#### ADM-16.03, "OCCUPATIONAL SAFETY AND HEALTH MANUAL"

#### Change 1 to ADM-16.03/SAFETY MANUAL: 6.25

#### CHAPTER 1 ADMINISTRATION

#### **RESPONSIBILITIES:**

**1.1** Responsibilities of the Division Director of Operations: The Division Director of Operations will have the overall responsibility for the Agency Safety Program and will be responsible for advising the Executive Staff on accident prevention, safety, and environmental issues.

**1.2 Responsibilities of the Agency Safety Program Manager:** The Agency Safety Program Manager will report to the Division Director of Operations concerning safety, fire prevention, and environmental health issues. The Agency Safety Program Manager will also provide technical assistance to the field elements and units of the Agency. The Agency Safety Program Manager will be responsible for the following:

**1.2.1** Acting as a consultant to all management areas to ensure the effectiveness of the Agency's Occupational Safety and Health Program. All questions on occupational safety, fire safety, accident prevention, accident investigation, and environmental matters which cannot be resolved at the work site level will ultimately be referred to the Agency Safety Program Manager through designated Environmental Health and Safety Officers (EHSOs) (see Section 1.3).

**1.2.2** Developing, maintaining, and distributing the SCDC Occupational Health and Safety Manual. The Manual will contain or reference standards and regulations that govern the Agency's fire safety, occupational safety, and health policies and procedures.

**1.2.3** Developing, maintaining, and distributing the SCDC Occupational Health and Safety Training Programs or courses of study and the delivery of training to EHSOs leading to their certification.

**1.2.4** Serving as the designated Safety, Health, and Environmental Official for the SCDC and serving as the "Authority Having Jurisdiction" for the SCDC as defined and used in the National Fire Protection Life Safety Code (NFPA 101). (4-ACRS-1C-08M, 4-4124)

**1.2.5** Participating in the interview/selection process for all EHSO positions. Position vacancy announcements will be coordinated through the Division of Operations. The Agency Safety Program Manager will participate in the interview and selection process.

**1.2.6** Working and coordinating with Wardens and Division Directors to manage and meet goals of Agency Safety Program.

**1.3 Responsibilities of the Environmental Health and Safety Officer (EHSO):** An EHSO will be selected for each facility and work site. In major institutions/work sites (as defined by the Division Director of Operations Safety Program Manager), the EHSO will work directly for the Warden or appropriate Division Director and will be a special staff advisor to the Warden, Division Director, or work site manager on matters relating to safety, fire prevention, and environmental health issues. These EHSOs will also provide technical assistance to collateral EHSOs (see Section 1.5) in smaller facilities /work sites who primarily perform duties other than safety functions. The EHSO will be responsible for ensuring that all new employees and new inmates are made aware of the Agency's basic safety regulations as they apply to the specific institution, and the necessity for compliance. Designated EHSOs will:

**1.3.1** have the primary function of environmental health and safety and, under normal circumstances, will not be assigned to security posts or duties other than those associated with the Safety Program;

**1.3.2** be dual-rated by the Agency Safety Program Manager and the Warden or appropriate Division Director;

**1.3.3** meet all the SCDC certification requirements within six (6) months of employment or entry into the position;

1.3.4 chair the work site's Environmental Health and Safety Committee;

**1.3.5** investigate, along with an injured employee's immediate supervisor, all allegations of work site accidents/injuries and near-misses, document findings, and make recommendations to superiors to correct deficiencies and eliminate hazards in accordance with the guidelines contained herein; (**NOTE**: If accident/injuries are reported, drug tests will be conducted as required in accordance with Policy Procedure GA-03.02, "Drugfree Workplace Program.")

**1.3.6** report immediately, in writing, to the Warden or Division Director and the Agency Safety Program Manager all hazards or unsafe acts in accordance with guidelines contained herein (if the hazard or unsafe act is severe, notification should be made by the fastest method, followed by a written report using SCDC Form 19-29A, "Incident Report");

**1.3.7** make inspections pursuant to the guidelines of this Occupational Health and Safety Manual and relevant SCDC policies and procedures;

**1.3.8** bring to the attention of the Warden/Division Director and the Agency Safety Program Manager any hazards, violations, or deficiencies;

**1.3.9** request assistance from the Agency Safety Program Manager to correct and/or prevent major or recurring hazards, violations, or deficiencies;

**1.3.10** review and provide input on facility/work site construction, remodeling, or demolition and/or any changes in procedures authorized by facility/work site personnel as they relate to occupational safety, health, fire and life safety requesting assistance from the Agency Safety Program Manager as needed;

**1.3.11** ensure that proper recording of "recordable" accidents has been achieved, as outlined in Section 1.14, and as defined by OSHA; (**NOTE:** Any accident causing loss of life or serious injury will be reported to the Warden or Division Director and the Agency Safety Program Manager immediately.) The Agency Safety Program Manager is responsible for reporting the accident to OSHA.

**1.3.12** order the immediate cessation of any operation or activity that poses an imminent threat of death or serious injury; initiate, in conjunction with the shift supervisor, the evacuation of employees and inmates until the hazard has been corrected or removed and post a notice from the EHSO giving notice of the hazard. The EHSO will immediately notify the appropriate department officials and the Agency Safety Program Manager of such an order. The EHSO will be responsible for assisting in the implementation of the Department's "Lockout/Tagout," "Confined Space Entry" procedures, and other OSHA regulations as required;

**1.3.13** ensure that all new employees and new inmates are advised of basic safety regulations and the need for compliance;

**1.3.14** investigate all fires causing loss of life, serious injury, or property damage over \$500; record and report information on each fire to the Warden/Division Director and Agency Safety Program Manager immediately;

1.3.15 ensure the fire preparedness of the facility/work site;

**1.3.16** oversee the implementation of the Agency's fire and safety procedures;

1.3.17 establish and maintain fire watches as required;

1.3.18 ensure that disaster and fire drills are conducted;

**1.3.19** assist with investigation of state vehicle accidents (including trucks, tractors, trailers, farm equipment, etc.) as needed. (Refer to SCDC Policy/Procedure OP-20.02,

"Transportation Management," for additional information on reporting/review of accidents in SCDC vehicles.);

**1.3.20** maintain OSHA Logs pursuant to directives contained herein; (Refer to Section 1.14)

**1.3.21** assist the Warden/Division Director in posting a safety notification(s) in the institution /division indicating the commitment to the SCDC safety standards; and

**1.3.22** review and update the institutional emergency plan in accordance with the SCDC Policy/Procedure OP-22.29, "Emergency Preparedness."

**1.4 Responsibilities of the Alternate EHSO:** At institutions and work sites that have full-time EHSOs, the Warden/Division Director will appoint an Alternate EHSO subject to the approval of the Agency Safety Program Manager. The Alternate EHSO will perform all required functions and responsibilities of the EHSO when the EHSO is absent due to position vacancy, vacation, sick leave, training, etc. All Alternate EHSOs will receive formal EHSO training in occupational safety and health through a course of study developed by the Agency Safety Program Manager with a goal of being certified. Additional on-the-job training will be provided through the EHSO.

**1.5 Responsibilities of Collateral EHSOs:** The Warden/Division Director of smaller institutions/work sites designated by the Agency's Division Director of Operations will appoint a Collateral EHSO (full-time correctional officer) to perform (on a smaller scale) the functions of the EHSO at large institutions. These officers will receive technical assistance from a designated EHSO in close proximity to their work sites. All vacancy announcements will be coordinated through the Division of Operations. The Agency Safety Program Manager will participate in the interview and selection process along with the respective Warden/Division Director. The Collateral EHSO will be dual-rated by the Agency Safety Program Manager and the Warden/Division Director and will be certified within six (6) months.

**1.6 Responsibilities of SCDC Supervisors:** Each first line supervisor will be responsible for training those under his/her supervision and reviewing each work project in advance to ensure that trained personnel and proper equipment are available. The supervisor will ensure that both employees and inmates know how to carry out their work safely.

**1.6.1** Each supervisor will be responsible for preventing accidents by ensuring that both employees and inmates maintain clean and orderly conditions; by maintaining equipment; by establishing work methods; by assigning jobs; by giving directions; and by ensuring the use of proper equipment.

**1.6.2** Each supervisor will investigate all accidents/injuries and near-misses that involve his /her employees on his/her assigned shift. This investigation will be conducted with the facility/work site EHSO in accordance with directives contained in Section 1.15 of this Manual.

**1.6.3** Each supervisor's record regarding safety, accident prevention, and occupational health will be given major consideration in the annual performance evaluation rating. Corrective action may be taken against any employee who fails to adhere to the requirements of the SCDC Safety Program.

**1.7 Construction Site Supervisor Responsibilities for Accident Prevention:** This section defines each Construction Site Supervisor's responsibilities for work production and accident prevention. Each Construction Site Supervisor will:

**1.7.1** be familiar with the requirements of all accident prevention standards and rules pertaining to his/her job;

**1.7.2** carry out the procedures required by accident prevention standards and safe practices at the project;

**1.7.3** ensure that each employee/inmate under his/her supervision has received an initial safety orientation before starting work;

**1.7.4** explain all applicable safe practice rules and regulations to all employees/inmates under his/her direct supervision and require adherence thereto;

**1.7.5** supervise the instruction and training of new employee(s)/inmate(s) either personally or through delegated experienced operators until the new employee(s)/inmate(s) satisfactorily demonstrate(s) the ability to perform his/her work in a safe and efficient manner;

**1.7.6** enforce safety regulations and rules;

**1.7.7** be responsible for housekeeping in his/her department and for the use and maintenance of all personal protective devices, equipment, and safeguards;

**1.7.8** notify his/her direct supervisor and the EHSO concerning work areas where the supervisor believes protective devices are required. Such safety devices will include, but not be limited to, the following: machine guards, operational shields, exhaust vent hoods and systems, welding shields, approved personal protective equipment, automatic stops and controls, barricades, railings, etc.;

**1.7.9** report to his/her direct supervisor all cases of employees who are not qualified for the work to which s/he has been assigned or who engage in unsafe practices;

**1.7.10** report to his/her direct supervisor all cases where employees lack sufficient room or space for the performance of his/her work or where ventilation, heat, illumination, sanitation, or other facilities are inadequate;

1.7.11 attend and participate in all supervisors' meetings;

**1.7.12** conduct "Toolbox" (five [5] minute daily safety briefings);

**1.7.13** report immediately all accidents according to the directives contained in this Manual (see Section 1.13);

**1.7.14** assist the EHSO in accident investigation and submit a report promptly on required forms in accordance with Section 1.15 of this Manual;

**1.7.15** participate with the Agency Safety Program Manager in preparation of departmental or project safety rules; and

**1.7.16** forward to his/her supervisor all requests, suggestions, and complaints made, together with comments with regard to safe working conditions and corrections and corrective counter measures.

**1.8 Responsibilities of the Warden:** Wardens will make arrangements to include safety regulations as an inherent part of an orientation program for new employees and new inmates. **No** employee or inmate will be given a work assignment until s/he has had an opportunity to read and understand the basic safety regulations. Appropriate documentation will be maintained in the respective employee's training record and inmate's institutional record pertaining to safety training (see Section 1.10). The Warden will have overall institutional authority to ensure compliance with all safety directives at his/her institution, regardless of the purpose of any building.

**1.9 EMPLOYEE/INMATE CORRECTIVE ACTION:** While it is not the practice of the SCDC to affix blame when injuries occur, employees and inmates should recognize the importance of providing for a safe and healthful workplace and residence. Therefore, everyone will be accountable for safety.

**1.9.1** Should problems exist in the enforcement of Agency safety rules, procedures, and/or policies, employees and their supervisors may be disciplined receive corrective action, in accordance with related SCDC Policy/Procedure ADM-11.04, "Employee Corrective Action."

**1.9.2** Inmates should be disciplined in accordance with operational policy for creating a health, safety, or fire hazard as stated in SCDC Policy/Procedure OP-22.14, "Inmate Disciplinary System."

#### **1.10 SAFETY TRAINING FOR EHSO'S:**

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1.10.1 EHSOs will be given training in fire safety and occupational safety and health at least annually. These individuals will be trained by the Agency Safety Program Manager or designee on proper inspection techniques to include hazard recognition and recommended solutions. The purpose of this training will be to ensure that the EHSOs remain proficient in the occupational safety and health field, as well as to remain abreast of developments including the passage of new laws and standards. Upon successful completion of initial training, the EHSOs will be certified. The Agency Safety Program Manager will maintain documentation of training by memo and SCDC Form 17-7 "Training Roster." The Division of Operations Agency Safety Program Manager will ensure that documentation is presented to the Training Academy staff for permanent recording pursuant to SCDC Policy/Procedure ADM-17.03. "Administration of Agency Training Programs." The EHSO will train supervisory staff on an annual basis. The training will cover, among other things, the provisions of the SCDC Safety Program. This training must be documented and maintained pursuant to the guidelines outlined in SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs." (4-4212M)

**1.10.2 Initial Training:** All employees and inmates will be provided a safe work area, required equipment, and instructions in the proper way to perform assigned work projects. Safety will be considered a functional part of management and a part of job supervision performance. Each employee and inmate will receive training scheduled by his/her supervisor. This training will include demonstrations on the proper way to do a job. Employees and inmates will be trained about specific hazards involved so that they may perform assigned duties under general supervision. Employees and inmates will also be trained in the procedures for reporting hazards and injuries. Employee training will be documented and maintained in accordance with SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs." Inmate training will be documented and maintained by supervisors using SCDC Form 22-5, "Inmate Training Record."

**1.10.3 Report of Training:** Each in-service training session will be reported to the EHSO. A summary of the training will be included in the EHSO's quarterly report to the Agency Safety Program Manager.

**1.10.4 Monthly Training:** Each first line supervisor will schedule in-service safety sessions for both employees and inmates based on topics assigned centrally by the Agency Safety Program Manager or data gained from the monthly/quarterly reportable/recordable accident reports germane to the job site. The intent of this training will be to eliminate manpower loss and operating costs related to accidents. These informal sessions will relate to the work being performed and general safety requirements for all assigned personnel. Specialized instructions on a specific operation or machine will be directed only to those personnel involved. This specialized training is not intended to replace initial or continuous training, but will be utilized to increase job efficiency and reduce injuries. These sessions will be held either five (5) minutes a day, 20 to 30 minutes per week, or one (1) hour per month. Documentation will be recorded on the "Safety Committee Agenda/Minutes."

**1.10.5 Assistance:** Upon request, the EHSO will assist each supervisor in preparing for the monthly job safety training.

1.10.6 New Employee/Inmate Orientation: Orientation training will be provided by or in conjunction with the EHSO. Employee orientation/training will be documented pursuant to SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs." Inmate orientation/training will be documented on SCDC Form 18-69 "Certification of Inmate Orientation." As part of their institutional/divisional orientation, new employees/inmates will receive training in the following minimum areas: (4-ACRS-7B-14, 4-4082, 4-4212 M)

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accident prevention program	accident reporting	disaster response plans
safety rules	reporting hazardous conditions	housekeeping requirements
special hazards	personal hygiene	means of egress
location and use of fire extinguishers	proper lifting techniques	Safety Manual (will be an overview)

**1.11 WORK PLANNING COMMITTEE:** The Division Director of Compliance, Standards, and Inspections or designee and the Agency Safety Program Manager will be a permanent member of all Agency work planning committees. The Agency Safety Program Manager will be a consultant to top management on safety and will be in a position, during the planning stages, to give an opinion on plan alterations. S/he will assist and advise in the formulation of work systems and methods. S/he should be informed of all planned work projects, before they start, to ensure that fire and life safety, accident prevention, and occupational health concerns receive top priority.

**1.12 REVIEW AND APPROVAL OF PLANS:** All plans for alteration, remodeling, rehabilitation, and new construction will be submitted to the Division Director of Compliance, Standards, and Inspections and the Agency Safety Program Manager for review and prior approval to ensure that all plans and materials conform to safety codes and regulations.

**1.13 REPORTABLE ACCIDENTS/INJURIES:** All incidents of accidents, injuries, or near-misses on the job are reportable. They will be investigated consistent with the Accident Investigative Procedure (Section 1.15). They will be reported using SCDC Form 22-1, "Accident/Incident Report<del>,"</del> (A.I.R.).

**1.14 RECORDABLE ACCIDENTS/INJURIES:** Any accident that results in death, medical treatment more than first aid; and/or results in loss of consciousness, restriction of work movement, or transfer to another job; or any incident of TB conversion, will be recordable under OSHA guidelines. These accidents/incidents will be recorded for employees on an OSHA Log available through the Safety Program Manager and must be updated monthly-weekly by the EHSO.

#### **1.15 ACCIDENT INVESTIGATIONS:**

**1.15.1 EHSO and (Injured Employee's) Immediate Supervisor:** All accidents, injuries, and near misses will be investigated as described in Sections 1.15.1-1.15.6. The investigation will:

- determine the cause of the accident;
- prevent the recurrence of the accident;
- determine if there was a procedural inadequacy that requires correction;
- determine a need to change work standards;
- publicize the accident;
- provide report to the central safety committee if requested; and
- provide documentation for possible compensation claims or legal requirements.

**1.15.2 Guidelines for Accident Interviews:** The following guidelines are intended to assist supervisors and EHSOs in obtaining the information needed for accident reports:

- Show concern for the employee's injury, no matter how minor it is.
- Explain why the investigation is necessary.
- Use a friendly approach. Be concerned with gathering facts, not finding fault.
- If possible, discuss the injury at the actual scene of the accident.
- Get the injured employee's story before asking questions.
- Check your understanding of the story. Use the feed-back approach.
- Listen carefully. Avoid interruptions.
- Use tact in clearing up discrepancies in the employee's story.
- Avoid sarcasm, blame, and threats.
- Discuss ways to prevent recurrence of the accident with all parties concerned.

**1.15.3 When to Investigate:** The longer the delay in examining the accident scene and interviewing the victim(s) and witness(es), the greater the possibility of obtaining erroneous or incomplete information. The accident scene changes, memories fade, and people discuss what happened with each other. Whether consciously or not, witnesses may alter their initial impressions to agree with someone else's observation or interpretation. Further, prompt accident investigation also expresses concern for safety and well-being of employees.

**1.15.4** It is advisable to prepare investigation tools in advance. Having the necessary equipment ready will facilitate the investigation and help to eliminate delays and other difficulties. An investigation kit should include such items as:

camera and film;	tape recorder;	measuring devices;
sample containers;	SCDC Form 22-1, "Accident/Incident Report," (A.I.R.);	pen/pencils/writing pads.

**1.15.5 What to Look For:** The accident investigation must answer many questions. Because of the infinite number of accident-producing situations, contributing factors, and causes, it is impossible to list all the questions that apply to all investigations. The following questions are generally applicable, however, and will be considered in most accident investigations:

- 1. What was the injured person doing at the time of the accident? Performing an assigned task? Maintenance? Assisting another worker?
- 2. Was the injured employee working on an unauthorized task? Was the employee qualified to perform the task and familiar with the process, equipment, and machinery?
- 3. What were other workers doing at the time of the accident?
- 4. Was the proper equipment being used for the task at hand (screwdriver instead of can opener to open a paint can, file instead of a grinder to remove burr on a bolt after it was cut, etc.)?
- 5. Was the injured person following approved procedures?
- 6. Is the process, operation, or task new to the area?
- 7. Was the injured person being supervised? What were the proximity and adequacy of supervision?
- 8. Did the injured employee receive hazard recognition training prior to the accident?
- 9. What was the location of the accident? What was the physical condition of the area when the accident occurred?
- 10. What immediate or temporary actions could have prevented the accident or minimized its effect?
- 11. What long-term or permanent action could have prevented the accident or minimized its effect?
- 12. Was corrective action recommended in the past, but not adopted?

**1.15.6** During the course of the investigation, the above questions should be answered to the satisfaction of the investigators, the EHSO, and the immediate supervisor of the injured employee. Other appropriate questions may be addressed as the investigation continues. Questions and responses should be recorded.

**1.16 PREPARING THE ACCIDENT/INCIDENT REPORT:** Accidents in the SCDC is of significant interest to employees/inmates, who will ask questions that reflect their concerns. Is there any potential danger to those in the immediate vicinity? What caused the accident? How many people were injured? Extent of injuries?

**1.16.1** The job site supervisor and the EHSO should answer these questions truthfully and avoid covering up the facts. However, they must be sure of their facts.

**1.16.2** Major damage, injuries, and loss of time information will be reported via the SCDC MIN network system (SCDC Procedure OP-22.25, "Reporting Incidents and Accidents [MINS]").

**1.16.3** Wardens/Division Directors will utilize the aforementioned reports in addition to the quarterly statistical data of reportable and recordable injuries in their review of the accidents that occur on their work sites.

**1.16.4** Managers must demonstrate interest in safety by requiring prompt reporting of all serious or potentially serious incidents. They must use all reports to make decisions to prevent similar accidents from reoccurring, and they must look for answers to certain key questions.

- Are all significant accidents being reported?
- Are all parts of the work site equally committed to accident prevention?
- Are there trends or patterns in accidents or injuries?
- What system breakdowns predominate?
- What supervisors require additional training?
- Are employees advised of the results of an accident investigation and preventive measures being instituted?

**1.16.5** Until corrective action is initiated, any recommendations-no matter how thorough and relevant-remain ineffective.

**1.16.6** Work site supervisors will keep employees/inmates informed of accidents and preventive measures proposed or executed. Posting accident reports/ summaries /recommendations, without the names of persons involved, is one way to make such information available.

**1.16.7** Each work site/institution will have a Safety Bulletin Board for safety information purposes. Posters, accident reports, corrective action information, and other appropriate reports/information will be posted on the Safety Bulletin Board.

**1.17 FACILITY AND WORK SITE SAFETY COMMITTEES:** Each facility and work site will appoint a Safety and Health Committee that will act as an advisory panel to the facility or work site managers. This Committee will meet as needed (but no less than quarterly). The Safety Committee will be chaired by the EHSO or designee and will include personnel from each major functional area of the Institution/Division (e.g., Security, Medical, and Food Service). At a minimum, the following topics should be covered during each facility and work site committee meeting:

**1.17.1** Review of all accidents and injuries involving staff, inmates, or visitors for corrective /preventative action, as appropriate;

**1.17.2** Review of all inspection reports required by SCDC policies/procedure(s) as well as recommendation(s) for corrective action that will reduce employee and inmate exposure to hazards;

1.17.3 Fire/Safety issues;

**1.17.4** Specific safety-related problems that seem to be recurring and the development of appropriate prevention measures; and

**1.17.5** Review of Corrective Action Reports for annual inspections conducted by the Division of Compliance, Standards, and Inspections and outside agencies (e.g., DHEC, State Fire Marshal, Insurance Reserve Fund, etc.).

**1.17.6** The Safety and Health Committee will also be expected to create and to maintain a high level of interest in and awareness of safety among all employees at all levels. The Committee will:

- develop facility/work site safety plans and recommend their approval;
- assist the EHSO in developing and implementing an effective safety training program;
- encourage feedback from all levels of employees in all areas with regard to problems, ideas, and solutions related to safety;

- keep all employees informed of new safety procedures, training programs, accident causation, and other safety-related matters; and
- develop specific goals and objectives to reduce employee accidents and injuries.

**1.17.7** A copy of each facility and work site committee meeting minutes will be forwarded to the Safety Program Manager no later than the 20th of the month in which the meeting is held.

**1.17.8 Safety Committee Investigations:** Every instance of major injury, dismemberment, occupational disease, fatal injury, explosion, or fire where property damage exceeds \$500 will be investigated. A team composed of an Associate Warden or Division Director, and those Safety Committee Members selected by the EHSO will visit the scene, conduct a factual investigation, and render a written report. Reports on all investigations will be submitted to the Warden and to the Agency Safety Program Manager.

