I. **FINE ARTS SAFETY**

Two basic requirements for preventing illness or injury in art making areas are 1) recognition of the potential hazards of the materials being used, and 2) protective measures that limit exposure. The aesthetic value of art sometimes blinds us to the hazards inherent in art making activities, and yet many art materials may cause acute or chronic health effects, often without any warning signs. For example, neither epoxy resins nor glues for bonding plexiglass emit strong odors, yet both may cause liver damage and both are suspected carcinogens. Therefore, to ensure safe working conditions, faculty, staff, and students working with and around art materials must be made aware of 1) the hazards associated with art materials, 2) exposure risks if safety precautions are not exercised, 3) safety practices for working with art materials, and 4) personal protective equipment to limit exposure.
A. **Training and Implementation of Safety Measures**

The **faculty member in charge of the studio or shop** is responsible for 1) training staff and students in the correct procedures for the safe handling of art making materials; 2) documenting training sessions; 3) determining the need for personal protective equipment; 4) developing and making readily available in the studio/shop site-specific procedures (procedures customized to conditions and materials being used in a given work area) that include procedures for emergency response; 5) notifying the **Departmental Safety Representative** and the **Office of Environmental Health & Safety (OEHS)** should any problems or concerns develop regarding ventilation in the area, personal protective equipment, disposal of hazardous waste, etc.; and 6) updating hazardous chemical inventories.

B. **Compliance**

**Departmental Safety Representatives** (DSR) help to ensure that the units they represent that include studio/shops involved in art making activities are in compliance with policies and procedures set forth in this manual, particularly those policies and procedures regarding hazard communication, hazardous materials safety, personal protective equipment, respiratory safety, and fire safety. (A **unit** is a department, section, center, or program or any number or configuration of these components.) DSRs also collect and submit to OEHS any training documentation, PPE assessments, chemical inventories, and other required documentation prepared by the faculty member in charge of the studio/shop.

DSRs help ensure that the necessary measures have been taken by supervisory and other unit personnel to correct problems discovered during unit inspections. If corrections are not made despite deadlines and warnings from the DSR, the DSR shall report the unit's non-compliance to the Unit Head.

If the problem remains unresolved, OEHS shall consult with the Unit Head, and if the problem is not resolved at that point, OEHS may refer the matter to the University Operations Committee for consultation.

Unit’s should note that grant proposals that require certification of compliance with environmental health and safety regulations must be sent to OEHS for verification before grants may be funded. The Director of OEHS shall *not* certify a grant if the applicant is not in compliance with policies related to any of the following topics: OSHA Hazard Communication, OSHA Laboratory Standard, Animal Handler Medical Surveillance Program, Fire Safety, Radiation Safety, Hazardous Materials and Waste, and Biosafety.

C. **Hazardous Materials**

1. Never use any hazardous material without consulting the **material safety data sheet** (MSDS) for instructions on how to properly handle, store, and dispose of the material.

2. Label all containers clearly as to contents and associated hazards. MSDSs must be kept in the work area and made accessible to all employees. Copies may also be obtained from OEHS or on the OEHS website.

3. Written site-specific procedures for working with hazardous art materials and for performing dangerous processes within a given work area must be developed by the faculty member in charge of the studio/shop, reviewed with staff and students participating in art making
activities, and be easily and prominently accessible in the work area. The site-specific procedures must include procedures for emergency response.

4. Do not dispose of a hazardous material by pouring the material into a sink or drain, or by placing it in regular solid waste containers. OEHS should be contacted for hazardous waste disposal and for any questions regarding procedures for handling hazardous waste materials.

5. Do not eat, drink, smoke, or apply cosmetics in areas with hazardous materials: doing so may result in the ingestion or inhalation of toxic materials. Furthermore, smoking can multiply the harmful effects of such materials on the lungs and, in some cases, convert the material into something more hazardous. **REMEMBER:** Tulane has a campus wide “no smoking” policy that prohibits smoking in all but designated areas. *(See, Section 26, Fire Safety, of this manual for University policy on smoking.)*

6. Keep all solvent containers closed and store solvent drenched rags and towels properly to reduce exposure and contamination.

