# **MOSAIC TEMPLARS CULTURAL CENTER**

# **Safety Manual**

## **Table of Contents**

- I. Introduction
  - A. General
  - B. Purpose
  - C. Objectives
  - D. Policy
- II. Training
  - A. Policy
  - B. Responsibilities
- III. Protective Clothing and Equipment
  - A. Policy
  - B. Maintenance
  - C. General Use Requirements
- IV. Eye and Vision Protection Program
  - A. Purpose
  - B. Program Objectives
  - C. Identifying Eye Hazards
- V. Fire Prevention Program
  - A. General
  - B. Purpose
  - C. Policy
  - D. Program Components

### Last Updated: September 7, 2011

### MTCC Safety Manual Version 1.2

- E. Standards and Procedures
- F. Design of Fire Protection Systems
- G. Automated Sprinkler System
- H. Automatic Fire Alarm
- I. Transmission of Alarms
- J. Standpipe
- K. Portable Fire Extinguishers
- L. Building and Facilities
- M. Fire Evacuation Plans and Drills
- N. Housekeeping
- O. Smoking
- P. Electrical Facilities
- Q. Electrical Appliances
- R. Handling of Flammables
- S. Fire Incidents

### I. INTRODUCTION

#### A. General

- A safe and healthy environment for Mosaic Templars Cultural Center (MTCC)
  operations requires every employee's cooperation and a structured program to
  ensure that modern safety, fire prevention, and industrial hygiene practices are
  being utilized.
- 2. This handbook provides a basic source of information to assist personnel in carrying out their responsibilities for implementing an aggressive and disciplined safety program including fire prevention.
- B. **Purpose:** This handbook establishes policies, assigns responsibilities, and provides guidelines to assist in:
  - 1. Instituting effective, comprehensive, and continuing safety, occupational health, and fire protection programs.
  - 2. Maintaining safe conditions for MTCC personnel, contractors, and visitors.
  - 3. Developing and maintaining a system to collect, compile, and analyze safety, health, and fire loss statistics.
  - 4. Protecting property and collections from fire and explosions.

### C. Objectives

- 1. The first priority is the safety and the well being of MTCC visitors and staff.
- 2. The second priority is the protection and the preservation of artifacts and other property.
- D. **Policy:** The MTCC safety programs will:
  - 1. Provide a safe environment for employees and volunteers, the visiting public.
  - 2. Protect collections and prevent property damage from fire, explosions, and accidents.
  - 3. Give employees an active role in planning and implementing safety activities.
  - Ensure inspections of workplaces and operations by qualified personnel with the technical competence to recognize unsafe conditions.
  - Resolve all unsafe working conditions, including those involving operations, facilities, or equipment.
  - 6. Assure that attention will be given to employee reports of unsafe working

MTCC Safety Manual Version 1.2 Last Updated: September 7, 2011 conditions.

- 7. Require the acquisition, maintenance, and use of safety equipment, maintenance, personal protective clothing, and devices necessary to protect employees and the public.
- 8. Provide adequate safety and fire prevention training for all activities.
- 9. Coordinate accident and loss prevention activities of staff at all program levels.
- 10. Ensure that safety and fire protection engineering are fundamental elements in the design and engineering of facilities.

### II. TRAINING

- A. **Policy:** It is the policy of the MTCC that appropriate job related safety and health training be provided to all employees at all levels, and continuing training be provided for safety and health officials, and that personnel be trained so that they can organize, plan, and implement an effective program in their facilities.
- B. **Responsibilities:** The primary responsibility for providing safety and health training to employees rests with the supervisor. Training provided by the supervisor includes:
  - 1. Initial indoctrination and introduction to the work site and to any hazards or potential hazards related to the job that the employee is hired to perform. Initial indoctrination will include:
    - a) An outline of the current safety program of the work unit.
    - b) A review of safety rules, regulations, and work practices which comprise the standard and emergency operating procedures of the unit.
    - c) An explanation or demonstration of the specific hazards likely to be encountered on the job.
    - d) Employee responsibility for reporting safety and health hazards.
    - e) Specific training will include how to use and care for protective clothing and equipment.
  - 2. Specific training required to ensure that the employee performs the work with the least possible threat to the safety and health of the employee and coworkers and general public.