**1.18 CENTRAL SAFETY COMMITTEE:** There will be a Central Safety Committee chaired by the Safety Program Manager or designee. The Central Safety Committee members, to include a recorder, will be appointed by the Agency Director or designee and will consist of a senior management representative from Operations, Health Services, Programs and Services, and Budget and Resource Management. The Safety Program Manager will serve in a non-voting capacity unless there is a tie whereby s/he will cast the tie breaking vote. (Please review sections 1.18.1-1.18.10for the responsibilities of the Central Safety Committee.) The Central Safety Committee will be created to maintain a high level of interest in and awareness of Federal, State, and Agency safety-related policies/procedures and regulations by all levels of employees. The Central Safety Committee will:

1.18.1 meet bi-monthly and/or at the call of the Safety Program Manager or designee;

1.18.2 review accidents forwarded from institutional and work site Safety Committees;

1.18.3 review accidents identified as OSHA recordable;

**1.18.4** review accidents that show a repetitive occurrence;

**1.18.5** selectively review accidents, as appropriate, to determine whether a policy/procedure or a regulation violation may have occurred;

**1.18.6** recommend, through the appropriate member of the Agency Director's staff, corrective action in accordance with SCDC policy/procedure ADM-11.04, "Employee Corrective Action," or OP-22.14, "Inmate Disciplinary System ", to be taken against any employee or inmate, who violates applicable safety guidelines;

1.18.7 identify specific goals and objectives to reduce employee accidents and injuries;

**1.18.8** arrange a baseline environmental health and safety audit of the various Agency divisions to be performed by OSHA's Office of Voluntary Programs or a similar type organization. (The information derived from the audit will be used by the Safety Program Manager/Central Safety Committee or designee(s) to determine the most appropriate course of action.);

**1.18.9** take disciplinary action against an inmate who violates applicable safety guidelines in accordance with policy/procedure OP-22.14, "Inmate Disciplinary System";

**1.18.10** A copy of each Central Safety Committee meeting minutes will be forwarded to the Agency Director within two weeks from the meeting date.

#### **1.19 SAFETY LIBRARIES:**

**1.19.1** The Agency Safety Program Manager will maintain a reference library of codes and standards covering occupational health and safety. These materials will be updated as needed to remain current. The Safety Program Manager will ensure that the safety library also contains the appropriate technical reference materials required to support the occupational

safety, health, fire, and life safety programs. At a minimum, the current editions of the following reference books will be maintained by the Safety Program Manager:

- Accident Prevention Manual for Industrial Operations, Administration and Programs (National Safety Council);
- Accident Prevention Manual for Industrial Operations, Engineering and Technology (National Safety Council);
- Fundamentals of Industrial Hygiene (National Safety Council);
- General Industry, OSHA Safety and Health Standards (29 CFR 1910);
- Construction Industry, OSHA Safety and Health Standards (29 CFR 1926);
- National Electric Code (National Fire Prevention Association [NFPA70]);
- Concepts and Techniques to Machine Safeguarding. United States Department of Labor, Occupational Safety and Health Administration (OSHA publication #3067);
- SCDC Occupational Safety and Health Manual;
- Life Safety Code Handbook NFPA 101;
- ACA Standards Manuals;
- Standard Building Code (SBC); and
- Standard Fire Prevention Code (SFPC).

**1.19.2** EHSOs and Collateral EHSOs will be issued copies of needed reference materials by the Agency Safety Program Manager.

**1.19.3** All SCDC employees are members of the South Carolina Occupational Safety Council and may request films/videos from their library, free of charge, on numerous safety topics by contacting:

S. C. Occupational Safety Council Post Office Box 61044 Columbia, South Carolina 29260 (803) 738-1608

#### **1.20 IMMINENT DANGER SHUTDOWN AUTHORITY - PREFACE AND PRIORITY**

**1.20.1 Preface:** Compliance with accepted safety practices is the responsibility of all employees and inmates. With the assistance of the respective EHSO, each work site will establish an appropriate mechanism for identification and timely correction of violations of these standards.

**1.20.2 Priority:** Close attention will be given to maintaining adherence to construction and building codes and avoiding environmental pollution and health hazards which represent a potential long range exposure effect, particularly exposure to excessive noise, heat, toxic material, and improper ventilation. Corrective action will be initiated to eliminate exposure when detected.

**1.20.3 Imminent Hazard:** When an EHSO determines that conditions and/or practices exist in any place of employment that could reasonably be expected to cause death or serious physical harm, s/he will immediately inform the affected employees of the danger and shut down the work or process until such danger can be eliminated. The EHSO will also immediately verbally inform (followed by a written report) the Warden/Division Director and the Agency Safety Program Manager of the hazard before any corrective action is taken. Reactivation of the work or process will be contingent upon reinspection and written approval by the Agency Safety Program Manager or his/her designee. The process of "roping-off" affected areas, lockout/tagout, or any other effective isolation and warning means will be utilized in the shut-down of imminent hazards. In addition, a memorandum from the EHSO giving notice of the hazard will be posted to warn employees, inmates, and visitors to stay away from the affected areas.

# **1.21 IMMINENT DANGER SHUTDOWN AUTHORITY - AREAS OF CONCERN AND LIFE SAFETY HAZARDS:** The following are some issues of prime concern to safety for imminent shutdown, but are not all inclusive:

**1.21.1** Excavation of trenches of more than five (5') feet in depth which are not adequately shored or sloped to comply with 29 CFR 1926.651.

**1.21.2** Mechanical power presses, brakes, or shears not properly protected by point of operation guarding and safety control devices.

**1.21.3** Vehicles rendered unsafe by virtue of faulty brakes, steering, shocks, or other serious defects which render the vehicle unserviceable.

**1.21.4** Potentially combustible atmosphere in buildings or areas. Shutdown until the source of alien atmosphere is determined and corrected.

**1.21.5** Eye hazard work, when no protection is in force. Shutdown until eye protection is provided and used, or until the hazard is eliminated.

**1.21.6** Elevated work area, four (4') feet or more above adjacent floor or ground level, not adequately protected by guardrails, toeboards, and/or life lines.

**1.21.7** Electrical hazards. Shutdown until corrected, or guarded, or until the appropriate personal protective equipment is utilized.

**1.21.8** Unguarded woodworking equipment. Shutdown until guarded according to 29 CFR 1910.213.

**1.21.9** Unguarded v-belts or drive pulleys less than seven (7') feet above adjacent floor level.

**1.21.10** Any other hazard in direct violation of SCDC safety procedures that represents a threat to life or is a potential dismemberment hazard.

**1.21.11** Entrance into permit-required confined or void spaces.

**1.21.12** Asbestos removal and/or tampering with materials containing asbestos.

1.21.13 Operation of vehicle or non-vented gasoline/diesel engine indoors.

#### **1.22 INSPECTIONS CONDUCTED BY OUTSIDE AGENCIES:**

**1.22.1** An annual inspection will be performed by the Office of the State Fire Marshal and an Inspector from the Division of Compliance, Standards, and Inspections, in conjunction with the facility EHSO, for compliance with federal and state laws; nationally recognized codes, regulations, and standards for safety, health, and sanitation; and SCDC policies and procedures. A written report of the fire/life safety findings will be submitted by the Deputy State Fire Marshal to the head of each applicable institution/division with copies to the appropriate member of Executive Staff, to the Agency Safety Program Manager, and to the Division of Compliance, Standards, and Inspections. Issues of critical concern will be immediately communicated to the Executive Staff by special copy from the Safety Program Manager. Copies of all required corrective action reports will be provided to the Agency Safety Program Manager and the Division of Compliance, Standards, and Inspections as indicated in Section 1.22.3, below.

**1.22.2** When inspections are conducted by other agencies (i.e., South Carolina Department of Labor, Licensing and Regulation [OSHA], South Carolina Department of Health and Environmental Control [DHEC], Environmental Protection Agency [EPA], etc.), the institution/work site head will provide copies of these reports to the Agency Safety Program Manager and Division of Compliance, Standards, and Inspections within five (5) working days and will subsequently provide copies of corrective action responses which must be sent to those agencies within 30 calendar days in accordance with Section 1.22.3.

**1.22.3** The head of each institution/work site will prepare and forward a corrective action report to the Agency Safety Program Manager (through the EHSO) with copies to the

appropriate member of Executive Staff, the Division of Compliance, Standards, and Inspections, and the Division of Facilities Management, within 30 days of receipt of any inspection report. Corrective action reports will include:

- a copy of the Original Report;
- a detailed description of the action(s) taken to correct the violation;
- when corrective action cannot be accomplished within thirty (30) calendar days, a projected completion date;
- work order number;
- copies of requisitions or purchase order numbers.

**1.22.4** Special Audits: The Safety Program Manager, at his/her discretion, will arrange for audits by outside agencies, including local and/or state agencies, as needed to support the SCDC Occupational Safety and Health Requirements, Accident Prevention /Safety Program. (4-ACRS-1C-10/11M, 4-ACRS-1C-12/14, 4-ACRS-1C-13M, 4-ACRS-1A-03, 4-4124M, 4-4211M, 4-4329M)

#### **1.23 INSPECTIONS CONDUCTED BY INSTITUTION/WORK SITES:**

1.23.1 Inspections will be conducted to identify physical or sanitary deficiencies (e.g., burnt-out light bulbs, stopped-up toilets, inoperable cell doors, exhausted supplies, etc.). Employees should attempt to immediately correct the deficiency (if within their capabilities) before reporting/requesting maintenance. (4-ACRS-1C-08M, 4-ACRS-1C-10/11M, 4-ACRS-1C-12/14M, 4-4124M, 4-4211, 4-4329M)

**1.23.2 Housekeeping Sanitation Inspections: Housekeeping Sanitation Inspections will be completed in accordance with SCDC Policy/Procedure ADM-13.07, ''Maintenance and Repairs.'' (4-4218, 4-4333)** 

**1.23.3 Weekly Inspections:** The maintenance supervisor will coordinate weekly inspections to ensure that all safety deficiencies are addressed. (4-ACRS-1A-03, 4-4212M)

**1.23.3** Monthly Inspections - Environmental Health and Safety Officer Inspections: Institutional management inspections will be used by the responsible department personnel to identify hazards, violations, or deficiencies within the workplaces as prescribed. The EHSO will conduct a monthly walk-through of all designated workplaces. This walk-through will be documented on SCDC Form 19-89, "Inspection Report." The EHSO will make a thorough, in-depth inspection of every department, all buildings and facilities, to include recreational areas. The EHSO will obtain a written response from the appropriate area regarding any hazards, violations, or deficiencies identified in the inspection. Projects beyond the capability of unit maintenance will be diverted to the Division of Facilities Management by way of the automated work order system. (3-ACRS-4D-01, 4-4212M, 4-4329M)

**1.24 AGENCY SAFETY PROGRAM MANAGER INSPECTIONS:** The Agency Safety Program Manager will be available to inspect or audit an institution as requested by appropriate Department heads. The Agency Safety Program Manager will have the authority to conduct nonotice inspections of any SCDC facility or institution at any time.

**1.25 CONTRACT REPAIRS:** Items requiring repair or renovation through outside contracts (e.g., kitchen renovation, roofing, ventilation, etc.) will be recorded by Maintenance. This work will be coordinated through the SCDC Division of Facilities Management

**1.26 LIST OF INSPECTIONS:** Areas/Items to be inspected, frequency, and by whom, are as indicated below:

Area/Item	Frequency	Inspector
Vahialas	Daily	Vehicle Operators
venicies	Weekly	Vehicle Management Officer
Food Service Areas	Weekly	Warden/Associate Warden or designee (4- ACRS-4A-07, 4-4324M)
Sanitation of all Institutional Areas (Must be documented on SCDC Form <del>20-53-</del> 19- 89)	Weekly	Designated trained employee. (4-ACRS- 1A-03, 4-4329M)
Fire/Life Safety/Health	Monthly	Individual must be designated as an EHSO/Alternate EHSO/Collateral EHSO (4-ACRS-1A-03, 4-4212M, 4-4329M)
Entire Facility (Sanitation)	Monthly	Must be a different person conducting weekly and monthly inspections. (4- ACRS-1A-03, 4-4212M, 4-4329M)
Security Devices	Weekly	Major or Captain (4-4186)
Generators	Bi- weekly*	Trades Supervisor
Fire Extinguishers	Monthly	EHSO or designee
Standpipe Hoses	Monthly	Individual must be designated as an EHSO.
Other Fire Fighting Equipment	Monthly	Individual must be designated as an EHSO.
Sanitation and Fire/Life Safety	Monthly	Warden (4-4200M, 4-4212M)
Security Areas (perimeter lighting, perimeter security posts, electronic fence protection system, fences, and gates)	Daily on each	Shift Captain/Lieutenant

\*Run weekly, tested monthly per DHEC Reg. 61-16.

**1.27 REQUIRED VISITS OF INSTITUTIONAL AREAS:** Areas/Items to be visited, frequency, and by whom, are as indicated below:

Area/Item	Frequency	Inspector
Living and Activity Areas	Weekly	Warden, Associate Warden, and Duty Warden (4-4185)

**1.28 REQUIRED PATROLS:** Areas/Items to be patrolled, frequency, and by whom, are as indicated below:

Area/Item	Frequency	Inspector
Occupied Areas - Faulty, Unsafe, or Dirty Conditions	Daily	Line Supervisory Staff from each Functional Area
Unoccupied Areas - Faulty, Unsafe, or Dirty Conditions	Weekly	Line Supervisory Staff from each Functional Area (4-4184)

**1.29 INSPECTION REPORTS:** Copies of all inspection reports will be forwarded to the Warden or his /her designee.

#### **1.30 PERIMETER SECURITY INSPECTIONS DOCUMENTATION**

**1.30.1** A "Perimeter Security Inspection Log Book" (bound log book) will be maintained in the Major's/Captain's office, or other area designated by the Warden, to reflect an inspection record of those areas mentioned above. The log book will uniformly show:

- date and time of inspections;
- name of inspector(s);
- detected/existing deficiencies;

- date deficiencies were corrected;
- Major's/Captain's assessment/comments; and
- sixty-day review by the Warden and/or Associate Warden.

**1.30.2** The security areas will be inspected daily by an experienced, knowledgeable, and fully qualified Captain/Lieutenant. This daily inspection must include the electronic fence protection system for institutions having the same.

**1.30.3** The Warden/Associate Warden or designee will inspect all perimeter sensitive areas at periodic intervals (no less than once a month), and record the inspection results in the Perimeter Security Inspection Log Book. The Warden will also ensure that positive action is immediately taken to correct all detected deficiencies.

**1.30.4** The Warden/Associate Warden or designee will review the Perimeter Security Inspection Log Book at least every 60 days. At that time, the Warden will record in the log book a brief assessment of the reliability and dependability of the electronic fence protection system for institutions having the same.

#### CHAPTER 2 OCCUPATIONAL SAFETY

**2.1 INTRODUCTION:** This chapter provides guidelines and directives concerning occupational safety requirements for all personnel performing work within the SCDC. It is the responsibility of the SCDC to provide a safe and healthy environment and work conditions for all employees and inmates. In all matters relating to occupational health, SCDC policies and procedures will adhere to recognized occupational health standards and codes. All institutions, divisions, and persons will conform with federal, state, and local standards, codes and regulations and manufacturer's guidelines where applicable. The EHSO should be contacted if information is not available. If the EHSO is not available, the Safety Program Office should be contacted.

#### **2.2 Specifically:**

**2.2.1** The SCDC will make every effort to ensure a safe working environment for all employees and inmates.

**2.2.2** Supervisors will ensure the availability of appropriate Personal Protective Equipment (PPE) and enforce its use.

**2.2.3** The SCDC will monitor and make every effort to ensure that adequate illumination, ventilation, and noise levels are maintained both in working and living areas as required by ACA Standards.

**2.2.4** EHSOs and supervisors at all levels will ensure proper first aid training and the availability of first aid supplies in the workplace. First aid supplies will be provided as per applicable SCDC policies and procedures.

**2.2.5** The firing range supervisor will provide orientation to personnel and will ensure compliance with firing range safety procedures.

**2.3 ROAD CREW SAFETY ORIENTATION AND TRAINING:** At a minimum, the EHSO will train job site supervisor(s) in the following safety issues:

**2.3.1** PPE necessary for the job tasks to include the proper care, use, and maintenance of the equipment (e.g., foot wear, eye and ear protection, gloves, etc.).

**2.3.2** Proper use and maintenance of manual edged-blade equipment such as axes, swing blades, scythes, bush axes, etc.

**2.3.3** Proper use and maintenance of motor-powered equipment such as weed-eaters, lawn mowers, and chainsaws.

**2.3.4** Review of specific "hot weather" and "cold weather" working precautions designed to maximize inmate labor while minimizing inmate exposure to inclement weather.

**2.3.5** Hazards of working within a few feet of passing motor vehicles.

**2.3.6** When lifting objects, inmates will bend their knees, utilizing the large muscles of the legs instead of the smaller muscles in the back.

**NOTE:** A vast array of safety videos are available, at no cost, from the South Carolina Occupational Safety Council that may complement training on the aforementioned safety issues (telephone number 803-738-1608).

**2.4 GENERAL SAFETY RULES AND PRACTICES FOR ROAD CREW INMATES:** The following basic rules and practices will be explained to road crew inmates by the work site supervisor assigned to a specific road crew prior to the beginning of work. This orientation will be documented on SCDC Form 22-5, "Inmate Training Record."

**2.4.1** All participants in SCDC road crew activities, whether employees or inmates, will report unsafe working practices or individual acts which are unsafe to the work site supervisor or the EHSO.

**2.4.2** Road crew work site supervisors will ensure that inmates observe and obey every rule, regulation, and order as is necessary to provide for a safe working environment. The work site supervisor will be responsible for environmental health and safety at the work site to include rules in Sections 2.3.1.-2.3.6.

**2.4.3** All inmates will be given frequent accident prevention instructions. Instructions, practices, and drills will be discussed prior to the beginning of the work day by the work site supervisor no less than once per week.

**2.4.4** No one will knowingly be permitted or required to work while his/her ability or alertness is so impaired by fatigue, illness, or other causes that might necessarily expose an inmate or others to danger.

**2.4.5** Horseplay, scuffling, and other acts which tend to endanger the safety or well-being of all personnel will be prohibited.

**2.4.6** Inmates will not handle or tamper with any electrical equipment, machinery, or air /water lines in a manner not within the scope of their duties, unless they have received instructions and training on its proper use, care, and maintenance from the work site supervisor.

**2.4.7** All injuries will be reported promptly to the work site supervisor who will notify his /her institution or the nearest institution by radio immediately for medical instructions.

**2.4.8** Inmates will not ride in vehicles standing up. Inmates will not ride in vehicle seats that are not bolted to the floor. Inmates will not sit in open vehicles (vehicles without sides), on the sides of vehicles, or on top of a vehicle cab. Inmates will not ride in vehicles with feet on bumpers holding on to any part of the vehicle. Inmates may ride in the backs of trucks on SCDC property, but must be seated on the bed. The back of the truck must be closed or secured by a safety chain. Inmates will not ride in the backs of trucks under any other conditions whether on or off of SCDC property.

**2.4.9** Inmates will not throw materials, tools, or other objects from heights (trees, structures, or buildings).

**2.4.10** Flammable liquids will never be used for cleaning purposes, starting fires, or starting vehicles.

**2.4.11** Inmates must wash their hands thoroughly after handling suspected poisonous substances and/or garbage.

**2.4.12** Inmates will not cut limbs, trees, wood, or grass unless they are properly utilizing the tools, equipment, or machinery and properly wearing the required PPE.

**2.4.13** Loose or frayed clothing will never be worn around moving machinery or other sources of entanglement. If shirts are worn, the shirt-tails will be tucked neatly into the trousers.

**2.4.14** Inmates will not lift or lower portable electric tools by the power cord. The cords of these power tools will not be left where cars or trucks can run over them.

**2.4.15** Machinery or equipment will not be repaired or adjusted while in operation.

**2.4.16** Weather conditions will be monitored to ensure the safety of employees and inmates. Transport vehicle mobile radios must be able to receive information from the sending work site or the nearest institution that thunderstorms, tornado warnings or watches, etc., have been forecast.

**2.4.17** Employees and inmates will not stand near trees or utility poles during an approaching thunderstorm. They will immediately return to their transport vehicle and be seated when lightning is observed.

**2.4.18** Vests supplied by the Department of Transportation (D.O.T.) will be worn when working on roads.

2.4.19 Inmates will wear appropriate headgear as indicated by the conditions of work.

**2.5 ROAD CREW VEHICLE AND ROAD SAFETY:** The following safety practices will be implemented by the transporting employee to alert other vehicle operators and to provide a safety margin for workers:

**2.5.1** Work crew transport vehicles will be removed from the highway and parked to the right of the roadway shoulder.

**2.5.2** At no time will road crew vehicles stop in active highway lanes to discharge passengers or equipment.

**2.5.3** Signs (two [2]) will be utilized to alert vehicular traffic that SCDC road crew workers are in the vicinity. Signs will be posted beginning at no less than 1,000 feet from the actual work site, and signs will be appropriately moved forward as the road crew work progresses. One (1) sign may be placed or mounted on the vehicle.

**2.5.4** Orange safety cones (two [2]) will be placed on the visible side of the roadway shoulder, at the rear of the transport vehicle. Two (2) will be placed at the vehicle, one (1) beside the vehicle rear and one (1) at the front bumper.

**2.5.5** Road crews may only work on one (1) side of a road at a time. Inmates may not be divided into groups to work more than one (1) road shoulder at a time.

**2.5.6** All traffic regulations will be observed at all times.

**2.6 ROAD CREW SUPPLY NEEDS:** Work site supervisors on road crews will ensure that their transport vehicles are maintained in a safe condition, and that the vehicles are equipped with the following basic supplies:

- 1. First-Aid Kit;
- 2. \*Bloodborne Pathogen Kit;
- 3. \*CPR Airway Shield;
- 4. \*Latex Gloves;
- 5. Water Jug and Disposable Cups;
- 6. Refuse Container to Collect Trash;
- 7. Insect Repellant/Sun Block;
- 8. Orange Safety Cones (4);
- 9. Roadside Vehicle "Alert" Signs, to be obtained from the Department of Transportation;
- 10. Portable Toilet;
- 11. Appropriate Head Gear; and

12. Hand washing Materials.

\*These items may be contained in the First Aid kit.

**2.7 AVAILABILITY AND USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE): The SCDC** will ensure the availability and use of Personal Protective Equipment (PPE) to protect employees /inmates in the workplace.

**2.7.1** The EHSO/work site supervisor will survey respective work areas to determine the type of PPE required at each work site.

2.7.2 The EHSO/work site supervisor will designate 100% PPE required wear at the work site and ensure that appropriate PPE is obtained (e.g., eye, hearing protection, appropriate head gear, etc.) and that personnel are trained in its use. (4-4337)

2.7.3 The work site supervisor will ensure proper PPE is worn.

2.7.4 Work site supervisors will inspect work sites to ensure compliance.

#### 2.8 AVAILABILITY AND USE OF EYE PROTECTION DEVICES:

**2.8.1** The EHSO, in coordination with the Warden and appropriate supervisor, will identify and designate in writing all areas within the work site which constitute a potential hazard to the eyes. These areas will be designated 100% eye protection areas and the mandatory use of eye protection for everyone in the area must be enforced. Specifically, anyone passing through, visiting, or working in such an area must wear eye protection at all times. The supervisor will be responsible for posting this information in designated areas.

**2.8.2** Any supervisor of an area designated as a 100% eye protection area will be responsible for ensuring that adequate eye protection devices are available and that each device will provide clear vision to the wearer.

