Rules of
Office of Administration
Division 30—Design and Construction
Chapter 4—Facility Maintenance and Operation

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1 CSR 30-4.010 Objectives and Definitions

PURPOSE: This rule states the objectives of these rules and defines terms used in the rules under this chapter pertaining to the maintenance and operation of state-owned facilities.

1. The following objectives are covered in the rules under this chapter:
   (A) Establish standards for facility maintenance and operations;
   (B) Establish standards and procedures for maintenance programs;
   (C) Establish standards for physical security and safety programs;
   (D) Establish standards and procedures for maintenance evaluation and assistance; and
   (E) Establish standards and procedures for the procurement of standing maintenance and repair contracts in order to accomplish selected maintenance, and repair projects at state facilities.

2. Definitions.
   (A) The definitions as established under 1 CSR 30-2.020, 1 CSR 30-2.030, 1 CSR 30-2.040 and 1 CSR 30-3.010 will apply to terms used in rules under this chapter.
   (B) Emergency repair. Emergency repair is the work performed to restore service or to prevent impending breakdowns of service or to correct hazardous conditions.
   (C) Maintenance. Maintenance is the routine or systematic, or both, day-to-day work necessary to preserve the useful life of buildings, equipment, grounds and other facilities. If the services of a private contractor are used in addition to or in place of the services of in-house personnel for the type of work outlined above they shall be obtained through the process outlined in Chapter 8 or 34, RSMo. Maintenance includes, but is not necessarily limited to, the following types of work:
     1. Inspection, cleaning and adjustments to equipment and systems;
     2. Repair of items or elements necessary to prevent service interruptions; or
     3. Minor alterations to include painting, replacement of carpet or other floor coverings, office and systems modifications to include interior partitions and ancillary systems.
   (D) Programmed repair. Programmed repair is the work performed to correct non-emergency deficiencies or hazards in accordance with a planned priority. This corrective repair emphasizes restoring the integrity of a facility or system.

1 CSR 30-4.020 Facility Management

PURPOSE: This rule establishes standards and procedures for management of state-controlled facilities.

Editor’s Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the headquarters of the agency and is available to any interested person at a cost established by state law.

(A) General. The purpose of these rules is to provide guidance to the various agencies and facility operators within state government for good management of physical facilities, including space management and utilization, maintenance, energy use and conservation, safety and security, and facility records.

(B) Space Management. The space assigned to and utilized for each function or activity should be limited to the minimum necessary to support performance of that function or activity. Agencies shall annually review facility space utilization. In addition, a review of space required and space assigned should be made whenever there is a significant change in assigned functions or activities. These reviews should also examine environmental requirements to assure that minimum needs are being met without excess capacity. Activities which occupy more space than required should be consolidated or combined, as appropriate, to minimize space occupied, consistent with requirements for performing assigned functions and tasks. The director shall develop and issue standards for allocation and utilization of administrative space in state-controlled facilities. These standards shall be issued as appendices to this rule.

(C) Energy Conservation.

(A) General. Each department/agency shall have an established and continuing energy conservation program which has as its goal a more efficient use of energy. The program shall include active management and supervision, in order to assure that realistic energy conservation goals are established and actions are taken to implement cost-effective practices and projects to minimize energy consumption. The program should be examined and updated on a continuing basis. Goals achieved should be noted and procedures for maintaining associated gains should be established. Revisions of practices and procedures shall be incorporated into revised goals and projects as conditions change or new requirements develop.

(B) Program Development.

1. New construction or alterations. For a new construction or alterations to existing facilities, the energy conservation program shall require that all major elements and systems which consume energy be evaluated to economically minimize energy use. A requirement shall be established for designers of new facilities or alterations to existing facilities to provide (as a minimum) a summary of the examination and conclusions which established the annual energy consumption, selection of each utility system and each major item of energy consuming equipment. The energy conservation standards and criteria established by the American Society of Heating, Refrigeration and Air Conditioning Engineers in ASHRAE 90-80 have been adopted as energy standards and criteria for Missouri. These standards and criteria shall be utilized in selecting systems and equipment which consume energy.

