



# Hazardous Materials and Waste Management Training 1/25/08

VAMHCS SAFETY  
DEPARTMENT



# OVERVIEW

- New Chemical Storage Guidelines:
  - Acids, Bases, flammables, corrosives, poisons.
- Spill Procedures
- Hazardous Waste Protocol
- Additional Policy changes
  - Picric Acid
- Chemical Purchasing



# Chemical Storage

- When in doubt refer to the “VA Baltimore Research Service – Chemical Storage Guidelines” and the MSDS for each chemical.
- Label all containers in English with chemical name, date received, and, if possible, hazards associated.
- Chemicals should not be stored on the floor or in breakable containers. If chemicals are stored in breakable containers secondary containment is required.



# Chemical Storage

- Do not store chemicals in fume hoods, this prevents proper ventilation.
- Chemicals being stored in research common rooms (3C111, 3C127, 3C121, coldrooms: 3C103, 3C104), which do not have designated room numbers on them will be discarded as waste on **March 1, 2008**



# Incompatible Storage

- The following material **MUST ALWAYS BE STORED SEPERATELY**:
  - Flammables/Combustible (ignitable)
    - Acetic Acid, Formic Acid
  - Corrosives (Acids/bases)
  - Oxidizers
  - Poisons/Toxics
- **Oxidizing Acids:** Store separate from each other and all other chemicals including other acids



# Peroxide Forming Chemicals

- Do not purchase large quantities
- **Label every container with date received and date opened.**
- Consult Table 3 of the Chemical Storage Guidelines policy for storage times.
  - 3 Months
  - 1 Year



# Spill Procedures

- Spill kits are located in 3C101 & 3C111 and are specific for acids, caustics, and solvents.
- Each lab should have access to a universal spill absorbent.





# Class I: < 5 Gallons

- Contain & Stop spill
  - Prevent ignition or reaction with other chemicals
  - Use Universal Absorbent or chemical specific absorbent
  - Do not allow chemicals to go down the drain
- Contact Safety Department
  - Alan East, ext. 4014
  - Emmanuel Mbong, ext. 4548
- Take steps to recover spilled product
  - Discard of recovered product as Hazardous waste through the Safety Department
  - Do not discard as RMW or Solid Waste



# Class II: > 5 Gallons

- Remove any injured staff
- Contact the Safety Department immediately
  - Do not contact the Baltimore Fire Department
- If possible remove any sources of ignition or reaction.
- If possible prevent spill from spreading into drains.



# Hazardous Waste Procedures



- Label all chemical waste containers with:
  - Chemical Name
  - “WASTE”
  - Date in which accumulation began
- **DO NOT:** Label containers with “**Hazardous Waste**”
  - This disputes our VAMHCS Policy and EPA regulations.
  - The Safety Dept. will determine if a chemical is hazardous.
- **DO:** Contact the Safety Dept. when you want to discard of a waste chemical so that we can determine the proper method.

## DO NOT

- Label Chemical Waste as “Hazardous Waste”

- Discard Chemical Waste in the following ways:

- Down the Drain
- As RMW
- As Solid Waste

- Mix unlike chemicals during storage

- Collect more than 55 Gallons of Waste before disposing of it.

## DO

- Label chemical Waste with
  - Chemical Name
  - “Waste”
  - Accumulation Start Date

- Contact the Safety Department when you have chemicals to dispose of.

- Clean out your un-used chemicals often.

- Provide secondary containment for you chemical waste.



# Picric Acid

- Dangerous, shock sensitive, explosive.
- New Policy in affect
  - All purchases must be approved by Chemical Hygiene Officer (Grazyna Zaidel)
  - Should be ordered in small usable quantities.
  - If possible order a less dangerous chemical
  - If ordered, must be inspected monthly for dry crystals.
  - If crystals are found notify the Safety Department.
- For disposal of Picric Acid Notify the safety department.



# Chemical Purchasing

- When purchasing new chemicals keep the MSDS.
  - Send a copy of the MSDS to the Safety Department
- Order less hazardous & environmental friendly chemicals.
- Order chemicals in smaller quantities to avoid excess storage.
- **You must notify the Chemical Hygiene Officer, Grazyna Zaidel when you bring over chemicals from University of MD.**



# Eye Wash Monitoring

- The operation of the eye wash unit will be checked by the user weekly.
- The eyewash will be engaged for 30 seconds. (Replace protective covers)
- The water turbidity and flow rate will be observed. (Water should be clear and flowing at a rate that the two water streams converge)
- Findings will be recorded on the Eye Wash Log.

Example:

Date   Initials   Turbidity:   Flow rate:   Corrective Action   Work Order  
Clear=OK   Converge=OK



# Contact Information

- Safety Department:

**Alan East**

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- Chemical Hygiene Officer:

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