



Department of
Environmental
Conservation

Lab Waste Management and RCRA Updates for Colleges and Universities

2020

Agenda

10:00 AM – Regulatory Update and Overview of the academic labs rule

11:00 AM – Lab management plans

11:20 AM – Lab clean-outs

11:35 AM - Resources for green chemistry Presented by NYSDEC Pollution Prevention Unit, NYS Pollution Prevention Institute and Beyond Benign



Status of FedReg 5

- February 18, 2020 - Filed final regulatory package with Department of State.
- To be published in the State Register and on DEC website on March 4, 2020
- Effective April 19, 2020.

FedReg 5 Summary

- 38 federal rules predominantly from 2002 to 2012.
- 10 of those rules are directly related to regulation of Hazardous Waste Combustors
- Key Federal rule revisions within FedReg5 include:

Changes to the Standards for Hazardous Air Pollutants for Hazardous Waste Combustors from September 30, 1999 to present. These changes will result in formally shifting the responsibility for permitting of the six existing hazardous waste incinerators at four facilities in the State to Division of Air Resources (DAR). This reduces duplication in permitting between Clean Air and RCRA requirements.

TCLP Use with Manufactured Gas Plant (MGP) Waste. The March 13, 2002 Federal Register disallowed the use of the toxicity characteristic leaching procedure (TCLP) to determine whether *MGP waste* is hazardous. More stringent criteria laid out in Program Policy DER-4 is currently followed and proposed amendments would incorporate provisions of DER-4 into the regulations.



FedReg 5 Summary

Universal Waste Rule for mercury containing equipment. This is presently being implemented by a DEC Commissioner Policy, CP-39, which authorizes enforcement discretion to allow regulated parties to handle hazardous waste mercury containing equipment under the universal waste rule provisions in lieu of full hazardous waste regulation.

Methods Innovation Rule. The rule amends a variety of testing and monitoring requirements to allow more flexibility when conducting RCRA related sampling and analysis.

RCRA Burden Reduction Initiative. This rule reduces various paperwork requirements for the regulated community. There are certain aspects that are not proposed for adoption by the State, related to certain State notification and documentation requirements and the State requirement for an independent professional engineer certification, both which will be retained.

The Cathode Ray Tubes(CRT) Rule. This is presently being implemented by a DEC Commissioner Policy, CP-57, which authorizes an enforcement discretion to allow regulated parties to store used, broken for CRTs and CRT glass removed from CRTs prior to legitimate recycling in compliance with federal regulations.

Alternative Requirements for College Labs. Universities within the State have expressed interest in managing their waste under this federal rule which is an alternate set of regulations that allows eligible academic entities to participate, on a voluntary basis. The alternate regulations add some flexibility while requiring participating labs to develop a Laboratory Management Plan. The rule also increases regulatory incentives for academic laboratories to conduct regular lab cleanups.



FedReg 5 State Initiatives

- ***Notification under 6 NYCRR 371.1(c)(7).*** Remove notification requirement for certain commonly recycled wastes; to clarify that parties claiming exemptions must also maintain documentation on-site; and to match federal language for respondents in enforcement actions.
- ***Loading and unloading areas are part of a tank system:*** Clarification that permit applications would address prevention of hazards for loading and unloading areas are part of a tank system. This would include spills in addition to physical hazards, and increase consistency between the Chemical Bulk Storage regulations and Hazardous Waste Management regulations.

FedReg 5 – Minor Changes from Generator Rule

- Amended the definitions of “Acute hazardous waste” and “Small quantity generator” to match federal language from the Generator Improvements Rule (GIR).
 - **"Acute hazardous waste"** means hazardous wastes that meet the listing criteria in subparagraph 371.2(b)(1)(ii) of this Title and therefore are either listed in subdivision 371.4(b) of this Title with the assigned hazard code of (H) or are listed in paragraph 371.4(d)(5) of this Title.
 - **"Small quantity generator"** is a generator who generates the following amounts in a calendar month:
 - (i) Greater than 100 kilograms (220 lbs) but less than 1,000 kilograms (2,200 lbs) of non-acute hazardous waste; and
 - (ii) Less than or equal to 1 kilogram (2.2 lbs) of acute hazardous waste listed in subdivision 371.4(b) or paragraph 371.4(d)(5) of this Title; and
 - (iii) Less than or equal to 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in subdivision 371.4(b) or paragraph 371.4(d)(5) of this Title.