2. Existing facilities.
   A. Energy audit. Each agency should perform an energy audit on each facility to determine where and how energy is used. The audit should identify if energy usage can be reduced by changes in operating practices, equipment or building systems or physical conditions.
   B. Implementation. Those changes which can be made within current appropriations should be made immediately. Changes which require additional funding, for example, purchase of new equipment, energy saving capital improvements, should be implemented as soon as funds are available. Energy conservation measures which generate savings equal to their cost within seven (7) years are considered by industry standards to be cost effective.

4. Emergencies.

(A) Preplanned Response. Preplanned response to emergencies is essential for the safety of personnel and for minimizing damage to property. Evacuation plans, including notification systems for each facility, shall be prepared and posted in prominent locations throughout the facility. A line drawing floor
plan eight and one-half inches by eleven inches (8 1/2" × 11" minimum size) shall be prepared for each floor to show evacuation routes. These floor plans, suitably protected, shall be posted in prominent locations throughout the facility. Periodic drills (annual as a minimum) shall be held to familiarize personnel with the notification system and evacuation routes. All exits or assembly areas, or both, shall be clearly marked. Plans shall include, when and where appropriate, designation of state employees for damage control until local assistance arrives. Each drill shall be evaluated by the agency to determine effectiveness and where possible to make improvements.

(B) Coordination With Local Agencies. Local agencies for fire and police protection and for disaster planning shall be consulted in development of evacuation or shelter planning, or both. These local agencies will be able to recommend types of emergencies for which an emergency response should be prepared and appropriate responses for those emergencies. In addition, when appropriate, state facilities may be used for shelters in case of a disaster. This use for shelters will be coordinated and preplanned for situations where other suitable local facilities are not available.

(C) Damage Control. Preplanned responses for each type of emergency shall include designation of knowable personnel to take actions which will minimize or control potential damage. These designations shall be closely coordinated with local agencies and will include instructions and limitations for conditions under which each action will be performed or will be prohibited.

(5) Facility Records.

(A) General. Each facility shall maintain at the site complete up-to-date as-built drawings for each facility, available manuals for facility equipment, service and repair records for each major item of facility equipment and warranty information on all elements or equipment for which a warranty is issued. For single small facilities, these records may be held at a location deemed appropriate by the department/agency, so long as they can be made available on short notice to the site.

(B) Drawings. As-built drawings shall be maintained in a current status to include significant changes resulting from construction or maintenance/repair work. In addition, applicable specifications shall also be maintained for all work and equipment currently in place.

(C) Equipment Manuals and Records. Available equipment manuals and manufacturers literature shall be maintained on-site for each item of installed facility equipment. In addition, an equipment record showing original installation date, along with the date, cost and extent of all repairs modifications, or both, shall be maintained for each item of installed facility equipment. A record shall be maintained of each preventative maintenance inspection or service for each item of facility equipment.

(D) Control Diagrams. Each item of facility equipment for which there is a separate control system shall have a control diagram available on or adjacent to the item. The diagram shall identify the equipment, the control elements and the corresponding equipment elements controlled. The complete sequence of operation of the control shall be detailed on the diagram.

(E) Warranties. All warranties issued for equipment or work on a facility shall be recorded, filed and periodically reviewed by the facility operations personnel. A follow-up system shall be maintained to review each item covered by a warranty after approximately eighty percent (80%) of the warranty period has elapsed, to determine condition and performance. Any noted deficiencies shall be reported to the guarantor for correction. For newly completed Capitol Improvement and Maintenance (C & M) projects, noted deficiencies shall be reported to the Division of Design and Construction for correction. If appropriate, another inspection shall be scheduled immediately prior to expiration of the warranty period and any noted deficiencies shall be reported for correction.


*Original authority: 8.320 and 8.360, RSMo 1958, amended 1965.*

1 CSR 30-4.030 Maintenance Program Standards and Procedures

PURPOSES: This rule establishes standards and procedures to be used by agencies in planning maintenance programs.