7. Special precautions must be taken when handling the following highly toxic art materials: arsenic oxide, asbestos, benzene (benzol), benzidine dyes, carbon tetrachloride, chloroform, trichloroethylene, chromate pigment powder, phenol (carbolic acid), tetrachloroethane, and uranium oxide. Consult MSDSs and OEHS for more information on handling these and other highly toxic materials. *(See, Section 12, Hazard Communication, and Section 29, Hazardous Materials Safety, of this manual.)*

**D. Personal Protective Equipment**

1. An assessment of the work area must be conducted by the faculty member in charge of the studio/shop to determine the need for **personal protective equipment** (PPE). If it is determined that respiratory protection is required, personnel must receive a medical evaluation, be fit-tested, and trained in the use of the respirator. Proper work practices and engineering controls must also be implemented.

2. Appropriate clothing such as long-sleeved shirts, long pants, or protective smocks, boots, enclosed shoes, and gloves must be worn to protect the body from flying particles, chemical splashes, dust and radiation. Separation of work clothing from regular clothing is preferred.

3. Hearing protection (ear plugs or muffs) may be needed when working with equipment that produces high noise levels. Contact OEHS for an area evaluation.

4. Emergency showers and eyewash stations must be provided where injurious and corrosive materials are used. These units must be accessible, kept operable, and inspected regularly. **Facilities Services** shall inspect safety showers at least annually. Units shall inspect eye wash stations weekly. Inspections shall be conducted on a routine basis and documented. *(See, Section 14, Personal Protective Equipment, and Section 15, Respiratory Protection, of this manual.)*
E. Ventilation

1. Many art materials are labeled with a "use with adequate ventilation" warning. Opening a door or window is insufficient. In order to reduce air contaminants and prevent their spread to adjacent areas, the use of certain common art materials may need to be restricted. Spray paints, spray glues, spray fixatives, contact cements and rubber cements must not be used indoors unless approved local exhaust systems are available.

2. In areas such as printmaking, metal-smithing, and sandblasting, the faculty member in charge of the studio/shop must ensure that efficient local ventilation is maintained through proper maintenance and cleaning.

3. The faculty member in charge of the studio/shop and/or the DSR must contact OEHS to assist in the evaluation of ventilation problems or concerns.

F. Housekeeping

1. Follow instructions on the manufacturer's label in using cleaning materials.

2. In areas where accumulation of hazardous dust is possible, such as the ceramics-clay mixing room, sculpture's investment making area, and stained glass cleaning room, special consideration must be made for cleaning furniture and lighting fixtures. Wet cleaning methods or vacuum cleaning using specialized HEPA equipment may be required. Consult OEHS for assistance.

3. Practice good housekeeping: properly dispose of rags used to absorb chemicals, seal containers, properly store hazardous materials, make certain exits are not blocked, etc.

G. Fire Protection

1. Every shop or studio that stores or uses flammable or combustible materials must have an available fire extinguisher suited to the material used in the area:

   Class A  -  Fires involving wood, paper, textiles.
   Class B  -  Fires involving flammable and combustible liquids.
   Class C  -  Fires involving energized electrical equipment.
   Class D  -  Fires involving combustible metals (to be provided only if such materials are used in these areas. Class D extinguishers are metal specific.)

2. Smoking is not permitted in any area containing flammable or combustible liquids. Signage such as "No Smoking," "Open Flame," or "Spark Producing Electrical Equipment," shall be posted in areas containing flammable or combustible materials.

3. Towels or rags used with flammable or combustible solvents/paints must be placed in approved waste containers with self-closing lids and removed from the building daily.

4. Large quantities (55 gal) of waste solvents, such as turpentine or other paint thinners, shall not be purchased and/or used without the approval of OEHS. Contact OEHS for instructions on proper disposal of large quantities of waste solvents.
5. Flammable and combustible solvents and waste must be stored away from heat or ignition sources and from exits. Store quantities in excess of 10 gallons in safety cans or in "flammable liquid" storage cabinets.

6. Flammable or combustible liquid spills must be contained and cleaned immediately. For large spills, contact OEHS for assistance. (See Section 29, Hazardous Materials Safety, and Section 26, Fire Safety, of this manual.)

H. Studio Close-Out

Fine arts studios that are closing for relocation or remodeling should use the same close-out notification form and follow the same procedures as in Section 30, Laboratory Safety, IV, Laboratory Close-Out, of this manual.

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