**2.8.3** Enforcement is the key to good eye protection. Supervisors must be made aware of their responsibilities for enforcement.

2.8.4 Eye and face protective equipment will meet the requirements of ANSI Z87.1/1968.

**2.8.5** Employees/inmates involved in welding operations will be furnished with filter lenses of the proper shade number.

**2.9 FOOT PROTECTION:** In areas where there is a reasonable probability of foot injury, the wearing of the required work boots or toe protectors will be mandatory as determined by the work site supervisor.

**2.10 HEARING PROTECTION:** The goal of the SCDC Hearing Program is to prevent hearing loss. The program includes the following:

**2.10.1** Work environments will be surveyed by the job site supervisor in conjunction with the EHSO to identify potentially hazardous noise levels and personnel at risk. A specific program as outlined in OSHA 29CFR 1910.95 will be implemented.

**2.10.2** Environments that contain equipment which produces potentially hazardous noise will, whenever it is technologically and economically feasible, be modified to reduce the noise level to acceptable levels. Reduction of noise at the source is in the best interest of the SCDC. The use of personal hearing protective devices to limit noise exposure is considered to be an interim protective measure while engineering control methods are being implemented. Where engineering controls are not feasible, administrative controls and/or the use of hearing protective devices (e.g., ear plugs, muffs, etc.) will be employed.

**2.10.3** Periodic hearing testing will be conducted to monitor the effectiveness of the hearing conservation program. Early detection of temporary threshold shifts will allow further protective action to be taken before permanent hearing loss occurs. Follow-up evaluation will be provided to ensure appropriate referral, treatment, and early return to duty.

**2.10.4** The EHSO will perform and record annual noise level surveys of all living areas in order to determine compliance with ACA requirements.

**2.10.5** EHSOs will maintain noise level screenings on file for at least three (3) years.

**2.11 HAND PROTECTION:** Whenever an employee's or inmate's hands are exposed to, or are likely to be exposed to, such hazards as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasion; punctures; chemical burns; thermal burns; or harmful temperature extremes, appropriate hand protection will be selected and provided and its use required for affected employees /inmates. Selection of the equipment will be based on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified. The work site supervisor will be responsible for issuing necessary PPE items.

**2.12 LIFTING:** The work site supervisor will be responsible for planning ahead in reference to the types of lifting required for a specific project or task. Instruction as to proper methods of lifting will be the responsibility of both the work site supervisor and job supervisor. The single most important rule when lifting objects is to get help. All persons then on "LIFT" command must bend at the knees (not the back) and must use their legs to lift (not their backs). Back supports will not be used as "weight belts," but will be utilized only as a reminder for the individual to lift properly. These supports are not OSHA acceptable PPE.

#### **2.13 HEAD PROTECTION:**

**2.13.1** Supervisors will be responsible for ensuring that all employees and inmates wear appropriate head gear in areas or on details, within the work site, construction, or industries. This includes road crews. The EHSO and the work site supervisor will have the responsibility and authority to shut down an operation if the personnel and/or workers in the area or on the detail are not wearing required PPE.

**2.13.2** The supervisors must ensure that the PPE is in good condition and available for use.

**2.13.3** All head gear worn by electrical crews must be constructed of non-conductive material, without the use of metal rivets. The hats must also be certified as to their dielectric strength. Area maintenance supervisors, construction superintendents, and work site supervisors will ensure that no employee or inmate works on high voltage equipment without proper credentials and without necessary PPE. Such equipment must be readily available, the proper size, and in good condition. All electric equipment will be de-energized before work begins.

**2.13.4** Supervisors will be required to wear head gear as an example to employees and inmates, as well as for their own protection.

**2.13.5** Head protection equipment (helmets) will be worn in areas where there is a possible hazard of an impact or penetration from falling objects or from electrical shock and burns.

**2.13.6** Helmets for protection against impact and penetration by flying objects will meet ANSI requirements.

#### 2.14 RESPIRATORY PROTECTION:

**2.14.1** The EHSO will thoroughly check all work sites to locate areas where respiratory protection would be beneficial or required by codes and will ensure that supervisors post such requirements in those areas. The EHSO must also ensure that respirators used in these areas are of a type which is acceptable and conform to the OSHA Respiratory Protection Standard.

**2.14.2** The EHSO will be responsible for seeing that filter canister type masks are not used except as indicated in Section 2.14.7, below. NIOSH requires that

all regulators be of pressure demand type and that the pressure inside the mask be higher than outside pressure at all times. This will ensure that in the event of a bad seal, no toxic or poisonous atmosphere gets inside the mask/hood.

**2.14.3** In emergencies, or when engineering or administration controls are not effective in controlling toxic substances, appropriate respiratory protective equipment will be provided by the SCDC and will be used.

**2.14.4** Respiratory protection devices will be appropriate for the hazardous material or area involved and the extent of the work performed.

**2.14.5** Employees or inmates required to use respiratory protective devices will be instructed in their use.

**2.14.6** The SCDC will inform all employees/inmates of the contents of the OSHA Respiratory Protection Standard and all federal regulations, agency policies, etc., applicable to the protection of employees/inmates from airborne contaminants and diseases. Employees will use the provided respiratory protection equipment in accordance with instructions and training.

**2.14.7** Air purifying or filtering respirators will be used when oxygen level is within an acceptable range.

**2.14.8** Air supplying respirators will be utilized when:

- the work space is a permit-required confined space;
- there is inadequate oxygen (less than 19.5%);
- contaminant concentrations exceed cartridge/canister capacity;
- no cartridge is effective against the contaminant; and/or
- there is an unknown contaminant.

**2.14.9** Air supplying respirators may be face masks connected by a hose to a stationary air supply (airline) or self-contained breathing apparatus (SCBA) with a portable air supply used in permit-required confined space procedures.

**2.14.10** The Respiratory Program will follow OSHA guidelines.

**2.15 IDENTIFICATION AND DISPOSAL OF OUTDATED CHEMICAL MUNITIONS:** Outdated chemical munitions will be identified by each armory and properly disposed of by the Division of Security. The institutional EHSO can assist as necessary.

**2.16 ILLUMINATION: EHSOs will annually conduct surveys of all institutional living areas to determine compliance with ACA standards in the area of illumination. EHSOs will maintain Illumination Survey results on file for at least three (3) years. (4-ACRS-1A-07/08, 4-4145, 4-4146)** 

**2.17 VENTILATION:** The SCDC will ensure that all living areas are ventilated by natural or mechanical ventilation to provide a safe environment.

**2.17.1** EHSOs will annually conduct surveys of all institutional areas to determine compliance with ACA standards in the area of ventilation.

**2.17.2** EHSOs will maintain ventilation survey results on file for three (3) years for audit /accreditation purposes.

2.17.7 The recommended reference source for good ventilation practice is the Industrial Ventilation Manual of the American Conference of Governmental Hygienists. (4-ACRS-1A-07/08, 4-4151, 4-4152)

**2.18 AVAILABILITY OF MEDICAL TREATMENT AND SUPPLIES:** See HS-18.02 for information regarding first aid kits and first aid. Medical facilities for the treatment of the injured must be available within 20 minutes of the work site, or a person assigned to a work site must be trained in multi-

media first aid by a certified first aid instructor. This training must include CPR, Bloodborne Pathogens, and First Aid. All injuries, no matter how minor or under what circumstances (in the workplace, during recreation, by assault, etc.), that occur at SCDC facilities or in SCDC vehicles, will be reported and documented per this policy.

#### 2.19 FIRING RANGE SAFETY, RULES, AND ACCIDENT PREVENTION:

**2.19.1** The safety of employees during training with firearms is of prime concern because the potential for accidents and injuries associated with weapon firing is well documented. The following requirements must be rigidly enforced at all training units utilizing or operating outdoor firing ranges.

**2.19.2** Wood frames for targets may be utilized for all handgun firing. Metal target holders may be utilized for firing shoulder weapons (shotguns, carbines) at targets that are located 25 yards or more away.

**2.19.3** Gate openings and any other accesses to firing areas will be closed and secured during firing operations.

**2.19.4** A red flag will be prominently displayed while firing is in progress.

**2.19.5 Hearing Protection:** The potential for hearing loss associated with firing is well known; therefore, hearing protection devices are required at all firing ranges. Pursuant to SCDC Policy/Procedure ADM-17.04, "SCDC Firearms Training Standards," the Division Director of Training and Staff Development will ensure that any staff member permanently assigned to any SCDC firing range is tested on at least an annual basis for lead levels and hearing loss as directed by applicable state and federal regulations. Hearing protection must be provided and worn by all participants, instructors, and observers during firearm training on all ranges.

**2.19.6** Virtually all employees of SCDC may be required to handle firearms at some time. The potential for injuries, from serious to fatal, always exists when carrying and handling firearms, especially if basic safety rules are not followed.

**2.19.7** All weapons will be considered loaded and will not be pointed at any person or thing not intended as a target.

**2.19.8** Loaded firearms will not be passed from one (1) person to another. All ammunition will be removed and passed separately.

**2.19.9** Weapons and ammunition will be separated when lowered or raised from or to the towers, except that unloaded handguns and ammunition may be passed in the same containers. Shoulder weapons should be passed in a scabbard or sling and the ammunition passed in an attached pouch or separate container.

**2.19.10** Other than revolvers, rounds will not be chambered in any weapon until the bearer is ready to fire. Under no circumstances should a rifle or shotgun be carried in a scabbard, vehicle, or picket rack with a round in the chamber.

**2.20 TOWER SAFETY:** Towers will be kept in a sanitary condition. Cleaning will be accomplished by the tower Officer. Towers will be inspected frequently by the shift Lieutenant and inspections will be conducted unannounced monthly by the EHSO. Monthly inspections will be recorded in the remarks section of SCDC Form 19-89, "SCDC Inspection Report." Towers with outside walkways will be provided with an approved (OSHA- required) safety railing. An appropriate means of egress must be provided for each tower.

#### **CHAPTER 3**

#### **TECHNICAL SAFETY**

**3.1 ELECTRICAL SAFETY:** 

**3.1.1 Ground Fault Protection:** The SCDC will use either ground-fault circuit interrupters or an equipment grounding conductor program to protect employees and inmates on construction sites. These requirements will be in addition to any other requirements for equipment grounding conductors covered in the current National Electric Code (NFPA 70). Construction sites, maintenance, education, etc., will be closely monitored by the EHSO and work site supervisor.

**3.1.2 Electrical Grounding:** All electrical powered equipment must be grounded or be of double insulated case type construction. The non-current-carrying metal parts of fixed, portable, and plug-connected equipment will be grounded; however, portable tools and appliances protected by an approved system of double insulation need not be grounded.

**3.1.3 Extension Cords:** Extension cords will be of a three (3) prong type and will be protected from damage. The cords will not be fastened with staples, hung from nails, or suspended by wires. Splices will meet the requirements of the National Electric Code (NFPA 70). Worn or frayed cords will not be used. It should be noted that exposed insulation of plug ends will be unacceptable and that any cuts or frays in the cord must be repaired. Electrical tape over these cuts or breaks will not be acceptable.

**3.1.4 Guarding:** Guarding will be required when the light bulbs are within seven (7) feet of the working surface or where otherwise exposed to physical damage (e.g., storage closets).

**3.2 HIGH VOLTAGE:** Each workplace will evaluate the accessibility of inmates to high voltage areas (excess of 600 volts). Inmates will not work on high voltage energized circuits. Where the above ground power lines are readily accessible without direct supervision of a qualified electrical supervisor, identification of the hazard should be made known by attaching signs which state: "DANGER: HIGH VOLTAGE."

**3.3 UNDERGROUND FAULT PROTECTION:** Purpose: To provide a method for accident prevention in the use of temporary electric power during the construction of a project. To provide guidelines for the utilization of this method and assure compliance with the requirements set forth in National Electric Code (NFPA 70) and OSHA Construction Standards 1926.404 (b) (1) (iii). (References - OSHA Construction Standards 1926, Subpart "K," Electrical.)

**3.4 PREVENTATIVE MAINTENANCE:** Each workplace, farm, and industry will develop a preventative maintenance program. Implementation of the program will keep the physical plant in good condition and will be reflected in the safety record. Maintenance falls under Division of Facilities Management. It is, however, the responsibility of SCDC personnel in all departments to direct the attention of the facility maintenance staff to any problems as soon as they are discovered (refer to SCDC Policy/Procedure ADM-13.07, "Maintenance and Repairs"). The safety of employees and inmates is closely related to the conditions of a building and equipment; therefore, the EHSO should develop a good understanding of the building's preventative maintenance program and problems unique to the unit. The EHSO should not hesitate to point out areas which need improvement.

**3.5 LOCKOUT/TAGOUT PURPOSE, GUIDELINES, AND DEFINITIONS:** The purpose of this section is to prescribe procedures which ensure compliance with OSHA Control of Hazardous Energy Standard, Title 29, CFR 1910.147; to establish a program and utilize procedures for affixing appropriate lockout or tagout devices; and to otherwise disable machines and/or equipment in order to prevent unexpected energization, start-up, or release of stored energy so as to avoid injury to employees and inmates.

**3.5.1** The SCDC will inform all employees and inmates of the contents of the OSHA Control of Hazardous Energy Standard. Employees will be informed during new employee orientation (refer to SCDC Policy/Procedure ADM-17.01, "Employee Training Standards") and annually as required. Inmates will be instructed by the institution EHSO/designee during inmate orientation. This training will be documented on SCDC Form 22-5, "Inmate Training Record." All employees and inmates, upon

observing a machine or piece of equipment which is locked out/tagged out to perform servicing or maintenance, will refrain from attempting to start, energize, or use that machine or equipment. (4-ACRS-7D-22, 4-4082)

#### **3.5.2 Definitions:**

Affected Employees /Inmates	Those employees/inmates designated by position description who are required to operate equipment or use a machine on which servicing or maintenance is being performed under lockout or tagout, or whose job requires them to work in an area in which such servicing or maintenance is being performed.
Energy Isolating Device	A mechanical device which physically prevents the transmission or release of energy, including but not limited to the following: a manually operated electrical circuit breaker; a disconnect switch; and, a manually operated switch by which the conductors of a circuit can be disconnected from all non-grounded supply conductors. In addition, no pole can be operated independently or line valve or block, etc.
Lockout Device	A device that utilizes a positive means such as a lock (either key or combination type) to hold an energy isolating device in a safe position and; thus, prevent the energizing of a machine or of equipment.
Tagout Device	A prominent warning device (such as a tag and a means of attachment) which can be securely fastened to an energy isolating device in accordance with an established procedure in order to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

**3.5.3 Guidelines:** All Agency operated, serviced, and maintained machines and equipment in which the unexpected energization or start up of the machines or equipment or the release of stored energy could cause injury to employees or inmates are affected by the OSHA Control of Hazardous Energy Standard.

**3.5.4** The Tagout Standard does <u>not</u> apply to: installations under the exclusive control of electric utilities; work on cord and plug connected electric equipment so long as the cord is unplugged; and hot tap operations involving transmission and distribution systems for gas, steam, water, or petroleum products performed by pressurized pipelines, provided the work site supervisor demonstrates that (1) continuity of service is essential; (2) documented procedures are followed; and (3) special equipment is used that will provide proven, effective protection for employees and inmates.

**3.5.5** An annual hazardous energy safety audit will be performed and repeated by Trades (Vocational) Instructors, Trades (Maintenance) Personnel, and Divisional Technical Advisors (for the Division of Prison Industries; Division of Support Services; Division of Facilities Management; Division of Medical and Professional Health Services, etc.) to identify machinery or equipment in need of energy control devices and to ensure compliance with the lockout/tagout standards. Any deficiencies should be documented on SCDC Form 19-89, "Inspection Report."

**3.5.6** Equipment or machinery in need of lockout/tagout or an energy isolating device may include but not be limited to: generators, exhaust fans, trash compactors, steam/water pipes, prison industry manufacturing equipment, etc., or any equipment being maintained that requires an employee or inmate to bypass or remove a guard or other safety device prior to service.

**3.5.7** See SCDC Policy/Procedure ADM-13.04, "Energy Consumption, Management, and Conservation," for more requirements for development of energy conservation plans.

**3.6 LOCKOUT/TAGOUT (ENERGY CONTROL PROGRAM) PROCEDURES:** The Energy Control Program (lockout/tagout) will consist of:

1. energy control procedures;

- 2. employee/inmate training; and
- 3. inspections to ensure that applicable equipment is isolated from the energy source and that it is rendered inoperative prior to service or maintenance.

The application of energy control (lockout/tagout procedures) must cover the following elements and actions and must be conducted in the following sequence of events:

#### 3.7 LOCKOUT/TAGOUT PREPARATION FOR SHUT DOWN:

**3.7.1** Before an authorized employee/inmate turns off a machine or piece of equipment, the authorized employee/inmate must have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means to control the energy. The authorized employee/inmate must find the switches, valves, or other devices that control energy in need of lockout.

**3.7.2** Affected employees/inmates will be notified of the time and purposes of the lockout of the equipment.

**3.7.3** Utilizing the aforementioned procedures, the machine or equipment will be turned off or shut down.

**3.7.4** Following shut down, the authorized employee/inmate will proceed with locating and isolating all energy sources (steam, gas, electricity, etc.). Through means of blocking, bleeding, venting, etc., the authorized employee/inmate must rid the equipment/machine of any stored energy, as in springs, hydraulic systems, or air pressure.

**3.7.5** The authorized employee/inmate will attach the lock that holds the energy isolating devices (switches, etc.), maintaining them in an "off" or "safe" position. An authorized will be responsible for supervising the removal of all lockouts. The tagout device will be used in lieu of the locking device when the equipment or machinery cannot be locked out. Tagouts must be affixed in a manner clearly indicating that the operation or movement of the energy isolating device from the "safe" or "off" position is prohibited. The tag must be fastened at the same point at which the lock would have been attached. Where such is not possible, the tag should be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the machine or equipment.

#### **3.8 TESTING THE OPERATING CONTROLS FOLLOWING LOCKOUT:**

**3.8.1** The authorized employee/inmate will ensure that no one is close enough to the machinery or equipment to sustain injury during the test. The authorized employee/inmate will place all controls in the "on" position, ensuring that the machine/equipment will not start up and that the power will not come on. Following this determination, the authorized employee/inmate will return the operating controls to the "off" or "safe" position.

**3.8.2** Prior to performing the necessary service or maintenance, the employee/inmate will test the electrical parts and circuits to ensure that they are de-energized.

**3.9 RELEASE FROM LOCKOUT/TAGOUT:** Before lockout or tagout devices are removed and energy is restored to the machine or equipment, the following procedures must be followed.

**3.9.1** The work area will be inspected to ensure that all non-essential items have been removed, that tools are accounted for and secured, and that machine or equipment components are operationally intact.

**3.9.2** The work area will be inspected to ensure that all employees/inmates have been safely positioned and/or relocated and are notified that the lockout or tagout devices are being removed.

**3.9.3** An authorized employee will supervise the lockout/tagout.

- 1. Strict key and/or combination-to-lock control applicable to SCDC Policy /Procedure OP-22.17, "Key Control," labeled as belonging to specific mechanical equipment.
- 2. Knowledge or documentation that the removing party possesses the skills and knowledge necessary to provide equivalent safety removal procedures.
- 3. Verification that the employee who originally installed the lockout/tagout device is not available at the work site.
- 4. Knowledge or documentation that reasonable efforts were made to contact the originally authorized employee.
- 5. Notification to the originally authorized employee/inmate, upon determination of his/her location, that another authorized employee /inmate has performed this task.

#### 3.10 GROUP LOCKOUT/TAGOUT:

**3.10.1** When servicing or maintenance is performed by a crew, department, or other group, they will utilize a procedure which affords the employees/inmates a level of protection equivalent to that provided by the implementation of a personal lockout/tagout device under the supervision of the EHSO.

**3.10.2** Primary responsibility will rest with one (1) designated employee (Crew Chief). S/he will be responsible for ascertaining the exposure status of individual group members.

**3.10.3** Each authorized employee/inmate of the group will affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when s/he begins work, and will remove such when s/he stops working.

#### 3.11 OUTSIDE PERSONNEL/CONTRACTORS LOCKOUT/TAGOUT

**PROCEDURES:**Whenever outside service personnel are engaged in activities as specified within this policy, the authorized SCDC employee and the authorized outside service employee (contract employee) will inform each other of their respective lockout/tagout procedures.

**3.12 LOCKOUT/TAGOUT TRAINING:** For training purposes, employees and inmates are divided into two (2) groups: Authorized and Affected.

**3.12.1** Authorized employees/inmates will receive technical training by their respective divisional or institutional work site supervisors in:

how to recognize the type and amount of energy used by the machines and equipment: how to keep the energy controlled; definition of terms used; equipment used for lockout/tagout (standardized appearance, personal identification procedures); Procedures, including: preparation for shutdown; notification to affected employees; shutdown, isolation, blocking, and securing; placement, removal, and transfer of device; testing to verify effectiveness of energy control; release from lockout/tagout; key/combination to lock controls; release if employee who applied the device is no longer at facility; special procedures and rules for tagout systems; special procedures for changes of shifts and personnel changes; special procedures and practices for group lockout/tagout; inspection program; and communication and reporting of problems.

**3.12.2** Affected Employees/Inmates will be trained in: the purpose and importance of the energy control procedures (lockout/tagout); and the importance of not attempting to repair, service, or start-up machinery without adhering to proper procedures for lockout/tagout.

**3.12.3** Employee/Inmate Re-training: Employee/inmate re-training must be given in the following circumstances: where there is a change in the internal components and energy source of machine or equipment or the purchase of a different brand, make, or model machine/equipment; when there is a change in the energy control procedure; when periodic inspections reveal deviations from or inadequacies in the employees knowledge or use of energy control procedures.

**3.12.4** All employee training or re-training must be documented pursuant to SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs," within an employee/inmate training record for audit purposes. All inmate training will be documented on SCDC Form 22-5, "Inmate Training Record." (3-ACRS-1D-08, 3-4079)

**3.12.5** Training Resource Sources: Wardens, Training Specialists, Trades (Vocational and Maintenance) personnel, EHSOs, and production personnel are encouraged to avail themselves of a vast array of videos, films and other training aids from the South Carolina Occupational Safety Council, the State Accident Fund, and/or the Agency Safety Program Manager.

**3.13 LOCKOUT/TAGOUT TAGS NEEDED FOR WORK SITE AREAS:** An adequate supply of warning tags with nylon cable tags must be maintained. Tags will be:

**3.13.1** Tags must be instantly identifiable as equipment to be used in the SCDC Lockout /Tagout Program and will not be used for any other purpose.

**3.13.2** Tags must be standardized in at least one (1) of the following criteria: color, shape, or size. Print and format will also be standardized.

**3.13.3** Tags must be constructed and printed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or the message to become illegible. Tags must not be subject to deterioration when used in corrosive environments, such as areas where acid or alkali chemicals are handled and stored.

**3.13.4** Tags must be substantial enough to prevent inadvertent or accidental removal. (Each work site must purchase appropriate tags, etc., from reputable suppliers of safety equipment.) Tag device attachment means will be of a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds and having the general design and basic characteristics of being at least equivalent to a one (1)-piece, all-environment-tolerant nylon cable tie.

**3.13.5** Tag messages will warn of a possibly hazardous condition if the machine or equipment is energized. Tags must clearly convey warning messages such as:

"DO NOT START" - "MACHINE BEING REPAIRED" "DO NOT OPEN" - "WORKER INSIDE COULD BE KILLED" "DO NOT OPERATE" - "MACHINE REPAIR IN PROGRESS"

**3.14.6** Tags must show the identity of the authorized employee performing the maintenance /servicing and:

- CANNOT BE REUSED;
- CANNOT BE RELEASED WITH LESS THAN 50 POUNDS OF STRENGTH;
- MUST BE SELF-LOCKING; and
- MUST SUSTAIN ADVERSE TEMPERATURE AND DAMP WEATHER CONDITIONS.

