

***AGRICULTURE PROPERTY MANAGEMENT REGULATIONS
CHAPTER 110-80 SAFETY AND ENVIRONMENTAL MANAGEMENT***

SUPPLEMENTING

***FEDERAL MANAGEMENT REGULATION
SUBCHAPTER C – REAL PROPERTY
PART 110-80—SAFETY AND ENVIRONMENT MANAGEMENT***

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Subpart A—General Provisions

§102-80.5—What is the scope of this part?

The real property policies contained in this part apply to Federal agencies, including GSA’s Public Buildings Service (PBS), operating under, or subject to, the authorities of the Administrator of General Services. The responsibilities for safety and environmental management under this part are intended to apply to GSA or those Federal agencies operating in GSA space pursuant to a GSA delegation of authority.

§102-80.10—What are the basic safety and environmental management policies for real property?

The basic safety and environmental management policies for real property are that Federal agencies must—

- (a) Provide for a safe and healthful work environment for Federal employees and the visiting public;
- (b) Protect Federal real and personal property;
- (c) Promote mission continuity;
- (d) Provide reasonable safeguards for emergency forces if an incident occurs;
- (e) Assess risk;
- (f) Make decision makers aware of risks; and
- (g) Act promptly and appropriately in response to risk.

Subpart B—Safety and Environmental Management

Asbestos

§102-80.15—What are Federal agencies' responsibilities concerning the assessment and management of asbestos?

Federal agencies have the following responsibilities concerning the assessment and management of asbestos:

(a) Inspect and assess buildings for the presence and condition of asbestos-containing materials. Space to be leased must be free of all asbestos containing materials, except undamaged asbestos flooring in the space or undamaged boiler or pipe insulation outside the space, in which case an asbestos management program conforming to U.S. Environmental Protection Agency (EPA) guidance must be implemented.

(b) Manage in-place asbestos that is in good condition and not likely to be disturbed.

(c) Abate damaged asbestos and asbestos likely to be disturbed. Federal agencies must perform a pre-alteration asbestos assessment for activities that may disturb asbestos.

(d) Not use asbestos in new construction, renovation/modernization or repair of their owned or leased space. Unless approved by GSA, Federal agencies must not obtain space with asbestos through purchase, exchange, transfer, or lease, except as identified in paragraph (a) of this section.

(e) Communicate all written and oral asbestos information about the leased space to tenants.

Radon

§102-80.20—What are Federal agencies' responsibilities concerning the abatement of radon?

Federal agencies have the following responsibilities concerning the abatement of radon in space when radon levels exceed current EPA standards:

(a) Retest abated areas and make lessors retest, as required, abated areas to adhere to EPA standards.

(b) Test non-public water sources (in remote areas for projects such as border stations) for radon according to EPA guidance. Radon levels that exceed current applicable EPA standards must be mitigated. Federal agencies must retest, as required, to adhere to EPA standards.

Indoor Air Quality

§102-80.25—What are Federal agencies' responsibilities concerning the management of indoor air quality?

Federal agencies must assess indoor air quality of buildings as part of their safety and environmental facility assessments. Federal agencies must respond to tenant complaints on air quality and take appropriate corrective action where air quality does not meet applicable standards.

Lead

§102-80.30—What are Federal agencies' responsibilities concerning lead?

Federal agencies have the following responsibilities concerning lead in buildings:

- (a) Test space for lead-based paint in renovation projects that require sanding, welding or scraping painted surfaces.
- (b) Not remove lead based paint from surfaces in good condition.
- (c) Test all painted surfaces for lead in proposed or existing child care centers.
- (d) Abate lead-based paint found in accordance with U.S. Department of Housing and Urban Development (HUD) Lead-Based Paint Guidelines, available by writing to HUD USER, P.O. Box 6091, Rockville, MD 20850.
- (e) Test potable water for lead in all drinking water outlets.
- (f) Take corrective action when lead levels exceed the HUD Guidelines.

Hazardous Materials and Wastes

§102-80.35—What are Federal agencies' responsibilities concerning the monitoring of hazardous materials and wastes?