FedReg 5 – Minor Changes Continued

- Modified quantity limits for “acute hazardous waste” and “acutely hazardous unwanted material” for consistency with the GIR:
 - 1 quart for acute containerized gases and liquids.
 - (*Limit for containerized gases is a state change, EPA does not have one*)
 - 1 kilogram for acute solids.
- Modified requirements of the Wastewater Treatment Unit and Elementary Neutralization Unit Exemptions to match requirements to generator category
- Academic Labs Rule (“Subpart K”) [6 NYCRR 372.2(e)]: Labs now have 12 months (instead of 6) for removal of unwanted hazardous material from the laboratory – EPA change in GIR.

FedReg6 Overview

Revisions Under
Development



Status of FedReg 6

Preparing draft regulations and evaluation documents (explaining the effects)

Next steps:

- Early Public Outreach– webinars and meetings
- **Publish draft regulations/more focused outreach?**
- Evaluate comments, revise as needed
- Propose regulations – public meetings and hearing(s)
- Evaluate comments, revise as needed
- Approval process
- Publish final regulations
- Effective 60 days later



EPA Rules Included in FedReg 6:

- **Conditional Exclusions for Solvent Contaminated Wipes (Wipes Rule)** (78 FR 46448) – set of reduced requirements; NYS laundering policy is in some ways inconsistent.
- **Conditional Exclusion for Carbon Dioxide (CO₂) Streams in Geologic Sequestration Activities** (79 FR 350) – removes some barriers for CO₂ Sequestration
- **Hazardous Waste Electronic Manifest Rule (e-Manifest Rule)** (79 FR 7518) and **User Fee Rule** (83 FR 420) – in effect nationally but states must adopt for consistency.



EPA Rules Included in FedReg 6

- **Revisions to the Definition of Solid Waste (73 FR 64668)**
as amended by: Revisions to the Definition of Solid Waste (DSW Rule) (80 FR 1694) – recycling provisions for hazardous secondary materials
- **Hazardous Waste Export-Import Revisions (Export-Import Rule) (81 FR 85696)** – On January 1, 2017 EPA began implementing this rule
- **Hazardous Waste Generator Improvements Rule (GIR) (81 FR 85732)** – Reorganizes generator regulations and includes some provisions to help management.



EPA Rules Included in FedReg 6

- **Air Bags Rule (Interim Final Rule)** (83 FR 61552) – to support safe removal and disposal of recalled and other airbags.
- **Pharmaceuticals Rule (40 CFR 266, Subpart P)** (84 FR 5816) – Sewering ban in effect nationwide on August 21, 2019 regardless of adoption status. Sets up special provisions to expedite safe, secure return and disposal of unused pharmaceuticals.



EPA Rules

- **Aerosol Cans** – published December 2019 (add to Universal Waste Rule and add incentives to recycle aerosol cans) – not effective in NYS until adopted by NYS
- **Modernizing Ignitable Liquids Determinations (Update to ignitability test method)** – The current test method for ignitability has been out of date for some time. Rule was proposed by EPA on April 2, 2019.

Unless otherwise noted, EPA Rules are not effective in NY until adopted into state regulation



State Initiatives

- Define “staging” to eliminate confusion about “no prior storage” with respect to the recycling exemption.
- Add cold crushing option for used oil filters
- Extend secondary containment of liquids provisions to all liquid storage of greater than 185 gallons throughout the state, and include a phase-in period (by quantity or by location?)
- Extend closure requirements to all LQGs statewide.
- Part 364 coordination
- Add paint waste and solar panels to Universal Waste Rule

New Policies

Pharms Rule: Nicotine Listing Policy

Listing has been amended to exclude FDA-approved over-the-counter nicotine replacement therapies (OTC NRTs) – **Effective through State Enforcement Discretion August 21, 2019**