**3.15 LOCKOUT/TAGOUT LOCKS NEEDED FOR WORK SITE AREAS:** Locks will be:

**3.15.1** Instantly identifiable as equipment to be used in the SCDC Lockout /Tagout Program and will not be used for any other purpose and identified by (labeled or tagged) the name of the authorized employee who installed them.

**3.15.2** Standardized within the facility in at least one (1) of the following criteria: color, shape, or size. Locks must be key or combination style and may not be utilized for any other purpose than lock-out.

**3.15.3** Substantial enough to prevent removal without the use of excessive force or unusual techniques, such as the use of bolt cutters or other metal cutting tools.

**3.15.4** Capable of withstanding the environment to which they are exposed and durable enough for the heat, cold, humidity, or corrosion;

**3.16 EXCAVATIONS:** The Facilities Maintenance Supervisor will review CFR 1926 for guidance.

**3.17 BACK-UP ALARMS:** All construction equipment used by SCDC, such as loaders, bulldozers, and tractors, must have back-up alarms. All forklifts used in warehouses, etc., and all trash trucks used will also have back-up alarms. No employee or inmate will use any motor vehicle or any earth-moving or compacting equipment having an obstructed view to the rear unless the vehicle has a reverse signal alarm distinguishable from the surrounding noise levels, or the operator is guided by the signals of an observer stating that it is safe to do so.

**3.18 SLOW-MOVING VEHICLE EMBLEM:** Slow-moving vehicle emblems will be posted on any farm machinery traveling on the highway at speeds less than 25 m.p.h. This emblem is of a highly reflective color, able to be seen by other vehicles both in the daytime and by means of reflected headlights at night. The emblem consists of a fluorescent yellow-orange triangle with a dark red reflective border. The reflective border defines the shape of the fluorescent color, visible in daylight, and creates a hollow red triangle in the path of motor vehicle headlights at night.

**3.19 VEHICLE OPERATOR SAFETY INSPECTION:** Operators will inspect for safety deficiencies prior to putting any motor vehicle, heavy equipment, or motorized equipment into operation. The inspection will consist of what is considered operation maintenance, oil and water levels, tires, safety features, and any mechanical defects. Maintenance or repair requirements will be reported to the appropriate authority.

**3.20 TOXIC AND CAUSTIC MATERIALS** (Other than pesticides, herbicides, and insecticides): The manufacturers' directions and safety precautions (labels) will be followed. The Material Safety Data Sheet will be followed for proper usage and storage. This information will be updated by the OSHA regulations contained in 29 CFR 1910, subpart Z, "Occupational Health and Environmental Control," parts 1910.1000 through 1910.1200. Toxic and caustic materials will be kept physically separate from food as specified in the United States Public Health Service Sanitation Manual.

**3.21 EYEWASH/SHOWER EQUIPMENT:** (Reference: 29 CFR 1910.151(c), ANSI Standard Z358.1)

**3.21.1** Safety eye wash and shower equipment are provided for the emergency treatment of the eyes or body of any employee/inmate who works in an environment where there is a potential exposure to toxic or corrosive materials. Safety eye wash and showers will conform to regulations.

**3.21.2** Job site supervisors will ensure that employees/inmates are aware of the location of, requirement for, and proper procedures to use this equipment. Job site supervisors will perform weekly tests on equipment to flush the lines and to verify that:

- valves open freely;
- water flows evenly;

- water is clean;
- screen is clean;
- system is free from rust;
- drains are open;
- pressure is maintained;
- access is clear; and
- foam filters are replaced monthly.

The weekly test will be documented on an attached tag, or in a log book used for this purpose. All chemical exposures will be reported to the EHSO.

**3.21.3** All employees and inmates will know the locations of the equipment and the proper procedures for usage of the Safety Eye Wash, the Safety Shower, and how to seek medical attention:

- 1. Safety Eye Wash: Flush eyes for 15 minutes, minimum. Hold eyelids open; roll eyeballs so water flows on all surfaces and in the folds surrounding the eye.
- 2. Safety Shower: Flush body for 15 minutes, minimum.
- 3. Medical Attention: Seek medical attention immediately.

**3.22 PAINTING:** A spray booth or room meeting the specifications of OSHA CFR 1910.107 and State Fire Rules and Regulations is mandatory for any interior spray painting.

**3.23** CONFINED SPACE PROGRAM: All SCDC employees/inmates, except those trained and equipped as stated herein, will be prohibited from entering permit-required confined spaces. All Wardens, Division Directors, and work site supervisors will evaluate their respective work sites to determine if any spaces are permit-required confined spaces as defined within this Manual, and will maintain carefully controlled centralized work site documentation for review by OSHA and Agency authorities. (4-4455M)

**3.23.1 Manholes:** All manholes will be identified by number and color during the annual evaluation to ensure compliance with OSHA Standards. The manhole covers may be painted in the below colors or in yellow with a colored dot signaling the type of utility. A schematic showing all confined spaces will be maintained by the area EHSO and the Maintenance Supervisor. and the Division of Compliance, Standards, and Inspections. The following color codes will be utilized:

- RED Electrical
- YELLOW Gas/Steam/Oil
- ORANGE Communications
- BLUE Water
- GREEN Sewer

**3.23.2 Sewer Manholes:** All sewer manholes will be considered permitrequired confined spaces and can only be entered by trained employees/inmates with proper safety equipment.

**3.23.3** All spaces will be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise.

**3.23.4** If the entry supervisor decides that the confined space is not safe for entry, s/he will notify the responsible Warden, Division Director, and EHSO who will take effective measures to prevent employees/inmates from entering such spaces (e.g., posting warning signs and utilization of locking devices in accordance with OSHA Control of Hazardous Energy Standard [lockout/tagout], etc.).

**3.23.5** Only employees/inmates approved and trained will be utilized to enter a permit-required confined space. Work site supervisors will ensure that no employees/inmates, except those trained and equipped as stated herein, participate in any task which would require working in or around a permit-required confined space. The EHSO will supervise the program for the institution. The Agency Safety Program Manager will be notified and will be the approving authority for permit-required confined space entry.

**3.23.6** Rescue and emergency services procedures, as well as the authorized work permit, must be posted visibly on or near the permit required confined space undergoing maintenance or service. Inmates may not participate in rescue procedures.

**3.23.7** The Division of Compliance, Standards, and Inspections Agency Safety Program Office will provide technical assistance to the Facilities Management.

**3.23.8** A work site supervisor whose employees/inmates enter a non-permitrequired space need only to comply with the provision to train employees and conduct an audit of the confined spaces if: the supervisor can demonstrate that the only hazard posed by the permit required space is an actual or potential hazardous atmosphere; the supervisor can demonstrate that continuous forced air ventilation alone is sufficient to maintain that the permit required space is safe for entry; and the supervisor develops monitoring and inspection data that support the aforementioned.

#### 3.24 CONFINED SPACE TRAINING:

**3.24.1** The <u>Permit-Required Confined Space Entry Program</u> must be available in writing for inspection by employee/inmate workers and will include training for employees/inmates and supervisors in:

- Hazard Communication;
- Self-Contained Breathing Apparatus;
- Lockout/Tagout Procedures;
- Atmospheric monitoring;
- Personal Protective Equipment requirements and use;
- The role of attendants posted outside permit-required spaces (non-inmate);
- A written permit system;
- Multi-employer situations;
- Rescue and emergency services (non-inmate); and
- CPR and First Aid (non-inmate).

**3.24.2** The Agency Safety Program Manager will be the responsible authority for the development, coordination and presentation of training as it pertains to all aspects of the OSHA Permit-Required Confined Space Standard.

**3.24.3** The Agency Safety Program Manager will develop lesson plans on the general aspects of the confined space standard and technical training to facilitate presentation by local trainers. The Agency Safety Program Manager will be responsible for the training of institutional EHSOs in all aspects of the standard to facilitate the training of employees/inmates at their respective work sites (institution/division) in the general aspects of the standard and where appropriate, the specific technical training required of employees/inmates who have job duties which require a more technical understanding of the standard.

**3.24.4** The collection and maintenance of documentation to record confined space training for employees is defined in SCDC Policy/Procedure ADM-

17.03, "Administration of Agency Training Programs." Inmate training will be documented on SCDC Form 22-5, "Inmate Training Record." (4-ACRS-7B-14, 4-4082)

**3.24.5** No employee/inmate is allowed to enter a confined space unless the employee/inmate has completed the Confined Space Training Program.

**3.24.6** Employees/inmates required to enter confined spaces will be re-trained in the Confined Space Entry Program every two (2) years.

**3.24.7** Training resources (films, videos) are available free of charge from the South Carolina Occupational Safety Council, SCDC Division of Compliance, Standards, and Inspections, and/or the State Accident Fund.

#### 3.25 PERMIT-REQUIRED CONFINED SPACE ENTRY SPECIFIC PROCEDURES:

**3.25.1** No confined space will immediately be assumed safe. Confined spaces will be regarded as permit-required until tested (mandatory) and treated (if necessary).

**3.25.2** PRE-ENTRY PROCEDURES - NOTIFY AGENCY SAFETY PROGRAM MANAGER IMMEDIATELY

**3.25.3 IF NO HAZARDS EXIST FOLLOWING TESTING, OR IF HAZARDS CAN BE SAFELY ELIMINATED IN ACCORDANCE WITH PROCEDURAL GUIDELINES,** then **NO** permit-required confined space procedures need to be followed, **EXCEPT** the provisions to train employees /inmates and to continue the audit (continuous testing and written documentation of the audit results).

**3.25.4** Before entering any permit-required confined space (spaces where hazards have not been eliminated), the following equipment must be assembled and ready for use at the work site:

- entry permit;
- gas monitoring equipment;
- maintenance (or two-way) radio (if unassisted voice communication is not practical);
- body harnesses;
- lockout/tagout equipment if required;
- tripod and winch (if rescue will involve a vertical lift of unconscious or disabled employee);
- a self-contained breathing apparatus with a full tank (a minimum of 30 minutes of supplied air);
- any Personal Protective Equipment that is necessary;
- safety cones (if necessary);
- powered ventilator (if required);
- portable lighting, if necessary; and
- ladders, if necessary.

**3.25.5** The above equipment must be available and will be obtained through the Facilities Management Safety Officer with assistance from the Division of Compliance, Standards, and Inspections. the Safety Program Office. The Construction/Maintenance Safety Officer Facilities Management Safety Officer will designate the storage location and develop a system of accountability for the equipment. If the aforementioned equipment is not sufficient to adhere to the specific requirements of working in or near a permit-required confined space, work within such a space will not commence until sufficient equipment is obtained and placed in use.

**3.25.6** Before entering any confined space, all members of the confined space entry work crew must be trained in the following areas:

- definition of classes of confined spaces;
- atmospheric testing and hazard assessment;
- ventilation practices;
- Personal Protective Equipment;
- pre-entry and entry procedures;
- rescue procedures (employees only); and
- first aid and CPR (employees only).

3.25.7 A confined space Entry Permit must be completed by an Entry Supervisor and be approved by the EHSO and the *Facilities Management* Construction/Maintenance Safety Officer and maintained at the work site before anyone enters the confined space. Copies of permits must be kept on file at the EHSO's office for five (5) years. (A sample Entry Permit is attached as Appendix C). The Entry Supervisor must complete the confined space Entry Permit in the following order: (4-4455M)

- 1. record the date and time;
- 2. record the location (work site);
- 3. record the reason for entry;
- 4. record the person's name taking the atmospheric readings;
- 5. test the confined space atmosphere for oxygen deficiency, combustible gases, and toxic gases during the following steps:
  - calibrate gas detectors in accordance with factory recommendations;
  - lower the gas detector probe into the confined space and take readings at the top, middle, and approximately six (6") inches above the bottom of the confined space - and again at the middle and the top as the probe is removed;
  - prevent access to confined space if any test reveals unacceptable levels of oxygen (less than 19.5% or greater than 23%), combustible gases (greater than 10% of the lower flammable limit), or toxic gases (10 ppm or greater or hydrogen sulfide or 35 ppm or greater of carbon monoxide) as indicated in the Confined Space Classification Table;. Normally, SCDC employees will only monitor for acceptable levels of oxygen, combustible gases, and hydrogen sulfide. However, if the confined space is in an area where there is heavy traffic or if internal combustion engines are used in the immediate area in such a manner that carbon monoxide may develop inside the confined space, then the carbon monoxide level must also be monitored. SCDC employees/inmates will only enter Class C-non-permit confined spaces.)
  - record the reading;
- 6. indicate possible work hazards that may exist or be created;
- 7. indicate safety equipment required for entry;
- 8. have all entrants sign the entry permit acknowledging readings, possible work hazards, and required safety equipment;
- 9. have the EHSO or the Construction/Maintenance Safety Officer sign the permit authorizing the entry if conditions are acceptable for entry;
- 10. record the date authorized; and
- 11. post the Entry Permit at the entry portal or other conspicuous location.

**3.25.8** If the confined space is vacated for any period of time (for example, lunch), a new Entry Permit must be completed. The duration of the permit may not exceed the time required to complete the assigned task.

**3.25.9** If it is previously determined or if one suspects that a potentially explosive atmosphere exists, extreme care should be used in removing covers to the confined space opening, such as manhole covers.

**3.25.10** Smoking will not be permitted within 20 feet of a confined space entrance. Eating will not be permitted within or around a confined space.

**3.25.11** The work site will be protected from hazards such as traffic or construction material. All loose objects must be moved at least four (4) feet from the confined space entrance.

**3.25.12** If a hazardous chemical spill is suspected, entrance to the confined space will be prohibited. The EHSO, Construction/Maintenance Safety Officer, and Entry Supervisor will be notified immediately. S/he will proceed to ventilate the confined space by using the following procedures:

#### 3.26 STANDARD VENTILATION PROCEDURES:

**3.26.1 Manholes:** remove one (1) or two (2) manhole lids on each side of the work area for a minimum of 15 minutes. If natural ventilation is inadequate, a power ventilator should be used. Ventilation (whether natural or powered) will continue as long as work is being performed.

**3.26.2 Lift Stations:** Operate ventilating fans 15 minutes prior to entering any lift station confined space and continue ventilating as long as work is being performed.

**3.26.3** Tanks: Open all doorways, hatches, and openings to allow for natural ventilation. If natural ventilation is not adequate, a power ventilator will be used.

**3.26.4** After Ventilation: After ventilating, the atmosphere will be re-tested in accordance with Pre-Entry Procedures. If levels are still unacceptable, the Entry Supervisor will ensure that ventilation is continued. If levels are acceptable, access may be authorized, using entry procedures, after the entry permit is signed.

# **3.27 ENTRY PROCEDURE STANDARD INSTRUCTIONS (Permit-Required Confined Spaces):**

**3.27.1** No personnel will be allowed to enter a Class A or Class B confined space (see Appendix C for definitions), except employees/inmates who are properly trained. Trained employees only or contract personnel may only be used in emergency rescue.

**3.27.2** An attendant (employee only) trained in CPR and First Aid will be present outside the confined space to operate the life line and to assist the person in the confined space. The attendant will remain in constant communication with the person(s) in the confined space. At no time will a worker be left alone or unattended in a confined space.

**3.27.3** All confined space entries which will require a vertical lift of a disabled employee/inmate during rescue will use a tripod and winch during entry (more than five [5] feet deep).

**3.27.4** Wristlets or anklets will be used for entry into narrow confined spaces where it is not possible to rescue the entrant by pulling on a body harness.

**3.27.5** The gas monitor will be turned on and carried into the confined space. If the gas monitor alarm sounds, employees/inmates will exit the confined space immediately. If the gas monitor does not sound indicating that atmospheric levels are unacceptable, work will be allowed following all safety procedures.

**3.27.6** Employees/inmates will exit the confined space if light-headedness or sickness occurs.

**3.27.7** Smoking will not be permitted within 20 feet of confined spaces.

**3.27.8** When all pre-entry procedures have been successfully accomplished, workers will be allowed to continue with the following entry procedures.

#### 3.28 SPECIAL INSTRUCTIONS FOR MANHOLE ENTRY:

**3.28.1** See instructions listed above.

3.28.2 Put on body harness and attach to lifeline (if required).

**3.28.3** Check each manhole entry step by hitting each one before putting weight on it.

**3.28.4** If the manhole does not have steps, put in a ladder that reaches to the bottom.

**3.28.5** The following steps should be used if entry requires going past the maximum length of the tripod retrieval cable:

- 1. When entrant reaches the maximum retrieval cable length, entrant may unhook retrieval cable and go further if attached to a proper lifeline which extends out of the confined space.
- 2. A second entrant (attached to the retrieval cable and an additional proper lifeline) is required to enter the confined space to monitor the first entrant. The second entrant will be physically strong enough to pull the first entrant out of the confined space. The second entrant may not be an inmate.
- 3. If the first entrant become disabled, a 30 minute self-contained breathing apparatus (SCBA) will be lowered to the second entrant. The second entrant is required to put on the SCBA.
- 4. Depending on the situation, the second entrant may oversee and guide the retrieval of the first entrant; or proceed to the first entrant and pull the disabled first entrant out; or pull the disabled first entrant to the maximum length of the retrieval cable and attach the victim at that point.

#### **3.29 LIFE STATION ENTRY PROCEDURES:**

**3.29.1** See standard instructions listed above.

**3.29.2** If the lift station is equipped with ventilation fans and readings are acceptable, then entry is permitted.

**3.29.3** If the lift station is not equipped with ventilation fans and gas readings are not acceptable, reference standard ventilation procedures.

#### 3.30 ALL OTHER CONFINED SPACE ENTRY PROCEDURES:

**3.30.1** See standard instructions listed above.

**3.30.2** All person(s) entering the confined space will wear a full body harness with a lifeline attached to the manlift (if required).

**3.30.3** A ladder or other safe means will be used to enter or exit confined spaces exceeding four (4) feet in depth.

# **3.31 STANDARD EMERGENCY RESCUE PROCEDURES FOR PERMIT REQUIRED CONFINED SPACES:**

**3.31.1** If off-site rescue services are used, they must have access to the confined space(s) in order to develop rescue plans and to practice rescues no less than once annually.

**3.31.2** To facilitate non-entry rescue, retrieval systems or methods will be used whenever an authorized entrant enters a confined space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems must meet the following requirements:

- 1. Each authorized entrant will use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, or above the entrant's head. Wristlets may be used in lieu of the chest or full body harness if the employer can demonstrate that the use of a chest or full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.
- 2. The other end of the retrieval line will be attached to a mechanical device or fixed point outside the confined space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device will be available to retrieve personnel from vertical type confined spaces more than five (5) feet deep.
- 3. A Material Safety Data Sheet (MSDS) must be kept at the work site. The MSDS will be made available to the medical facility treating the exposed entrant.

#### 3.32 CONFINED SPACE ENTRY PERSONAL PROTECTIVE EQUIPMENT (PPE):

**3.32.1** Certain confined space entries may require the use of PPE by workers and/or rescue teams entering the confined space. The specific equipment required will have been determined by the Entry Supervisor prior to the issuance of the permit. If the permit requires PPE, all employees entering the space must be equipped with and must use the equipment. (4-4337)

**3.32.2** In deciding what equipment is required, the following guidelines will be followed:

- Head Protection: Is there any danger from falling objects, either from within the confined space or through the entryway? Do obstructions or equipment in the confined space present a bump hazard? If yes, then head protection must be worn.
- Eye and Face Protection: Eye protection (minimum of safety glasses) is required in all confined spaces. If exposed to hazardous chemicals, chemical goggles must be worn. Face protection (face shields) may be needed (in addition to eye protection) if the employee/inmate is exposed to flying particles or liquids.
- Hand Protection: Will the workers need protection from sharp edges and rough surfaces? Protection ranging from canvas to metal mesh gloves may be needed. Gloves made of rubber or similar material may be worn to protect against irritating materials. Will the workers encounter extreme heat or cold? Heat protective gloves or thermal insulating gloves may be necessary. Other considerations include whether workers will be handling

slippery tools or materials and whether workers will be exposed to snakes, spiders, or other pests and rodents.

- Foot Protection: Will the workers risk injury from falling objects, chemicals, etc.? Will they need additional protection from slippery surfaces, electrical conductivity, or sparks? If the answer is "yes," proper foot protection will be used.
- Protective Clothing: Will the workers need protection from temperatures, moisture, chemicals, vapors, flames, static electricity, etc.? If the answer is "yes," then protective clothing should be worn.
- Respiratory Protection: The Entry Supervisor will determine if respiratory protection is needed and, if so, will issue necessary gear and directives.
- Hearing Protection: If conditions within the confined space require hearing protection to be worn, consider how it will affect communications between the workers in the confined space and the person outside the confined space (the attendant). When using hearing protection, visual contact must be maintained between the attendant and the worker. If visual contact is not possible, then another method will be used to maintain contact between the worker and attendant (for example, with radios).

#### CHAPTER 4

#### EQUIPMENT, TOOLS, AND SUPPLIES

**4.1 Agency Safety Program Manager's Office:** The following list of tools or equipment is recommended for the Agency Safety Program Manager's Office:

Pocket Tape Recorder	Light Meter	Air Sampler	Slide Projector
Thermometer	Mirror	Sound Level Meter	Hygrometer
Flashlight	Air Flow Meter	Tape Measure	Combustible Gas Detector
Camera	pH Test Kit	Distance Measuring Wheel (Auto Accidents)	Electric Outlet Polarity Tester

**4.2 Environmental Health and Safety Officers:** The following list of tools or equipment is recommended for Environmental Health and Safety Officers (EHSOs):

Camera	Flashlight	Tape Measure	Electric Polarity Tester	
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#### 4.3 POWER LAWN MOWER AND WEED EATER REQUIREMENTS AND OPERATION:

**4.3.1** All equipment will be operated and maintained in accordance with the manufacturer's specifications. Before any cutting operations begin, the lawn will be checked for all debris.

**4.3.2** All power-driven chains, belts, and gears will be positioned or otherwise guarded to prevent the operator's accidental contact with them during the normal starting, mounting, and operating of the machine. Lawn mowers will never be operated when other people are in the immediate vicinity.

**4.3.3** There will be a shut-off device provided to stop the operation of the engine and all positions of controls will be clearly identified. Spark plugs must be disconnected before the housing underside is cleaned.

**4.3.4** The blades of mowers will be enclosed, and the enclosure will extend below the lowest cutting point of the blade.

**4.3.5** A warning will be placed near the opening chute stating that the mower will not be used without the catcher assembly or the chute guard in place. Either the catcher or chute guard will be with the mower when purchased. The opening on the discharge chute will never discharge directly toward any part of the operator.

**4.3.6** Riding mowers will be provided with stops to prevent locking of the steering mechanism. A mechanical means must be provided to stop the mower.

**4.3.7** Chain guards or other suitable guards (e.g., belting, etc.) will be required on all openings (side and rear) of bush hog type mowers.

4.3.8 Safety Gear: Safety glasses and hearing protection will be worn. It will be the responsibility of the supervisor to ensure that personal protective equipment is issued and worn. Inmates and staff will be required to wear work boots while operating any type of power mower. Work boots will be issued to each operator, as needed. Supervisors will be responsible for ensuring that safety equipment is issued and worn by operators. Tennis-type shoes will not be worn when cutting grass. (4-4337)

**4.3.9** Before actual operation, each operator will be provided with instruction on power mower safety covering potential hazards. This will be the supervisor's responsibility with the assistance of a training program developed by the EHSO. The instruction will be documented on SCDC Form 22-5, "Inmate Training Record," and maintained by the supervisor.

