

# **LABORATORY MANAGEMENT PLAN (LMP)**

**Brigham Young University  
Provo, Utah  
(25 Jan 2019)**



## **PART I**

Brigham Young University must implement and comply with the specific provisions of Part I of this Laboratory Management Plan as required in 40 CFR 262.214(a).

**Element 1:** Container Labeling in accordance with 40 CFR 262.206(a):

- I. *Unwanted material(s)* as defined in 40 CFR 262.200 originating from eligible facilities and laboratories under Subpart K regulations must use the equally effective term “**Unwanted Lab Material**” on all labels.
- II. All the information associated with each container will be stored and tracked through an on-line database. Each container will be assigned a unique number that will be written on the affixed label to the container. The affixed label will provide enough information to alert emergency responders as of the content’s nature.

**Element 2:** Brigham Young University will comply with 40 CFR 262.208(a)(2) for regularly scheduled removals of unwanted material from the laboratory.

- I. Containers will be removed within 12 months of each container’s accumulation start date. (“Rolling 12-months”)
- II. The accumulation start date will be written on the associated label and tracked on-line. The accumulation start date begins when Environmental Management personnel drops the container at the facility or laboratory.

## Part II

### As required in 40 CFR 262.214(b) Brigham Young University must:

**Element 1:** Container labeling and in-line container management will comply according to 40 CFR 262.206:

Containers must be labeled “Unwanted Lab Material”. The label affixed to the container will have the following information:

1. The words “Unwanted Lab Material”
2. The words and/or a symbol to alert first responders as of the main risks associated with the contents of the container
3. A unique container identifier that will be both human readable and barcode readable

Additional information associated with the container such as pH, chemical constituents, waste profile, pertinent dates, etc. will be maintained and tracked on line.

The container must be clean with no dried chemicals on the outside. The lid must be on tightly and sealed to prevent any spilling during transportation.

Each container will be picked up by Environmental Management within 5 to 10 working days from the time of the “Unwanted Materials Pickup Request” is submitted.

Environmental Management will not disconnect any unwanted materials from in-line equipment. The laboratory worker must disconnect these and label them as described above.

Lab employees/students are responsible for providing secondary containment while filling and storing any unwanted materials in their laboratory. However, during transportation and storage at the central accumulation area located in the Chemicals Management Building, Environmental Management will provide secondary containment as needed. Environmental Management will return container within 2 weeks.

NOTE: Containers labeled “Surplus Item” are not unwanted materials by definition but useful product.

**Element 2:** Training for laboratory workers and students will be commensurate with their duties as required in 40 CFR 262.207(a).

Training will be provided on-line and in a classroom setting as requested by the intended audience. Each laboratory worker and students will be trained commensurate to their individual duties. There will be an initial training and an annual refresher for all laboratory workers. Each student participating in a class or lab having the potential of generating unwanted lab materials will receive training under the direction of the person in charge instructing the student as to how to properly manage the unwanted lab material generated in the laboratory.

At Brigham Young University, there will be two categories of laboratory workers; Principal investigators (PIs) and laboratory employees (paid or not).

Training will originate with Environmental Management and will be tracked and offered online through Risk Management training coordinator.

Environmental Management will develop training requirements for all laboratory workers.

Environmental Management will track lab worker training.

**Element 3:** Required training for BYU's Trained Professionals as outlined in 40 CFR 262.207(d)(1).

A trained professional will pick up and transfer all unwanted materials from laboratories and eligible facilities at Brigham Young University.

A trained professional at Brigham Young University will have at a minimum the following training and corresponding refreshers:

1. 40-Hour HAZWOPER Training
2. RCRA Regulations Training
3. DOT Training
4. Biological Waste Management Training
5. Radiological Training
6. Truck Driving Training
7. In-House Training in Waste Container Management Database
8. Chemical Compatibility Training
9. Other training as needed

The training will be offered via classroom instruction (on and off BYU Campus) and online courses.

**Element 4:** Unwanted lab material will be removed from the laboratory in accordance to 40 CFR 262.208(a)(2):

Risk Management's On-Line Hazardous Waste Pickup Request System allows laboratory workers to request unwanted material pickups.

All users of this on-line system must first obtain a password through Risk Management prior to start submitting requests. To obtain the required access, the laboratory worker must complete all the relevant training.

When a pickup request is submitted through the online system, Environmental Management personnel will pick up the unwanted material within 10 working days. After picking up the material, the material will be transported to Brigham Young University's on-site central accumulation area located in the Chemicals Management Building and be further processed for shipment, disposal or redistribution.

All containers must be removed automatically from the laboratory or eligible facility within 12 months of each container's accumulation date per regulation. At Brigham Young University, all containers will automatically be removed 30 days before its' 12 month expiration date or when it is 90% full, whichever comes first.

For regularly scheduled removals— Develop a regular schedule for identifying and removing unwanted materials from its laboratories (see the required standards at 40 CFR 262.208(a)(1) and (a)(2)).

**Element 5:** Brigham Young University's practices for making hazardous waste determinations, including specifying the duties of the individuals involved in the process as required in 40 CFR 262.11 and 262.209 through 262.212.

Brigham Young University's Environmental Management Section trained professionals will make the determination of whether an unwanted material is a hazardous waste, a recyclable material, or if the unwanted material is suitable for reuse.

The determination will be made within four days after arriving at BYU's Chemicals Management Building.

The determination if an unwanted material is a hazardous waste, therefore a regulated material, will be made in accordance to 40 CFR 261.

**Element 6:** Describe Brigham Young University intended best practices for laboratory clean-outs, if the eligible academic entity plans to use the incentives for laboratory clean-outs provided in 40 CFR 262.213:

1. At Brigham Young University, all eligible facilities and laboratory working under Subpart K will have an option to conduct a clean out once a year in accordance with 40 CFR 262.213(a)(1) through (3)
2. At Brigham Young University, all clean outs will be documented in accordance with 40 CFR 262.213(a)(4). The information will include at a minimum the identity of the laboratory being cleaned out, the date the laboratory clean out starts and the date when it ends, and the volume of hazardous waste generated in the laboratory during the clean out. The records of all cleanouts will be kept for a minimum of three years from the date the clean out ends and will be tracked on line.

**Element 7:** Brigham Young University's practices for emergency prevention will be according to 40 CFR 262.214(b)(7):

1. Procedures for emergency prevention, notification, and response, appropriate to the hazards in campus laboratories are outlined in Brigham Young University's General Emergency Plan
2. A list of chemicals that Brigham Young University has, or is likely to have, that becomes more dangerous when they exceed their expiration date and/or as they degrade can be accessed via the Chemicals Management Program Database
3. Procedures to safely dispose of chemicals that become more dangerous when they exceed their expiration date and/or as they degrade are in place through the Chemicals Management Program
4. Procedures for the timely characterization of unknown chemicals are under the jurisdiction of the Health and Safety section of BYU's Risk Management