(1) General. An effective planned maintenance program provides for maintaining facilities and equipment in a safe and acceptable condition, promotes effective use of facility maintenance personnel, establishes a basis for determining budget requirements and long-range planning and provides a means of evaluating the maintenance effort. The program includes inspections, evaluation of conditions or requirements, or both, establishment of priorities, scheduling, servicing and operation of facility equipment, corrective work and supervisory evaluation of the maintenance effort. Standing maintenance and repair contracts may be used to perform routine maintenance and repair but contracts shall not be used to construct new facilities or to alter the exterior dimensions of existing facilities or make substantial interior alterations.

(2) Preventative Maintenance. Preventative maintenance, accomplished on a regular schedule, will substantially reduce the scope and cost of corrective maintenance/repair, emergency repairs, downtime and overtime.

(A) Inspection. Scheduled preventative maintenance for a facility element, system or equipment item shall include inspection of the item. Conditions and appearance of materials, fastenings, seals, drive systems, lubrication or other elements shall be noted each time an item is serviced. A checklist made to be used to record work required, work accomplished or conditions, or both, noted for each element. The checklist also serves to assure that no element is inadvertently omitted. Space for remarks also shall be included on the checklist to provide specific information concerning noted problems or deficiencies.

(B) Minor Repairs. Normally, repair work is not a part of the regular scheduled servicing. However, when the individual performing the servicing has the supplies and tools available (and the repair can be accomplished quickly) minor repairs can be performed during the scheduled servicing. This repair work should not be undertaken if it will prevent completion of the servicing schedule. A condition requiring maintenance/repair, which is discovered during scheduled servicing, should be reported, so that work required can be evaluated and performed as an emergency repair (if required) or as a programmed maintenance item.

(C) Procurement. Procurement of materials, equipment and supplies for preventative maintenance shall be an operations budget expenditure in accordance with the provisions of Chapter 34, RSMo.

(3) Programmed Maintenance/Repair.

(A) General. Programmed maintenance/repair is the work required to correct deficiencies. Emergency maintenance/repair is not included in this definition. Emergency work may include some items previously programmed, but only to the extent necessary to restore service, correct imminent hazards or prevent breakdowns. Because of the urgency, emergency work is expensive. Consequently, the scope of emergency work shall be limited to the items which are necessary to correct the emergency condition. In many instances
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1. Coordination with local fire department. Facility managers are responsible for minimizing the maintenance/repair backlog, through preventative maintenance, conservation and effective use of available resources.

(A) Operations Budget Items. Minor items in the backlog of maintenance/repair work which can be accomplished by in-house forces or with standing maintenance contracts should be specifically identified and included in the justification for the operations budget. Other items which can be accomplished within the provisions of 1 CSR 30-3.040(1)(A) and (1)(A)2. may be included in the operations budget.

(B) Capital Improvement Items. Major items in the backlog of maintenance/repair work shall be specifically identified and included in the justification for the Capital Improvement Budget and in the Long Range Plan.

6. Work Order System. A work order (or job order) system shall be established by the agency for assignment of work to personnel employed in facility maintenance positions. The work order system should track project initiation, cost of labor, cost of materials and time needed to complete the work. Specific requirements for the work order system and forms may vary from location to location.

7. Maintenance, Evaluation and Assistance Program. The director, within available resources, shall establish a program of evaluation and assistance for the maintenance of state facilities.


1 CSR 30-4.040 Facility Safety and Security

PURPOSE: This rule establishes standards for safety and physical security of state-controlled facilities.

1. General. The standards in this chapter apply to requirements for facilities and facility equipment. Requirements for or relating to operations of the facility occupants are not addressed, except as they affect facility safety and security. References to codes will be interpreted to mean current codes as established in 1 CSR 30-3.030(3)(D).

(A) Fire Prevention and Protection.

1. Coordination with local fire department. Facility managers for each site shall
establish liaison with the local fire department. The local fire department shall be invited to make informal inspections and make recommendations for fire prevention and protection. The visits by fire fighters also provide the opportunity for them to be familiar with the facility and contents, which will enhance the effectiveness of their operation if a fire occurs. The coordination shall also address emergency actions that are appropriate for state employees at the facility, including limitations on actions by these employees.