## C. Emergency Coordinators are responsible for:

- 1. Assisting supervisors in fulfilling their training responsibilities.
- 2. Reviewing (on a regular basis) safety training activities in their facilities.
- 3. Coordinating safety and health training programs.
- 4. Developing or recommending specific training courses designed to instruct personnel in the identification and control of occupational illnesses and injuries.
- 5. Disseminating information on available training resources.
- 6. Auditing the effectiveness of safety and health training program implementation.

## **III. PROTECTIVE CLOTHING AND EQUIPMENT**

- A. **Policy:** It is the policy of the MTCC that the use of protective equipment and/or clothing will be required when safety or health hazards exist, which cannot be removed from the work environment.
- B. **Maintenance**: Protective clothing and equipment will be maintained as specified by the manufacturer and MTCC standards. In addition supervisors will train employees in preventive maintenance techniques.
- C. General U.S. Requirements for Protective Clothing & Equipment: The following are general use guidelines regarding protective clothing and equipment. Whenever such clothing or equipment is used, it must be properly fitted by competent persons and must be properly maintained.
  - 1. **Respiratory protective devices** are required when:
    - a) The atmosphere is immediately dangerous to life or health due to oxygen deficiency or contamination by irrespirable or poisonous substances.
    - b) The atmosphere, although not immediately dangerous to life or health, could produce discomfort or injury after a prolonged single exposure or several shorter exposures.
    - c) Special conditions exist when working in crawl spaces or with high solvent chemicals such as lacquer thinner. These conditions require the use of a special air filter mask.
    - d) Atmospheric conditions that are dusty or cause coughing and/or sneezing require the use of a white particle mask.
  - 2. **Ear protectors**, such as ear plugs or earmuffs, will be worn when noise levels approach or exceed limits set by OSHA. These conditions may exist when working around loud machinery such as the weed eater or backpack blower.
    - a) Protective eyewear, such as goggles and safety glasses, will be worn to provide protection from flying particles, chemical fumes and dust particles.
       This eyewear must always be worn by life or health due to oxygen deficiency or contamination by irrespirable or poisonous substances.
    - b) The atmosphere, although not immediately dangerous to life or health, could produce discomfort or injury after a prolonged single exposure or several

- MTCC Safety Manual Version 1.2 shorter exposures.
  - c) Special conditions exist when working in crawl spaces or with high solvent chemicals such as lacquer thinner. These conditions require the use of a special air filter mask.
  - d) Atmospheric conditions that are dusty or cause coughing and/or sneezing require the use of a white particle mask.
- 3. **Ear protectors**, such as ear plugs or earmuffs, will be worn when noise levels approach or exceed limits set by OSHA. These conditions may exist when working around loud machinery such as the weed eater or backpack blower.
- 4. Protective eyewear, such as goggles and safety glasses, will be worn to provide protection from flying particles, chemical fumes and dust particles. This eyewear must always be worn by people using the weed eater, grinding machine or any activity that may cause sparks or flying debris.
- 5. **Protective clothing** will be worn to prevent injury from excessive heat or cold and the effects of acids, alkalis, and other dangerous chemicals used in cleaning machinery or laboratory work.
- 6. **Protective hand wear** should be worn by persons subject to disabling hand injuries, especially those caused by:
  - a) Machinery and tools.
  - b) Abrasion by rough materials.
  - Metal and wood splinters and fragments.
  - d) Glass.
  - e) Excessive heat or cold.
  - f) Acids, alkalis, solvents or other toxic chemicals.
  - g) Electrical shock.
- 7. **Safety belts:** Motor vehicle safety belts will be worn by persons driving or riding in state vehicles and/or trucks in accordance with Arkansas State Law.

### IV.EYE AND VISION PROTECTION PROGRAM

- A. **Purpose:** This chapter sets forth guidelines in implementing and managing the MTCC Eye and Vision Protection Program by:
  - 1. Defining eye hazard areas.
  - 2. Establishing procedures for procuring protective eye equipment.
- B. **Program Objectives:** Implementing this program throughout the for MTCC will:
  - 1. Encourage employees to wear safety glasses and other required eye protection.
  - 2. Prevent accidents and injuries.
  - 3. Increase employee productivity.

