

# **Building Managers Training Occupational Medicine /Environmental Health**

David L. Thaxton, CIH

AD60/Integrated Customer Support Dept.

Occupational Medicine & Environmental  
Health Services

# Environmental Health Overview



- Asbestos
- Hazard Communication (HAZCOM)
- Hearing Conservation
- Confined Spaces
- Respiratory Protection
- Radiation/Laser Safety

# Regulations

- 29 CFR 1910, Occupational Safety and Health Standards for General Industry
- 10 CFR 20, Nuclear Regulatory Commission
- ANSI Standards Z136



# Asbestos

- Asbestos may exist in spray applied insulation, floor tiles, pipe lagging, acoustical tiles and exterior siding
- No one should raise the ceiling tiles or go above the ceiling unless appropriately trained or approved by OMEHS
  - All work to be performed above the ceiling will be done after hours unless approved by OMEHS
- Any suspect debris should be reported to OMEHS



# Chemical Usage

- **Employees trained in Hazard Communication**
- **Appropriate personal protective equipment (PPE) available**
- **Employees trained on correct use of PPE**
- **Ensure containers are properly labeled**
- **Chemicals should be stored in appropriate cabinets/areas**
- **Segregate chemicals according to compatibility**
- **Limit quantities**
- **Dispose of out-dated chemicals**
- **Proper chemical disposal—contact Environmental Engineering Department**



# Container Labeling

- Label all containers
- Labeling consists of: name (as it appears on the MSDS) & appropriate hazard warnings
- Replace torn or damaged labels
- Label containers that have had chemicals transferred into them







ALCOHOL



CAUTION

ALCOHOL

ALCOHOL

ALCOHOL



CHEMICAL NAME \_\_\_\_\_

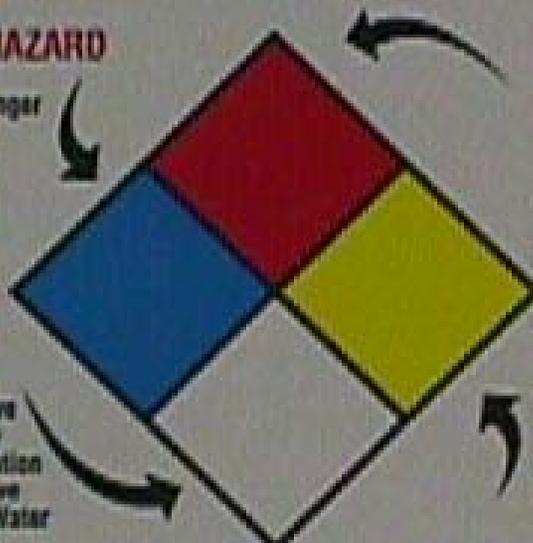
Chemical Manufacturer's / Importer Name \_\_\_\_\_

### HEALTH HAZARD

- 4 Deadly
- 3 Extreme danger
- 2 Hazardous
- 1 Slightly hazardous
- 0 Normal

### SPECIFIC HAZARD

- ACID Acid
- ALK Alkali
- COR Corrosive
- OXY Oxidizer
- P Polymerization
- R Radioactive
- W Use No Water



### FIRE HAZARD

- Flash Points
- 4 Below 73° F
  - 3 Below 100° F
  - 2 Above 100° F, not exceeding 200° F
  - 1 Above 200° F
  - 0 Will not burn

### REACTIVITY

- 4 May detonate
- 3 Shock & heat may detonate
- 2 Violent chemical change
- 1 Unstable if heated
- 0 Stable

Address \_\_\_\_\_

Emergency Phone \_\_\_\_\_

### PERSONAL PROTECTION ✓ Mark Appropriate Items

<input type="checkbox"/> Safety Glasses	<input type="checkbox"/> Apron	<input type="checkbox"/> Respirator
<input type="checkbox"/> Face Shield	<input type="checkbox"/> Boots	<input type="checkbox"/> Self Contained Air Respirator
<input type="checkbox"/> Gloves	<input type="checkbox"/> Splash Goggles	<input type="checkbox"/> Full Protection Suit
<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER

### ROUTE OF EXPOSURE ✓ Mark Appropriate Items

<input type="checkbox"/> INHALATION	<input type="checkbox"/> INGESTION	<input type="checkbox"/> ABSORPTION THROUGH SKIN
-------------------------------------	------------------------------------	--