Federal agencies' responsibilities concerning the monitoring of hazardous materials and wastes are as follows:

- (a) Monitor the transport, use, and disposition of hazardous materials and waste in buildings to provide for compliance with GSA, Occupational Safety and Health Administration (OSHA), Department of Transportation, EPA, and applicable State and local requirements. In addition to those operating in GSA space pursuant to a delegation of authority, tenants in GSA space must comply with these requirements.
- (b) In leased space, include in all agreements with the lessor requirements that hazardous materials stored in leased space are kept and maintained according to applicable Federal, State, and local environmental regulations.

Underground Storage Tanks

§102-80.40—What are Federal agencies' responsibilities concerning the management of underground storage tanks?

Federal agencies have the following responsibilities concerning the management of underground storage tanks in real property:

- (a) Register, manage and close underground storage tanks, including heating oil and fuel oil tanks, in accordance with GSA, EPA, and applicable State and local requirements.
- (b) Require the party responsible for tanks they use but do not own to follow these requirements and to be responsible for the cost of compliance.

Seismic Safety

§102-80.45—What are Federal agencies’ responsibilities concerning seismic safety in Federal facilities?

Federal agencies must follow the standards issued by the Interagency Committee on Seismic Safety in Construction (ICSSC) as the minimum level acceptable for use by Federal agencies in assessing the seismic safety of their owned and leased buildings and in mitigating unacceptable seismic risks in those buildings.

Risks and Risk Reduction Strategies

§102-80.50—Are Federal agencies responsible for identifying/estimating risks and for appropriate risk reduction strategies?

Yes, Federal agencies must identify and estimate safety and environmental management risks and appropriate risk reduction strategies for buildings. Federal agencies occupying as well as operating buildings must identify any safety and environmental management risks and report or correct the situation, as appropriate. Federal agencies must use the applicable national codes and standards as a guide for their building operations.

§102-80.55—Are Federal agencies responsible for managing the execution of risk reduction projects?

Yes, Federal agencies must manage the execution of risk reduction projects in buildings they operate. Federal agencies must identify and take appropriate action to eliminate hazards and regulatory noncompliance.

Facility Assessments

§102-80.60—Are Federal agencies responsible for performing facility assessments?

Yes, Federal agencies must evaluate facilities to comply with GSA’s safety and environmental program and applicable Federal, State and local environmental laws and regulations. Federal agencies should conduct these evaluations in accordance with schedules that are compatible with repair and alteration and leasing operations.

Incident Investigation

§102-80.65—What are Federal agencies’ responsibilities concerning the investigation of incidents, such as fires, accidents, injuries, and environmental incidents?

Federal agencies have the following responsibilities concerning the investigation of incidents, such as fires, accidents, injuries, and environmental incidents in buildings they operate:

- (a) Investigate all incidents regardless of severity.
- (b) Form Boards of Investigation for incidents resulting in serious injury, death, or significant property losses.

Responsibility for Informing Tenants

§102-80.70—Are Federal agencies responsible for informing their tenants of the condition and management of their facility safety and environment?

Yes, Federal agencies must inform their tenants of the condition and management of their facility safety and environment. Agencies operating GSA buildings must report any significant facility safety or environmental concerns to GSA.

Assessment of Environmental Issues

§102-80.75—Who assesses environmental issues in Federal construction and lease construction projects?

Federal agencies must assess required environmental issues throughout planning and project development so that the environmental impacts of a project are considered during the decision making process.

Subpart C—Accident and Fire Prevention

§102-80.80—With what general accident and fire prevention policy must Federal agencies comply?

Federal agencies must—

- (a) Comply with the occupational safety and health standards established in the Occupational Safety and Health Act of 1970 (Pub. L. 91-596); Executive Order 12196; 29 CFR part 1960; and applicable safety and environmental management criteria identified in this part;
- (b) Not expose occupants and visitors to unnecessary risks;
- (c) Provide safeguards that minimize personal harm, property damage, and impairment of Governmental operations, and that allow emergency forces to accomplish their missions effectively;
- (d) Follow accepted fire prevention practices in operating and managing buildings;
- (e) To the maximum extent feasible, comply with one of the nationally recognized model building codes and with other nationally-recognized codes in their construction or alteration of each building in accordance with 40 U.S.C. 3312; and
- (f) Use the applicable national codes and standards as a guide for their building operations.

