

## To Be Rescinded

### 1301:7-7-15 Hazardous production material facilities.

#### (A) Section FM-1501.0 General

(1) FM-1501.1 Scope: The storage, handling and use of hazardous production materials (HPM) in excess of quantities permitted by Tables 307.8(1) and 307.8(2) in the building code listed in rule 1301:7-7-44 of the Administrative Code and classified as an HPM facility shall comply with this rule.

(2) F-1501.2 Approval required: Approval shall be obtained from the code official to store, handle or use hazardous production materials.

(3) FM-1501.3 Operation and maintenance: All devices and systems required by section 416.0 of the building code listed in rule 1301:7-7-44 of the Administrative Code shall be maintained in an operable condition.

#### (B) Section FM-1502.0 Definitions

FM-1502.1 General: The following words and terms shall, for the purposes of this rule and as stated elsewhere in this code, have the meanings shown herein.

Emergency control station: An approved location on the premises where signals from emergency equipment are received and which THAT is staffed by trained personnel.

Fabrication area: A fabrication area is one in which there are processes involving hazardous production materials (HPM) and includes ancillary rooms or areas, such as dressing rooms and offices, that are supplemental to the area processes.

Flammable liquid gas: A liquefied compressed gas which, under charged pressure, is partially liquid at a temperature of 70 degrees F. (21 degrees C.) and is flammable.

Hazardous production material (HPM): A solid, liquid or gas that has a degree of hazard rating in health, flammability or reactivity of Class 3 or 4 as ranked by NFPA 704 listed in rule 1301:7-7-44 of the Administrative Code and which is utilized directly in research, laboratory or production processes that have, as their end product, materials that are not hazardous.

HPM flammable liquid: A liquid defined as either flammable or combustible under the definitions indicated in paragraph (B) (FM-2802.0) of rule 1301:7-7-28 of the Administrative Code.

Service passage, HPM: A passage in which hazardous production materials (HPM) are transported from a separate inside HPM storage room or the exterior of the structure to the perimeter wall of the fabrication area, for purposes other than required means of egress.

Storage room, HPM, separate inside: A room in which hazardous production materials (HPM) are stored in containers, tanks, drums or other means, and which is separated from other occupancies. Such rooms include:

HPM cutoff room: An HPM storage room within a structure and having at least one exterior wall.

HPM inside room: An HPM storage room totally enclosed within a structure and not having exterior walls.

Work station: A defined space or an independent principal piece of equipment using HPM within a fabrication area where a specific function, laboratory procedure or research activity occurs. Approved cabinets serving the work station shall be defined as a part of the work station. The station shall contain ventilation equipment, fire protection devices, sensors for gas and other hazards, electrical devices and other processing and scientific equipment.

(C) Section FM-1503.0 Fabrication area

(1) FM-1503.1 General: Fabrication areas shall comply with the building code listed in rule 1301:7-7-44 of the Administrative Code for HPM facilities.

(2) F-1503.2 Location: The occupied levels of fabrication areas shall not be located below the first story.

(3) F-1503.3 Amount of HPM in a fabrication area: The total amount of HPM permitted in a single fabrication area shall be based on the densities in Table F-1503.3(2), or the quantities in Table F-1503.3(1), whichever is the larger amount.

(4) F-1503.4 Excess flow control: Where HPM supply gas is carried in pressurized piping, a fail-safe system shall shut off flow caused by a rupture in the piping. Where the piping originates from within the HPM cutoff room, an excess flow valve shall be located within the HPM cutoff room. Where the piping originates from outside the structure, the valve shall be located outside the structure and as close to the outlet of the bulk source as practical.

(5) F-1503.5 Gas detection system: Where HPM gas is used or dispensed and the physiological warning properties for the gas are at a higher level than the accepted permissible exposure limitation for the gas, a continuous gas monitoring system shall be provided to detect the presence of a short-term hazard condition. Where dispensing occurs and flammable gases or vapors are liberated in quantities exceeding 20 percent of the lower explosive limitation, a continuous gas monitoring system shall be provided. The gas monitoring system shall be connected to the emergency control station.