**4.3.10** Rotary power mowers will be maintained in good operating condition at all times.

4.3.11 All power lawn mowers will meet the specifications of OSHA 29 CFR 1910.243(e).

**4.4 WEED-EATERS/EDGERS:** These pieces of equipment will be checked routinely during normal usage to ensure that the monofilament cord is feeding properly and that the cutting area is clean and clear of debris. All equipment will be operated and maintained in accordance with the manufacturer's specifications.

**4.4.1 Gasoline Powered:** Operators using gasoline powered "string-trimmers" or edgers must be issued safety glasses. Before operations begin, the equipment will be thoroughly checked to ensure that it is working properly. The engine will be turned OFF before any adjustment or work to the machine is completed.

**4.4.2 Electric Powered:** Operators using electric powered "string-trimmers" must wear safety glasses while operating the equipment. Before beginning operations, the equipment will be checked to ensure that it is working properly. The operator will ensure that the power supply cord is of adequate size and will check the cord to ensure that there are no cracks or tears in the casing or insulation which could allow moisture into the power cord. A three (3) wire ground supply cord will be required. The unit will be disconnected before adjustment or repair to the unit is completed.

**4.4.3** Safety Gear: Work boots will be worn by operators of these machines. At NO time will sneakers be worn. Safety glasses and hearing protection will be worn. It will be the responsibility of the supervisor to ensure that personal protective equipment is issued and worn. (4-4337)

#### **4.5 OTHER POWER EQUIPMENT:**

**4.5.1** Use of leaf blowers, lawn vacuums, and chain saws will require use of *work boots*, safety glasses, and hearing protection. (4-4337)

**4.5.2** All power equipment will be provided with a shutoff device to stop operation of the motor or engine. The device will require manual and intentional reactivation to restart the motor or engine.

**4.5.3** All positions of the operating controls will be clearly identified.

**4.5.4** All power take-offs (PTOs), power-driven chains, belts, and gears will be positioned or otherwise guarded to prevent accidental contact with the operator during normal starting, mounting, and operation of the machine.

**4.5.4** All power supply cords will be of an adequate size and will be checked before each use to ensure that there are no cracks or tears in the casing or insulation that could allow moisture into the cord. Only three (3) wire grounded power supply cords will be used.

**4.5 POWER EQUIPMENT TRAINING:** All operators of powered equipment will be given specific instruction by the detail supervisor on safety and operation of the equipment, covering potential hazards. Such training will be documented using SCDC Form 19-22, "Certification for Inmate Operators of Farm and Heavy Equipment or Other Motorized Equipment," and kept on file within the landscape foreman's office pursuant to SCDC Policy/Procedure OP-20.02, "Transportation Management."

**4.6 LAUNDRY SAFETY TRAINING:** Employees and inmate workers will be properly instructed as to the hazards of their work by safety talks, instruction, and on-the-job training. Inmate training will be documented and maintained using SCDC Form 22-5, "Inmate Training Record," and maintained by the supervisor. Employee training will be documented in accordance with SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs," by the employee's supervisor and maintained by the same.

**4.7 LAUNDRY EQUIPMENT:** All laundry equipment will be maintained and will meet the following requirements:

**4.7.1** All laundry presses will have two (2) hand activating controls. Dry cleaning presses will be converted into a two (2) hand control operation with a foot activator as a hold switch and adding an additional hand activating button. Only one (1) worker will be assigned to a press.

**4.7.2** No safety guard or device attached to or forming an integral part of any machine will be removed or made ineffective except for the purpose of making immediate repairs or adjustment. Any such device removed during repair will be replaced immediately upon completion of repairs.

**4.7.3** Every washing machine will be equipped with a safety interlocking device that will prevent the inside cylinder from moving when the outer door is open, and will also prevent the door from being opened while the inside cylinder is in motion. This interlocking mechanism should not prevent the movement of the inner cylinder under the action of a hand-operated mechanism or an inching device.

\*The term "safety interlock" refers to a device that will prevent the operation of the machine while the cover or door is open or unlocked or will hold the cover or door closed and locked while the basket or cylinder is in motion.

**4.7.4** No machine will be operated until repairs and adjustments have been made and equipment is in good working condition.

**4.7.5** No moving part of any machine will be oiled, cleaned, adjusted, or repaired while the machine is in operation or in motion.

\*It is very important to check that there are vacuum breaker valves on all water inlet pipes in this area, particularly where there are mixing vats in operation (mixing bleach and starch). This is a very common area for back-siphonage problems. Also, any sinks used in the laundry will have an air gap at the inlet of at least two and one-half  $(2\frac{1}{2})$  times the diameter of that inlet.

#### 4.8 CONTAMINATED CLOTHES, FLOORS, TABLE TOPS, AND SHELVES:

**4.8.1** All clothing contaminated by human or hazardous waste must be sent to the laundry in sealed water soluble plastic bags. The bags should be placed directly in the washer with the clothes still sealed inside.

**4.8.2** The floors in the laundry will be constructed to be water tight, free from projections, crevices, or dangerous gradients. They will be maintained in good repair and drained so that no water may accumulate.

**4.8.3** The working spaces on table tops, shelves, etc., will be constructed of materials that are properly surfaced, finished, and maintained in good repair.

**4.8.1** Follow procedures as outlined in SCDC Policy ADM-16.09, "Exposure Control Plan (Bloodborne Pathogens)" and Medical Directives 100.B.3 and 300E-2E.

#### **4.9 LAUNDRY FACILITIES:**

**4.9.1 Steam Pipes:** All steam pipes within seven (7) feet of any floor or working platform will be insulated or covered with heat resistive material or otherwise properly guarded and color coded.

**4.9.2 Steam Machines:** Steam machines will not be operated at a pressure above that given by the manufacturer's pressure rating as shown on the name plate. If steam source is at a pressure higher than that given by manufacturer, a stop valve, reducing valve, or pressure gauge will be installed in the order named from the source. The safety valve will be located in a non-hazardous place.

**4.9.3 Pressure Reducing Valve:** Where pressure reducing valves are used, one (1) or more relief or safety valves will be provided on the low pressure side of the reducing valve. The relief or safety valve will be located adjacent to, or as close as possible to, the reducing valve. Proper protection will be provided to prevent injury or damage caused by liquid escaping from the relief or safety valve if vented to the atmosphere. The vents will be of ample size and as short and direct as possible. The combined discharging capacity of the relief or safety valve will be such that the pressure rating of the lower-pressure piping and equipment will not be exceeded if the reducing valve sticks or fails to open. The ANSI Code for Pressure and Power Piping (ANSI 31.1.0/1967 and B31.1.0a/1969) will be adhered to. For gas appliances and pipings, ANSI Z21.30/1964 will be followed.

**4.10 METAL WORKING OPERATIONS:** All metal working equipment will meet ANSI Standards and OSHA requirements. The work site supervisor will be responsible for developing written job safety instructions for each operation. These safety instructions will be posted on each machine at eye level in the operator's work zone. These instructions for all operations must be kept current. Safety training will be given monthly for every worker and records maintained by every supervisor indicating subject of training, data given, and who attended. Equipment training will be documented as per SCDC Policy /Procedure ADM-17.03, "Administration of Agency Training Program." Inmate training will be documented on SCDC Form 22-5, "Inmate Training Record."

**4.10.1 Presses:** Metal forming, turning, and processing presses must meet all established codes for such equipment and must be adequately guarded to ensure that operator's hands will not come into contact with the presses at any point of operation.

- 1. All presses will be set for long stroke. Unless otherwise authorized by the shop manager, the short stroke circuit must be inoperative. Presses must be re-energized for each press cycle (long stroke is defined as having a minimum of 135° of the downstroke of the press). Presses will have time-delay devices in two (2) hand control circuits.
- 2. Controls will never be installed on the rams of presses.
- 3. Die blocks must be installed as specified.

- 4. Presses will not be permitted to operate on a continuous cycle without written permission of the EHSO. Electrical terminals for continuous cycle must be rendered inoperative.
- 5. Automatic and progressive presses will be equipped with dual controls.
- 6. If two (2) people are required to operate the press, each operator will have a set of dual hand controls.
- 7. Press controls will have anti-repeat, interlocking, and self-checking features.
- 8. Press control bottoms must be 18 inches above floor.

**4.10.2 Abrasive Wheel Machinery:** Abrasive wheels will be used only on machines provided with guards. Guards will cover the spindle end, nuts, and flange projection. Abrasive wheel machinery will meet or surpass the requirements of CFR 1910.215, Abrasive Wheel Machinery.

**4.10.3 Electrical Safety Precautions:** Every machine connected to an electrical circuit will have a single safety disconnect capable of interrupting all power supply circuits to the machine simultaneously.

- 1. When two (2) or more machines are interconnected, all sources of electric power must feed through a common safety disconnect.
- 2. Controls must be interlocked and time-delay devices installed in the circuit so that proper sequence of operation cannot be bypassed.
- 3. In multiple-press installation, when one (1) or more presses are mechanically interconnected through separate or common mechanical handling devices, the source of power must feed through a common safety disconnect capable of interrupting all electrical circuits.

**4.10.4 Pneumatic Safety Precautions:** Every machine connected to an air source will be provided with a master shut-off valve.

- 1. Pneumatic controls must be of adequate capacity to permit addition of tools and mechanical handling devices.
- 2. Air circuit must be arranged to permit release of all captivated air on service side of valve.
- 3. In multiple press installation, it is imperative that the air source be equipped with an air lockout valve to release all captured air in equipment when the air valve is in closed position.

**4.11 WOODWORKING EQUIPMENT GENERAL REQUIREMENTS:** All woodworking equipment will meet the SCDC's requirements and ANSI codes. The National Safety Council Accident Prevention Manual will also be used as a guide.

**4.12 WOODWORKING MACHINE CONSTRUCTION:** Each machine will be designed, constructed, and mounted in a manner which will eliminate hazardous vibrations at any operating speed and while using any tool designed for the machine.

**4.13 WOODWORKING MACHINE OPERATIONS:** Only trained and qualified operators, as determined by the work site supervisor, will be allowed to operate woodworking equipment. Proper safety guards and safety equipment must be utilized and the operator must wear PPE. Inmate training will be documented using SCDC Form 22-5, "Inmate Training Record."

**4.14 BAND SAWS:** All portions of the saw blade will be enclosed or guarded with the exception of the working portion of the blade.

#### 4.15 MATERIAL HANDLING:

**4.15.1** Where mechanical handling equipment is used, sufficient safe clearance will be allowed for aisles, loading docks, doorways, and wherever turns or passage must be made.

**4.15.2** Only authorized operators or supervisors will be permitted to operate mechanical handling equipment. Each operator will be responsible for the mechanical condition of the equipment to which s/he is assigned. All mechanical defects will be reported to the foreman immediately. Operators will not make repairs or adjustments to this equipment. Supervisors will ensure that the operators use the equipment at a safe rate of speed. Employee training will be documented in accordance with SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs." Inmate training will be documented on SCDC Form 22-5, "Inmate Training Record."

**4.16 MATERIAL STORAGE:** All material storage will be in accordance with fire and safety codes. Materials will be stored with regard to their fire characteristics. All flammable gases will be identified. Their use and storage will be in accordance with all fire and safety codes. Weeds and grass in outside storage areas will be kept under control.

**4.17 AGRICULTURAL SAFETY:** All agricultural machinery will meet the provisions of OSHA Standard 1910 and 1928.

4.18 AGRICULTURAL CHEMICALS - PESTICIDES, HERBICIDES AND INSECTICIDES: The Division Director of Support Services or designee will ensure that employees/inmates and outside contractors are informed of the contents of the EPA Workers Protection Standard (WPS) at work sites where greenhouses, nurseries, farm operations, and/or agricultural gardens are located, and at any other work site where pesticides are used. Strict compliance with the WPS will be required of affected employees/inmates to reduce the potential for accidents or injuries from exposure to agricultural pesticides. Documentation of instruction will be maintained by the Division Director of Support Services or an approved designee. See SCDC procedures relating to agriculture for additional information. All pesticides (including herbicides and insecticides) used in the SCDC must be properly stored, used, and accounted for, as follows:

**4.18.1** All use directions and safety precautions prescribed by the manufacturer must be followed.

4.18.2 Only pesticides registered with the Environmental Protection Agency will be used for their registered purpose.

4.18.3 All pesticides will be separated from food items, as required by the United States Public Service Sanitation Manual.

4.18.4 All applicable state and federal pesticide laws and regulations will be followed. (3-ACRS-3B-03M, 3-ACRS-4D-04M, 4-4215M)

**4.19 FOOD SERVICE SAFETY:** Guidelines for the sanitary control of food prepared and served in the institution are provided in the Rules for Food Service Sanitation, South Carolina Department of Health and Environmental Control. Further, the United States Public Health Service "Food Service Sanitation Manual" is the reference for use in this area.

**4.20 FOOD CONTAMINATION:** Food Service workers will be instructed on how to keep all equipment clean and sanitary and to place waste food from dining areas in receptacles away from the food being served. Employee training will be documented in accordance with SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs." Inmate training will be documented on SCDC Form 22-5, "Inmate Training Record."

#### CHAPTER 5 ENVIRONMENTAL HEALTH

**5.1 PLUMBING:** The design, construction, and maintenance of the institution plumbing system will meet the requirements of the current National Plumbing Code. Any area that will be remodeled will meet the requirements of the code regardless of whether the original construction met such requirements. A prime concern in the plumbing system is assuring that there are no cross-connections in the system (e.g., back-siphonage protection will be provided on all threaded hose connections). The Division Director of Facilities Management or designee will be responsible for ensuring compliance.

**5.2 SEWAGE TREATMENT:** Since each institution is under the jurisdiction of a different water management authority, it will be necessary for each facility to ensure that its sewage treatment arrangement meets the applicable standards of the local authority. The SCDC will adhere to all SCDHEC regulations for disposal treatment of sewage.

**5.3 GARBAGE AND REFUSE:** Refuse includes all garbage, rubbish, and other putrescible and nonputrescible solid waste, except the solid and liquid waste discharged into the sanitary sewer system of the institution. Garbage and refuse will be collected and removed as often as necessary to maintain sanitary conditions and to avoid creating health hazards. Since methods for handling and disposing of refuse affects the local environment, compliance with the requirements of local, state, and federal agencies will be required. The SCDC will not operate a sanitary landfill. All wastes will be disposed of per DHEC regulations.

**5.4 HAZARDOUS WASTE:** Any waste identified as hazardous waste under EPA regulations must be handled and disposed of accordingly. Additionally, EPA requirement, Material Safety Data Sheet, or the equivalent for each material will be consulted for proper handling and disposal methods. Each facility will contact the Agency Safety Program Manager or designee for current requirements and assistance. DHEC can provide names of approved Hazcom waste haulers, as needed.

5.5 BIOHAZARDOUS INFECTIOUS WASTE: Biohazardous infectious wastes will be placed in orange/red bags (biohazard bags) boxed, taped, marked, and stored appropriately. Disposal will be only by an approved biohazard waste contractor. This will be the responsibility of the Laboratory Manager for Health Services. (4-ACRS-1A-04M, 4-4331M)

5.6 WATER SUPPLY:

**5.6.1 Drinking Water:** In addition to the requirements of the National Plumbing Code for the water distribution system, all requirements of the Safe Drinking Water Act will be followed for evaluating the quality and safety of the institution water supply.

5.6.2 Water Samples: The Division Director of Facilities Management or designee will ensure that all water used by the SCDC meets all required DHEC regulations. Monitoring of water sources will be as required by the laws of the state of South Carolina, including annual certification. (4-ACRS-1A-01M, 4-4330M)

5.7 LIGHTING: Illumination will be provided in all rooms, passageways, stairways, etc., to prevent eye strain, permit inspection for cleanliness, and provide for safety. The intensity of light will be determined by means of an accurate light meter. The standards for illumination in various areas of the institution will be based on the recommendations of the American Correctional Association Standards. Light surveys will be conducted as directed in OSHM Chapter 2, ''Occupational Safety'' (see Section 2.16). (4-4145)

5.8 HOUSEKEEPING: Each institution will develop a housekeeping plan to assign responsibilities in keeping a clean and sanitary environment. The EHSO will ensure that proper types of supplies for general sanitation are used in institutions in accordance with local needs and policy. The EHSO will monitor the application of the housekeeping plan during his/her monthly inspections of all areas (see Section 1.23.4). Floor surfaces will be kept in good repair, free from holes, splinters, and loose boards. They will be kept clean and orderly. There will be no obstructions across or in aisles that could create a hazard. Permanent aisles and passageways will be appropriately marked.

- Aisles and passageways will be kept clear and in good repair.
- Exits will not be obstructed by the storage of material or placement of equipment.
- All required exits will be appropriately marked. (4-ACRS-1A-06, 4-4333)

**5.9 BARBER AND COSMETOLOGY OPERATIONS:** Barber and cosmetology operations will be conducted under the provisions of SCDC Policy/Procedure ADM-16.02, "Inmate Barbering/Beauty Services."

5.10 NOISE CONTROL AND HEARING CONSERVATION:

**5.10.1** Any work area of the institution or its industries with a noise level that exceeds the OSHA Standard CFR 1910.95 is considered a high noise level area. As per the Hearing Conservation Program, managers will arrange for annual surveys of the industry to verify they that are in compliance. The EHSO or the Agency Safety Program Manager or designee will verify these findings.

# 5.10.2 Noise levels in housing units will be monitored to achieve compliance with ACA standards. The EHSO will conduct at least one (1) survey annually of each housing unit to verify noise levels. (4-4150)

**5.10.3** It is the responsibility of each institution, in consultation with the Division of Facilities Management and the Safety Program Manager to eliminate as much noise as is feasible from any department identified as having high noise level areas. Vibration dampening, acoustical paneling, and other acceptable methods of sound dampening will be employed wherever feasible. Protection against the effects of occupational noise exposure will be provided when the sound levels exceed OSHA recommended levels. Feasible engineering and/or administrative controls will be utilized to keep exposure below the allowable limit as established in the Hearing Conservation Program.

**5.10.4** Personal Protective Equipment: Any area of the unit which has a noise level of greater than 90dBA will be considered a high noise level area. All employees and inmates in this area assigned full time will be required to wear approved hearing protection. Use of this protection will be mandatory and will be enforced. All ear protection will be approved by the Agency Safety Program Manager or designee.

#### 5.11 INCLEMENT WEATHER AND NATURAL DISASTER GENERAL GUIDELINES:

**5.11.1** All activities (ranging from work details to recreation) will receive continuous monitoring during any extreme weather, such as heat, cold, rain, wind, thunderstorms, etc., and/or when natural disasters occur.

**5.11.2** During periods of extreme weather, supervisors will tailor work schedules to fit the climate, the physical condition of employees and inmates, and the degree of strenuous activity required.

**5.11.3** Wardens, Division Directors, and EHSOs will be responsible for ensuring that each person in a supervisory capacity is thoroughly briefed on his/her responsibility to be especially observant of the effects of weather and to use necessary precautions against overexposure. When it is decided that weather conditions could threaten the health and/or safety of employees and inmates, the assigned activities will be altered to decrease the threat of injury.

**5.11.4** Wardens, Division Directors, and EHSOs will develop written plans for their respective areas of responsibility regarding severe weather injury prevention and natural disaster injury prevention and will continuously monitor severe weather pursuant to directives contained in SCDC Policy/Procedure OP-22.29, "Emergency Preparedness," or received during training in the same. Below are general guidelines to be utilized by responsible authorities in the development of specific plans relevant to severe weather and natural disaster injury prevention.

#### **5.12 LIGHTNING:** Safety rules include, but are not limited to:

- 1. Take shelter inside a building or inside a vehicle.
- 2. Do not stand underneath a natural lightning rod such as an isolated tree in an open area.
- 3. Get off and out of the water.
- 4. Get away from tractors and other metal farm equipment.
- 5. Get away from wire fences, clotheslines, metal pipes, rails, and other metallic paths which could carry lightning to you from some distance.
- 6. Groups of persons in exposed situations should spread out at least several yards apart.

- 7. If you are in an open area and feel your hair stand on end, indicating that lightning is about to strike, drop to your knees and bend forward, putting your hands on your knees. In this position, if lightning strikes near you, the chances of it using your body as a conductor are minimized.
- 8. Persons struck by lightning who appear to be lifeless can often be revived by applying CPR techniques, if CPR is started within several minutes of being struck.

**5.13 SEVERE THUNDERSTORMS:** A severe thunderstorm is any thunderstorm that causes hail at least 3/4-inch in diameter or winds of 50 knots (or 58 mph) or more. Heavy rains and lightning are not considered part of the severe criteria. Severe thunderstorms can produce very strong winds over a small area.

**5.13.1 Severe Thunderstorm Watch:** Severe thunderstorm watches are issued when conditions are favorable for the formation of severe thunderstorms. There may or may not be any activity when issued. This is simply a forecast of the possibility of severe weather. You should continue your normal activities, but be ready to act promptly if a warning is issued.

**5.13.2 Severe Thunderstorm Warnings:** Severe thunderstorm warnings are issued when a severe thunderstorm has been observed on radar or spotted by observers in the field. This is the time to take shelter.

**5.13.3** Generally, during severe thunderstorms, safety is found in a building or vehicle, but there are some safety rules to consider:

- 1. Any program or activity that is taking place in a mobile home type structure on facility grounds should cease or be moved to a more permanent structure. Tie-downs may help protect against thunderstorm winds, but they are no guarantees.
- 2. Bring trash cans inside buildings, along with any other objects that may be blown about.
- 3. Bring all objects inside buildings if they have the potential to be damaged by hail.
- 4. Have employees/inmates remain indoors until the storm has completely passed.

**5.14 HURRICANES:** The SCDC will develop written procedures for all areas of responsibility in regard to hurricane injury prevention and will continuously observe and advise in their application. Drills will be conducted as per SCDC Policy/Procedure OP-22.29, "Emergency Preparedness."

**5.14.1** At the beginning of Hurricane Season (June), make plans for action:

- 1. Learn the storm surge history and elevation of your area.
- 2. Learn safe routes inland.
- 3. Learn location of official shelters.
- 4. Trim dead wood from trees.
- 5. Check for loose rain gutters and down spouts.
- 6. Stock boards to cover glass in windows.

**5.14.2 Hurricane Warning:** When a Hurricane Warning is issued for your area (conditions that threaten within 24 hours):

- 1. Check often for official bulletins on television, radio, or Weather Radio.
- 2. Fuel all vehicles.
- 3. Check supplies of special medicines and drugs.
- 4. Check batteries in radios and flashlights.
- 5. Secure lawn furniture and other loose material which is outdoors.
- 6. Tape, board, or shutter windows to prevent shattering.
- 7. Fill containers with several days supply of drinking water.
- 8. Remain indoors. Travel is extremely dangerous when winds and tides are moving through your area.
- 9. Monitor the storm's position through the National Weather Service advisories.

**5.14.3 Eye of the Hurricane:** If the calm storm center passes directly overhead, there will be a lull in the wind lasting from a few minutes to half  $(\frac{1}{2})$  an hour or more. When the hurricane has passed:

- 1. Stay out of disaster areas.
- 2. Drive carefully along debris-filled streets. Roads may be undermined and could collapse under the weight of a vehicle.
- 3. Avoid loose or dangling wires, and report them immediately to your power company.
- 4. Report broken sewer or water mains.
- 5. Prevent fires. Lowered water pressure may make fire fighting difficult.
- 6. Check for gas leaks.
- 7. Check food and water for spoilage.

**5.15 TORNADO:** The SCDC will follow the written procedures that are included in SCDC Policy /Procedure OP-22.29, "Emergency Preparedness."

