objectives and targets, and (ii) the promotion of pollution prevention and environmental improvements.

The current RCRA system allows generators to accumulate hazardous

waste at satellite accumulation areas under 40 CFR 262.34(c). The requirements under 40 CFR 262.34(c) set specific requirements for container management, labeling, and accumulation times. No written plans are currently required for a facility to set forth and document the procedures that they will use to comply with the requirements of § 262.34(c). In today's proposed rule, the Universities would be required not only to comply with proposed requirements on container management, labeling and holding times pursuant to proposed § 262.104, which offers some flexibility but still ensures protection of human health and the environment, they would also have to specifically document the procedures they will use to comply with proposed § 262.104. In addition, to documenting the procedures for complying with the Minimum Performance Criteria of § 262.104, the Universities would also have to develop and document the procedures for all of the elements in Table 2, i.e.: (i) their environmental policy, (ii) roles and responsibilities, (iii) a pollution prevention plan, (iv) their system for tracking requirements applicable to laboratory waste, (v) criteria for identifying physical and chemical hazards and control measures to reduce releases, (vi) a system for conducting surveys of hazardous chemicals of concern, (vii) procedures for cleaning out laboratories, (viii) criteria with which laboratory workers would be required to comply in managing laboratory waste according to the Minimum Performance Criteria, (ix) procedures for safe and timely removal of wastes from laboratories, (x) procedures for emergencies, (xi) procedures for training, (xii) procedures for safe transfer of waste to the accumulation areas, (xiii) procedures for regularly inspecting a laboratory to assess conformance with the requirements of the EMP, (xiv) procedures for identifying environmental management plan nonconformances and corrective actions, (xv) recordkeeping requirements to document conformance with their EMP. This Laboratory Environmental Management Plan would be an entirely new requirement imposed upon the Universities. (This proposed requirement doesn't change existing institutional RCRA requirements. For example any University that is currently required to have a Contingency Plan would still be required to have a Contingency Plan).

EPA envisions a three-part compliance assurance program to ensure that this proposed system

adequately protects human health and the environment. First, because EPA expects the Minimum Performance Criteria to operate as an equivalent, alternative system to the current RCRA requirements in 40 CFR 262.34(c), EPA expects the first level of assurance to be similar to the inspection system currently in place. Thus, at the laboratory level, the first level: the management of laboratory waste would have to be in conformance with the Minimum Performance Criteria. The second level would be the documentation of procedures: the Laboratory EMP would have to be written in conformance with the requirements of the standard proposed at 40 CFR 262.105. The third level would be operational: the operations ongoing in all the laboratories that are participating would have to be in conformance with the procedures described in the EMP. Thus, this proposal provides two additional levels of review for satellite storage of hazardous waste, while allowing the Universities to be more centralized in their operations and to adopt a more coherent approach to management of laboratory wastes.

#### 8. How the Laboratory XL Project Will Result in Superior Environmental Performance

The Laboratory XL Project is designed to achieve environmental results that are superior to what is currently achieved by the current RCRA regulatory system. The aim of the proposal is to enable the Universities to more easily manage all hazardous chemicals under a logical, integrated scheme. Under the proposed model, environmental professionals at the Universities would, at on-site hazardous waste accumulation areas, determine whether there are any opportunities, throughout the University, for reuse of laboratory waste or whether the laboratory waste is hazardous waste.

As a result, the Laboratory XL project is expected first and foremost to result in increased pollution prevention. In a 1996 survey of approximately 100 academic institutions conducted by the Campus Safety Health and Environmental Management Association, nearly 95 percent of respondents reported that they reused or recycled less than one percent of the hazardous chemical waste otherwise destined for disposal. In the FPA, the Universities have committed themselves to increased hazardous waste reduction. The Universities have set specific pollution prevention goals including (i) a 10 percent reduction in the overall amount of hazardous waste generated

from participating laboratories (from baseline) and (ii) a 20 percent increase (from baseline) in reuse of laboratory waste over the life of the project. In accordance with the FPA for this project, the Universities participating in this XL project would report each year on their progress in meeting these goals.

Second, under this proposed rule, each University would implement their procedures for an annual assessment of those hazardous chemicals that they believe pose significant risks (based on physical or health hazards, or defined shelf-life) in an effort to minimize risks to human health and the environment and to monitor materials that might otherwise accumulate on the shelf or require disposal.

In addition, this XL project would promote the following:

- *Setting of Environmental Objectives and Targets and Pollution Prevention:* The systematic approach to environmental management would enable the University to organize waste management functions to achieve goal setting, better tracking, pollution prevention, and control. This process is outlined in more detail in the Final Project Agreement.

- *Streamlining of the Regulatory Process:* By setting up a complementary system that essentially attempts to integrate EPA and OSHA requirements, the project would streamline the overall regulatory process for laboratories, reducing the burden on the Universities and resulting in a more efficient and protective approach to chemical management.

- *Increased Environmental Awareness:* The implementation and continuous improvement of the Laboratory Environmental Management Standard for laboratories would enhance environmental awareness among researchers and students leading to a transfer of good environmental management practices to the larger community.

Finally, the implementation of the Laboratory Environmental Management Standard would achieve superior environmental performance because criteria would be set for the systematic management of all laboratory wastes. Some of the laboratory wastes would otherwise not be managed under the requirements of RCRA (such as ethidium bromide wastes and virgin or unused chemicals on the shelf and that haven't consistently been defined as hazardous waste.)

#### D. What Regulatory Changes Will Be Necessary to Implement This Project?

##### 1. Federal Regulatory Changes

Today's proposal would provide the Universities with a temporary conditional deferral from two specific RCRA regulations: Hazardous Waste Determination: 40 CFR 262.11, and the Satellite Accumulation Provisions: 40 CFR 262.34(c). The site-specific rule necessary to allow for the temporary conditional deferral, and being proposed by EPA today, would add a paragraph (j) to 40 CFR 262.10 to clarify that the temporary holding of laboratory wastes within the participating University laboratories would be covered by a new section to 40 CFR part 262, subpart J. Proposed subpart J would fully describe the conditions to be met for each University's management of laboratory waste and by its Laboratory Environmental Management Plan as outlined above, in the sections C.2., C.3. and C.4 of this preamble.