Nicotine P075 Listing	
No Longer Part of Listing	Still Included in Listing
<ul style="list-style-type: none">• Nicotine Patches• Nicotine Gums• Nicotine Lozenges	<ul style="list-style-type: none">• E-liquids/e-juices in e-cigarettes, cartridges, or vials• Prescription nicotine (e.g., nasal spray, inhaler)• Legacy pesticides containing nicotine• Nicotine used in research and manufacturing• Other unused formulations

Conditional exemption for Vehicle Airbags

- Reduced requirements for airbags sent for safe disposal.
- Airbags managed under the special exemption won't be counted towards generator status.
- Airbags may be deployed while still installed in a vehicle that will be recycled for scrap metal value – deploying installed airbags in vehicles that will go for scrap metal recycling is considered exempt treatment.
- Generator can electronically deploy non-defective airbag modules outside of the vehicle and direct the metal for recycling under the hazardous scrap metal exemption; CESQGs can electronically deploy non-defective airbags.

DEC Enforcement Directive signed July 5, 2019; includes state notification requirement



Focus on Colleges and Universities

Most Frequently Generated Wastes by Colleges and Universities (USA - 2015)

Waste Code	Number of LQGs	Volume Generated (Tons)
F001-F005 (Listed Solvents)	1721	3852
Lab Packs	1401	778
D001 (ignitable)	1233	478
Ignitable, Corrosive or Reactive	957	285
D002	891	387
Numerous P & U listed	Several hundred	Considerably less

Typical Lab Wastes

Unused chemicals

Residuals from lab experiments

Solvents and cleaning products

Batteries, light bulbs

Old equipment



Lab Issues

- **Failure to make HW determination or inadequate HW determination**(several wastes at each site);
- **Open containers**;
- **Storage** - Containers stored in a way that could lead to a release;
- **Labeling** - No labels or insufficient labels;
- **Training deficiencies**;
- **Universal waste violations**;
- **Emergency Response** - contingency plan violations; not informing emergency authorities (*hospital, fire, etc.*);
- **Manifest** - using the wrong codes



Academic Labs

- Since labs are usually used by students, lab safety training and management of wastes is more challenging.
- The level of training and experience of all users of the labs varies considerably.
- Undergraduate students may be in a particular lab only a few times each semester, and many different students use the same equipment during the semester.
- Most students are not able to make a hazardous waste determination at the time that the waste is generated.

Definitions and Key Information

Location in the Regulations

6 NYCRR 372.2(e)

(EPA's location is 40 CFR Part 262, Subpart K, rule is called "Subpart K" or "Academic Labs Rule")

Colleges and universities will be able to elect to "opt in." They can choose when to opt in and may opt out.

It is not mandatory.



Definitions of Some Terms

Satellite accumulation area (SAA) - area at or near the point of generation, under control of the operator, where hazardous waste may temporarily be stored.

Conditionally exempt (CESQG), small (SQG) and large (LQG) quantity generators – hazardous waste regulations are based on quantity of hazardous waste generated in a calendar month. Most colleges and universities are SQGs or LQGs, though some very small colleges are CESQGs.

Central Accumulation Area- designated hazardous waste storage area, where wastes are accumulated for up to 180 days (SQGs) or 90 days (LQGs)



Definitions of Some Terms

Eligible academic entity means a college or university, or non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

Laboratory means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person.

Working container means a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.



Laboratory

Includes These Parts of an Eligible Academic Entity:

- Photo laboratories
- Art studios
- Field laboratories
- Chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories
- Diagnostic laboratories at teaching hospitals

Unwanted Material

- Chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory
- May include reactive acutely hazardous unwanted materials
- Materials that may eventually be determined not to be solid waste or a hazardous waste (e.g., may be reused elsewhere, or reclaimed or recycled in an exempt manner)

Roles

Laboratory worker' a person who handles chemicals and/or unwanted material in a laboratory, and may include:

- Faculty and staff
- Post-doctoral fellows
- Interns
- Researchers
- Technicians
- Supervisors/managers, and principal

Does not include undergraduate and graduate students *in a supervised classroom setting*

'Trained professional' means a person who has completed the applicable training requirements for LQGs or is knowledgeable about normal operations for SQGs and CESQGs.