### C. Identifying Eye Hazards

- 1. Responsibilities: Supervisors are primarily responsible for identifying eye hazards and assuring that proper eye protection is used.
- 2. Eye hazardous jobs: As a general rule, supervisors will designate the following types of work as eye hazardous and will require employees to wear safety glasses while performing these tasks.
  - a) Chemical Laboratory: Work with explosive, hazardous, or toxic substances or with equipment that may produce an eye impact hazard. Safety glasses also must be worn by anyone passing through a chemical laboratory area.
  - b) Shops: Work performed by staff using saws, drills, and bench grinders.
  - c) Grounds work: Work performed on the grounds using the weed eater.

### V. FIRE PREVENTION PROGRAM

- A. General: Fire protection includes all measures relating to preventing, detecting, controlling, and extinguishing fires to prevent loss of life and to minimize injury to personnel and damage to property. Fires may be prevented or damage can be minimized by:
  - 1. Detecting, identifying, and eliminating hazardous procedures, operations, and conditions.
  - 2. Guarding against or controlling fire hazards which cannot be eliminated.
  - 3. Establishing safe practices consistent with operations.
  - 4. Motivating, training and educating all personnel in fire safety principles.
- B. **Purpose:** This chapter sets forth policy and guidelines and establishes the responsibility of officials in implementing an aggressive and disciplined fire protection program.
- C. **Policy:** The MTCC fire prevention, safety, and protection program will conform to the following principles:
  - Programs with sound engineering and economic principles will be formulated to improve fire protection measures and afford increased protection to life, material, equipment, and facilities.
  - 2. Maintenance and inspections of buildings, facilities, fire, protection equipment, and systems will be performed by trained and properly qualified personnel.
  - 3. Design and/or modifications of buildings, equipment, exhibits, and facilities will incorporate modern fire protection engineering practices.
- D. **Program Components:** The MTCC Fire Protection Program will include:
  - 1. Providing adequate fire fighting systems.
  - 2. Training all personnel in fire prevention practices.
  - 3. Incorporating adequate fire safety design features in exhibits and construction projects.
  - 4. Furnishing essential fire protection services including fire prevention inspections of all buildings, structures, and activities.
  - 5. Ensuring adequate maintenance of fire protection equipment and systems.

- 6. Detecting and correcting fire hazards to eliminate or minimize personnel and property losses.
- 7. Initiating prompt action to prevent loss of life and property in the event of fire.
- 8. Reviewing, analyzing, and investigating all fires to determine the cause and appropriate corrective action.

### E. Standards and Procedures:

- The MTCC fire protection criteria will conform to the requirements contained in the current National Fire Codes, Volumes 1 to 8, published by the National Fire Protection Association (NFPA). Except as otherwise noted, the requirements will provide the basic level of protection.
- The Building Manager (Kenneth Brown) is responsible for directing and implementing all fire prevention and protection functions and should be consulted on all fire protection matters. He/she will provide technical supervision and assistance in all matters concerning fire prevention, fire safety, and fire protection activities.
- 3. Any fires or fire related incidents such as a burning odor or signs of burned wiring will be reported to the Building Manager (Kenneth Brown) as soon as possible after the occurrence so that a determination may be made about whether further investigation is necessary.

### F. Design of Fire Protection Systems:

- 1. The design of fire protection systems will conform to the current applicable requirements of the NFPA National Fire Codes, Volumes 1 to 8.
- 2. Fire protection systems will include:
  - a) Automatic sprinkler systems
  - b) Automatic fire alarm systems
  - c) Portable fire extinguishers
  - d) Standpipes
- G. **Automatic Sprinkler Systems:** Sprinkler systems automatically detect and extinguish fires. The automatic sprinkler system is installed in MTCC ensure maximum safety to personnel and to reduce the potential fire loss to property including artifacts and specimens. The system will receive a complete inspection

MTCC Safety Manual Version 1.2 Last Updated: September 7, 2011 and trip test according to state regulation by a licensed automatic sprinkler service company.

Η.

- a) life or health due to oxygen deficiency or contamination by irrespirable or poisonous substances.
- b) The atmosphere, although not immediately dangerous to life or health, could produce discomfort or injury after a prolonged single exposure or several shorter exposures.
- c) Special conditions exist when working in crawl spaces or with high solvent chemicals such as lacquer thinner. These conditions require the use of a special air filter mask.
- d) Atmospheric conditions that are dusty or cause coughing and/or sneezing require the use of a white particle mask.
- 2. **Ear protectors**, such as ear plugs or earmuffs, will be worn when noise levels approach or exceed limits set by OSHA. These conditions may exist when working around loud machinery such as the weed eater or backpack blower.