2. Inspections by state employees. Facility managers shall designate one (1) or more persons to make regular scheduled fire prevention inspections. The number of persons designated will depend on the area, the items to be inspected and the interval between inspections. Inspection of fire extinguishers and hoses shall be included. Each extinguisher and hose shall have a tag to record date and initials for each inspection. In some locations, these inspections can be incorporated into preventative maintenance schedules. A report of deficiencies noted shall be made to the facility manager and corrective action shall be initiated.

3. Installed alarm systems. Installed alarm systems shall be included in preventative inspection and maintenance schedules. Installed alarm systems shall be tested periodically on a regular schedule. The date and results of each test shall be entered into the system maintenance file record. The local fire department shall be advised of the test, to prevent unneeded response. Failure of an alarm system to function properly in a test shall be considered an emergency condition and corrective action shall be taken immediately.

4. Fires in adjacent facilities or areas. Emergency planning shall include actions to be taken in the event of fires in adjacent facilities or areas. Liaison to allow notification to or from occupants in adjacent facilities shall be established. Grounds maintenance shall incorporate measures to minimize potential for trash, grass or brush fires.

5. Evacuation plans. In coordination with local fire departments, an evacuation plan shall be established for each facility. The plan shall include routes, exits and assembly areas for occupants. A plan of the exit routes for trash, grass or brush fires. Each fire drill, the facility manager shall take action and/or make recommendations, as appropriate, to incorporate improvements into the plan.

(B) Preparedness for Other Emergencies. Similar plans for action in the event of other emergencies shall be prepared. The plans shall be coordinated with local agencies to assure organized efforts by all parties when action is necessary. The plans shall emphasize procedures to promote protection and safety of personnel and to minimize potential damage to property.

(C) Electrical System Safety. Electric code requirements (1 CSR 30-3.030(3)(D)) shall be met for all wiring and electrical equipment.

1. Inspections. Preventative inspection and maintenance schedules shall include inspection (and servicing as appropriate) of electric wiring and equipment. Deficiencies noted in capacity or condition of electric wiring or equipment shall be evaluated immediately to determine the potential as imminent hazards. Deficiencies determined to be imminent hazards shall be scheduled for immediate correction. Other noted deficiencies shall be scheduled with priority as indicated in 1 CSR 30-4.020(4)(B).

2. Controls. Electrical protection and control equipment shall be secured in locked cabinets or enclosures, with access limited to authorized personnel. Emergency planning shall include actions for appropriate operation of electrical controls. This planning shall be coordinated with local emergency agencies to assure their awareness of these actions for their own operations in an emergency.

3. Repairs. Repairs to electrical wiring and equipment shall be accomplished only by experienced personnel following procedures to assure minimum potential hazards. Except under emergency conditions, repairs to electrical wiring or electrical equipment shall be accomplished by a team of two (2) or more persons. Materials and equipment installed during electrical repairs shall be in accordance with current codes.

4. Lighting. Safety and/or emergency lighting shall provide minimum lighting levels to assure safe movement of personnel. Emergency lighting, including exit lights, shall be included in preventative inspection and maintenance programs, to assure proper functioning in accordance with current codes. Date and result of each test or inspection shall be recorded in the system maintenance record file. Night lighting shall be adequate to provide minimum essential light levels in all corridors or aisles.

(D) Facilities and Facility Equipment.

1. Floor loads. Floors are designed to carry specific loads. Normally these loads are expressed in terms of concentrated loads (such as file cabinets) on a small area or uniform loads (such as desks) spread over a wider area. Facility managers shall become familiar with the design floor loads and insure that equipment and/or rows of file cabinets or similar heavy loadings do not exceed the designed capacity. When expertise is not available in the department/agency, requests for assistance in establishing floor load capacities may be directed to the Division of Design and Construction.