Table F-1503.3(1)  
Permitted amounts of HPM in a single  
fabrication area - quantity basis

Material	Maximum quantity <sup>b</sup>
Flammable liquids	
Class IA	90 gallons
Class IB	180 gallons
Class IC	270 gallons
Combination flammable liquids	360 gallons <sup>a</sup>
Combustible liquids	
Class II	360 gallons
Class IIIA	750 gallons
Flammable gases	9,000 cubic feet at one atmosphere of pressure at 70 <sup>o</sup> F.
Liquefied flammable gases	180 gallons
Flammable solids	1,500 pounds
Corrosive liquids	500 gallons
Oxidizing material - gases	18,000 cubic feet
Oxidizing material - liquids	150 gallons
Oxidizing material - solids	1,500 pounds
Organic peroxides	30 pounds
Highly toxic materials and toxic materials	Included in the aggregate for flammables as noted above

Note a. Containing not more than the exempt amounts of class IA, IB or IC flammable liquids.

Note b. 1 gallon = 3.785 L; 1 cubic foot = 0.028 m<sup>3</sup>; 1 pound = 0.454 kg; degrees C. = [(degrees F.)-32]/1.8.



Table F-1503.3(2)  
Permitted amounts of HPM in a single  
fabrication area - density basis<sup>a,c</sup>

State	units <sup>d</sup>	flammable	oxidizer	corrosive
Solid	pounds per square foot	0.001	0.003	0.003
liquid	gallons per square foot	0.04 <sup>b</sup>	0.03	0.08
gas	cubic feet per square foot	1.250	1.250	3.000

Note a. HPM within piping shall not be included in the calculated quantities.

Note b. The maximum permitted quantities of flammable and combustible liquids shall not exceed the following:

Class (IA) + (IB) + (IC) (combination flammable liquids).....	=	0.025
However, Class IA shall not exceed.....	=	0.0025
Class II.....	=	0.01
Class IIIA.....	=	0.02

Note c. Highly toxic materials and toxic materials shall be limited by the maximum quantities indicated in Table F-1503.3(1).

Note d. 1 pound per square foot = 4.88 kg/m<sup>2</sup>; 1 gallon per square foot = 40.70 L/M<sup>2</sup>; 1 cubic foot per square foot = 0.301 m<sup>3</sup>/m<sup>2</sup>.

(D) Section FM-1504.0 Work stations within the fabrication area

(1) F-1504.1 Construction: Work stations located within fabrication areas shall be constructed of materials compatible with the materials utilized at the station. The portion of the work station serving as a cabinet for hazardous gases and flammable liquids shall be noncombustible and, where metal, shall not be less than 0.0478-inch (No. 18 gage) steel.

(2) F-1504.2 Quantities of HPM: The maximum quantities of HPM materials in use at a work station shall not exceed the quantities indicated in Table F-1504.2.



(4) Table F-1504.2  
Maximum quantities of HPM at a work station

Material type	Material state	Maximum quantity <sup>b</sup>
Flammables and toxics combined	Gas	3 cylinders
	Liquid	15 gallons
	Solid	5 pounds
Corrosives	Gas	3 cylinders
	Liquid	25 gallons <sup>a</sup>
	Solid	20 pounds
Oxidizers	Gas	3 cylinders
	Liquid	12 gallons <sup>a</sup>
	Solid	20 pounds

Note a. An equal amount of nonflammable HPM liquid in reservoirs of filtering systems of connected materials in use shall be permitted.

Note b. 1 gallon = 3.785 L; 1 pound = 0.454 kg.

(3) FM-1504.3 Exhaust ventilation: A ventilation system shall be provided to capture and exhaust fumes and vapors at the work station. The system shall comply with paragraphs (D)(3)(a)(FM-1504.3.1) and (D)(3)(b)(FM-1504.3.2) of this rule.

(a) FM-1504.3.1 Duct systems: HPM duct systems shall comply with paragraphs (D)(3)(a)(i)(FM-1504.3.1.1) through (D)(3)(a)(iv)(F-1504.3.1.4) of this rule.