(i) *Hazardous Waste Determination:* 40 CFR 262.11: Current regulation requires that generators make a determination as to whether a solid waste is a RCRA hazardous waste. The proposed rule would identify the specific point at which the Universities would make this determination. Under the proposed rule, the Universities would not make a hazardous waste determination until the laboratory waste is received at the on-site Hazardous Waste Accumulation Areas identified in Table 1 above. These areas would be the point where decisions would be made as to whether the laboratory waste would be reused within the University, accumulated for up to 90- or 180-days pursuant to 40 CFR 262.34, or sent to a RCRA permitted (or interim status) treatment, storage or disposal facility.

Because universities have such small and diverse waste streams and have large numbers of small laboratories, EPA recognizes the resource efficiency in making the hazardous waste determination at the on-site hazardous waste accumulation area. This approach would enable the university to determine whether laboratory waste can be reused on site at a central area, where the connections between departments and laboratories on a university-wide basis can be better made by the institution's professional environmental health and safety personnel. EPA also recognizes that while laboratory wastes remain in the laboratory, they would be managed pursuant to the Laboratory Environmental Management Standard as embodied in the proposed subpart J which includes Minimum Performance Criteria to ensure that they would be

managed in a manner protective of human health and the environment.

(ii) *Satellite Accumulation Provisions:* 40 CFR 262.34(c): This regulation governs the satellite accumulation of hazardous waste. It states in paragraph (1) that a generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without complying with paragraph 262.34(a) provided the generator: (i) complies with sections 265.171, 265.172 and 265.173(a); and (ii) marks the containers with the words "Hazardous Waste" or with other words that identify the contents. Paragraph (2) states that a generator that accumulates in excess of the amounts in paragraph (1) must, with respect to the excess amount, comply within three days with 40 CFR 262.34(a) or other applicable provisions. This paragraph also requires that the generator must mark the container holding the excess accumulation with the date the excess began accumulating.

This proposed rule would allow the Universities to manage hazardous waste in the laboratories without complying with § 262.34(c). Specifically, the Universities would not be required to comply with the 3-day accumulation time limit that applies to hazardous waste in excess of 55 gallons. Instead, under the proposed rule, Universities would be allowed to take 30 calendar days to remove the waste in their laboratories once the 55 gallon (or one quart of acutely hazardous laboratory waste) threshold is reached, while complying with their Environmental Management Plans. The extension from 3 to 30 days would allow for University environmental, health and safety professionals to collect and remove laboratory wastes during planned, systematic and scheduled intervals rather than the current reactive and episodic pick-ups which, in an institution with over a hundred laboratories, can be extremely inefficient, diverting environmental, health and safety department staff time from more proactive measures. By providing additional time for waste pickups to be carefully scheduled, this proposed rule should enable university environmental professionals to provide additional training to students and other laboratory workers and to develop waste minimization, reuse and recycling opportunities for chemicals from the university laboratories. In addition, while laboratory waste is being held in the laboratory, the Universities would

have to manage it in compliance with minimum performance criteria.

Thus, the result of today's rule is that 40 CFR 262.34(c) would no longer be the only alternative available to manage waste in the individual laboratories at the Universities. Another system would be available under the proposed rule at 40 CFR part 262, subpart J, which sets forth the requirements of the Laboratory Environmental Management Plan (proposed § 262.105), and the Minimum Performance Criteria (proposed § 262.104).

Proposed subpart J would only apply within the Universities' laboratories and while the laboratory waste is en route to an on-site hazardous waste accumulation area. Once the laboratory waste is received at the on-site hazardous waste accumulation area, subpart J would no longer apply and laboratory waste that is determined to be hazardous waste would be subject to all applicable RCRA requirements.

## 2. State Regulatory Changes

The state of Vermont and the Commonwealth of Massachusetts are authorized under section 3006 of RCRA to implement the federal RCRA program. Thus, these state programs operate in lieu of the federal program. Moreover, Vermont and Massachusetts hazardous waste management regulations, codified in Code of Vermont Regulations and 310 Code of Massachusetts Regulations (CMR) 30.00, respectively, contain equivalent or more stringent requirements as compared to the Federal regulations at 40 CFR 262.10 and 262.34(c). The Universities are subject to the Vermont (for the University of Vermont) and the Massachusetts (for the University of Massachusetts Boston and Boston College) state regulations, which would include requirements that the hazardous waste in laboratories be handled according to the accumulation provisions of RCRA. Therefore, conforming state regulatory changes or legal mechanisms must be implemented in addition to the proposed federal changes to undertake this new system.

### *E. Why Is EPA Supporting This New Approach to Laboratory Waste Management?*

EPA is supporting the regulatory model contained in today's rule because it provides for a degree of environmental protection that is at least as protective as that which existing RCRA regulations would provide for the participating laboratories. The model also promotes systemic, integrated cost-effective compliance which should increase opportunities for waste

minimization through the centralization of waste determinations. EPA and the Universities anticipate that chemicals which would have been disposed of as waste should be redistributed and reused through the centralized hazardous waste determination process. In addition, by providing the Universities the flexibility to schedule regular waste pickups, professional resources can be redirected from reactive waste management to proactive waste management.

