

## **Labs Rule- Q and A**

### **What are the environmental benefits of this proposed rule?**

Subpart K promotes environmental protection and public health by creating generator requirements better suited to the specific circumstances of colleges and universities, which will result in safer management of laboratory hazardous wastes. Subpart K will facilitate RCRA hazardous waste determinations and will require that they be performed by specifically trained personnel, instead of by untrained students. Additionally, Subpart K will promote the protection of human health and the environment by ensuring that all unwanted materials which may, in whole or in part, be RCRA hazardous wastes are safely managed while in the laboratory prior to the time that the hazardous waste determination is made. In addition, the requirement in Subpart K to develop and implement a laboratory management plan (LMP) will improve a college or university's coordination and integration of hazardous waste management procedures and enhance environmental awareness among researchers and students at colleges and universities, leading to a transfer of good environmental management practices to the larger community. Furthermore, encouraging voluntary laboratory clean-outs will facilitate the removal and proper management of outdated or unstable chemicals in college and university chemical inventories, leading to safer laboratory environments and enhanced environmental protection.

### **How does this proposed rule help colleges and universities dispose of their hazardous waste?**

The proposed rule helps universities comply with regulations by allowing them to make the hazardous waste determination either: 1) In the laboratory, before the hazardous waste is removed and destined for the central accumulation area, 2) At an on- or off-site treatment, storage or disposal facility, or 3) At the CAA or on-site TSDF, provided certain provisions are met. This action, in combination with the training provision that laboratory workers must be trained and students instructed commensurate with their duties, is designed to ensure that persons properly and thoroughly trained in the RCRA hazardous waste regulations are making such determinations for all wastes generated at the laboratory. Previously, this determination was frequently made by individual researchers or students. EPA believes that this will reduce the chances of improper or nonexistent hazardous waste identification, and thus the possibility of hazardous wastes being improperly managed. It also will allow environmental health and safety personnel at the colleges and universities to determine - campus-wide - whether any of the chemicals or other materials generated in one laboratory may continue to be used in another laboratory and thus reduce the amount of waste, whether hazardous or not, that is generated in the first place.

### **How do college and university laboratories differ from industrial hazardous waste generators?**

Relative to industrial production facilities, laboratories generally have a large number of points of generation (i.e. points where waste is originally generated), such as multiple laboratory benchtops within a single laboratory and laboratories located at several areas on a single campus. Laboratories also tend to generate a relatively small volume of hazardous waste and many different wastestreams at each of these points of generation. In contrast, industrial generators tend to generate only a few wastestreams in large quantities at relatively few generation points. Additionally, while most individuals involved in hazardous waste generation activities at both industrial production facilities and other non-college or university laboratories are employees who are professionally trained in managing hazardous wastes, students often generate hazardous waste at college and university laboratories. Further contrast exists between the transient nature of students in a college or university laboratory settings and the relative stability of employees in a commercial production or other non-academic laboratory.

### **What are small quantity generators (SQG) and large quantity generators (LQG)?**

Large Quantity Generators (LQG) generate 1,000 kilograms per month or more of hazardous waste, or more than 1 kilogram per month of acutely hazardous waste. Requirements for LQGs include:

- LQGs may only accumulate waste on site for 90 days. Certain exceptions apply.
- LQGs do not have a limit on the amount of hazardous waste accumulated on site.
- There must always be at least one employee available to respond to an emergency. This employee is the emergency coordinator responsible for coordinating all emergency response measures. LQGs must have detailed, written contingency plans for handling emergencies.
- LQGs must submit a biennial hazardous waste report.

Small Quantity Generators (SQG) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month. Requirements for SQGs include:

- SQGs may accumulate hazardous waste on site for 180 days without a permit (or 270 days if shipping a distance greater than 200 miles).
- The quantity of hazardous on site waste must never exceed 6,000 kilograms.
- There must always be at least one employee available to respond to an emergency. This employee is the emergency coordinator responsible for coordinating all emergency response measures. SQGs are not required to have detailed, written contingency plans.

### **What are performance-based standards?**

Performance-based standards provide facilities with flexibility to choose the appropriate manner in which to manage their hazardous wastes in order to meet the requirements of the regulations. Subpart K was developed with performance-based standards in part to account for the diversity among college and university operations and practices,

curricula, and goals. This diversity in programs for managing wastes, including hazardous wastes is also reflective of logistical considerations including, campus size, space, personnel, and other resource differences among colleges and universities.