**Protective eyewear**, such as goggles and safety glasses, will be worn to provide protection from flying particles, chemical fumes and dust particles. This eyewear must always be worn by

- I. Automatic Fire Alarm Systems: Automatic smoke/fire detection and alarm systems are installed in the buildings to provide early detection of fires 24 hours each day. MTCC building is monitored through smoke and heat detectors. The fire alarm system operates both an audible alarm and visible strobe light. The building has battery powered emergency lighting.
- J. Transmission of Alarms: The automatic sprinkler system and automatic alarm system are equipped to transmit alarms to a central contract monitoring service who then transmits this information to the central fire station. The system is tested daily by security personnel from the central monitoring service to insure proper equipment operation.
- K. **Standpipes:** Standpipes with 2 ½" hose outlets (without hose) are provided for use by the fire department.
- L. **Portable Fire Extinguishers:** The installation and maintenance of portable fire extinguishers will meet the following requirements:
  - 1. Fire extinguishers will be installed, maintained, and hydrostatically tested as specified in the NFPA Standard No. 10, Portable Fire Extinguisher.
  - 2. When recharging an extinguisher, the instructions listed on the extinguisher name plate will be used.
  - 3. Extinguishers are visually inspected by security staff (or other assigned personnel) each month.
  - 4. Extinguishers will receive an annual inspection from a licensed inspection service to ensure proper operation of equipment.
  - 5. Use of carbon tetrachloride and chlorobromethane extinguishing agents are prohibited due to toxic vapors. (NOTE: These agents are extremely dangerous when used indoors or when subjected to high temperature.)

### M. Buildings & Facilities

- 1. It is the responsibility of the Building Manager (Kenneth Brown) to:
  - a) Make fire prevention an integral part of a regular quarterly inspection program.
  - b) Ensure that buildings and facilities under jurisdiction are secure from fire

- Last Updated: September 7, 2011
- c) Ensure that emergency/self-protection plans include fire drill and evacuation requirements.
- d) Ensure that unannounced fire drills are conducted at least semi-annually.
- e) Post a conspicuous warning sign at elevator to read: "Notice: This elevator will not be used during emergencies. Use a marked exit stairway."
- f) Mark all hazardous areas with appropriate signs, such as: "Danger," "Flammable Liquids," etc.
- g) Ensure that trash is not permitted to accumulate and overflow.
- h) Issue written authorizations approving the use of appliances.
- i) Ensure appropriate corrective action is taken to eliminate fire hazards.
- 2. It is the responsibility of MTCC employees to:
  - a) Keep trash accumulation to a minimum.
  - b) Keep hallways, stairways, fire lanes, and access aisles clear of all storage or obstacles.
  - c) Maintain clear access to fire equipment.
  - d) Place oily rags or similar materials in approved metal containers with tight fitting metal covers provided for that purpose.
  - e) Immediately notify the supervisor or Building Manager (Kenneth Brown) of any apparent fire hazard.
- 3. Guards will:
  - a) Make daily tours to observe fire and safety hazards.
  - b) Notify offenders and other guards of all violations with the appropriate forms.

### N. Fire Evacuation Plans and Drills:

- 1. Unannounced evacuation drills will be conducted semi-annually.
- 2. Evacuation plans and procedures for evacuation drills will be included in the emergency/self-protection plan.
- O. **Housekeeping:** Good housekeeping is a basic factor toward maintaining an adequate fire prevention program. Disposing, limiting or segregating combustibles helps to reduce the danger of fire. Combustibles should be treated in the following manner:
  - 1. Combustible wastes will be collected periodically and disposed of on each