EPA hopes that this proposed rule will result in a successful innovative pilot of a new system for universities and research organizations as unique workplaces where researchers and students often move from one jurisdiction to another throughout the country. If this pilot is successful, EPA hopes that this system could be translated into a national program, to address the confusion regarding the RCRA rules that has been reported by the universities. By implementing a standard system for universities, laboratory workers would remain cognizant of the requirements for managing chemicals, and in particular, waste chemicals, no matter where in the U.S. they are performing their research. EPA recognizes that the proposed new system may not be appropriate or necessary for some institutions such as small colleges but may, at some point, depending on the results of this XL project, consider the possibility of offering it as a regulatory option.

Finally, for this pilot, the Universities would be implementing continuous improvement systems which would include training, planning, and self-inspections in ways that have never been tested before.

### *F. How Have Various Stakeholders Been Involved in This Project?*

Stakeholder involvement during the project development stage was encouraged in several ways. The methods included communicating through the media (newspaper, e-mails, and the LCEE website); directly contacting interested parties and offering an educational program regarding the regulatory requirements impacted by the XL project. Stakeholders have been kept informed on the project status via mailing lists, newspaper articles, public meetings and the establishment of a website at URL: <http://esf.uvm.edu/LabXL>.

Representatives from Second Nature and Ecologia, national environmental interest groups (with members participating in the ISO14000 standard setting process), and the Tellus Institute (a nationally recognized nonprofit

corporation providing research on, among other issues, environmental management performance and reporting) have participated in conference calls and meetings with the Project XL team and provided comments during the development of the proposed Final Project Agreement. A representative of the national environmental group, the Environmental Defense Fund, has also been a participant in commenting on this proposal. These representatives continue to be notified of project meetings and activities.

The university and research community is a diverse and busy one. Each University has held individual local stakeholder meetings in an effort to engage their surrounding communities. However, few local stakeholders other than employees of the facilities have expressed interest in actively participating in the development of the project. Copies of all comment letters, as well as EPA's response to comment letters, will be located in the rulemaking Docket (see the ADDRESSES section of today's preamble).

As this XL project continues to be implemented, the stakeholder involvement program would shift its focus to ensure that: (1) Stakeholders are apprised of the status of project implementation and (2) Stakeholders have access to information sufficient to judge the success of this Project XL initiative. Anticipated stakeholder involvement during the term of the project will likely include other general public meetings to present periodic status reports, availability of data and other information generated. In addition to the EPA, VTDEC, and MADEP reporting requirements of today's rulemaking, the FPA includes provisions whereby the University Laboratories will make copies of interim project reports available to all interested parties. A public file on this XL project has been maintained at the website <http://esf.uvm.edu/labxl> throughout project development, and the Universities have committed to continue to update it as the project is implemented. Additional information is available at EPA's website at <http://www.epa.gov/projectxl>.

A detailed description of this program and the stakeholder support for this project is included in the Final Project Agreement, which is available through the docket or through EPA's Project XL site on the Internet (see ADDRESSES section of this preamble).

#### *G. How Will This Project Result in Cost Savings and Paperwork Reduction?*

Laboratory waste management currently accounts for the most substantial expense for environmental, health and safety programs at the participating Universities. This XL Project would allow academic institutions to more effectively promote and implement waste minimization programs in laboratories which would reduce waste disposal costs and minimize chemical purchasing costs. The opportunity to develop a systematic, planned procedure for the pickup of laboratory wastes and centralization of waste management decisions would also enable Environmental Health and Safety Departments to more effectively utilize staff on proactive activities such as training and implementing chemical reuse and waste minimization programs.

Additionally, a certain amount of paperwork associated with RCRA compliance is likely to be reduced in the long term, while in the short term the requirement to write Environmental Management Plans would add additional paperwork. Once the Laboratory EMP is written, the annual review of the Chemical Hygiene Plans required by OSHA, and the review of the Environmental Management Plan could be accomplished in one step. The Universities do not expect significant paperwork reduction gains given the fact that the RCRA requirements would still be fully applicable once the laboratory waste reaches the on-site hazardous waste accumulation areas.

#### *H. How Will EPA Ensure the Integrity and Comprehensiveness of Each University's Laboratory Environmental Management Plan?*

EPA, along with MA DEP and VT DEC and designated stakeholders would have sufficient opportunity to review and comment on the Laboratory EMP's as they are being developed by the Universities. In this pilot project, once its Laboratory EMP is complete, each University would formally submit their own Laboratory EMP to EPA and the applicable state for a final review of its conformance with the requirements of the Laboratory Environmental Management Standard. Because the Universities would be working with the agencies in developing their EMP, it is expected that they would be able to respond quickly to any possible comments or concerns raised by the agencies.

#### *I. How Will the Terms of the Laboratory XL Project and Proposed Rule Be Enforced?*

All XL projects must include a legally enforceable mechanism to ensure accountability and superior environmental performance. EPA retains its full range of enforcement options under the proposed rule. The enforcement response on the part of EPA would vary depending upon the actual performance of each University and the severity of any violation. So that EPA can continue to evaluate this XL project, each University would be evaluated by EPA Region I through regular inspections based on the following four criteria:

1. Does the University have an Environmental Management Plan as required by the Laboratory Environmental Management Standard?
2. Does the University's Environmental Management Plan include the required policy and procedural elements specified in the Laboratory Environmental Management Standard?
3. Is the University in compliance with the Minimum Performance Criteria as set forth in the Laboratory Environmental Management Standard at 40 CFR 262.104?
4. To what degree do the University's environmental management practices in the laboratory conform to its Environmental Management Plan?

Today's proposed rule includes a termination provision, in addition to EPA's usual enforcement options, which authorizes EPA to remove from this XL project any University that does not comply with the Laboratory Environmental Management Standard as described in the rule. In the event of such removal, the temporary conditional deferral would be revoked and the Universities would be required to submit to EPA an implementation schedule setting forth how the Universities would plan to come into full compliance regulations within 90 days from such notice. The schedule would reflect the Universities' intent to use their best efforts to come into compliance as quickly as practicable within the 90 day transition period. During this 90 day transition period, the provisions of this proposed rule and the University's Environmental Management Plan would apply in full. At the conclusion of the 90 day period, the applicable RCRA regulations would again apply to the Universities in full.