(i) FM-1504.3.1.1 Materials: Materials for ducts shall comply with the mechanical code listed in rule 1301:7-7-44 of the Administrative Code.

(ii) F-1504.3.1.2 Reactives: Two or more operations shall not be connected to the same exhaust system where either one or the combination of the removed substances constitutes a fire, explosion or chemical reaction hazard within the duct system.

(iii) F-1504.3.1.3 Penetrations: Exhaust duct systems penetrating fire-resistance rated construction shall be contained in a shaft of equivalent fire-resistance rated construction. Ducts shall not penetrate fire walls. Fire dampers shall not be installed in exhaust ducts.

(iv) F-1504.3.1.4 Automatic sprinkler system: All exhaust ducts shall be internally protected with

automatic sprinklers where all of the following conditions apply:

- (a) The largest cross-sectional diameter is equal to or greater than 10 inches (254 mm).
- (b) The ducts are within the structure.
- (c) The ducts are conveying gases or vapors in a flammable range.

Combustible nonmetallic ducts with a largest cross-sectional diameter equal to or greater than 10 inches (254 mm) shall be internally protected with automatic sprinklers.

#### Exceptions

(a) Ducts approved for nonsprinklered applications are not required to be internally protected with automatic sprinklers.

(b) Ducts not more than 12 feet (3658 mm) in length installed below the ceiling level are not required to be internally protected with automatic sprinklers.

(b) FM-1504.3.2 Ventilation power and controls: The exhaust ventilation system shall have an emergency source of power. The emergency power shall be designed and installed in accordance with NFPA 70 listed in rule 1301:7-7-44 of the Administrative Code. The emergency power shall provide the exhaust system with not less than 50-percent capacity where it is demonstrated that the reduced level of exhaust will maintain a safe atmosphere with respect to flammability and health.

(4) F-1504.4 Fire protection requirements: Automatic sprinkler coverage of the horizontal surface at any work station shall not be obstructed. There shall be an automatic sprinkler installed within the exhaust duct connections of work stations of combustible construction. The sprinkler shall be located not more than 4 feet (1219 mm) from the point of the duct connection to the work station. The sprinkler and connecting piping to the duct shall be coated with approved materials to prevent corrosion when necessary. Access to the sprinkler shall be provided for periodic inspection. The design of the automatic sprinkler system in the area shall take into consideration the spray pattern and the effect on the equipment. Where an approved alternative fire suppression system is provided, activation of such systems shall deactivate the related processing equipment.

#### Exceptions

(a) Process equipment operating at temperatures exceeding 932 degrees F. (500 degrees C.) and provided with automatic shutdown capabilities for HPM.

(b) Exhaust ducts from flammable gas storage cabinets that are part of a work station.

(5) FM-1504.5 Electrical requirements: Electrical equipment and devices located within 5 feet (1524 mm) of work stations in which flammable liquids or gases are utilized shall comply with NFPA 70 listed in rule 1301:7-7-44 of the Administrative Code for class I, division 2, hazardous locations. Work stations shall not be energized without first activating the exhaust ventilation.

Exception: The requirements for class I, division 2, hazardous locations shall not apply where the air removal from the work station or dilution will provide nonflammable atmospheres on a continuous basis.

(6) F-1504.6 Chemical drainage and containment: Each work station utilizing HPM liquids shall have: an approved means of containing or directing any spilled and leaked liquids to the drainage system; drainage piping systems shall be connected to a compatible system for disposition of spilled and leaked liquids; and the work surface shall be provided with a slope or other means for directing any spilled materials to the containment or drainage system.

(7) F-1504.7 Identification: All systems utilized in HPM supply and drainage shall be identified. Identification shall be conspicuously visible at all times.

(8) F-1504.8 Shutoff valves: Shutoff valves for HPM supply piping shall be provided at the work station, branch connections into the fabrication area, and points of entry into egress corridors and provided with ready access thereto.

(9) F-1504.9 Protection of containers from damage: All HPM containers located in or connected to a work station shall be protected from damage or dislodgment and shall not project from the work station.