- MTCC Safety Manual Version 1.2 Last Updated: September 7, 2011 working day or more often when necessary.
- 2. Rags and waste materials contaminated with oil (especially animal or vegetable oils), paints, thinner, furniture polish and other liquids that may cause spontaneous heating will be kept in covered metal containers when not in use.
- 3. Stacks, exhausts and filters will be cleaned as necessary.
- 4. Storing combustibles under stairways or in hallways is prohibited.
- 5. Contaminated rags will be isolated from other combustibles during storage until properly washed.
- Combustible packing material will be stored in noncombustible containers with hinged self-closing covers.
- P. **Smoking:** Smoking is **not permitted** in any Arkansas State buildings.
- Q. **Electrical Facilities:** All electrical facilities must meet the requirements of the National Electric Code, NFPA Standard 70, except as otherwise noted:
  - 1. Installation, replacement or alteration of all electrical wiring will be done only by qualified personnel.
  - 2. When faulty electrical wiring (e.g., short circuit, overheating, insulation failure, and exposed conductors) is detected, the current will be turned off until the fault has been corrected by authorized maintenance personnel.
  - 3. Automatic circuit breakers will not be taped, fastened, or altered to prevent automatic disconnection of electrical power.
  - 4. Electrical fuses will not be bypassed or replaced with hazardous substitutes or with fuses having a higher amperage capacity rating.
  - 5. Telephone wires will not be used for lighting or power circuits.
  - 6. Electrical wiring will be fastened securely to walls or ceilings by approved methods.
  - 7. Flammable material will be insulated or kept at a safe distance from electric bulbs to avoid ignition by heat and radiation.
  - 8. Fluorescent light fixtures having exposed ballasts or transformers will not be installed in contact with combustible material unless the fixtures are specifically designed for such installation.
  - 9. Electrical wiring and fixtures will be of an approved explosion-proof, or dustproof type (as required by regulations of the National Electric Code, NFPA

MTCC Safety Manual Version 1.2 Last Updated: September 7, 2011 Standard No. 70) if installed or used in places where dangerous concentrations of explosive vapors, gasses or dust may be present.

- R. **Electrical Appliances:** The following requirements regarding the use of electrical appliances will apply:
  - Hot plates, coffee pots, electric heaters and similar equipment will be permitted only when authorized by the Building Manager. *Note:* Requests for permission to use electrical appliances must be submitted in writing to the Building Manager (Kenneth Brown) in the form of a work order.
  - 2. Proposed locations for electrical appliances must be inspected to determine the adequacy of electric circuits and evaluate the fire hazard involved before written authorization is given.
  - 3. Electrical appliances must be insulated and equipped with integral thermostatic controls designed to prevent overheating.
  - 4. Electrical appliances must be Underwriters Laboratory (UL) listed, insulated and separated from all combustible materials when in use or stored.
  - Electrical heaters must be installed and specifically approved by authorized personnel because of their high potential as fire hazards, high operating cost, and possible electric-load limitations in the building wiring circuits or distribution lines.
- S. **Handling of Flammables:** The storage, handling, and use of flammable liquids will be in accordance with NFPA Standard No. 30, Flammable and Combustible Liquids Code. The following restrictions apply to the use of flammable liquids:
  - 1. Flammable liquids with a flash point of less than 100 degrees Fahrenheit should be stored in identifiable red-labeled containers or in approved safety cans.
  - 2. Flammable liquids having a flash point of 100 degrees Fahrenheit or less will not be used for cleaning purposes.
  - 3. Only approved safety solvents will be used.
    - a) No. 321, Basic Classification of Flammable and Combustible Liquids.
    - b) No. 325A, Flash Point Index of Trade Name Liquids.
    - No. 325M, Fire Hazard Properties of Flammable Liquids, Gasses, Volatile Solids.
    - d) No. 327, Cleaning or Safeguarding Small Tanks and Containers.

MTCC Safety Manual Version 1.2

Last Updated: September 7, 2011

- e) No. 491M, Manual of Hazardous Chemical Reactions.
- f) No. 704, Identification of Fire Hazards of Materials.
- g) No. 801, Facilities Handling Radioactive Materials.
- h) No. 910, Protection of Library Collections.
- i) No. 911, Protection of Museum Collections.

### T. Fire Incidents

- 1. The Building Manager (Kenneth Brown) and staff will investigate all fire incidents and submit a report when deemed appropriate to the director. The report will include:
  - a) A description of the incident and its probable cause recommendations regarding the prevention of similar incidents in the future including the review or revision of programs.
  - b) The updating of the equipment for fire protection and detection systems.
  - c) The intensification of training efforts or other such recommendations.
- 2. If arson is evident or suspected, a criminal investigation will be conducted by the Arkansas State Police and State Fire Marshal.
- 3. Procedures for reporting a fire incident will comply with the provisions contained in sections 5e of this chapter.