**5.15.1 Tornado Watches:** Tornado Watches are not tornado warnings. They are issued to alert persons to the possibility of tornado development in a specified area, for a specified period of time. Recommended actions during a tornado watch include:

- 1. Posting monitors with a clear view of surrounding area.
- 2. Advising Agency/institutional staff of the tornado watch.
- 3. Turning to an all-weather channel and/or local radio station, and assigning an employee to monitor the same.

**5.15.2 Tornado Warnings:** Tornado Warnings are issued when a tornado has been sighted in the area or is indicated by radar. Warnings indicate the location of the tornado at the time of detection. When a warning is issued, persons in the path of the storm will take immediate safety precautions. Recommended actions during tornado warnings include:

- 1. Relocate employees/inmates to the center of a building (interior hallways), under the stairwell in the middle of a building, in a basement, or on the lowest floors of a multi-rise structure.
- 2. Instruct employees/inmates to cover themselves in order to help protect against flying debris.
- 3. Do not attempt to open windows (this is not likely to prevent damage).
- 4. If indoor shelter is not readily available, take shelter in a depression or ditch away from the indoor structure.
- 5. In open country, move away from the tornado at right angles. If this is not possible and shelter is not available, lie down in a low area with hands shielding head. Be alert for flash floods.
- 6. If operating a motor vehicle, stop the vehicle, get out, and lie down in a low area away from the car on the side of the road which is away from the tornado.
- 7. Never try to out run a tornado.

**5.16 HOT WEATHER WORK SCHEDULES:** During periods of extreme heat, the supervisor will ensure that work schedules are tailored to fit the climate, the physical condition of employees and inmates, and the degree of strenuous activity required. Close observation and supervision are essential to minimize heat stress injury to employees and inmates. Certain general principles must be considered.

**5.16.1** The amount of heat produced by the body increases directly with increasing work. Therefore, reduction of workload markedly decreases the total heat stress.

**5.16.2** Workloads and/or duration of physical exertion should be reduced during periods of extreme heat and should be gradually increased to allow acclimatization.

**5.16.3** While decisions to modify work schedules must be governed by the particular local situation, heavy work should be scheduled for the cooler hours of the day such as early morning or late evening.

**5.16.4** Alternate work and rest periods may prove satisfactory. Under moderately hot conditions, five (5) minute rest periods in the shade alternating with 25 minutes of work in the sun may be desirable. Under severe conditions, the duration of rest periods should be increased. The Division Director of Agriculture and Food Service or designee will initiate a half ( $\frac{1}{2}$ ) day work schedule for farm workers beginning May 15 and ending September 15.

**5.16.5** Exposure to high temperatures at night as well as in the daytime will decrease the amount of work personnel can perform effectively.

**5.16.6** Workloads must be reduced at high temperatures when dehydration resulting from excess sweating and lack of water replacement occurs.

**5.16.7** Work in the direct sun should be avoided as much as possible on hot days.

**5.16.8** Unnecessary standing in the heat should be avoided because continued standing in place causes an added burden on the circulation.

**5.17 HEAT INJURY:** All employees and inmates exposed to high temperatures will be informed of the potentially serious results of heat injury, the general nature of these conditions, and how they can be prevented. Employees and inmates will receive instruction on recognizing the earliest signs of heat injury and appropriate action to prevent its occurrence. All security employees and employees in a supervisory capacity should be able to apply effective first aid. Such signs include:

#### 5.17.1 Symptoms of Heat Exhaustion:

Sweating; moist, clammy skin	Weakness and fatigue	Nausea, vomiting
Slightly elevated temperature	Headache	Disorientation

#### What to do for a Victim of Heat Exhaustion:

- Remove victim from heat.
- Apply cool, wet cloths. Fan victim. Stop if victim develops goose bumps or shivers.
- If the victim is conscious, give fluids. If possible have victim drink a mixture of one (1) pint of water with one (1) teaspoon of salt every 30 minutes until person recovers.
- Seek medical attention if person does not improve.

#### What NOT To Do for a Victim of Heat Exhaustion:

- Do not give victim any stimulant, including alcohol or cigarettes.
- Do not apply ice directly to skin.
- Do not allow victim to become so cold that s/he shivers.
- Do not leave victim alone.

#### **5.17.2 Symptoms of Heatstroke:**

Hot, dry skin	Red or spotted skin (for those who have light skin tone/color)	Extremely high body temperature
Mental confusion	Convulsions	Loss of consciousness

#### What to do for a Victim of Heat Stroke:

- Remove person from heat.
- Remove victim's clothing and place him/her in a cool bath, if possible; or apply cool compresses to the body.
- Seek medical attention immediately.

#### **5.18 COLD WEATHER WORK:**

**5.18.1** Close observation and supervision are essential to minimize injuries caused by extreme cold exposure. Water in skin tissue can crystallize and freeze, causing abnormal function and sensation. Toes, nose, fingers, and ears are the most commonly affected areas. Frostbite and hypothermia are the two (2) emergencies associated with cold exposure, with the latter considered life threatening.

**5.18.2** Workloads and/or duration of physical exertion conducted outside should be reduced during periods of extreme cold.

**5.18.3** The key to reducing injuries in extremely cold conditions includes:

- 1. limiting the time of exposure;
- 2. ensuring that all individuals are dressed appropriately for conditions, to include the issue of protective clothing as may be needed;
- 3. ensuring that individuals have balanced dietary intake;
- 4. ensuring that all work resources such as vans and trucks are continuously maintained in a state of extreme cold weather operational readiness;
- 5. ensuring that all personnel are briefed on the hazards and difficulties of motor vehicle operations and any other safety matters evident or expected;
- 6. ensuring that all personnel exposed to extremely cold temperatures have been informed of the potentially serious results of cold injuries, the general nature of these conditions, and how they can be prevented; and
- 7. the Division Director of Agriculture and Food Service or designee will set hours of work for farm workers to ensure compliance with this standard.

**5.18.3 Signs and Symptoms of Frostbite:** Cold, numb, or painful skin that becomes hard and white, or ash gray as pain progresses and Pain.

#### What To Do for a Frostbite Victim:

- Move victim to warm area.
- Put affected body parts in warm water (100° to 105°F) until skin becomes flushed.
- After warming, keep affected fingers and toes separated with gauze.
- Give warm fluids.
- If normal sensations have not returned within 30 minutes, seek medical attention.

#### What NOT To Do for a Frostbite Victim:

- Do not rub affected area.
- Do not break blisters.
- Do not give victim stimulants, including alcohol or tobacco.
- Do not leave victim alone (frostbite can lead to hypothermia which can lead to death).
- Do not use hot water.

#### 5.18.4 Signs and Symptoms of Hypothermia:

- Drowsiness
- Disorientation
- Stumbling
- Slurred Speech
- Unstable Gait
- Uncontrolled Shivering
- Weak, Irregular Pulse
- Blueness or Puffiness of Skin for those who have light skin tones/color
- Blueness of lips and nail beds will be evident in those with dark skin tones/color

#### What To Do for a Hypothermia Victim:

- If victim is unconscious, check the airway, breathing, and circulation (ABCs) and initiate CPR (if necessary) in accordance with Agency training.
- Remove any wet clothes and submerge victim in warm water (100° to 105°F). Rapid warming is required. If water is not available, use your own body heat to warm victim.
- Stay with the victim and keep him or her warm, monitoring the ABCs until help arrives.
- Seek medical attention immediately.

#### What <u>NOT</u> To Do for a Hypothermia Victim:

- Do not leave the victim alone.
- Do not use hot water to warm victim.
- Do not give hot liquids, alcohol, or anything by mouth.
- Do not allow the victim to move.
- Do not rub or manipulate the extremities.

Your goal is to minimize heat loss and add heat.

#### 5.19 FLASH FLOOD:

**5.19.1** Flash flood watches are issued when there is the threat of heavy rain that could result in flash flooding. Be ready to act the moment a warning is issued, as time may be critical in these situations.

**5.19.2** Flash flood warnings are issued when a flash flood is occurring or is imminent. This is the time to follow the safety rules for flash floods.

- Flash floods are very dangerous and may kill more people than any other type of storm. Many people misjudge the speed and force of the water flowing through an area. Be especially careful at night because it is much harder to recognize flood dangers in darkness.
- If you are on high ground, stay there. Do not attempt to travel through flooded areas.
- Never try to cross a flooded area by foot or by vehicle.

#### **5.20 EARTHQUAKES:**

**5.20.1** During an earthquake, if indoors, stay there; and take cover under a table, desk, or other sturdy furniture.

- Face away from windows and glass doors.
- Lie, kneel, or sit near a structurally sound interior wall or corner away from windows, brick fireplaces, glass walls, etc.
- Protect your head and body from falling or flying objects.
- Remain until shaking stops. Think out your plan of action first; then move.
- Know exit routes if in a commercial building. Take cover; do not move until shaking stops.
- Stay in the building on the same floor. Do not be surprised if the electricity goes out, or if the elevator, fire alarm, or sprinkler systems activate. DO NOT USE ELEVATORS!

**5.20.2** If outside, get into an open area away from trees, buildings, walls, and power lines.

- Lie down or crouch low to maintain balance.
- Get to the best available shelter if there is not an open area available.

**5.20.3** If in a vehicle, pull to the side of the road and stop the vehicle.

- DO NOT park under overpasses or power lines.
- Stay in your vehicle until the earthquake is over.
- If the earthquake has been severe, do not attempt to cross bridges or overpasses that may have been damaged.
- Turn off engine.
- Turn on radio. Follow emergency instructions.
- Stay in the vehicle if downed power lines have fallen across it. You are insulated by the tires. Wait for help. You might be able to back away from the lines.
- If you must leave your vehicle, move to an open area quickly.

**5.20.4** If you happen to be in a Food Service area, turn off the stove at the first sign of shaking and quickly take cover under a counter or table, or in a doorway. Do not attempt to relight the gas pilot.

#### 5.20.5 After the Earthquake:

- Check for injuries.
- Apply first aid.
- Do not move seriously injured individuals unless they are in immediate danger.
- Check utilities (water, gas, electricity). If there is damage, turn the utility off at the source.
- Check for other hazards and control them (fire, chemical spill, toxic fumes, and precarious collapse).
- Check buildings for cracks and damage, including roofs, chimneys, and foundations.
- Check food and water supplies.
- Emergency water can be obtained from water heaters, melted ice cubes, canned vegetables, and toilet tanks.
- Following an earthquake, NEVER use matches, lighters, or candles inside.
- Do not utilize your vehicle unless there is an emergency. Keep the streets clear for emergency vehicles.
- Be prepared for after shocks.

#### 5.21 HAZARDOUS MATERIAL (HM) MANAGEMENT PROGRAM: Disposal mechanisms for HM will be the responsibility of the Division of Facilities Management. Only licensed HM companies will be utilized. (4-ACRS-4A-02M, 4-4331M)

**5.22 INDUSTRIAL HYGIENE:** While other publications will be of assistance in managing the industrial hygiene program, the OSHA regulations are the governing authority. Health hazards discussed in this section concern environmental conditions present in the workplace which may cause illness or death. If the scope of the problem is beyond the expertise of the local EHSO, OSHA has been delegated responsibility by Executive Order 12196 to provide services and guidance to federal agencies and to assist them with development and implementation of occupational safety and health programs. OSHA Technical Services will be available to agencies upon request. In addition to OSHA's assistance, NIOSH will conduct health hazard evaluations by written request to:

#### NIOSH

Hazard Evaluation and Technical Assistance Branch, Mail Stop R-9 4676 Columbia Parkway Cincinnati, Ohio 45226

NIOSH will evaluate hazards resulting from exposure to chemical substances only, while OSHA will assist with evaluation of physical agents (e.g., noise, heat, etc.).

#### 5.23 FEASIBLE ADMINISTRATIVE WORK PRACTICE AND ENGINEERING CONTROLS:

**5.23.1 Administrative Controls:** Any procedures which significantly limit daily exposure by control or manipulation of the work schedule. Use of personal protective equipment is not considered a means of administrative control.

**5.23.2 Work Practice Controls:** The actions of the employee which result in the reduction of exposure through such methods as effective use of engineering controls, sanitation, and hygiene practices, or other changes in the way an employee performs his/her assigned job. Personal protective equipment is a work practice control.

**5.23.3 Engineering Controls:** Consists of substitution, isolation, ventilation, and equipment modification.

- 1. Substitution may involve process change, equipment replacement, or material substitution.
- 2. Isolation results in the reduction of the hazard by providing a barrier around the material, equipment, process, or employee. This barrier may consist of a physical separation or isolation by distance.
- 3. Ventilation is the process of supplying or removing air by natural draft or mechanical means, to or from any space. It is a method used to control airborne contaminants which adversely affect employees and the general environment. (For proper measure and design of ventilation system, the Industrial Ventilation Reference Textbook published by the American Conference of Governmental Industrial Hygienists will be used as a guide.)
- 4. Equipment modification will result in increased performance or change in character, such as the application of sound absorbent material.

#### 5.24 EXPOSURE TO TOXIC AND HAZARDOUS SUBSTANCES:

**5.24.1 Material Safety Data Sheets for Identified Toxic or Hazardous Substance:** It will be the responsibility of each department using an identified toxic or hazardous substance listed in table Z-1, Z-2, or Z-3 or OSHA CFR 1910.1000, to obtain and maintain the Material Safety Data Sheet on that substance. The MSDS lists information relative to the storage, use, and disposal of the material, and those requirements will be followed. All materials on the inventory sheets must be identified as hazardous or non-hazardous.

**5.24.2 Storage of Identified Toxic or Hazardous Substance:** Toxic and caustic materials will be stored in their original containers with labels intact. If dispensed to other containers, those containers will be labeled with substantially the same information as the original. Care must be exercised in storing interactive chemicals so that inadvertent mixing does not occur through carelessness or mishap. Materials classified as toxic, caustic, or flammable will require a system of accountability as outlined in Section 6.8.

**5.24.3 Use of Identified Toxic or Hazardous Substances:** Treat all such substances with respect. The supervisor will demonstrate to competent inmate workers the proper, safe method of use of the material. The Material Safety Data Sheet will outline the precautions to be used for each chemical. The level of supervision required for chemicals will be determined by the level of hazard labeling:

#### 5.24.4 Labeling of Identified Toxic or Hazardous Substances:

- 1. **"DANGER"** labeling indicates the highest hazard in toxics and caustics. These will be used only under direct supervision of a staff member. If dilution would reduce the hazard (e.g., pesticides mixed to a 2% solution in water), then less supervision would be required. The dilution process, in such cases, would require staff supervision.
- 2. "WARNING" labeling indicates a lower hazard of toxicity or causticity. These will be used with extended supervision. The amount needed for a shift may be issued to an

inmate for use. The amount left at the end of the shift will be monitored when returned to the dispensing site for accountability and control. Dilution may reduce the hazard as explained above.

- 3. "CAUTION" labeling indicates the lowest hazard and is generally directed toward keeping out of the reach of children. Hazardous chemicals labeled at this level require no security or supervision, but supervisors should be aware of what products they use in this category.
- 4. Most products carry a warning label of some description. Determining the extent of control and supervision will depend on the contents of the material. Further clarification can be obtained by referring to OSHA CFR 1910.1000 Z table or 1910.1200.D.

**5.24.5 Disposal of Identified Toxic or Hazardous Substances:** At no time will a toxic or caustic substance be disposed of by pouring it on the ground, flushing it into sewers, and/or any other unsafe method. The Material Safety Data Sheet will prescribe the proper method of disposal and related precautions. All disposal of hazardous waste materials will be in compliance with the current EPA RCRA laws. Only licensed regulated H/W companies will be utilized to dispose of H/W.

**5.24.6 Contingency Plans/Spill Response Plan:** The Agency Safety Program Manager will review the contingency plan/spill response plan on an annual basis.

**5.25 PEST/TERMITE CONTROL OPERATIONS:** Pest/Termite Control Operations will be conducted pursuant to SCDC policy and procedure regarding same.

#### 5.26 OSHA HAZARD COMMUNICATION STANDARD:

5.26.1 The affected supervisor/Agency Safety Program Manager or designee will inform all employees/inmates and outside contractors of the contents of the OSHA Hazard Communication Standard, the hazardous properties of chemicals in the work place, safe handling procedures, and measures to take to protect themselves from these chemicals. Employees/inmates will also be informed of the hazards associated with nonroutine tasks. Employee training will be documented pursuant to SCDC Policy /Procedure ADM-17.03, "Administration of Agency Training Programs." Inmate instruction will be documented on SCDC Form 22-5, "Inmate Training Record," and maintained by the supervisor. (4-ACRS-7B-14, 4-4082)

**5.26.2** Chemical manufacturers, importers, and distributors are responsible for the labeling of chemicals. EHSOs or designees at every work place will verify that all containers which are received for use: are clearly labeled as to the contents; note the appropriate hazard warning; and list the name and address of the manufacturer.

**5.26.3** EHSOs will maintain an updated list of all chemicals used by employees/inmates in each work place for which they have responsibility. This list will indicate the location of each chemical to be used and ensure that a Material Safety Data Sheet (MSDS) is on file.

**5.26.4** EHSOs will maintain a master file of all Material Safety Data Sheets for all chemicals to which employees/inmates may be exposed at their respective institutions or within those divisions located in facilities separate from Headquarters. The Maintenance Supervisor for the Central Office building will serve as its EHSO. EHSOs will ensure that each work area in their institutions/divisions have MSDSs for the chemicals used in that area. Current MSDSs will be readily available for every employee/inmate to review during each shift.

**5.26.5** A complete file of MSDS will be maintained as determined by the institutional EHSO and the Agency Safety Program Manager.

5.26.6 When a chemical is transferred from its original container to an approved secondary container, it will be labeled with either an extra copy of the original manufacturer's label or with a completed SCDC Supply S-27, "Chemical Label," which may be obtained through the Commissary Branch. (4-ACRS-1C-17M, 4-4215M)

**5.26.7** All employees/inmates who are required to work with chemicals will receive information and relevant training as scheduled by his/her supervisor in OSHA related Standards as follows:

- a summary of OSHA Standard 1910.1200 and this Manual;
- the chemical and physical properties of hazardous materials and the methods that can be used to detect the presence or release of chemicals;
- the physical hazards of chemicals;
- the health hazards, including signs and symptoms of exposure to chemicals, and any medical conditions known to be aggravated by exposure to the chemical;
- procedures to protect against hazards;
- the work procedures to follow which will assure protection when using chemicals or cleaning hazardous chemical spills and leaks;
- location of MSDSs; how to read and interpret the information on both labels and MSDSs, and how to obtain additional hazard information; and
- emergency procedures.

**5.26.8** All inmates during their institutional orientation will receive training as outlined in 5.26.7. When inmates are assigned to a job, the Work Site Supervisor will provide training as outlined in Section 5.26.7. This training will be documented on SCDC Form 18-69, "Certification of Inmate Orientation Form."

**5.26.9** Prior to any new chemical(s) being introduced to the work place, each employee /inmate of each work site where the chemical(s) will be stored or used will be given information as outlined in Section 5.26.7. Prior to receiving new chemicals at any work place, Material Safety Data Sheets will be obtained by the requestor and forwarded to the EHSO.

5.26.10 Employees/inmates who are required to perform hazardous <u>non-routine</u> tasks will receive special training by their work site supervisors to inform them about the chemicals to which they may be exposed and the proper precautions they should take to reduce or avoid exposure. Documentation will be maintained for inmates utilizing SCDC Form 22-5, "Inmate Training Record." Documentation for employees will be in accordance with SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs." (4-ACRS-7B-14, 4-4215)

**5.26.11** Upon notification, the EHSO or designee will document the time, date, and location that outside contractors are advised of any hazards which may be encountered in the normal course of their work on the premises, the labeling system in use, the protective measures to be taken, and the safe handling procedures to be used. This documentation of training will be in memorandum form and will be retained by the EHSO.

**5.27 AGENCY HAZARD COMMUNICATION PROGRAM COORDINATOR:** The Agency Safety Program Manager will act as the Hazard Communication Program Coordinator for the Agency and will: monitor institutional/work place programs; and provide technical assistance as needed.

**5.28 LEAD CONTROL PROGRAM:** The Division Director of Facilities Management or designee will ensure compliance with the OSHA Lead Standard.

**5.29 OSHA ASBESTOS STANDARD:** The Division Director of Facilities Management or designee will ensure compliance with the OSHA Asbestos Standard under the provisions of applicable SCDC Policy.

#### **CHAPTER 6**

#### FIRE PREVENTION AND CONTROL

**6.1 FIRE SAFETY REQUIREMENTS:** All staff will comply with the most current edition of adopted fire safety codes, standards and regulations of the National Fire Protection Association (NFPA), Occupational Safety and Health Administration (OSHA), Mandatory Standards of the American Correctional Association, American Society for Testing and Materials (ASTM), and the American National Standards Institution (ANSI).

6.2 INSPECTIONS: Weekly safety and sanitation inspections will be conducted by a designated employee and documented on SCDC Form 19-89, "SCDC Inspection Report." Fire and safety inspections will be conducted monthly by the EHSO and documented on SCDC Form 19-89, "SCDC Inspection Report." Copies of the inspection will be forwarded to the Warden for review and corrective action, if needed. The inspection reports and corrective action taken will be maintained by the EHSO for review by appropriate officials. Inspections by other agencies, such as local or state fire officials, will be required on at least an annual basis. Inspection results and SCDC Form 8-5, "Corrective Action Reports," will be sent to the Division Director of Compliance, Standards, and Inspections and to the Agency Safety Program Manager. (4-ACRS-1A-03, 4-4212M)

**6.3 VISITS AND INSPECTIONS BY OUTSIDE SPECIALISTS:** Visits and inspections by outside fire specialists will be encouraged. Sources of help are often available from fire departments, government agencies in the area, private industry, and the State Fire Marshal's Office.

**6.3.1** All facilities will establish a working relationship with the local fire department and fire marshal's office, and will also enter into written mutual aid agreements that address HAZMAT and fire emergency response.

**6.3.2** Fire departments will be invited to tour the institution at least annually and suggestions for fire protection improvements relative to our facilities will be encouraged. Fire departments will be provided with copies of the institution's fire control plan. The EHSO will make quarterly contact with the local fire official. The quarterly contact and annual tour will be referenced in Safety Committee minutes.

**6.3.3** The local fire marshal (from outside the institution) is required by state law to inspect the institution annually. The Division Director of Compliance, Standards, and Inspection or designee will schedule this inspection and coordinate with the EHSO to arrange a tour of the facility.

6.4 FIRE PREVENTION, CONTROL, AND EVACUATION PLAN: Each institution will develop a fire prevention, control, and evacuation plan to include, but not be limited to, the following areas:

6.4.1 provision of adequate fire protection service;

6.4.2 quarterly testing of fire equipment and monthly fire inspections, documented on SCDC Form 19-89, "SCDC Inspection Reports";

6.4.3 proper placement of adequate fire protection equipment throughout the institution;

6.4.4 the location of building/room floor plans and publicly posted plans, and the use of exit signs and directional arrows for traffic flow. The plan will be issued to the local fire department with each revision;

6.4.5 procedures for posting an individual exit diagram in medical and in visitation areas which are accessible to the general public;

6.4.6 standards for training and drills to be conducted;

6.4.7 procedures for notification of the local fire department; and

#### 6.4.8 procedures for the routing of the plan from the Warden to the Agency Safety Program Manager for final approval. (4-ACRS-1C-10/11M, 4-ACRS-1C-12/14M, 4-ACRS-1C-13M, 4-4211M)

**6.5 FIRE DRILLS:** FIRE DRILLS WILL BE CONDUCTED AT LEAST QUARTERLY PER SHIFT. The EHSO will ensure that these quarterly fire drills are scheduled in such a manner that the facility undergoes one (1) fire drill each month and be documented on the Fire Drill Report, SCDC Form 22-7 (see Appendix C). (For example; January, 1st shift A Card fire drill; February, 2nd shift A Card fire drill; March, 1st shift B Card fire drill, April, 2<sup>nd</sup> shift B Card fire drill.) The following guidelines will apply to all drills:

**6.5.1** All fire drills will be unannounced. These *drills will be properly documented on* SCDC Form 22-7, "Fire Drill Report," in the institution's Control Room Log Book, and in the Area/Housing Unit Log Book. The drills will be recorded on the appropriate page for the date and time of the drill, as well as in the rear of the log book for quick reference. The documentation in the log books will include all information as required on the 22-7 form. (Amended by Change 1 to ADM-16.03, dated February 9, 2011.)