The rationale for the 90-day transition period is to allow sufficient time for the Universities to reinstate the operational and administrative infrastructure

necessary for proper RCRA compliance. Such a transition will likely require the dismantling of the Environmental Management Plan and its component parts. Retraining and reverting to the implementation of the current RCRA system would include, among other things, (1) the re-establishment of 3-day pick-ups of hazardous waste from the University laboratories, (2) making early hazardous waste determinations in the laboratories, and (3) the re-training of hundreds of laboratory workers. Most importantly, this transition might require the acquisition of funding and resources which were unnecessary under the streamlined Environmental Management Plan. For example, additional funding might be needed for the re-negotiation of contract terms with hazardous waste contractors who might be needed for additional hazardous waste pick-ups. Finally, the Universities may receive such a revocation notice during the summer or during a semester break when staff and graduate students are less available for re-training. For all of these reasons, and given the fact that the proposed rule and Environmental Management Plan would be fully applicable during this time, EPA is confident that the 90-day time frame is reasonable.

#### *J. How Long Will This Project Last and When Will It Be Complete?*

As with all XL projects testing alternative environmental protection strategies, the term of the University Laboratory XL project is one of limited duration. Today's proposed rule would set the term of the XL Project at four years after the effective date of this rule.

Because Project XL is a voluntary and experimental program, today's proposed rule contains provisions that allow the project to conclude prior to the end of the four years in the event that it is desirable or necessary to do so. For example, an early conclusion would be warranted if the project's environmental benefits do not meet the Project XL requirement for the achievement of superior environmental results. In addition, new laws or regulations may become applicable to the Universities' laboratories during the project term which might render the project impractical, or might contain regulatory requirements that supersede the superior environmental benefits that the University Laboratories are achieving under this project. Similarly, the Universities may also request that the temporary conditional deferral be revoked prior to the four years if the experimental project does not provide sufficient benefits for the Universities to justify continued participation.

If an early conclusion to the project is determined to be appropriate, today's rule provides a mechanism for EPA to legally conclude the project prior to the four years, through a notice of termination, which would trigger the 90-day transitional period described above in this preamble discussion. While EPA, the state environmental agencies and the Universities have broad discretion and latitude to initiate an early conclusion of the project, both expect to exercise their good faith and judgment in determining whether exercising this option is appropriate.

EPA reserves the discretion to terminate a project and an FPA in the event a University fails to comply with or meet its obligations in the proposed rule, or its supplementary commitments contained in the FPA. The FPA and the site specific rule also provide for the project sponsor's return to compliance with existing regulatory requirements following termination.

#### **IV. Additional Information**

##### *A. How To Request a Public Hearing*

A public hearing will be held, if requested, to provide opportunity for interested persons to make oral presentations regarding this regulation in accordance with 40 CFR part 25. Persons wishing to make an oral presentation on the site specific rule to implement the University Laboratory XL project should contact Ms. Gina Snyder or Mr. George Frantz of the Region I EPA office, at the address given in the ADDRESSES section of this document. Any member of the public may file a written statement before the hearing, or after the hearing, to be received by EPA no later than August 10, 1999. Written statements should be sent to EPA at the addresses given in the ADDRESSES section of this document. If a public hearing is held, a verbatim transcript of the hearing, and written statements provided at the hearing will be available for inspection and copying during normal business hours at the EPA addresses for docket inspection given in the ADDRESSES section of this preamble.

##### *B. How Does This Rule Comply With Executive Order 12866?*

Under Executive Order 12866 (58 FR 51735, October 4, 1993) the Agency must determine whether the regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety in State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlement, grants, user fees, or loan programs of the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Because the annualized cost of this final rule will be significantly less than \$100 million and will not meet any of the other criteria specified in the Executive Order, it has been determined that this rule is not a "significant regulatory action" under the terms of Executive Order 12866, and is therefore not subject to OMB review.

Executive Order 12866 also encourages agencies to provide a meaningful public comment period, and suggests that in most cases the comment period should be 60 days. However, in consideration of the very limited scope of today's rulemaking and the considerable public involvement in the development of the proposed Final Project Agreement, the EPA considers 30 days to be sufficient in providing a meaningful public comment period for today's action.

##### *C. Is a Regulatory Flexibility Analysis Required?*

The Regulatory Flexibility Act (RFA), 5 U.S.C. 601 *et seq.*, generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This rule will not have a significant impact on a substantial number of small entities because it only affects three institutions, the University of Massachusetts in Boston, Massachusetts, Boston College in Boston, Massachusetts, and the University of Vermont in Burlington, Vermont. These universities are not small entities. Therefore, EPA certifies that this action will not have a significant economic impact on a substantial number of small entities.

*D. Is an Information Collection Request Required for This Project Under the Paperwork Reduction Act?*

This action applies only to three universities, and therefore requires no information collection activities subject to the Paperwork Reduction Act, and therefore no information collection request (ICR) will be submitted to OMB for review in compliance with the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.*

*E. Does This Project Trigger the Requirements of the Unfunded Mandates Reform Act?*

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation of why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

As noted above, this rule is applicable only to the three universities in Massachusetts and Vermont. The EPA has determined that this rule contains

no regulatory requirements that might significantly or uniquely affect small governments. EPA has also determined that this rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA.

*F. RCRA and Hazardous and Solid Waste Amendments of 1984*

1. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified states to administer and enforce the RCRA program for hazardous waste within the state. (See 40 CFR part 271 for the standards and requirements for authorization.) States with final authorization administer their own hazardous waste programs in lieu of the federal program. Following authorization, EPA retains enforcement authority under sections 3008, 7003 and 3013 of RCRA.