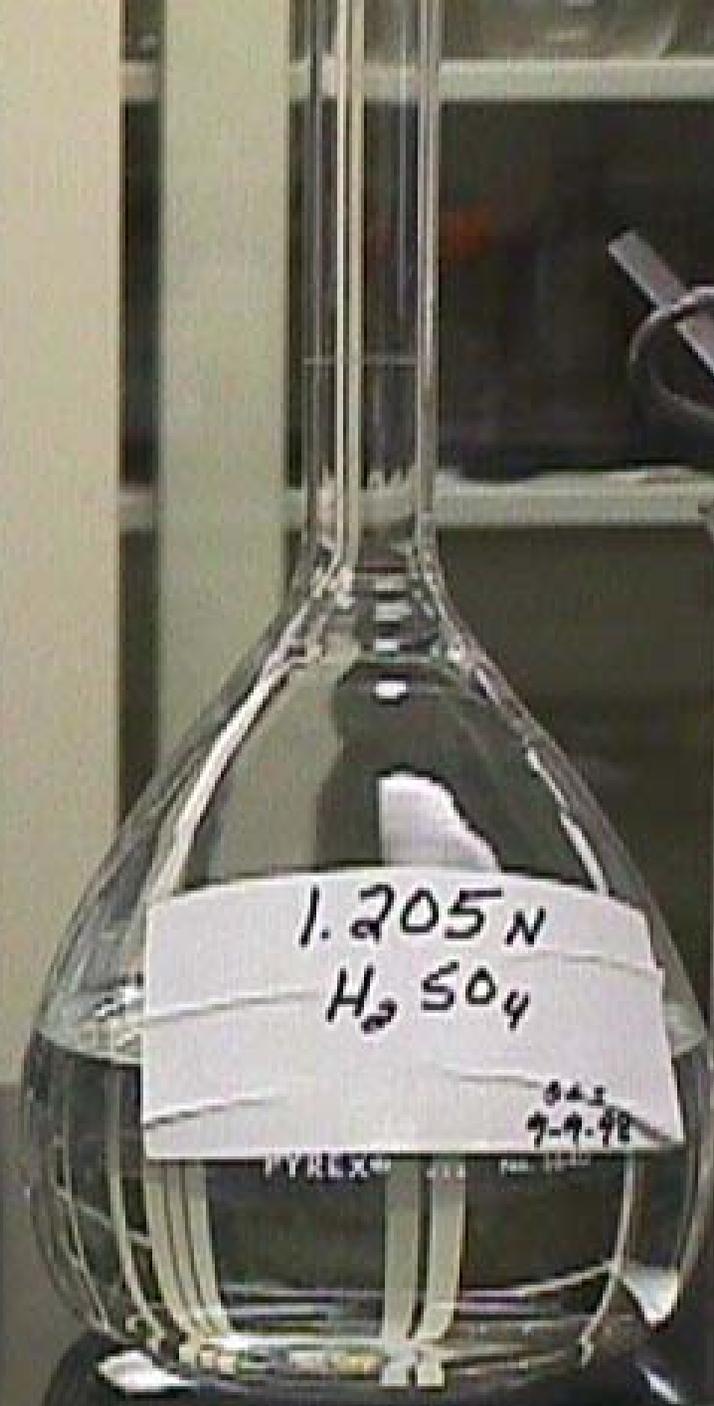
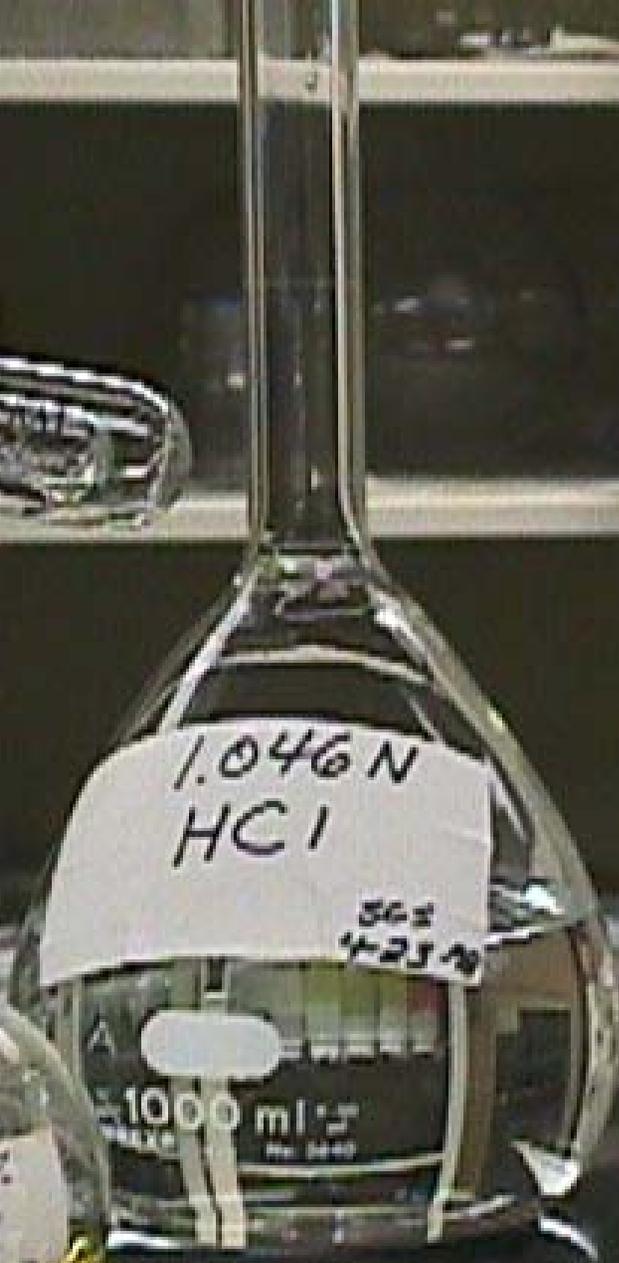
### HEALTH HAZARDS