2. Floor and stair finishes. Floor and stair finishes shall be maintained in a safe condition. Selection of floor waxes shall include consideration for skid resistance and stairs shall have nonskid surfaces or strips. Tiles on floors or stairs, stair nosings, nonskid surfaces or strips shall be maintained in a secure uniform surface. In corridors, aisles or stairs, loose, broken or missing tile, stair nosing or nonskid materials shall be considered as imminent health and safety hazards and shall be scheduled for immediate correction.

3. Equipment, controls and moving elements. Equipment with exposed moving elements or drives shall be in enclosed and/or locked spaces to prevent accidental contact by personnel. High voltage, high amperage and high temperature equipment or controls shall be in locked cabinets and/or spaces with access limited to authorized personnel. Main electrical control equipment, main valves and other utility or equipment controls shall be in locked spaces with access limited to authorized personnel.

4. Storage of flammable materials and gases. Storage for flammable materials and gases shall be limited to the minimum quantities, consistent with usage rates and available delivery schedules. Since these materials are especially hazardous to health, safety and property, they will be stored and handled accordingly. Ventilated, secured storage accessible only to authorized personnel shall comply with current codes. Where possible,
this storage shall be in a separate facility. The access to and storage or use of these materials shall be carefully controlled in accordance with current codes.

(2) Security.

(A) General. Security standards indicated in this section are minimum and apply to physical security of facilities. These standards do not address requirements for security personnel or security requirements for functions or activities of the facility occupants, since these are operations responsibilities of the various department/agencies. Security requirements for facilities of the Department of Corrections are exempted from the requirements of this chapter.

(B) Locks and Key Control. The security (against compromise) of locks shall be commensurate with need for security of the area or element being secured. Consultation with local police is an excellent source for establishing specifications on locking devices to meet high security requirements. The security of locking devices is dependent on the control of keys and combinations. A single missing key can compromise the security of a lock and the area or item secured by that lock. Strict accounting shall be maintained for all keys made for all facility locking devices. All keys made for locking devices which secure facilities or facility equipment shall be numbered and identified (in records) with the locking device. Each key for a facility locking device shall be issued by number to a specific individual and the issue of all keys shall be recorded in a key control register. All personnel leaving employment at the facility shall be required to return all keys issued for facility locking devices and the returns shall be recorded in the register. A periodic inquiry shall be made to determine the location of all keys for facility locking devices. If one (1) or more keys are missing, a determination of need for changing the locks and issuing new keys shall be made. A similar register shall be maintained for facility locking devices with combinations. When personnel leave employment at the facility, a determination of need for changing the combinations of facility locking devices shall be made.

(C) After Hours Access. After hours access to every facility shall be limited to an absolute minimum, consistent with requirements for accomplishing assigned functions or tasks. This access, if more than occasional, shall be documented with an after hours register. The register shall indicate the name of each individual, the area or areas of the facility to be visited or occupied, the purpose of the visit, the date and the times of arrival and departure.

(D) Security Lighting. Security lighting, when augmented by surveillance and/or irregular periodic patrols, is an effective deterrent against burglaries and vandalism. The lighting shall be designed and used with consideration for minimum effective light levels and energy conservation. Controls for automatic turn-on and turn-off shall be incorporated in all security lighting.

(E) Coordination With Local Police Agencies. Coordination shall be established with local police agencies to enhance the security of all state facilities. Coordination shall include providing names of persons to be notified in case of emergency or breach of physical security and a request for surveillance and/or patrols of the area. Local police shall be notified of the presence and/or location of items needing a high degree of security and items which may be likely targets for theft and vandalism. Posted signs, for notification in case of emergency, shall list only the telephone number of the local police or security office. The local police or security office can then notify personnel who should respond for an emergency. This notification system avoids the danger of an employee being forced to provide entry for unauthorized persons.

**AUTHORITY:** sections 8.320 and 8.360, RSMo 1986.* Original rule filed July 9, 1982, effective Nov. 15, 1982.


1 CSR 30-4.050 Public Use of State Facilities

(Rescinded November 30, 1998)