**6.5.2** Drills will require evacuation except as identified in 6.5.8.

**6.5.3** Drills will be initiated by a device such as pulling a pull station, smoking a smoke detector or flowing water through a flow switch (inspector test). P.A. system announcements will not meet this requirement. Each building's device should be checked at least one (1) time per year.

**6.5.4** All areas will be drilled. This will include administration areas.

**6.5.5** All EHSOs and dormitory supervisors will have keys to fire alarm panels. (All keys must be controlled per SCDC Policy/Procedure OP-22.17, "Key Control.") EHSOs and dormitory supervisors will be responsible for ensuring that panels are operated safely /correctly. Maintenance will repair the alarm if required. Maintenance will be notified only as needed.

6.5.6 EHSOs will train personnel in proper sequence of alarms. Each EHSO will develop, implement, and provide training on the plan to all personnel for the protection of all employees and inmates in the event of fire and for their evacuation to areas of refuge and from the building when necessary. All employees will be instructed and drilled with respect to their duties under the plan (Life Safety Code 101). Training will be documented pursuant to SCDC Policy/Procedure ADM-17.03, "Administration of Agency Training Programs." (4-ACRS-7B-14, 4-ACRS-1C-02/09M, 4-ACRS-1C-03M, 4-4082, 4-4221, 4-4222) Fire Alarm Sequence is:

- 1. Acknowledge the alarm. This may silence some alarms.
- 2. Silence the alarm. This is imperative when conditions exist which may require the use of force to extricate personnel from cells. It will enable teams to communicate better.
- 3. Determine the cause of the alarm and make corrections.
- 4. Reset the alarm. If unable to reset, then call maintenance for instructions.

**6.5.7** Fire drills in housing units, hospitals, and all other areas occupied or manned during other than normal working hours will be rotated in order to conduct a drill on every shift.

**6.5.8** Fire drills will include the evacuation of inmates except in areas where security of the institution is jeopardized or in medical areas where the evacuation of patients is not feasible. Staff drills or "walk throughs" will be conducted in these areas.

**6.5.9** Emergency key drills will be conducted and timed during the fire drill. Emergency keys will be drawn and used by the appropriate staff to unlock one (1) set of emergency exit

doors that are not usually used for evacuation (e.g., second floor rear stairs in housing units). Codes require a time of no more than two (2) minutes as the optimum time for the drawing of keys and unlocking of emergency doors.

**6.6 FIRE EVACUATION DIAGRAMS:** In addition to a general area diagram, the following information must be provided:

**6.6.1** Area of safe refuge instruction (in non-sprinkler buildings);

6.6.2 "You are here" point of references; and

6.6.3 emergency equipment locations.

**6.7 FIRE EQUIPMENT:** Employees will receive training in the use of all fire equipment, such as fire extinguishers and fire hose reels, located in their workplaces.

#### 6.8 FLAMMABLE, COMBUSTIBLE, AND CAUSTIC LIQUIDS: Each EHSO will ensure that:

**6.8.1** A system of accountability is maintained for all flammable liquids showing disposition and balance on hand. SCDC Form 8-1, "Toxic, Caustic, Flammable, and Consumable Supply Inventory," will be utilized to maintain a record of chemical amounts.

#### 6.8.2 Flammable liquids are used only under supervision. (4-ACRS-1C-17M, 4-4215M)

**6.8.3** Flammable liquids are not used for cleaning. Combustible solvents with a flash point of  $140^{\circ}$  F or higher will be used in approved metal diptanks with tight fitting lids. Diptanks with lids left open will be fitted with approved self-closing devices, such as fusible links.

**6.8.4** Portable containers used to store and transport flammable liquids are in their original containers or approved safety cans, painted red, with the contents clearly indicated on the can. Gasoline cans will conform to regulatory guidelines.

**6.8.5** Class I liquids are not dispensed from bulk supplies unless the nozzle and container are electrically interconnected, or the metallic floor plate on which the container stands while filling is electrically connected to the fill stem, or where the fill stem is bonded to the container during the filling by means of a bond wire.

6.8.6 Any rags containing flammable or combustible liquids will be disposed of in approved metal safety cans with tight fitting lids and will be properly disposed of at the end of each day. Moderately soiled oily rags which were used to clean parts or to wipe oil from one's hands may be disposed of by sealing them in a regular trash bag and disposed of with normal trash accumulations. Excess oil should be wrung from oil soaked rags into a used oil container. The rags should then be air-dried for a minimum of 24 hours. Once dry, the rags may be disposed of by sealing them in a regular trash bag and disposed of with normal trash accumulations. (Note: Do not air dry flammable rags inside any building or near an open flame. Do not dry oily rags inside a clothes dryer.) (3-ACRS-3B-05M, 4-4214M)

**6.8.7** Flammable liquids, if refrigerated, will be in an approved explosion proof refrigerator.

**6.8.8** Fire extinguishers of the approved class and size (as indicated in NFPA 10) will be available in the immediate vicinity where flammable and combustible liquids are used or stored.

**6.8.9** Gasoline/fuel pumps will be kept locked when not in use. Accountability of gasoline will be strictly maintained. All gasoline/fuel will have emergency cutoff switches which will be clearly identified and readily accessible. Inmates will not be allowed to dispense gasoline unless proper supervision is provided.

6.8.10 Smoking in or around flammable liquid storage or where the liquids are being used will be strictly forbidden. Approved standard NO SMOKING signs will be prominently displayed. (4-ACRS-1C-16M, 4-4214M)

# **6.9 STORAGE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS:** Flammable and combustible liquids will be stored according to fire codes and local, state, and federal regulations.

#### 6.10 CAUSTIC, FLAMMABLE, TOXIC MATERIAL INSTITUTIONAL GUIDELINES:

**6.10.1** Employees and inmates who are in possession of, who use, and/or who have reason to be near the storage of flammable, toxic, and caustic materials must be instructed by their supervisor in accordance with the OSHA Hazard Communication Standard as specified in SCDC Occupational Safety and Health Manual, Chapter 5, and any other regulation applicable to the use of or storage of the aforementioned materials (e.g., fire codes, emergency eyewash regulations, etc.).

**6.10.2** Each facility and work site will ensure that inmates are never in possession of flammable, toxic, and caustic materials, including hobby craft materials, unless they are under close supervision by qualified personnel. Unauthorized possession of these materials by inmates will be considered a violation of Agency rules and may result in disciplinary action in accordance with SCDC Policy/Procedure OP-22.14, "Inmate Disciplinary Procedures." Whenever it is necessary for inmates to be involved with the handling of flammable, toxic, or caustic materials, they will first be oriented by qualified personnel in accordance with the SCDC OSHA Hazard Communication Standard.

**6.10.3** Qualified personnel will issue proper safety equipment as prescribed by the applicable MSDS to employees and inmates if there is reason to believe that they will be in contact with a flammable, toxic, or caustic material. Supervisors will ensure that PPE is worn at all times.

**6.10.4** Flammable, toxic, and caustic materials must be stored in secure areas, under lock, in approved containers, ensuring that they remain inaccessible to inmates. Keys to those locks will be controlled and accounted for under the provisions of SCDC Policy/Procedure OP-22.17, "Key Control."

**6.10.5** A perpetual inventory will be utilized by the manager/supervisor of each workplace to confirm and document the amount of flammable, toxic, and caustic materials on hand, received, issued, and/or returned. SCDC Form 8-1, "Toxic, Caustic, Flammable, Consumable Supply Inventory," will be used for this purpose. Copies of inventories will be maintained by the respective workplace manager/supervisor for a period of three (3) years. Monthly, the workplace manager/ supervisor will complete SCDC Form 22-6 and forward the 22-6 to the EHSO. This inventory will not apply to routine cleaning products supplied by Prison Industries.

**6.10.6** All substances in containers that are labeled poisonous will be appropriately safeguarded to prevent them from becoming mixed with food items.

6.10.7 The EHSO or work site Safety Officer will ensure that storage areas for flammable, toxic, and caustic materials will be designated with a sign marked: CAUTION - TOXIC, FLAMMABLE, or CAUSTIC MATERIALS. The contents of containers stored in designated areas will be clearly identified as required by SCDC Form S-27, "Chemical Label." (4-ACRS-1C-17M, 4-4215M)

#### 6.11 OXYGEN, FUEL, AND GAS CYLINDERS:

**6.11.1** The handling, storage, and use of oxygen, fuel, or gas cylinders will be in accordance with NFPA 51, Design and Installation of Oxygen-Gas Systems for Welding, Cutting, and Allied Processes, and applicable OSHA standards.

**6.11.2** Cylinders permitted inside of buildings will be stored at least 20 feet from flammable liquids and easily ignited materials such as wood, paper, oil, and grease and where they will not be exposed to excessive rise in temperature, physical damage, or tampering by unauthorized persons.

**6.11.3** Separate rooms or buildings used for cylinder storage will be well ventilated.

**6.11.4** Oxygen cylinders in storage will be separated from fuel, gas cylinders, or combustible materials (especially oil or grease) by a minimum distance of 20 feet or by a non-combustible barrier at least five (5) feet high having a fire resistance rating of at least one-half ( $\frac{1}{2}$ ) hour.

**6.11.5** Valve protection caps will not be used for lifting cylinders from one vertical position to another. Valve protection caps will be in place before cylinders are removed and transported.

**6.11.6** Cylinders may not be used as rollers or supports, whether full or empty.

**6.11.7** When gas cylinders are in a storage area, they will be strapped, chained, or stored in racks in an upright position. This will prevent the tanks from falling and damaging the valves. Gas cylinders will be stored in this manner whether empty or full.

#### 6.12 PROPANE GAS:

**6.12.1** Liquefied petroleum gas, "LPG", and "Propane" fuel will be synonymous. All propane storage tanks will be installed in accordance with OSHA standards for storage and handling of liquefied petroleum gases (29 CFR 1910.110); NFPA 58, Standard for the Storage and Handling of Liquefied Petroleum Gases; and, where applicable, NFPA 54 and ANSI Z233.1-1980, Natural Gas Fuel Code.

**6.12.2 LP-Gas Engine Vehicles:** Vehicles propelled by LP-Gas engines may be stored or serviced inside garages if the fuel system is leak free, the fuel tank is not overfilled, the fuel tank shut-off valve is closed except while the engine is actually running, the vehicle is parked away from heat sources and other sources of ignition, and it is not parked over or near maintenance pits. Spare cylinders must be stored outside in a secure cage.

**6.13 PORTABLE SPACE HEATERS/OPEN FLAMES:** Portable space heaters will be <u>prohibited</u> at all SCDC facilities. Lighted candles in offices will be prohibited.

#### 6.14 GAS LINE TESTING:

**6.14.1** Institutional maintenance personnel will be notified immediately if a gas leak is actual or suspected.

6.14.2 All leaks detected will be corrected immediately.

**6.14.3** All combustible/flammable gases in distribution lines will have a natural odorant or be made odorous so that, at a concentration in the air of one-fifth (1/5) of the lower explosive limit, the gas will be readily detectable by persons with a normal sense of smell.

**6.14.4** Accurate and current records of all underground distribution lines will be maintained at every institution, and location of lines will be identified by signs at the surface. (Maintenance personnel will be responsible for the maintenance of such information.)

**6.15 HOT WORK PERMITS:** In an effort to guard against fires from heat-producing operations, each supervisor will develop a "fire watch" for all operations which produce open flames or sparks (e.g., welding, cutting, grinding) and are performed by using portable equipment away from the regular shop area. This program will cover the following:

#### 6.16 PORTABLE FIRE EXTINGUISHERS:

**6.16.1** An adequate number of the proper type and size extinguishers will be available for use throughout the institution in compliance with NFPA 10.

**6.16.2** Extinguishers will be maintained in a fully charged and operable condition in their designated places at all times when not in use. They will have their operating instructions and use classifications on their outward faces. A plastic/metal pin and break-away seal will be utilized to prevent tampering.

**6.16.3** Extinguishers will be conspicuously located where they will be readily accessible in the event of fire. If locations necessitate obstruction from view, means will be provided to indicate the location.

**6.16.4** Extinguishers will be installed on proper hangers or in cabinets to prevent discharging. Locked cabinets containing extinguishers will have break-glass fronts or all persons working in the area will be issued keys to cabinets.

**6.16.5** Extinguishers not exceeding 40 pounds in weight will be installed so that the tops of the extinguishers are not more than five (5) feet from the floor. Those exceeding 40 pounds will be installed with the top not more than three and one-half  $(3\frac{1}{2})$  feet from the floor.

**6.16.6 Travel Distance to Extinguisher:** Extinguishers will be placed so that the travel distance to an extinguisher is no greater than 75 feet and there is one (1) extinguisher for each 3,000 square feet of floor space. Travel distance to extinguishers for Class B fires is less, depending on type of hazard and extinguisher rating. Placement for these areas will conform to provisions outlined in NFPA 10, Chapter 3. Additional fire extinguishers will be placed in High/Special Hazard areas. Where distribution of fire extinguishers causes a security problem, the institution will be allowed to lock extinguishers in accordance with NFPA 101, Section 14-3.5.4 and Section 15-3.5.4, Exceptions 1 and 2.

**6.16.7** Fire extinguishers will be provided in vehicles with a capacity of 12 or more persons and "over the road" vehicles in excess of 10,000 lbs. GVW.

**6.16.8 Inspection:** Extinguishers will be inspected monthly by the EHSO or designee. An inspection tag will be affixed to the extinguisher indicating the date of inspection and the initials of the person performing it. Inspection is defined as a quick check that an extinguisher is available and will operate. This will be accomplished by ensuring that it is in its designated place, it has not been tampered with, and that there is no physical damage or condition to prevent operation. Verification will be made that the operating instructions are legible and facing outward, the plastic pin is in place and the extinguisher is sealed. The pressure gauge reading will be in the operable range. The EHSOs will obtain a supply of plastic pull pins, tags, and seals to replace items removed from operable extinguishers.

**6.16.9 Maintenance:** Extinguishers will be subjected to maintenance at least annually. This will include a thorough examination of the three (3) basic elements of the extinguisher. This will be performed by a qualified/licensed individual and will be documented on the fire extinguisher tag.

**6.16.10 Hydrostatic Testing:** The need for hydrostatic testing will be determined during annual maintenance. Hydrostatic testing of extinguishers will be completed according to NFPA 10.

# 6.17 FIRE SUPPRESSION SYSTEMS FOR COOKING OPERATIONS (VAPOR REMOVAL HOODS):

**6.17.1** The exhaust system will be operated during all periods of cooking.

**6.17.2** Systems which are filter equipped will not be operated with filters removed.

6.17.3 Each fire suppression system (range hood) will be inspected and serviced at least every six (6) months by a properly trained and qualified contractor certified through the State Fire Marshal's Office. (4-ACRS-1C-10/11M,4-ACRS-1C-12/14/M, 4-ACRS-1C-13M, 3-4199M)

**6.17.4** All fusible links will be replaced at least semi-annually, and more frequently if necessary. Old fusible links will be placed in the hand of the EHSO or Food Service Supervisor by the maintenance person.

**6.17.5** When bulb-type sprinklers or spray nozzles are used, they do not have to be replaced unless they are found to have a build-up of grease or other foreign material(s).

**6.17.6** Accurate records of all inspections and tests will be maintained by the EHSO. Any defect, modification, service, or repair will be included in this record (NFPA 96 Chapter 8).

**6.17.7** Open flames will only be used in food service areas as food warmers.

#### 6.18 DETECTION AND ALARM SYSTEMS:

**6.18.1** Alarm systems and detection systems will be provided with an emergency power supply in accordance with NFPA 72. Fire alarm signals will be sufficiently different so as to readily distinguish them from signals used for other purposes. All fire detection systems, sprinkler systems, and fixed fire suppression systems will be electrically supervised, and the alarms will be transmitted to an annunciator panel in the control room.

**6.18.2** The control room officer will make appropriate notifications as outlined in the institution fire control plan. The control room Officer will immediately notify the local fire department in the event of a fire emergency. Smoke alarms should be verified prior to fire department notification. Fire department notification will be immediate when evacuation of an area is required.

**6.18.3 Annunciator Panels:** Annunciator panels in the control room will be checked on each shift, and any problems noted will be logged in the control room log. Annunciator panels in other areas will be checked on each shift by the staff member in charge and any problems noted will be reported to the control room for appropriate logging.

**6.18.4 Manual Pull Station:** Each institution will have a fire alarm system which can be activated manually by manual fire alarm boxes. Manual fire alarm boxes may be locked and located in secure positions if keys are readily available.

**6.18.5** Alarms in Locked Housing Units: Signaling devices will be available for inmate use in all locked housing units that do not have continuous staff coverage. The device may be a buzzer, alarm bell, or telephone when it cannot be used to call outside the institution. These devices can be maintained in an enclosed case to be broken in the event of an emergency. The signaling device must be able to emit an audible signal to a location which has 24-hour coverage. Staff coverage must be provided when inmates are locked in their rooms or cells.

**6.18.6 Alarms in Other Locked Locations:** Inmates will not be left unattended in locked areas unless a signaling device is available to them for emergencies.

**6.18.7 Smoke Detectors:** All inmate housing areas will have smoke detection systems unless specific exception is granted.

#### 6.19 INSPECTION OF FIRE ALARM AND SMOKE DETECTORS

**6.19.1 Weekly:** The EHSO will ensure pull stations are inspected to verify that they have not been tampered with and that the alarm is in the "ready" position. Smoke detectors will be inspected to ensure that they are located appropriately and have not been tampered with. Annunciator panels and evacuation alarms will be checked to verify that the lights work and that they have not been tampered with. The EHSO will keep accurate documentation of all inspections using SCDC Form 19-89, "SCDC Inspection Report," and will place work orders for repairs as necessary.

**6.19.2 Monthly:** Maintenance will conduct monthly inspections of the complete fire alarm system, to include all components. Documentation of these inspections will be the responsibility of the Division Director of Facilities Management or designee which will also provide the institution's EHSO with a copy of his/her report.

**6.19.3** Fire alarm and smoke detectors will be tested monthly during fire drills. The devices will be activated on a rotating basis to ensure that all devices are tested in a 12 month period. Should testing reveal a need for repairs, work orders will be submitted. Calibration of smoke detectors will be the responsibility of the Division Director of Facilities Management or

designee. CANNED SMOKE will be used to activate smoke detectors during fire drills and during acquisition/installation of new heads or systems. Documentation of annual inspection, testing, and calibration will be the responsibility of the Division Director of Facilities Management or designee.

#### 6.20 AUTOMATIC SPRINKLERS:

6.20.1 Automatic sprinklers will be installed in accordance with NFPA 13, Installation of Sprinkler Systems. In addition to all inmate housing units, systems will be installed where required by present NFPA Codes and will be connected to a central supervisory alarm system. Sprinkler systems will be inspected and flow tested quarterly in accordance with NFPA 13A, Inspection, Testing, and Maintenance of Sprinkler Systems. Maintenance and inspection will be conducted by a qualified source. SCDC Form 21-16A and 21-16B, "Annual Sprinkler Inspection Report," will be used to document maintenance and inspection, which will be the responsibility of the Division Director of Facilities Management or designee. (4-ACRS-1C-10/11M, 4-ACRS-1c-12/14M, 4-ACRS-1C-13M, 4-4124M, 4-4211M)

**6.20.2** Clearance between sprinkler deflectors and the top of storage will be at least 18 inches.

**6.20.3** Sprinkler systems or high rack storage will comply with NFPA 321C, Rack Storage of Materials and NFPA 13, Installation of Sprinkler Systems.

**6.20.4** A supply of spare sprinklers will be maintained so that malfunctioned or damaged ones may be promptly replaced.

**6.20.5** A water flow and alarm drain test will be conducted annually by the Division Director of Facilities Management or designee. At least every 10 years, an internal inspection of the piping will be conducted to check for debris build up, and the piping will be flushed if needed. A record of these tests and inspections will be maintained for review by the State Fire Marshal's Office. References are: NFPA 13A, SFPC 603.15.2, and SFPC 603.15.6. SCDC Form 21-7, "Hydrant Inspection and Maintenance Report," will be used to document this test.

**6.20.6 Paint Spray Booths:** Paint spray booths will require an approved automatic sprinkler system in accordance with NFPA 13, Installation of Sprinklers, and NFPA 33, Spray Application Using Flammable and Combustible Materials. Sprinkler heads will be allowed to be covered by polyethylene or cellophane bags in accordance with NFPA 13A, Section 3-5.1.4.

**6.21 STANDPIPE HOSE STATIONS:** All non-sprinkler living units will have standpipe hose stations, so located and with adequate footage of hose (not to exceed 100 feet per station) to reach all areas of the unit. Cabinets that are lockable must have break-glass fronts or, all personnel on duty must have keys. Standpipe hose will be equipped with an adjustable (preferably plastic) nozzle.

#### **6.22 FIRE HYDRANTS:**

**6.22.1** EHSO/Maintenance personnel will ensure that fire hydrants are accessible and properly maintained. The water supply system will be checked to ensure that adequate pressure and flow are maintained for operating fire protection equipment. Hydrants will be flushed semi-annually and checked to ensure that they drain properly.

**6.22.2** Fire hydrants will be inspected monthly to ensure that they are not obstructed by storage, weeds, etc., and that they are conveniently accessible, are clearly visible, and have their caps in place.

**6.22.3** Fire hydrants will be opened and closed at least annually to ensure proper operation and will be properly lubricated.

**6.22.4** Records of these tests and inspections will be maintained in accordance with the Standard Fire Prevention Code. References are SFPC 602.5.1, NFPA 291, NFPA 13A, and SFPC 603.18.6.

6.24 EMERGENCY GENERATORS: Emergency generators will be maintained in accordance with the National Electrical Code. They will be tested at least every two (2) weeks or as indicated by other regulation (e.g., DHEC) or per the manufacturer's requirements. (4-4216, 4-4217)

#### 6.25 SELF-CONTAINED BREATHING APPARATUS:

**6.25.1** Housing units Level three institutions will be provided with two (2) self-contained breathing apparatus (SCBA) or approved escape packs which will be used only as an for ESCAPE apparatus. purposes in the Special Management Units (SMUs), Maximum Security Unit (MSU) and death Row. All other housing areas will be provided with smoke hoods to be used as ESCAPE apparatus. Do not attempt to rescue or recover using either apparatus. (Amended by Change 1 to ADM-16.03, Safety Manual, dated January 8, 2014.)

**6.25.2** Only self-contained breathing apparatus and escape packs *smoke hoods* approved by the United States Bureau of Mines or NIOSH will be authorized for use. (Amended by Change 1 to ADM-16.03, Safety Manual, dated January 8, 2014.)

**6.25.3** All self-contained breathing apparatus will be positive pressure type.

**6.25.4** Self-contained breathing apparatus will be provided with an indicator which automatically sounds an audible alarm when the remaining service life of the apparatus is reduced to within a range of 20 to 25 percent of its rated service life.