After authorization, federal rules written under RCRA (non-HSWA), no longer apply in the authorized state except for those issued pursuant to the Hazardous and Solid Waste Act Amendments of 1984 (HSWA). New federal requirements imposed by those rules do not take effect in an authorized state until the state adopts the requirements as state law.

In contrast, under section 3006(g) of RCRA, new requirements and prohibitions imposed by HSWA take effect in authorized states at the same time they take effect in nonauthorized states. EPA is directed to carry out HSWA requirements and prohibitions in authorized states until the state is granted authorization to do so.

2. Effect on Massachusetts and Vermont Authorization

Today's proposed rule, if finalized, would be promulgated pursuant to non-HSWA authority, rather than HSWA. Massachusetts and Vermont have received authority to administer most of the RCRA program; thus, authorized provisions of each State's hazardous waste program are administered in lieu of the federal program. Massachusetts and Vermont have received authority to administer hazardous waste standards for generators. As a result, if today's proposed rule is finalized, it would not be effective in Massachusetts and Vermont until the State adopts equivalent legal mechanisms or requirements as state law. It is EPA's

understanding that subsequent to the promulgation of this rule, Massachusetts and Vermont intend to propose rules or other legal mechanisms containing equivalent provisions. EPA may not enforce these requirements until it approves the State requirements as a revision to the authorized State program.

*G. How Does This Rule Comply With Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks?*

The Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant," as defined under Executive Order 12866; and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to Executive Order 13045 because it is not an economically significant rule, as defined by Executive Order 12866, and because it does not involve decisions based on environmental health or safety risks.

*H. Does This Rule Comply With Executive Order 12875: Enhancing Intergovernmental Partnerships?*

Under Executive Order 12875, EPA may not issue a regulation that is not required by statute and that creates a mandate upon a State, local or tribal government, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by those governments. If the mandate is unfunded, EPA must provide to the Office of Management and Budget a description of the extent of EPA's prior consultation with representatives of affected State, local and tribal governments, the nature of their concerns, copies of any written communications from the governments, and a statement supporting the need to issue the regulation. In addition, Executive Order 12875 requires EPA to develop an effective process permitting elected officials and other representatives of State, local and tribal governments to provide meaningful and timely input in the development of regulatory proposals containing significant unfunded mandates.

Today's rule does not create a mandate on State, local or tribal governments. The rule does not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

*I. How Does This Rule Comply With Executive Order 13084: Consultation and Coordination With Indian Tribal Governments?*

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments. If the mandate is unfunded, EPA must provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected and other representatives of Indian tribal governments to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities. Today's rule does not significantly or uniquely affect the communities of Indian tribal governments. There are no communities of Indian tribal governments located in

the vicinity of the university laboratories. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

*J. Does This Rule Comply With the National Technology Transfer and Advancement Act?*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standard. This proposed rulemaking does not involve technical standards. Therefore, EPA is not considering the use of any voluntary consensus standards. EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially-applicable voluntary consensus standards and to explain why such standards should be used in this regulation.

**List of Subjects in 40 CFR Part 262**

Environmental protection, Accumulation time, Hazardous waste, Waste determination.

Dated: July 21, 1999.

**Carol M. Browner,**  
*Administrator.*

For the reasons set forth in the preamble, part 262 of Chapter I of title 40 of the Code of Federal Regulations is proposed to be amended as follows:

**PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE**

1. The authority citation for part 262 continues to read as follows:

**Authority:** 42 U.S.C. 6906, 6912, 6922-6925, 6937, and 6938.

**Subpart A—General**

1. Section 262.10 is amended by adding paragraph (j) to read as follows:

**§ 262.10 Purpose, scope, and applicability.**

\* \* \* \* \*

(j)(1) Universities that are participating in the Laboratory XL project are the University of Massachusetts Boston in Boston, Massachusetts, Boston College in Chestnut Hill, Massachusetts, and the University of Vermont in Burlington, Vermont ("Universities"). The Universities generate laboratory wastes, (as defined in 40 CFR 262.102) some of which will be hazardous wastes. As long as the Universities comply with all the requirements of 40 CFR Part 262, Subpart J, the Universities' laboratories that are participating in the University Laboratories XL Project as identified in Table 1, are not subject to the provisions of 40 CFR 262.11, 262.34(c), 40 CFR Part 264, 40 CFR Part 265, and the permit requirements of 40 CFR Part 270 with respect to said laboratory wastes.

TABLE 1.—LABORATORY XL PROJECT PARTICIPANT INFORMATION

Institution	Approx. number of labs	Departments participating	Location of current hazardous waste accumulation areas
Boston College, Chestnut Hill, MA .....	120	Chemistry, Biology, Geology, Physics, Psychology.	Merkert Chemistry Building, 2609 Beacon St., Boston MA; Higgins Building, 140 Commonwealth Ave., Chestnut Hill, MA.
University of Massachusetts Boston, Boston, MA.	150	Chemistry, Biology, Psychology, Anthropology, Geology and Earth Sciences, and Environmental, Coastal and Ocean Sciences.	Science Building (Bldg. #080); McCormack Building (Bldg. #020); and Wheatley Building (Bldg. #010), 100 Morrissey Blvd., Boston, MA.
University of Vermont, Burlington, VT .....	400	Colleges of: Agriculture and Life Sciences, Arts and Sciences, Medicine, and Engineering and Mathematics; and Schools of: Nursing, Allied Health Sciences, and Natural Resources.	Given Bunker, 89 Beaumont Ave., Burlington, VT.

(2) Each University shall have the right to change its respective departments or the on-site location of its

hazardous waste accumulation areas listed in Table 1 upon written notice to the Regional Administrator for EPA—

Region I and the appropriate state agency. Such written notice will be



provided at least ten days prior to the effective date of any such changes.

2. Part 262 is amended by adding Subpart J to read as follows:

**Subpart J—University Laboratories XL Project—Laboratory Environmental Management Standard**

Sec.