A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements

Opting In

Opting In

1. Prepare to opt in – determine how to meet the requirements, and prepare lab management plan
 2. Submit or modify Site ID Form
 3. Maintain notification and documentation on-site
 4. Opt out by modifying Site ID Form
- All in – **must use for all labs at the site**. Same terminology and means of meeting time limit at all labs at the site;
 - Must opt in for each site (each contiguous piece of property that is operating under the same EPA ID Number)

Some Key Points

- All in – all labs at the site must operate under the lab rule if the site opts in.
- Same terminology and means of meeting time limit at all labs at the site, but other elements can be met differently at different labs.
- Must opt in by site – if multiple EPA ID numbers, each site that wants to opt in must individually notify.
- Can use the same Lab Management Plan for the whole college or university as long as each campus opts in.

Academic Labs Rule vs Satellite Accumulation Areas



Applicability

Satellite Accumulation

Any Small Quantity Generator or Large Quantity Generator, “at or near the point of generation”

Academic Labs

Any generator that is:

- A college or university (C/U), or
- A teaching hospital or non-profit research institute that is owned by or has a formal written affiliation agreement with a C/U

Terminology

Satellite Accumulation

Hazardous waste

Acute hazardous waste

Academic Labs

Unwanted material

Reactive acutely
hazardous unwanted
material



Acute hazardous waste

Acute hazardous waste

All 124 P-listed chemicals and any Acute F-listed chemicals have a 1 kg threshold

Reactively Acute Unwanted Materials

P006 – Aluminum phosphide

P009 – Ammonium picrate

P065 – Mercury fulminate

P081 – Nitroglycerine

P112 – Tetranitromethane

P122 – Zinc phosphide (>10%)



Time and Quantity Limits

Satellite Accumulation

No time limit, unless maximum accumulation volumes are exceeded

55 gallons of hazardous waste

Total of 1 quart (or 1 kg if solid*) of 124 P-listed acute hazardous wastes

Time allowed to exceed maximum volumes – 3 *calendar days*

Academic Labs

Time Limit: One year or 55 gallons of unwanted material

Total of 1 quart of 6 P-listed reactive acutely hazardous unwanted materials (1 kg if solid)

Time allowed to exceed maximum volumes – 10 *calendar days*



Container Labeling

Satellite Accumulation

“Hazardous waste” and
“Other words that identify
the contents of the
container”

Indication of hazards of the
container

Academic Labs

“Affixed or Attached to” Labeling

- “Unwanted material” or “other equally effective term,” **and**
- Information re: contents of the container, and

“Associated with” Labeling*

Sufficient information to make a hazardous waste determination, and
Accumulation start date;

*May be “affixed or attached” if preferred



Example of “Affixed or Attached to” Labels



HAZARDOUS WASTE

NAME OF CHEMICAL
 (For Mixtures Give Percentages)

ACETONE 80%
DICHLOROMETHANE
ACETIC ACID 10% 10%

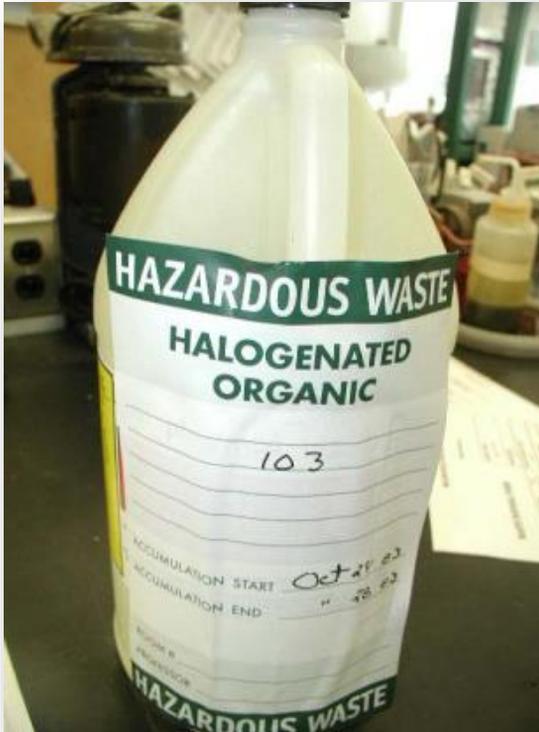
STATEMENT OF HAZARD (Please Check)