**6.25.5** Self-contained breathing apparatus *and smoke hoods* will be stored and located to provide prompt and easy access to all inmate housing units. It is recommended that SCBA units or escape packs be mounted in approved wall mounted cabinets in readily accessible areas. *Smoke hoods will be located at the officer's station, where it is secure but accessible, there is a dry environment and the hood is not likely to be damaged by tearing, puncturing or other harmful effects.* Placement of SCBAs and escape packs *smoke hoods* in other areas will be determined by the EHSO and/or Agency Safety Program Manager. the Division of Occupational Safety and Workers' Compensation. (Amended by Change 1 to ADM-16.03, Safety Manual, dated January 8, 2014.)

**6.25.6** Each self-contained breathing apparatus and escape pack *smoke hood* will be inspected by the responsible EHSO at least monthly to ensure that it is functional. Monthly inspections will include a check of the entire unit for:

- Deteriorated components;
- Air tightness of cylinders and valves;
- Gauge comparison;
- Valve operation; and
- Cleanliness of face mask.

Monthly inspections of the smoke hood will include a check of the barrier pouch for rips, tears, punctures, broken seal (loss of vacuum), gain in weight, rattling, or an expired warranty date. When any of these situations exist, the smoke hood should be returned to the EHSO. (Amended by Change 1 to ADM-16.03, Safety Manual, dated January 8, 2014.)

**6.25.7** An annual inspection and servicing will be conducted by an outside contractor on SCBAs.

**6.25.8** Accurate records of all inspections and tests will be maintained by the EHSO. Any defect, modification, or repair will be included in this record.

**6.25.9** SCBA cylinders will be hydrostatically tested within the periods specified by the manufacturer. References are NFPA 1404, Chapters 5 and 6.

#### **6.26 FIRE INVESTIGATIONS:**

**6.26.1 Environmental Health and Safety Officer:** All fires will be investigated by the EHSO or alternate EHSO. If the fire occurs during other than normal duty hours, the initial investigation may be performed by a correctional supervisor. The EHSO will be notified if serious injury, death, or property damage result and will report this information immediately to the Warden, the SCDC Emergency Action Center, and the Agency Safety Program Manager.

**6.26.2 Outside Resources:** The following outside agencies are generally available for assistance if needed:

- State Fire Marshal To aid in determining the cause of fire.
- National Fire Protection Association To aid in the investigation of large fires, explosions, serious injuries, or death.
- Federal Bureau of Investigation (FBI), Alcohol, Tobacco, and Firearms (ATF), and the Arson and Bombing Investigative Unit.

**6.26.3 Recommended Investigative Procedures:** These procedures are recommended by the NFPA to assist in determining the origin of fires:

- 1. Designate an individual to be in charge of the fire scene.
- 2. Determine whether the electrical supply needs to be shut off due to fire or water damage.
- 3. Secure the area from non-essential people. This is necessary to prevent injuries and preserve the fire scene evidence.
- 4. The EHSO or designee will conduct interviews of those individuals who appear to be involved in the initiation, detection, suppression, and clean-up of the fire. Interviews will be conducted as soon as possible after the fire.

#### CHAPTER 7

#### WORKERS' COMPENSATION:

**7.1 REPORTING ACCIDENTAL INJURIES:** Each employee/inmate will have the responsibility to perform his/her own work in a safe and efficient manner and will be expected to report unsafe acts or conditions to his/her respective supervisor(s). In the event of an accidental injury, the employee/inmate must report it to their supervisor immediately and prior to leaving the work site. If the employee/inmate is unable to report the accident, the immediate supervisor should report for the employee. Reporting an accident is the employee's/inmate's responsibility. Failure to give such immediate notice may cause serious delay in the payment of compensation and could even result in the failure to receive any compensation benefits under the law. All questions or inquiries concerning injuries or Workers' Compensation should be referred to the Workers' Compensation Coordinator in the Division of Human Resources.

**7.1.1** The employee/inmate must file a claim with the South Carolina Workers' Compensation Commission within two (2) years of the date of an accident.

**7.1.2** Once the supervisor has been notified of an accident, it is the supervisor's responsibility to ensure that SCDC Form 22-1, "Accident/Incident Report (A.I.R.)," is completed prior to the end of the injured employee's/inmate's shift.

**7.1.3** Copies of all reports will be submitted to the EHSO, who will assist the supervisor of the injured employee/inmate with the investigation of the accident. The EHSO will ensure that the completion of the SCDC Form 16-61, "Employee's First Report of Injury or Illness," is prepared from the joint investigation (if required), within 24 hours of the injury.

**7.1.4** If the supervisor thinks that the accident is of a questionable or suspicious nature, SCDC Form 16-61, "Employee's First Report of Injury or Illness," should be submitted as

"Alleged." This will alert the State Accident Fund that additional investigation may be necessary before liability is accepted.

**7.1.5** Failure by the institution or division to submit the required paperwork to the Workers' Compensation Section in the Division of Human Resources in time to meet the State Workers' Compensation Commission's deadline may result in a fine to the Agency. In such cases, the fine may be charged to the institution or division responsible for the delay and appropriate corrective action will be initiated against the responsible employee(s), pursuant to SCDC Policy/Procedure ADM-11.04, "Employee Corrective Action."

**7.1.6** Filing an intentional false work-related claim may result in corrective action up to and including termination or, in the case of an inmate, disciplinary action pursuant to SCDC Policy/Procedure OP-22.14, "Inmate Disciplinary System."

**7.2 FACILITY/DIVISION WORKERS' COMPENSATION CONTACT PERSON:** The EHSO at each work site will serve as the workers' compensation contact person where possible. The appropriate Division Director will be notified by the Workers' Compensation Coordinator if a contact person is required for his/her area, (e.g., Training Academy; Support Services; Prison Industries; Facilities Management).

**7.2.1** The EHSO will be responsible for ensuring that SCDC Form 22-1, "Accident/Incident Report," (A.I.R.), and SCDC Form 16-61, "Employee's First Report of Injury or Illness," are complete and accurate before submitting them to the Workers' Compensation Coordinator, Division of Human Resources.

**7.2.2** The EHSO or designee will be responsible for entering each recordable injury or illness on an Occupational Safety and Health Administration (OSHA) log. No other information will be required for distribution except the closed out OSHA log each December 31st. The log will be posted at the facility/work site (without names of personnel) according to OSHA guidelines.

#### 7.3 INITIAL MEDICAL SCREENING:

**7.3.1** With the exception of medical emergencies, employees and inmates sustaining occupational injuries or illness within the SCDC work environment will be initially screened by medical personnel on duty at an SCDC institution. Inmates will receive medical treatment in accordance with SCDC policies/procedures relating to inmate health care. For those injuries requiring first-aid treatment as defined herein, treatment will be afforded the affected employee(s) by medical personnel at the institution. First-aid treatment will be considered to be:

- application of antiseptics;
- bandaging;
- care of first degree burns;
- compresses, hot or cold;
- use of elastic bandage;
- irrigation of eye for removal of non-embedded foreign bodies;
- removal from wound by tweezers or other simple techniques of foreign bodies;
- use of non-prescription medications;
- observation of injury on second or subsequent visit; and
- ointments applied to abrasions to prevent drying or cracking.

**7.3.2** Based upon the initial assessment, consistent with first-aid protocols, the institutional medical personnel will complete SCDC Form 22-1, "Accident Incident Report," (A.I.R.), and recommend to the employee's supervisor whether or not the employee needs to be referred for further treatment to the designated Workers' Compensation health care provider for the institution/division.

#### 7.4 CONTRACTED HEALTH CARE PROVIDER:

**7.4.1** Failure by the employee to obtain the recommendation for further treatment by the contracted health care provider from the SCDC medical authority may result in a denial of benefits to the employee and/or initiation of appropriate corrective action from the employee's immediate supervisor.

**7.4.2** Refusing or otherwise not utilizing designated providers may result in a loss of Workers' Compensation benefits to an employee. An employee who desires to receive medical treatment from a provider other than those specified by the Agency, must make a written request to and receive approval from, the Workers' Compensation Coordinator prior to receiving treatment.

7.5 MEDICAL EXPENSES AS A RESULT OF WORK-RELATED INJURY: South Carolina Workers' Compensation law provides that medical expenses incurred as a result of work-related personnel bodily injury will be paid. The law does not provide for personal property (e.g., articles of clothing, eyeglasses, dentures) unless the injury results in the need for such items. (4-ACRS-7D-28, 4-4041)

#### 7.6 TIME LOST FROM WORK:

**7.6.1** If the treating physician certifies that the seriousness of the injury dictates time lost from work, the employee must provide such certification to the immediate supervisor in accordance with SCDC Policy/Procedure ADM-11.08, "Employee Leave." Any requests for sick leave, annual leave, or leave without pay due to a work-related injury will be processed in accordance with SCDC Policy/Procedure ADM-11.08, "Employee Leave."

**7.6.2** The supervisor must notify the EHSO at the work site with the exact dates and amount of time lost and when the employee actually returns to work. The EHSO must report any lost work time due to work-related accident or illness to the Workers' Compensation Coordinator. The EHSO must also notify the Workers' Compensation Coordinator immediately upon the employee's return to work.

**7.6.3** If an employee is deemed unable to work by the designated physician for more than seven (7) calendar days, s/he is eligible for Workers' Compensation benefits at a rate of 66-2 /3% percent of the employee's gross weekly wage, not to exceed the established maximum rate. If the disability lasts longer than 14 calendar days, eligibility may be retroactive to the first day of disability.

**7.7 WORKER'S COMPENSATION ELECTION STATEMENT:** Election of options will apply provided that the State Accident Fund considers the case compensable and accepts liability. South Carolina Workers' Compensation law states that before the election is made, the effect of this option on the employee's remaining and future leave must be explained to him/her by his/her supervisor or facility /division Workers' Compensation contact person. The SCDC Form 16-39, "Workers' Compensation Election Statement," must be signed by the employee and the person who explains the options to him/her as soon as possible following the accident. An employee who loses time from work other than the day of the accident must complete an SCDC Form 16-39, "Workers' Compensation Election Statement." Section 8-11-145 of the South Carolina Code of Laws provides that, in the event of accidental injury or illness arising out of and in the course of employment, a disabled employee will make an election to receive compensation under the following options:

**7.7.1** To be placed on paid leave status, using accrued sick and/or annual leave. When leave credits are exhausted before the employee can return to work, the employee will be entitled to Workers' Compensation disability benefits. While in a paid leave status, the employee will accrue his/her monthly sick and annual leave. Once sick leave is exhausted and the employee requests to use annual leave, the election statement will serve as the required written request. In the event that the number of days of annual leave taken in a calendar year exceeds the maximum amount allowed (30 days), in accordance with SCDC Policy/Procedure ADM-11.08, "Employee Leave," the election statement will serve as written approval to extend

beyond the 30 days. Sick and/or annual leave and lost time for on-the-job injury must be recorded on SCDC Form 16-2, "Leave and Attendance Report." SCDC Form 16-5, "Personnel Advice Form," along with SCDC Form 16-57, "Leave of Absence Request Without Pay," must be submitted to the Payroll and Benefits Section of the Division of Human Resources when designated leave has been exhausted.

**7.7.2** To receive Workers' Compensation benefits awarded in accordance with South Carolina State Law (Title 42). Under this method, the employee would receive disability benefits equal to 66 - 2/3% percent of the employee's gross weekly pay based on the average of 52 weeks prior to date of injury, not to exceed the current weekly rate authorized by the State Budget and Control Board. Employees receiving these benefits will be in leave-without-pay status with the SCDC and will receive non-taxable weekly payments from the State Fund. The Payroll and Benefits Section will bill the employee monthly for state group benefits only; any other deductions must be paid by the employee directly to the provider. An employee will not be eligible for monthly annual and sick leave accruals with this option. The employee's supervisor must submit SCDC Form 16-5, "Personnel Advice Form," along with SCDC Form 16-57, "Leave of Absence Request Without Pay," to the Payroll and Benefits Section. A second SCDC Form 16-5, "Personnel Advice Form," must be submitted once the employee returns to work. The employee's SCDC Form 16-2, "Leave and Attendance Report," should reflect leave without pay and lost time for on-the-job injury.

**7.7.3** To use sick and/or annual leave on a pro-rated basis in conjunction with Workers' Compensation according to the formula approved by the Budget and Control Board. With this option, employees will receive payment from the SCDC for eligible pro-rated leave taken and 66 2/3% (not to exceed the established maximum rate) of employee's gross weekly pay compensation from the State Accident Fund. Employees will not be eligible for monthly sick and annual leave accruals unless the total leave taken plus hours actually worked exceed one-half of the normal work hours for the month. Once sick leave is exhausted, the election statement will serve as the required written request. In the event that sick and annual leave is exhausted, the employee will only receive weekly compensation from the State Accident Fund. The Workers' Compensation Coordinator will determine the appropriate amount of pro-rated sick/annual leave to be used according to the formula developed by the Budget and Control Board. This will be reported to the work site leave coordinator and to the employee. If the employee exhausts all sick and annual leave accruals, refer to instructions for Option #2.

#### CHAPTER 8

#### **HEALTH SERVICES**

**8.1. Outpatient Health Care:** The Division of Health Services operates outpatient clinics for all correctional institutions. Outpatient clinics will comply with all fire and safety standards applicable for the institution setting, as referenced throughout the Safety Manual.

**8.2 Inpatient Infirmary Health Care:** The Division of Health Services operated three (3) DHEC licensed inpatient facilities and one (1) inpatient psychiatric facility. These facilities are located at Kirkland Correctional Institution (Kirkland Infirmary and Gilliam Psychiatric Hospital, Lee Correctional Institution and Lieber Correctional Institution. These inpatient facilities are regulated by the South Carolina Department of Health and Environmental Control Regulation Number 61-16, "Standards for Licensing Hospital and Institutional General Infirmaries," Volumes 26, Issue 4, April 26, 2002, in addition to applicable fire and safety codes and regulations and the SCDC Safety Manual. Each licensed facility will maintain a copy of DHEC Regulation Number 61-16 for reference.

#### **8.3 LABORATORIES**

#### 8.3.1 Kirkland Laboratory:

- Each laboratory in excess of 1,000 square feet will have at least two (2) remote exits
- Travel distance from any point in the Laboratory to an exit access or exit will not exceed 75 feet.
- Exit access corridors should be 60 inches wide, but will be no less than 44 inches at a minimum.

- A fixed-plumbing eye wash capable of providing fifteen minutes continuous flushing will be provided. An emergency shower will also be available.
- The KCI Laboratory Safety Manual is located in the laboratory at Kirkland. The Director of Laboratory Services will be responsible for updating that manual as needed.

**8.4 Radiology:** The Division of Health Services operates four (4) x-ray units, which are located at Kirkland, Lee, Kershaw and Evans Correctional Institutions. Each unit will comply with all applicable fire and safety regulations as established by the Safety Manual.

## APPENDIX A

#### SAFETY COMMITTEE AGENDA/MINUTES FORMAT

#### ATTENDANCE:

Present List by Name Indicate Chairperson

Excused:

Absent:

1. The meeting was called to order at \_\_\_\_\_\_ hours at <u>institution</u>. The minutes of the meeting of date of last meeting were approved (as presented or with changes).

2. <u>Unresolved Issues/Follow Up</u>: These items are for such entries as <del>RAC 1, 2, 3 other</del>-uncorrected safety items, *and* recurring problems.

3. Safety Risk Assessment Program:

a. Employee Events

# of Accidents# OSHA Recordable# of Lost Time Accidents# of Lost Days# of Restricted Activity Days

Specific trends or items of special interest.

b. Inmate Events:

# of Accidents# OSHA Recordable# of Lost Time Accidents# of Lost Days# of Restricted Activity Days

- c. Security Events Security events requiring Safety Committee Analysis
- 4. Emergency Procedures:
- a. Fire Safety Events

Fire Drills - Satisfactory/Unsatisfactory

#### b. Life Safety Code Events - (Construction, confined space, etc.)

- 5. Hazardous Materials and Waste:
- a. Chemical Incidents
- b. Hazardous Gases/Vapors
- c. Blood/Body Fluid/Infection Exposures

#### 6. Inspections Conducted: (General Synopsis - be specific)

- a. Weekly
- b. Monthly
- c. Quarterly

d. Annual

e. Other is OSHA, DHEC, HQ, Fire Marshal, etc.

7. <u>Utilities/Equipment Management</u>: Any new codes/standards which are new to the institution and discussed implementation.

#### 8. Safety Training:

a. # of classes

- b. Subject
- c. # attending

9. <u>Codes and Standards Update</u>: Any new codes/standards which are new to the institution and discussed implementation.

10. Other Business: Any item of interest not covered elsewhere.

The meeting adjourned at \_\_\_\_\_\_.

Submitted by: \_\_\_\_\_\_.

Approved by: \_\_\_\_\_

\*Note - this form may not print as it appears on the screen. We are attempting to fix this problem and hope to have it resolved as soon as possible.

## APPENDIX B

## ENTRY PERMIT

#### \_\_\_ CONFINED SPACE \_\_\_\_\_ HAZARDOUS AREA

PERMIT VALID FOR 8 HOURS ONLY ALL COPIES OF PERMIT WILL REMAIN AT JOB SITE UNTIL JOB IS COMPLETED.

SITE LOCATION AND DESCRIPTION \_\_\_\_\_

PURPOSE OF ENTRY \_\_\_\_

SUPERVISOR(S) in charge of crews Type of Crew Phone #

\*BOLD DENOTES MINIMUM REQUIREMENTS TO BE COMPLETED AND REVIEWED PRIOR TO ENTRY\*

REQUIREMENTS COMPLETED DATE TIME REQUIREMENTS COMPLETED DATE TIME

Lock Out/De-energize/Tag out l	Full Body Harness w/''D'' ring _
--------------------------------	----------------------------------

Blanked \_\_\_\_\_ Equipment \_\_\_\_\_

Purge-Flush and Vent \_\_\_\_\_ Lifelines \_\_\_\_\_

Ventilation \_\_\_\_\_ Fire Extinguishers \_\_\_\_\_

Breathing Apparatus \_\_\_\_\_ Lighting (Explosive Proof) \_\_\_\_\_

Resuscitator-Inhalator \_\_\_\_\_ Protective Clothing \_\_\_\_\_

Standby Safety Personnel \_\_\_\_\_ Respirator(s) (Air Purifying) \_\_\_\_\_

Burning and Welding Permit \_\_\_\_\_

#### Note: Items that do not apply enter N/A in the blank. \*RECORD CONTINUOUS MONITORING RESULTS EVERY 2 HOURS

CONTINUOUS MONITORING**	PERMISSIBLE	MONITODING DESULTS
TEST(S) TO BE TAKEN	ENTRY LEVEL	MONITORING RESULTS

Percent of Oxygen 19.5% to 23.5%
Lower Flammable Limit Under 10%
Carbon Monoxide + 35 PPM
Hydrogen Sulfide + 10 PPM * 15 PPM

\*Short-term exposure limit: Employee can work in the area up to 15 minutes.

+8 hr Time-Weighted Avg.: Employee can work in area 8 hrs (longer with appropriate respiratory protection).

#### **REMARKS:**

SAFETY STANDBY PE	RSON IS REQUIRED FOR ALL CONFINED SPACE WOR
SAFETY STANDBY PERSON(S) NAME OF SAFETY ST	ANDBY PERSON(S)
SUPERVISOR AUTHORIZING ENTRY	Ambulance 9-911 Fire 9-911
ALL ABOVE CONDITIONS SATISFIED	Safety 6-2817
INSTITUTION PHONE	Original to Department Copy to Safety
	Dro Entry Chook List
	Fre-Entry Check List
Date Time	Location
Reason for Entry	
Person Taking Readings	
(19.5% to 23% is acceptable)	
Combustible Gas	
(10% or less of LFL is acceptable)	
Hydrogen Sulfide	
(10% PPM or less is acceptable)	
(35% PPM or less is accentable)	
Possible Work Hazards N/A YES NO	
Energy Sources Isolated	
Corrosive Materials	
Toxic Materials	
Flammable Materials	
Suppery Surfaces	
Other Hazards	
If all readings are acceptable, and there is no reason to believ	'e conditions may change adversely then entry is permitted.

Qualified Person Authorizing Entry Date

## APPENDIX C

#### FIRE DRILL REPORT Reference: Standard Fire Prevention Code

1. Date of Drill: Time:

2. Name of Facility:

3. Address:

4. Weather Conditions: Sunny Cloudy Rainy

Temperature: °F Windy: Calm:

5. Was fire department notified? Yes No

If so, how was the fire department notified?

Telephone in facility

Building fire alarm system

6. Number of occupants evacuated? Inmates Staff

Were all rooms searched to be sure all occupants had evacuated? Yes No

7. Did everyone gather at designated meeting spot? Yes No

8. Total time involved to complete drill:

9. Devise used to initiate drill:

10. Was drill rated satisfactory: Unsatisfactory:

If unsatisfactory, date follow-up drill conducted:

(Must be within 30 days)

11. Remarks:

A record of all fire exit drills shall be kept on the premise. The following minimum information is required:

1. Time of drill.

2. Date of drill.

3. Weather conditions when occupants were evacuated.

4. Number of occupants evacuated.

- 5. Total time for evacuation.
- 6. Other information relevant to the drill.

7. Any problems will be addressed in the Remarks section.

SCDC 22-7 (January 1999)

## **APPENDIX D**

## **RELATED FORMS AND STATE/FEDERAL STATUTES**

#### FORMS:

8-1, 8-5, 16-2, 16-5, 16-39, 16-57, 16-61, 17-7, 18-69, 19-8, 19-22, 19-29, 20-53, 21-6, 21-7, 21-20, 21-16A, 21-16B, 21-7, 22-1, 22-3, 22-4, 22-5, S-27, S-41, S-42,

#### ACA/CAC STANDARDS:

4-ACRS-7D-28, 4-ACRS-7E-09, 4-ACRS-1C-08M, 4-ACRS-1A-03,4-ACRS-1A-08, 4-ACRS-1C-10M, 4-ACRS-1C-11M, 4-ACRS-1C-13M, 4-ACRS-1C-17M, 4-ACRS-1C-15M, 3-ACRS-1C-16M, 4-ACRS-1C-02M, 4-ACRS-1C-09, 3-ACRS-1C-03M, 3-ACRS-4A-07, 4-ACRS-1A-07, 4-ACRS-1A-07, 4-ACRS-1A-05M, 4-ACRS-1A-01M, 4-ACRS-4B-02, 4-ACRS-6C-02, 3-ACRS-4C-03M, 4-ACRS-4C-09, 4-ACRS-4C-05

4041, 4079, 4121M, 4138, 4139, 4143, 4144, 4145, 4177, 4178, 4179, 4199M, 4200M, 4201M, 4202M, 4203M, 4204, 4205, 4206, 4207, 4209M, 4210M, 4305M, 4310M, 4311M, 4312M, 4313M, 4314, 4318, 4350M, 4352, 4365, 4400, 4401M

#### STATE/FEDERAL STATUTES

EPA Workers Protection Standard Occupational Safety and Health Administration (OSHA) Regulations (Standards -29CFR) United States Code, Title 49, Transportation Code of Laws of South Carolina, 8-11.145, 19-300.1 through 19-310.3 Resource Conservation and Recovery Act <u>ADDITIONAL REFERENCES</u> SCDHEC Rules of Food Service Sanitation

National Fire Protection Association (NFPA), National Fire Codes, Volumes 1-12, 1998

National Fire Protection Life Safety Code, 1994

Standard Building Code (SBC), Southern Building Code Congress International, 1994

Standard Fire Prevention (SFPC), Southern Building Code Congress International, 1994

American Standards Institution Z87.1/1968; Z89.1/1969; Z358.1; 79.2/1960; B71.1/1968; 31.1.0/1967; B31.10a/1969; Z21.30/1964; 01.1/1961; Z87.2/1969; A6.1/1966; Z233.1/1980

United States Public Service Sanitation Manual

United States Public Health Service Food Sanitation Manual