262.100 To what organizations does this subpart apply?

262.101 What is in this subpart?

262.102 What special definitions are included in this subpart?

262.103 What is the scope of the laboratory environmental management standard?

262.104 What are the minimum performance criteria?

262.105 What must be included in the laboratory environmental management plan?

262.106 When must a hazardous waste determination be made?

262.107 Under what circumstances will a university's participation in this environmental management standard pilot be terminated?

262.108 When will this subpart expire?

**§ 262.100 To what organizations does this subpart apply?**

This Subpart applies to an organization that meets all three of the following conditions:

(a) It is one of the three following academic institutions: The University of Massachusetts Boston in Boston, Massachusetts, Boston College in Chestnut Hill, Massachusetts, or the University of Vermont in Burlington, Vermont ("Universities"); and

(b) It is a laboratory at one of the Universities (identified pursuant to § 262.105(c)(2)(ii)) where laboratory scale activities, as defined in § 262.102, result in laboratory waste; and

(c) It complies with all the requirements of this Subpart.

**§ 262.101 What is in this subpart?**

This Subpart provides a framework for a new management system for wastes that are generated in University laboratories. This framework is called the Laboratory Environmental Management Standard. The standard includes some specific definitions that apply to the University laboratories. It contains specific requirements for how to handle laboratory waste that are called Minimum Performance Criteria. The standard identifies the requirements for developing and implementing an environmental management plan. It outlines the responsibilities of the management staff of each participating university. Finally, the standard identifies requirements for training people who will work in the laboratories or manage laboratory waste. This Subpart contains requirements for

RCRA solid and hazardous waste determination, and circumstances for termination and expiration of this pilot.

**§ 262.102 What special definitions are included in this subpart?**

For purposes of this Subpart, the following definitions apply:

*Acutely Hazardous Laboratory Waste* means a laboratory waste, defined in the Environmental Management Plan as posing significant potential hazards to human health or the environment and which must include RCRA "P" wastes, and may include particularly hazardous substances as designated in a University's Chemical Hygiene Plan under OSHA, or Extremely Hazardous Substances under the Emergency Planning and Community Right to Know Act.

*Emergency* means any occurrence such as, but not limited to, equipment failure, rupture of containers or failure of control equipment which results in the potential uncontrolled release of a hazardous chemical into the environment and which requires agency or fire department notification and/or reporting.

*Environmental Management Plan (EMP)* means a written program developed and implemented by the university which sets forth standards and procedures, responsibilities, pollution control equipment, performance criteria, resources and work practices that both protect human health and the environment from the hazards presented by laboratory wastes within a laboratory and between a laboratory and the hazardous waste accumulation area, and satisfies the plan requirements defined elsewhere in this Subpart. Certain requirements of this plan are satisfied through the use of the Chemical Hygiene Plan (see, 29 CFR § 1910.1450), or equivalent, and other relevant plans, including a waste minimization plan. The elements of the Environmental Management Plan must be easily accessible, but may be integrated into existing plans, incorporated as an attachment, or developed as a separate document.

*Environmental Objective* means an overall environmental goal of the organization which is verifiable.

*Environmental Performance* means results of the data collected pursuant to implementation of the Environmental Management Plan as measured against policy, objectives and targets.

*Environmental Target* means an environmental performance requirement of the organization which is quantifiable, where practicable, verifiable and designed to be achieved within a specified time frame.

*Hazardous Chemical* means any chemical which is a physical hazard or a health hazard. A physical hazard means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive. A health hazard means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system and agents which damage the lungs, skin, eyes or mucous membranes.

*Hazardous Chemical of Concern* means a chemical that the organization has identified as having the potential to be of significant risk to human health or the environment if not managed in accordance with procedures or practices defined by the organization.

*Hazardous Waste Accumulation Area* means the on-site area at a University where the University will make a solid and hazardous waste determination with respect to laboratory wastes.

*In-Line Waste Collection* means a system for the automatic collection of laboratory waste which is directly connected to or part of a laboratory scale activity and which is constructed or operated in a manner which prevents the release of any laboratory waste therein into the environment during collection.

*Laboratory* means, for the purpose of this Subpart, an area within a facility where the laboratory use of hazardous chemicals occurs. It is a workplace where relatively small quantities of hazardous chemicals are used on a non-production basis. The physical extent of individual laboratories within an organization will be defined by the Environmental Management Plan. A laboratory may include more than a single room if the rooms are in the same building and under the common supervision of a laboratory supervisor.

*Laboratory Clean-Out* means an evaluation of the chemical inventory of a laboratory as a result of laboratory renovation, relocation or a change in laboratory supervision that may result in the transfer of laboratory wastes to the hazardous waste accumulation area.

*Laboratory Environmental Management Standard* means the

provisions of this Subpart and includes the requirements for preparation of Environmental Management Plans and the inclusion of Minimum Performance Criteria within each Environmental Management Plan.

*Laboratory Scale* means work with substances in which containers used for reactions, transfers and other handling of substances are designed to be safely and easily manipulated by one person. "Laboratory Scale" excludes those workplaces whose function is to produce commercial quantities of chemicals.

*Laboratory Waste* means a hazardous chemical that results from laboratory scale activities and includes the following: excess or unused hazardous chemicals that may or may not be reused outside their laboratory of origin; hazardous chemicals determined to be RCRA hazardous waste as defined in 40 CFR Part 261; and hazardous chemicals that will be determined not to be RCRA hazardous waste pursuant to 40 CFR 262.106.

*Laboratory Worker* means a person who is assigned to handle hazardous chemicals in the laboratory and may include researchers, students or technicians.

*Legal and Other Requirements* means requirements imposed by, or as a result of, governmental permits, governmental laws and regulations, judicial and administrative enforcement orders, non-governmental legally enforceable contracts, research grants and agreements, certification specifications, formal voluntary commitments and organizational policies and standards.