(10) F-1504.10 Work station clearances: Work stations involving HPM shall be provided with horizontal servicing clearances of not less than 3 feet (914 mm) for electrical equipment, gas cylinder connections, piping connections or fittings on piping systems containing HPM. These clearances apply to normal operational procedures and not to repair or maintenance-related work.

(E) Section FM-1505.0 Storage and dispensing of HPM within fabrication areas

(1) F-1505.1 General: The storage of HPM liquids, gases and solids shall be within storage cabinets or a work station. Separate cabinets shall be provided for each class of hazardous materials. Flammables, acids, bases, oxidizers, toxics and other incompatible materials shall not be stored within the same cabinet. Not more than three cabinets containing HPM flammable liquids shall be located in the same room.

Exception: Cabinets in groups of not more than three and located in the same room shall be spaced from other cabinets a minimum distance of 100 feet (30480 mm).



(2) FM-1505.2 Cabinet construction: Storage cabinets shall be of steel with a minimum thickness of 0.0478 inches (No. 18 gage). Doors shall be well-fitted, self-closing and equipped with a latching device. Joints shall be riveted or welded and tight fitting. The bottom of a cabinet designed for the containment of liquids shall be liquid tight to a height of at least 2 inches (51 mm). Electrical equipment and devices located within cabinets in which HPM gases or liquids are stored shall comply with NFPA 70 listed in rule 1301:7-7-44 of the Administrative Code.

(3) FM-1505.3 Special requirements for HPM gases: HPM gas systems shall comply with paragraphs (E)(3)(a)(F-1505.3.1) through (E)(3)(e)(FM-1505.3.5) of this rule.

(a) F-1505.3.1 Automatic sprinklers: Storage cabinets containing HPM gases, except gas cabinets located within an HPM cutoff room and not containing pyrophoric gases, shall be internally protected with automatic sprinklers.

(b) F-1505.3.2 Access ports: Self-closing limited access ports shall be installed on gas cabinets to provide access to equipment controls.

(c) FM-1505.3.3 Gas detection: Storage cabinets for HPM gases shall be provided with a continuous gas-monitoring system in accordance with paragraph (C)(5)(F-1503.5) of this rule whether or not dispensing occurs. Activation of the gas-monitoring system shall automatically close the valves on all HPM gas lines from the cabinets and initiate an alarm to the emergency control station.

(d) FM-1505.3.4 Ventilation: Storage cabinets shall be ventilated. Where the cabinet contains toxic gases, the average velocity of ventilation at the face of access ports shall not be less than 200 feet per minute (1 m/s) with a minimum of 150 feet per minute (0.75 m/s) at any point of the access port.

Gas storage cabinets shall be operated at a negative pressure relative to the surrounding area. The storage cabinet ventilation system shall comply with paragraphs (D)(3)(a)(FM-1504.3.1) and (D)(3)(b)(FM-1504.3.2) of this rule. Connection of the gas cabinet exhaust system to the system serving other work stations is permitted.

(e) FM-1505.3.5 Excess flow control: Excess flow control valves shall be installed where required by paragraph (C)(4)(F-1503.4) of this rule.

(F) Section FM-1506.0 Handling of HPM within the means of egress

(1) FM-1506.1 Existing buildings: Where there are alterations or modifications to existing fabrication areas, transportation of HPM shall not be permitted in a means of egress unless the means of egress complies with paragraphs (F)(2)(F-1506.2) through (F)(4)(c)(F-1506.4.3) of this rule and the building code listed in rule 1301:7-7-44 of the Administrative Code for HPM facilities.

(2) F-1506.2 Containers: All containers, tanks, drums or other means of containing the materials shall

be the original shipping container or an approved safety container. Where more than two such containers are transported within a corridor, the containers shall be in an approved cart. Glass containers shall not be utilized, except where purity of the HPM is a factor. Glass containers shall not exceed 1 gallon (4 L) in size.

(3) FM-1506.3 Carts and trucks: Transport carts and trucks of an approved design complying with paragraph (F)(4)(F-1506.4) of this rule shall be utilized for transporting HPM.

#### Exceptions

(a) The hand transport of HPM liquids shall be in approved safety containers. Transport shall be limited to two containers not exceeding 5 gallons (19L) each. The transport of drums shall be limited to a single drum to be transported by a suitable drum truck.

