

Spring Facility Managers Meeting

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Agenda

- ⌘ Walk-in Cold Rooms (Environmental Rooms)
 - ⌘ Description
 - ⌘ Incident
- ⌘ Laboratory's Role & Responsibility
- ⌘ Facility Manager's Role & Responsibility
- ⌘ EH&S - Where Do We Go From Here?



- Designed to control temperature and humidity
- Typically, they have a *CLOSED* circulation system, which means **NO** ventilation!
- The only source of fresh air is when the door is opened and closed
- Not for use with hazardous substances, volatile flammable solvents, volatile acids, asphyxiants, open flames, food or beverage for human consumption

Some Facts About UW Walk-In Cold Rooms

- ⌘ UW-Madison has about 420 walk-in cold rooms
- ⌘ About 300 walk-in cold rooms are research/lab
- ⌘ These spread across over 60 buildings. Some buildings, like Horticulture will only have one walk-in cold room. Others, like Microbial Sciences may have up to 24 rooms.
- ⌘ Walk-in cold rooms can range in size from 20 to 900 sq. ft.

Discovery of Potentially Hazardous Legacy Waste

- ⌘ In April, EH&S was notified of potentially hazardous materials in a walk-in cold room
- ⌘ As Chemical Safety was cleaning up they discovered some of the materials dated back to the 1970s and included chemicals and biologicals
 - ⌘ Two rusted metal canisters with biohazard emblems
 - ⌘ Hundreds of vials and bottles some with potential biohazard consequences
 - ⌘ Multiple liquid nitrogen dewars that contained old vials

Potentially Hazardous Legacy Waste

- ✎ Clearly the space had not been use for multiple years
- ✎ Discovered some highly reactive chemicals
 - ✎ N-butyllithium - DOT 4.2 Pyrophoric
 - ✎ o Ethyl chloroformate & chloroacetonitrile - DOT 6.1
Poison Inhalation Hazard
 - ✎ o Diethyl azodicarboxylate (DEAD) - special
exemption required for shipping
- ✎ Identified multiple containers and vials with poor or no labels
- ✎ Some containers/vials indicated potentially biological/infectious substances

Initial Impressions



Hazardous Infectious Substances



Safety Overview

- ⌘ Walk-in cold rooms can present potentially hazardous situations to researchers and building occupants
- ⌘ They are not designed for long-term storage of chemical or biological materials, especially hazardous materials
- ⌘ They should never be used for storage of cryogenic liquids (liquid nitrogen), compressed gas cylinders or dry ice ---- WHY?
- ⌘ Entryways should be signed with a Laboratory Emergency Information (yellow) card

Laboratory Role & Responsibility

- ⌘ Laboratory personnel should be aware of the risks and dangers of walk-in cold rooms
- ⌘ Laboratory staff should conduct annual inspections of walk-in cold rooms

Facility Manager's Role & Responsibility

- ⌘ Track complaints or problems with walk-in cold rooms
- ⌘ Submit work orders for any repairs that may be needed
- ⌘ Call EH&S if you have questions or need assistance

What is EH&S Going to Do in the Future?

Facility Number	Facility Name	Floor	Room Number	Use - <i>Subuse</i>	Room Area	UDDS
205	Biochemistry Labs	01	123A	Rsh Lab Svc - Cold Room	194.5	A073000
94	Biomedical Sci Labs	B1	B11	Rsh Lab Svc - Cold Room	59.72	A870500
45	Biotron Lab	01	123	Rsh Lab Svc - Cold Room	95.58	A870500
54	Birge Hall	04	439	Rsh Lab Svc - Cold Room	117.7	A489700
47	Chemistry Bldg	08	8369B	Rsh Lab Svc - Cold Room	59.86	A481500
1400	Clinical Science Center	08	K4-873	Rsh Lab Svc - Cold Room	130.4	A535700 (50%) A536300 (50%)

Information curtesy of our Space Management Office

In the near future, EH&S will be conducting inspections of all walk-in cold rooms related to research. Our team will consist of biological and chemical safety staff. Reports will be compiled and distributed to researchers, departments, and facility managers.