Ignitable Reactive
 Corrosive Toxic

Bldg./Room# _____
 Generator _____
 P.I. _____
 Date Container Full 03-13-02

Hazardous Accumulation areas must be inspected weekly.
 Keep incompatible waste separated.

Examples of “Associated With” Labels



Example of “Unwanted Materials” Labels

“Affixed or Attached to” Label

The words Unwanted Materials or equally effective term used consistently and written in Part I of the LMP (e.g. Lab Waste)

Information to alert Emergency Responders to the contents of the container

LAB HAZARDOUS WASTE

Waste Name

(No abbreviations or chemical formulas)

NON-HALOGENATED SOLVENT WASTE

S P E N T	Hazardous Constituents		Est. %
	ACETONE		50
	ETHANOL		40
	XYLENE		10

Information to make a HW Determination and Information to alert Emergency Responders to the contents of the container

Information to alert Emergency Responders to the contents of the container

Hazard(s)

(Check all that apply)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Ignitable (D001) | <input type="checkbox"/> Corrosive (D002) |
| <input type="checkbox"/> Reactive (D003) | <input type="checkbox"/> Oxidizer (D001) |
| <input type="checkbox"/> Halogen (F001 - F005) | <input type="checkbox"/> Toxic (D004 - D042) |

Accumulation Start Date

Container Start Date: 10/4/07 Container Fill Date: _____
Generated by: J.M. SMITH Ext: 4321

Example of “Unwanted Materials” Labels

“Affixed or Attached to” Label

Lab Waste

University of Washington

Environmental Health & Safety (206) 616-5835 UoW 1157

Chemical Composition and Associated Hazard

Spent Methyl Ethyl Ketone (MEK)

Spent Xylene

Spent Ethyl Benzene

Container Number 567

- Corrosive Reactive Other (explain)
 Non-Hazardous Toxic
 Ignitable Oxidizer

Waste Generator
information

Labeled By

Department

Phone

Building

Room

The words **Unwanted Materials** or equally effective term used consistently and written in Part I of the LMP (e.g. Lab Waste)

Information to alert Emergency Responders to the contents of the container

And

Information to make a HW Determination

Information to alert Emergency Responders to the contents of the container

“Associated with” Label (Log Book)

Container Number	Accumulation Start Date
567	12/15/09

Accumulation Start Date

Hazardous Waste Determinations

Satellite Accumulation

Determination made in the Satellite Accumulation Area when waste first generated

Academic Labs

Choice of when and where to make the determination:

372.2(e)

(11) “before the unwanted material is removed from the laboratory”; or

(12) “at an onsite central accumulation area”; or

(13) “at an on-site interim status facility or an on-site permitted TSDF” (Note: none are located in NY)



Container Management

Satellite Accumulation

Containers must be in good condition
Contents must be compatible with container

Containers must be kept closed except*:

- When adding or removing waste

Transfer of containers between SAAs is **not** allowed, therefore on-site consolidation of containers may not occur without a 90/180-day area

*the additional allowances will be added for SAA's in FedReg5

Academic Labs

Containers must be in good condition

Contents must be compatible with container

Containers must be kept closed except:

- When adding, removing, or consolidating unwanted materials;
- Working containers may remain open until the end of shift or procedure, whichever is first;*
- When venting is necessary to prevent dangerous situations*

Transfer of containers between labs is allowed, therefore on-site consolidation of containers may occur without a 90/180-day area

Training

Satellite Accumulation

Relevant to their responsibilities

Training required for personnel outside of SAA

Academic Labs

Training that is “commensurate with duties” is required for lab workers and students in labs