110-80.80 Fire prevention practices in USDA-controlled buildings.

(d) USDA employees must follow accepted fire prevention practices in USDA-controlled buildings.

- 1. The use of any device or utilizing an open flame is prohibited within space***

occupied or under the control of the Department. This prohibition includes, but is not limited to: candles, incense burners, and fires for any purpose.

2. An exemption to the prohibition on the use of open flames must be requested and granted by the building manager. In the National Capital Region, permission can be requested in writing, with specific reasons and with sufficient time to permit processing and response notification to: Office of Operations, Safety and Environmental Protection Branch, Room 1448, 1400 Independence Avenue, SW, Washington, DC 20250.

State and Local Codes

§102-80.85—Are Federally owned and leased buildings exempt from State and local code requirements in fire protection?

Federally owned buildings are generally exempt from State and local code requirements in fire protection; however, in accordance with 40 U.S.C. 3312, each building constructed or altered by a Federal agency must be constructed or altered, to the maximum extent feasible, in compliance with one of the nationally recognized model building codes and with other nationally recognized codes. Leased buildings are subject to local code requirements and inspection.

Fire Administration Authorization Act of 1992

§102-80.90—Is the Fire Administration Authorization Act of 1992 (Public Law 102-522) relevant to fire protection engineering?

Yes, the Fire Administration Authorization Act of 1992 (Pub. L. 102-522) requires sprinklers or an equivalent level of safety in certain types of Federal employee office buildings, Federal employee housing units, and Federally assisted housing units (15 U.S.C. 2227).

§102-80.95—Is the Fire Administration Authorization Act of 1992 applicable to all Federal agencies?

Yes, the Fire Administration Authorization Act applies to all Federal agencies and all Federally owned and leased buildings in the United States.

Automatic Sprinkler Systems

§102-80.100—What performance objective should an automatic sprinkler system be capable of meeting?

The performance objective of the automatic sprinkler system is that it must be capable of protecting human lives. Sprinklers should be capable of controlling the spread of fire and its effects beyond the room of origin. A functioning sprinkler system should activate prior to the onset of flashover.

Equivalent Level of Safety Analysis

§102-80.105—What information must be included in an equivalent level of safety analysis?

The equivalent level of life safety evaluation is to be performed by a qualified fire protection engineer. The analysis should include a narrative discussion of the features of the building structure, function, operational support systems and occupant activities that impact fire protection and life safety. Each analysis should describe potential reasonable worst-case fire scenarios and their impact on the building occupants and structure. Specific issues that must be addressed include rate of fire growth, type and location of fuel items, space layout, building construction, openings and ventilation, suppression capability, detection time, occupant notification, occupant reaction time, occupant mobility, and means of egress.

§102-80.110—What must an equivalent level of safety analysis indicate?

To be acceptable, the analysis must indicate that the existing and/or proposed safety systems in the building provide a period of time equal to or greater than the amount of time available for escape in a similar building complying with the Fire Administration Authorization Act. In conducting these analyses, the capability, adequacy, and reliability of all building systems impacting fire growth, occupant knowledge of the fire, and time required to reach a safety area will have to be examined. In particular, the impact of sprinklers on the development of hazardous conditions in the area of interest will have to be assessed.

§102-80.115—Is there more than one option for establishing that an equivalent level of safety exists?

Yes, the following are three options for establishing that an equivalent level of safety exists:

(a) In the first option, the margin of safety provided by various alternatives is compared to that obtained for a code complying building with complete sprinkler protection. The margin of safety is the difference between the available safe egress time and the required safe egress time. Available safe egress time is the time available for evacuation of occupants to an area of safety prior to the onset of untenable conditions in occupied areas or the egress pathways. The required safe egress time is the time required by occupants to move from their positions at the start of the fire to areas of safety. Available safe egress times would be developed based on analysis of a number of assumed reasonable worst case fire scenarios including assessment of a code complying

fully sprinklered building. Additional analysis would be used to determine the expected required safe egress times for the various scenarios. If the margin of safety plus an appropriate safety factor is greater for an alternative than for the fully sprinklered building, then the alternative should provide an equivalent level of safety.