*Senior Management* means senior personnel with overall responsibility, authority and accountability for managing laboratory activities within the organization.

*Universities* means the following academic institutions; University of Vermont, Boston College, and the University of Massachusetts Boston, which are participants in this Laboratory XL project and which are subject to the requirements set forth in this Subpart I.

**§ 262.103 What is the scope of the laboratory environmental management standard?**

The Laboratory Environmental Management Standard will not affect or supersede any legal requirements other than those described in § 262.10(j). The requirements that continue to apply include, but are not limited to, OSHA, Fire Codes, wastewater permit limitations, emergency response notification provisions, or other legal

requirements applicable to University laboratories.

**§ 262.104 What are the minimum performance criteria?**

The Minimum Performance Criteria that each University must meet in managing its Laboratory Waste are:

(a) Each University must label all laboratory waste with the chemical name and general hazard class. If the container is too small to hold a label, the label must be placed on a secondary container.

(b) Each University may temporarily hold up to 55 gallons of laboratory waste or one quart of acutely hazardous laboratory waste, or weight equivalent, in each laboratory, but upon reaching these thresholds, each University must mark that laboratory waste with the date when this threshold requirement was met (by dating the container(s) or secondary container(s)).

(c) Each university must remove all of the dated laboratory waste from the laboratory for direct delivery to the hazardous waste accumulation area within 30 days of reaching the threshold amount identified in paragraph (b) of this section.

(d) In no event shall the excess laboratory waste that a laboratory temporarily holds before dated laboratory waste is removed exceed an additional 55 gallons of laboratory waste (or one additional quart of acutely hazardous laboratory waste). No more than 110 gallons of laboratory waste total (or no more than two quarts of acutely hazardous laboratory waste total) may be temporarily held in a laboratory at any one time. Excess laboratory waste must be dated and removed in accordance with the requirements of paragraphs (b) and (c) of this section.

(e) Containers of laboratory wastes must be:

(1) Closed at all times except when wastes are being added to (including during in-line waste collection) or removed from the container;

(2) Maintained in good condition and stored in the laboratory in a manner to avoid leaks;

(3) Compatible with their contents to avoid reactions between the waste and its container; and must be made of, or lined with, materials which are compatible with the laboratory wastes to be temporarily held in the laboratory so that the container is not impaired; and

(4) Inspected regularly (at least annually) to ensure that they meet requirements for container management.

(f) The management of laboratory waste must not result in the release of hazardous constituents into the land, air

and water where such release is prohibited under federal law.

(g) The requirements for emergency response are:

(1) Each University must post notification procedures, location of emergency response equipment to be used by laboratory workers and evacuation procedures;

(2) Emergency response equipment and procedures for emergency response must be appropriate to the hazards in the laboratory such that hazards to human health and the environment will be minimized in the event of an emergency;

(3) In the event of a fire, explosion or other release of laboratory waste which could threaten human health or the environment, the laboratory worker must follow the notification procedures under paragraph (g)(1) of this section.

(h) Each University must investigate, document, and take actions to correct and prevent future incidents of hazardous chemical spills, exposures and other incidents that trigger a reportable emergency or that require reporting under paragraph (g) of this section.

(i) Each University may only transfer laboratory wastes from a laboratory directly to an on-site designated hazardous waste accumulation area. Notwithstanding 40 CFR 263.10(a), each University must comply with requirements for transporters set forth in 40 CFR 263.30 and 263.31 in the event of a discharge of laboratory waste en route from a laboratory to an on-site hazardous waste accumulation area.

(j) Each University must provide laboratory workers with information and training so that they can implement and comply with these Minimum Performance Criteria.

**§ 262.105 What must be included in the laboratory environmental management plan?**

(a) Each University must include specific measures it will take to protect human health and the environment from hazards associated with the management of laboratory wastes and from the reuse, recycling or disposal of such materials outside the laboratory.

(b) Each University must write, implement and comply with an Environmental Management Plan that includes the following:

(1) The specific procedures to assure compliance with each of the Minimum Performance Criteria set forth in § 262.104.

(2) An environmental, health and safety policy, signed by the University's senior management, which must include

commitments to regulatory compliance, waste minimization, risk reduction and continual improvement of the environmental management system.

(3) A description of roles and responsibilities for the implementation and maintenance of the Laboratory Environmental Management Plan.

(4) A system for identifying and tracking legal and other requirements applicable to laboratory waste, including the procedures for providing updates to laboratory supervisors.

(5) Criteria for the identification of physical and chemical hazards and the control measures to reduce the potential for releases of laboratory wastes to the environment, including engineering controls, the use of personal protective equipment and hygiene practices, containment strategies and other control measures.

(6) A pollution prevention plan, including, but not limited to, roles and responsibilities, training, pollution prevention activities, and performance review.

(7) A system for conducting and updating annual surveys of hazardous chemicals of concern and procedures for identifying acutely hazardous laboratory waste.

(8) The procedures for conducting laboratory clean-outs with regard to the safe management and disposal of laboratory wastes.

(9) The criteria that laboratory workers must comply with for managing, containing and labeling laboratory wastes, including: an evaluation of the need for and the use of any special containers or labeling circumstances, and the use of laboratory wastes secondary containers including packaging, bottles, or test tube racks.

(10) The procedures relevant to the safe and timely removal of laboratory wastes from the laboratory.

(11) The emergency preparedness and response procedures to be implemented for laboratory waste.

(12) Provisions for information dissemination and training, provided for in paragraph (d) of this section.

(13) The procedures for the development and approval of changes to the Environmental Management Plan.

(14) The procedures and work practices for safely transferring or moving laboratory wastes from a laboratory to a hazardous waste accumulation area.

(15) The procedures for regularly inspecting a laboratory to assess conformance with the requirements of the Environmental Management Plan.

(16) The procedures for the identification of environmental management plan noncompliance, and

the assignment of responsibility, timelines and corrective actions to prevent their reoccurrence.