✓ Mark Appropriate Items

<input type="checkbox"/> NO HEALTH HAZARD	<input type="checkbox"/> TOXIC	<input type="checkbox"/> CORROSIVE	<input type="checkbox"/> HIGHLY TOXIC
<input type="checkbox"/> CARCINOGEN	<input type="checkbox"/> IRRITANT	<input type="checkbox"/> SENSITIZER	

### TARGET ORGANS ✓ Mark Appropriate Items

<input type="checkbox"/> SKIN	<input type="checkbox"/> LUNGS	<input type="checkbox"/> CARDIOVASCULAR SYSTEM
<input type="checkbox"/> EYES	<input type="checkbox"/> KIDNEYS	<input type="checkbox"/> CENTRAL NERVOUS SYSTEM
<input type="checkbox"/> BLOOD	<input type="checkbox"/> LIVER	<input type="checkbox"/> AUTONOMIC NERVOUS SYSTEM
<input type="checkbox"/> HEART	<input type="checkbox"/> RESPIRATORY SYSTEM	<input type="checkbox"/> REPRODUCTIVE SYSTEM





# Material Safety Data Sheets (MSDS)



- Readily accessible for each chemical used within the work area
- User responsible for submitting copy of MSDS to OMEHS following acquisition
- OMEHS maintains Master file
- Access through intranet--
  - [http://eemo.msfc.nasa.gov/environmental/haz\\_mat/msds\\_search.htm](http://eemo.msfc.nasa.gov/environmental/haz_mat/msds_search.htm)

# Posted Noise Areas

- Areas with routine noise levels of 85 dBA or greater will be posted
- Notify OMEHS for Monitoring/Survey



# Hearing Protection

- Required when noise levels are 80 dBA TWA or greater
- Provided to the employees as needed
- Available through MSFC Supply Store or OMEHS (limited supply)







# Confined Space

- A space large enough that an employee can enter and perform work, not designed for continuous occupancy and has limited or restricted means for entry or egress
- Contact OMEHS for evaluation

# Confined Space Entry Requirements



- Prior to entry, a confined space entry procedure and permit must be approved by OMEHS and Safety & Mission Assurance Offices
- All confined spaces must be posted
- Prior to entry, all personnel entering must have a current physical examination

**DANGER**

**CONFINED  
SPACE**

**ENTER BY PERMIT ONLY**

# Respiratory Protection



- Required when employees may be exposed to harmful dusts, mists, fumes, gases, smoke, sprays, etc., which cannot be eliminated by adequate engineering controls, substitution of materials, or other means.
- Evaluations performed by OMEHS

# Radiation/Laser Safety



- Assure areas where radiation or laser producing sources are located are adequately posted and operate under approved SOPs
- Assure interlocks are installed on appropriate entrances and/or equipment to prevent inadvertent exposures
- Assure radiation or laser producing devices have been registered with OMEHS

# RADIATION

X-RAY



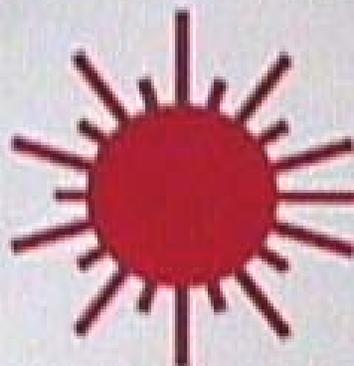
X-RAY

AMBER FLASHING LIGHT-STANDBY MODE  
RED FLASHING LIGHT-IN USE



# DANGER

LASER RADIATION—  
AVOID EYE OR SKIN EXPOSURE  
TO DIRECT OR SCATTERED  
RADIATION



---

EYE PROTECTION REQUIRED

COMMAND SUPPLY  
256-534-7767

CLASS 4 LASER PRODUCT



# CAUTION

---



---

Command Supply, Inc.  
256-534-7787

# Blood or Other Potentially Infectious Materials (OPIM)



- Never try to clean up a blood spill or OPIM
- Secure or block off the area to prevent others from contacting it
- Call Custodial Services @ 4-7977



# Sharps Containers

- Never dispose of needles, lancets or any other form of sharps in trash receptacles
- Available to Center Employees who use needle injected medications or lancets
- Available at Medical Center
- Carry filled container to the Medical Center



RECOMMENDED FILL LINE

**Sharps-A-Gator**  
Sharps Container

Contains up to 300 Sharps, 100ml of Blood, 100ml of Urine, 100ml of Saliva, 100ml of Tissue

USE THIS BUCKET - SINGLE USE ONLY

Product Description: 400 Sharps-A-Gator  
Product Part No.: 2114002

Capitol Controls  
www.capitolcontrols.com





# Telephone Numbers

- Medical Center/Environmental Health Services  
544-2390
- Respiratory Protection Services  
544-4483/544-4484
- On-site Emergencies  
911
- Blood Spills  
544-7977/544-4000 (after hours)
- Help-Line  
544-4357