**What must college and university laboratories do to comply with this proposed rule?**

A college or university laboratory must manage its unwanted materials in accordance with the performance-based standards set out in this proposed rule for container management, container labeling, and personnel training. The laboratory must also remove their unwanted materials within the defined limits (on a regular interval not to exceed six months or when 55 gallons of unwanted materials, or one quart of reactive acutely hazardous reactive unwanted material has been accumulated, whichever occurs first). Colleges and universities must also follow the recordkeeping requirements described in the proposed rule. Additionally, a laboratory must develop, implement and retain a Laboratory Management Plan (LMP) describing in detail how the college or university laboratory plans to meet these performance-based requirements. Finally, the proposed rule recommends that laboratories implement an environmental management system (EMS), although an EMS is not required by the proposed rule.

**What elements must be included in a laboratory's laboratory management plan?**

Specifically, a laboratory management plan (LMP) must describe how a college or university will meet the required standards for: (1) container management and labeling; (2) training of laboratory workers, other appropriate faculty, and environmental health and safety personnel, commensurate with their duties; (3) instructing students; (4) ensuring safe movement of the unwanted materials from the laboratory to an on-site central accumulation area; an on-site interim status/permitted treatment, storage, or disposal facility; or an off-site interim status/permitted treatment, storage, or disposal facility; and (5) conducting laboratory clean-outs, if a college or university chooses to conduct these events.

**Why would a college or university want to continue to operate under the existing regulations?**

EPA recognizes that hazardous waste management operations vary widely among campuses and some colleges and universities have developed programs that have proven to be successful, and thus may be reluctant to change from the regulation under which they are currently operating. Therefore, Subpart K is an optional, alternative set of requirements to the existing generator regulations at 262.11 and 262.34(c). Those colleges or universities that choose to continue to manage their laboratory hazardous waste under the current hazardous waste regulations may do so. Colleges or universities that would like the additional flexibility of Subpart K may choose to manage their laboratory hazardous waste according to this new set of generator regulations. Subpart K was developed with performance-based standards in part to account for the diversity among college and university operations and practices, curricula, and goals. The term

“performance-based standards” means a flexible approach that will allow colleges or universities the discretion to determine the most appropriate and effective method of compliance with the requirements of today’s proposed rule. This diversity in programs for managing wastes, including hazardous waste, is also reflective of logistical considerations including campus size, space, personnel, and other resource differences among colleges and universities.

### **Is this proposed rule mandatory for all academic laboratories?**

Subpart K, Standards Applicable to Academic Laboratories, is optional in that colleges and university laboratories may elect to remain regulated under current RCRA generator regulations or may choose to manage their wastes according to Subpart K. Although Subpart K does give colleges and universities the option to select between the existing hazardous waste regulations or the proposed alternative regulations, EPA does not intend for colleges and universities to make this decision on a laboratory-by-laboratory basis. All laboratories in the college or university (covered under a single EPA ID number) must operate under the same set of regulations.

### **When can my college or university implement Subpart K?**

Under section 3006 of RCRA, EPA may authorize qualified states to administer their own hazardous waste programs in lieu of the federal program within the state. As a result, new federal requirements such as Subpart K do not take effect in an authorized state until the state adopted the federal requirements as state law. Authorized states are not required to modify their program to adopt regulations consistent with Subpart K since Subpart K is as stringent as the current regulations. Colleges and universities may implement Subpart K on the day their state adopts the proposed rule, for those states that have final HWSA authorization, or on the proposed rule’s effective date in those states that do not have final HWSA authorization.

### **How often can a laboratory conduct laboratory clean-outs?**

A college or university laboratory may conduct an unlimited number of laboratory clean-outs each year, however, the frequency with which colleges and universities can take advantage of the incentives for laboratory clean-outs is limited to once per 12-month period per laboratory. There are two incentives for conducting a laboratory clean-out are: 1) during a laboratory clean-out, laboratories have an increased amount of time that unwanted materials may remain in the laboratory (30 days); and 2) laboratories are not required to count wastes generated during the designated laboratory clean-out period towards their generator status in 40 CFR 262.34.