(17) The recordkeeping requirements to document conformance with this Plan.

(c) Organizational responsibilities for each university. Each University must:

(1) Develop and oversee implementation of its Laboratory Environmental Management Plan.

(2) Identify the following:

(i) Annual environmental objectives and targets;

(ii) Those laboratories covered by the requirements of the Laboratory Environmental Management Plan.

(3) Assign roles and responsibilities for the effective implementation of the Environmental Management Plan.

(4) Determine whether laboratory wastes received at a hazardous waste accumulation area are solid wastes under RCRA and, if so, whether they are hazardous.

(5) Develop, implement, and maintain:

(i) Policies, procedures and practices governing its compliance with the Environmental Management Plan and applicable federal and state hazardous waste regulations.

(ii) Procedures to monitor and measure relevant conformance and environmental performance data for the purpose of supporting continual improvement of the Environmental Management Plan.

(iii) Policies and procedures for managing environmental documents and records applicable to this Environmental Management Standard.

(6) Ensure that:

(i) Its Environmental Management Plan is available to laboratory workers, vendors, employee representatives, visitors, on-site contractors, and upon request, to governmental representatives.

(ii) Personnel designated by each University to handle laboratory wastes and RCRA hazardous waste receive appropriate training.

(iii) The Environmental Management Plan is reviewed at least annually by senior management to ensure its continuing suitability, adequacy and effectiveness. The reviews may include, but not be limited to, a consideration of monitoring and measuring information, Laboratory Environmental Management Standard performance data, assessment and audit results and other relevant information and data.

(d) What are the Information and Training Requirements for Each University? (1) Each University must provide laboratory workers with information and training so that they

understand and can implement the elements of each University's Environmental Management Plan that are relevant to the laboratory workers' responsibilities.

(2) Each University must provide the information and training to each laboratory worker when he/she is first assigned to a work area where laboratory wastes may be generated. Each University must retrain a laboratory worker when a laboratory waste poses a new or unique hazard for which the laboratory worker has not received prior training and as frequently as needed to maintain knowledge of the procedures of the Environmental Management Plan.

(3) Each University must provide an outline of training and specify who is to receive training in its Environmental Management Plan.

(4) Each University must ensure that laboratory workers are informed of:

(i) The contents of this Subpart and the Laboratory Environmental Management Plan(s) for the laboratory(ies) in which they will be performing work;

(ii) The location and availability of the Environmental Management Plan;

(iii) Emergency response measures applicable to laboratories;

(iv) Signs and indicators of a hazardous substance release;

(v) The location and availability of known reference materials relevant to implementation of the Environmental Management Plan; and

(vi) Environmental training requirements applicable to laboratory workers.

(5) Each University must train Laboratory workers in:

(i) Methods and observations that may be used to detect the presence or release of a hazardous substance;

(ii) The chemical and physical hazards associated with laboratory wastes in their work area;

(iii) The relevant measures a laboratory worker can take to protect human health and the environment; and

(iv) Details of the Environmental Management Plan sufficient to ensure they manage laboratory waste in accordance with the requirements of this Subpart.

(6) Requirements pertaining to Laboratory visitors:

(i) Laboratory visitors, such as on-site contractors or environmental vendors, that require information and training under this standard must be identified in the Environmental Management Plan.

(ii) Laboratory visitors identified in the Environmental Management Plan must be informed of the existence and location of the Environmental Management Plan.

(iii) Laboratory visitors identified in the Environmental Management Plan must be informed of relevant policies, procedures or work practices to ensure compliance with the requirements of the Environmental Management Plan.

(7) Each University must define methods of providing objective evidence and records of training and information dissemination in its Environmental Management Plan.

**§ 262.106 When must a hazardous waste determination be made?**

Each University must evaluate all laboratory wastes to determine whether they are solid wastes under RCRA and, if so, determine pursuant to 40 CFR 262.11(a) through (d) whether they are hazardous wastes, as soon as the laboratory wastes reach the University's Hazardous Waste Accumulation area(s). At this point each University must determine whether the laboratory waste will be reused or whether it must be managed as RCRA solid or hazardous waste. Laboratory waste that is determined to be hazardous waste is no longer subject to the provisions of this Subpart and must be managed in accordance with all applicable RCRA requirements.

**§ 262.107 Under what circumstances will a university's participation in this environmental management standard pilot be terminated?**

(a) EPA retains the right to terminate a University's participation in this Laboratory XL project if the University:

(1) Is in non-compliance with the Minimum Performance Criteria in § 262.104; or

(2) Has actual environmental management practices in the laboratory that do not conform to its Environmental Management Plan; or

(3) Is in non-compliance with the Hazardous Waste Determination requirements of § 262.106.

(b) In the event of termination, EPA will provide the University with 15 days written notice of its intent to terminate. During this period, which commences upon receipt of the notice, the University will have the opportunity to come back into compliance with the Minimum Performance Criteria, its Environmental Management Plan, or the requirements for making a hazardous waste determination at § 262.106 or to provide a written explanation as to why it was not in compliance and how it intends to return to compliance. If, upon review of the University's written

explanation, EPA then re-issues a written notice terminating the University from this XL Project, the provisions of § 262.107(c) will immediately apply and the University shall have 90 days to come into compliance with the applicable RCRA requirements deferred by § 262.10(j). During the 90-day transition period, the provisions of this Subpart shall continue to apply to the University.

(c) If a University withdraws from this XL project, or receives a notice of termination pursuant to this section, it must submit to EPA and the state a schedule for returning to full compliance with RCRA requirements at the laboratory level. The schedule must show how the University will return to full compliance with RCRA within 90 days from the date of the notice of termination or withdrawal.

**§ 262.108 When will this subpart expire?**

This Subpart will expire on [INSERT DATE 4 YEARS FROM EFFECTIVE DATE OF FINAL RULE].

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