(b) A second alternative is applicable for typical office and residential scenarios. In these situations, complete sprinkler protection can be expected to prevent flashover in the room of fire origin, limit fire size to no more than 1 megawatt (950 Btu/sec), and prevent flames from leaving the room of origin. The times required for each of these conditions to occur in the area of interest must be determined. The shortest of these three times would become the time available for escape. The difference between the minimum time available for escape and the time required for evacuation of building occupants would be the target margin of safety. Various alternative protection strategies would have to be evaluated to determine their impact on the times at which hazardous conditions developed in the spaces of interest and the times required for egress. If a combination of fire protection systems provides a margin of safety equal to or greater than the target margin of safety, then the combination could be judged to provide an equivalent level of safety.

(c) As a third option, other technical analysis procedures, as approved by the responsible agency head, can be used to show equivalency.

§102-80.120—What analytical and empirical tools should be used to support the life safety equivalency evaluation?

Analytical and empirical tools, including fire models and grading schedules such as the Fire Safety Evaluation System (Alternative Approaches to Life Safety, NEPA 101A) should be used to support the life safety equivalency evaluation. If fire modeling is used as part of an analysis, an assessment of the predictive capabilities of the fire models must be included. This assessment should be conducted in accordance with the American Society for Testing and Materials Standard Guide for Evaluating the Predictive Capability of Fire Models (ASTM E 1355).

§102-80.125—Who has the responsibility for determining the acceptability of each equivalent level of safety analysis?

The head of the agency responsible for physical improvements in the facility or providing Federal assistance or a designated representative will determine the acceptability of each equivalent level of safety analysis. The determination of acceptability must include a review of the fire protection engineer's qualifications, the appropriateness of the fire scenarios for the facility, and the reasonableness of the assumed maximum probable loss. Agencies should maintain a record of each accepted equivalent level of safety analysis and provide copies to fire departments or other local authorities for use in developing pre-fire plans.

§102-80.130—Who must perform the equivalent level of safety analysis?

A qualified fire protection engineer must perform the equivalent level of safety analysis.

§102-80.135—Who is a qualified fire protection engineer?

A qualified fire protection engineer is defined as an individual with a thorough knowledge and understanding of the principles of physics and chemistry governing fire growth, spread, and suppression, meeting one of the following criteria:

(a) An engineer having an undergraduate or graduate degree from a college or university offering a course of study in fire protection or fire safety engineering, plus a minimum of 4 years work experience in fire protection engineering.

(b) A professional engineer (P.E. or similar designation) registered in Fire Protection Engineering.

(c) A professional engineer (P.E. or similar designation) registered in a related engineering discipline and holding Member grade status in the International Society of Fire Protection Engineers.

Room of Origin

§102-80.140—What is meant by “room of origin”?

Room of origin means an area of a building where a fire can be expected to start. Typically, the size of the area will be determined by the walls, floor, and ceiling surrounding the space. However, this could lead to unacceptably large areas in the case of open plan office space or similar arrangements. Therefore, the maximum allowable fire area should be limited to 200 m² (2000 ft²) including intervening spaces. In the case of residential units, an entire apartment occupied by one tenant could be considered as the room of origin to the extent it did not exceed the 200 m² (2000 ft²) limitation.

Flashover

§102-80.145—What is meant by “flashover”?

Flashover means fire conditions in a confined area where the upper gas layer temperature reaches 600 °C (1100 °F) and the heat flux at floor level exceeds 20 kW/m² (1.8 Btu/ft²/sec).

Reasonable Worst Case Fire Scenario

§102-80.150—What is meant by “reasonable worst case fire scenario”?

Reasonable worst case fire scenario means a combination of an ignition source, fuel items, and a building location likely to produce a fire that would have a significant adverse impact on the building and its occupants. The development of reasonable worst case scenarios must include consideration of types and forms of fuels present (*e.g.*, furniture, trash, paper, chemicals), potential fire ignition locations (*e.g.*, bedroom, office, closet, corridor), occupant capabilities (*e.g.*, awake, intoxicated, mentally or physically impaired), numbers of occupants, detection and suppression system adequacy and reliability, and fire department capabilities. A quantitative analysis of the probability of occurrence of each scenario and combination of events will be necessary.