Training required for personnel outside of lab (“trained professionals”)

Lab Clean-Outs

Satellite Accumulation

Maximum volumes are easily exceeded and excess volumes must be removed within 3 days

Often results in an increase in generator status (episodic generation)

Academic Labs

Incentives provided to conduct clean-outs (limited to once per lab per 12 months):

- 30 days to conduct a clean-out;
- Do not have to count hazardous waste from a clean-out toward generator status if it is an UNUSED commercial chemical product (*i.e.*, P- or U-listed, or characteristic)

Lab Management Plan (LMP)

Satellite Accumulation

None required

Academic Labs

- 2-Part LMP required with 9 elements
- Developing plan is a collaborative process
- Each element describes how the Lab Rule requirements will be met. The lab must follow the plan for the first part; can deviate from the second part of plan if all requirements are met.

Non-Laboratory Wastes

In the laboratory:

Batteries, lamps, etc. generated in the lab can be handled as lab wastes. However, once they are moved to the CAA, they must continue to be managed as hazardous wastes.

Alternately, they can be managed as universal waste from point of generation (e.g., in the lab) onward.



Other non-lab wastes

Wastes generated in other areas are fully regulated.

- Chemicals from stockrooms that don't support labs;
- Vehicle maintenance waste;
- Machine shops;
- Print shops;
- Commercial photo processing;
- Power plants

Generator Status – Fees and Waste Reduction Plans

Generator status when counting all waste, including unused CCPs generated during lab cleanout	Generator status when not counting unused CCPs generated during lab cleanout	Follow on-site accumulation requirements for:	Follow off-site transportation and disposal requirements for:
LQG	CESQG	CESQG	LQG
LQG	SQG	SQG	LQG
SQG	CESQG	CESQG	SQG

Lab Management Plans

The basics

- Getting Started
- Where must it be kept
- When must it be written and updated
- What must it contain



Getting Started

Identify who will be involved:

- who will write the lab management plan
- who will train lab workers and students

Set a timeline to write the plan, train personnel and begin implementing the plan

Write the lab management plan – if you have more than one site, can use same plan for all sites that opt in or have site-specific plans

When you are ready to implement the plan, notify EPA



More About the LMP

Must be accessible and made available to all lab workers, students, or any others at the academic entity who request it.

Must be updated whenever necessary and at least once every 5 years. If changes are made to the required elements, LMP must be updated before implementing those changes.

DEC inspectors may request plans annually or before or during a hazardous waste inspection.



Contents of the LMP

Part I – Enforceable

- Must follow the written plan

Part II – Best Management Practices

- Must reasonably address these;

Note that in the LMP Part II, academic institutes describe their intended practices from a range of choices. They may deviate from the plan by following another option but must still be in compliance with the Academic Labs Rule (examples will follow)

Part I

Enforceable

1- Container Labeling Procedure

- What term will be used? “Unwanted material” or an equally effective term.
- How will information that is associated with the container be conveyed? Will all information be on the attached label, or will another method be used?

Examples: log book, bar code, spreadsheet

2 – When to remove unwanted material

- Regular schedule (12 months or less); or
 - Rolling 12-month schedule (within 12 months of each container's accumulation start date)
-
- Whichever method is chosen must be used at all labs on the site.

Part II

Best Management Practices

Element B1: Procedures for:

- Labeling containers of unwanted material in the laboratory
- Managing containers of unwanted material in the laboratory
- Managing containers of unwanted materials attached to in-line equipment such as HPLCs

Elements B2 & B3: Training

Element B2: Training to students and laboratory workers.

Element B3: Training to trained professionals to ensure safe on-site transfers of unwanted materials.

How will training be provided (e.g., on-line, classroom, hand-outs, in-person training)? Describe the content and level of training for various types of lab personnel. How frequently will training be provided? LQGs must document training.



Element B4: Procedures

Element B4: A schedule for removing unwanted materials from the laboratory that will ensure compliance with the choice in Part I, element 2 of the LMP.

- Describe procedures for laboratory to alert appropriate personnel (e.g., EH&S staff) when unwanted materials need to be removed from the laboratory due to reaching the volume limits of *55 gallons* of unwanted materials or *1 quart* of acutely reactive unwanted materials or *1 kg* of solid acutely reactive materials.
- Describes procedures to ensure that the appropriate personnel will respond within *10 calendar days*.

Element B5: Determination Procedures

Element B5: Describes the process that will be used to make hazardous waste determinations, including who will be involved in what part of the process.

Where will the determinations be made?

Who will make the determinations?



Element B6: Lab Cleanouts

Indicates whether the institution intends to conduct laboratory clean-outs. If so, describes how laboratory clean-outs will be conducted and documented.

Develop schedule and identify personnel who will conduct the clean-out. Develop standard procedures.

How will the cleanups be documented? For instance, electronically or on paper. Where will documentation be stored?



Element B7: Emergency Prevention

Element B7: Describes intended best practices for emergency prevention, including:

- Procedures for emergency prevention, notification, and response, appropriate to the hazards in the laboratory; and
- A list of chemicals that the eligible academic entity has, or is likely to have, that become more dangerous when they exceed their expiration date and/or as they degrade; and
- Procedures to safely dispose of chemicals that become more dangerous when they exceed their expiration date and/or as they degrade; and
- Procedures for the timely characterization of unknown chemicals.



Laboratory Clean-Outs

Lab Clean-Outs

“Laboratory clean-out’ means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory.

A clean-out may occur for several reasons. It may be on a routine basis (e.g., at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor/occupant.

A regularly scheduled removal of unwanted material as required by paragraph 372.2(e)(9) of this subdivision, does not qualify as a laboratory clean-out.



Details

30 Day clock begins when you start activities such as inventory and sorting

Each lab at a site may have an annual cleanout, but cleanouts aren't mandatory.

Records should be kept to show that a cleanout is only conducted once per year per lab.

May exceed the 55 gallons, 1 quart or 1 kg limit during the cleanout

At the end of the cleanout, all lab clean-out waste must have been removed to on on-site CAA or sent off-site for disposal.



Lab Clean-Out

The biggest benefit to lab clean-outs?

1. During a laboratory cleanout, laboratories do not have maximum a volume limit on the amount of unwanted materials generated in the laboratory, only a time limit that unwanted materials may remain in the laboratory (30 days); and
2. Laboratories are not required to count hazardous wastes that are unused commercial chemical products (i.e., P- and U- listed HW and unused characteristic HW) generated during the designated laboratory clean-out period towards their generator status.

In the Central Accumulation Area

Both lab cleanout wastes and wastes originating from other areas of the academic entity can be accumulated in the CAA.

However, wastes from an annual cleanup should be kept segregated from other hazardous waste to avoid confusion when counting to determine on-site generator status.



Documenting and Manifesting Clean-out Waste

Records:

- Identify the laboratory cleaned out
- Identify start and end date of the clean-out
- Indicate the volume of lab clean-out waste

Use box 14 of the Manifest to:

Indicate that portion (or all of the waste if applicable) that is from a laboratory clean-out.

It is up to the academic laboratory to ensure that the manifests being used to ship clean-out waste clearly identify which materials are from the Clean-out. Similarly, not clean-out wastes should be listed on separate lines in Section 9.



For More Information

More information on the Academic Labs Rule:

<https://www.epa.gov/hwgenerators/managing-hazardous-waste-academic-laboratories-rulemaking>

NYS Hazardous Waste Updates:

<http://www.dec.ny.gov/regulations/117108.html>



Thank you!

More information on the Academic Labs Rule:

<https://www.epa.gov/hwgenerators/managing-hazardous-waste-academic-laboratories-rulemaking#main-content>

DEC Hazardous Waste Updates:

<http://www.dec.ny.gov/regulations/117108.html>

Michelle Ching, PE

Michelle.ching@dec.ny.gov

Professional Engineer 1, RCRA Compliance and Technical Support Section

Bureau of Hazardous Waste and Radiation, Division of Materials Management

(518) 402-8652

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