(b) The transport of HPM gases shall be by approved gas cylinder hand trucks. Cylinders not exceeding 25 pounds (11 kg) are permitted to be hand carried.

(c) The transport of solid HPM shall not exceed 50 pounds (23 kg) unless transported by approved hand trucks. Such hand trucks shall be limited to 100 pounds (46 kg) of materials.

HPM gas cylinder valves shall be capped or plugged with an approved closure device, and protective cylinder caps shall be in place. Cylinders placed on carts and trucks shall be individually restrained.

HPM shall not be dispensed in a means of egress. Carts and trucks shall not be stored unattended within a means of egress.

(4) F-1506.4 Cart and truck design: Carts and trucks shall be designed to provide a stable base for the commodities to be transported and shall have a means of restraining containers against accidental dislodgment. Carts and trucks shall be provided with a device that will enable the operator to control movement safely by providing stops or speed reduction devices. Power carts and trucks shall be approved for class I, division 1, or class I, division 2, hazardous locations and shall not have internal combustion engines.

(a) F-1506.4.1 Liquid transporters: Construction materials for HPM carts or trucks utilized for HPM flammable or combustible liquids, except materials utilized for castors, gaskets, trim and drains, shall not be less than 0.0478-inch (No. 18 gage) steel or approved materials with a class I flame spread rating. HPM liquid carts and trucks shall be designed to enclose the transported contents. The carts and trucks shall be capable of containing a spill from the largest single container transported with a maximum individual container size of 5 gallons (19 L).

(b) F-1506.4.2 Size: The length and width of a cart shall not exceed 48 inches (1219 mm) or one-half the width of existing egress corridors, whichever is less. The capacity of carts and trucks transporting

HPM shall not exceed 55 gallons (208 L) of liquids, seven cylinders up to 400 pounds (182 kg) each of gases or 500 pounds (227 kg) of solids.

(c) F-1506.4.3 Identification: Carts and trucks shall bear a marking indicating the contents therein. Incompatible materials shall not be transported on the same cart or truck.

(G) Section FM-1507.0 Handling HPM in service passages

(1) FM-1507.1 Transportation criteria: A service passage shall be provided where necessary to transport HPM to and from an HPM cutoff room or from the outside of the structure to the perimeter wall of the fabrication area. A service passage shall not be a required means of egress corridor. Service passages in which HPM is transported shall meet the following requirements:

(a) All containers shall comply with paragraph (F)(4)(b)(F-1506.4.2) of this rule.

(b) The maximum quantities of HPM to be transported in a service passage at one time shall be two times the quantities indicated in paragraph (F)(4)(b)(F-1506.4.2) of this rule.

(2) F-1507.2 Prohibited procedures: HPM shall not be dispensed in a service passage.

(H) Section FM-1508.0 Storage of HPM

(1) FM-1508.1 Outside storage of HPM: General storage of HPM located outside the structure shall comply with the separation, construction and fire safety requirements of this code and the building code listed in rule 1301:7-7-44 of the Administrative Code.

(a) FM-1508.1.1 Shutoff in piping from outside storage: All HPM gaseous supply piping from outside storage shall be provided with excess flow control in accordance with paragraph (C)(4)(F-1503.4) of this rule. A manual emergency shutoff valve located outside the structure shall be installed on each HPM supply pipe from outside storage. The valve shall be identified, capable of ready access and the location clearly visible.

FM-1508.1.2 Special provisions: Outside storage of HPM shall be safeguarded from public access (see paragraph (N)(2)(F-2314.2) of rule 1301:7-7-23 of the Administrative Code).

(2) FM-1508.2 Inside storage of HPM: Flammables, corrosives, oxidizers, water reactives, solids and liquids located within a storage room shall be separated from each other in accordance with Table FM-1508.2. Where Table FM-1508.2 permits a noncombustible partition between classes of HPM, the classes are permitted in the same room. Water-reactive HPM shall be isolated in separate rooms from flammable or combustible liquids. The separation is not required to be fire-resistance rated. Toxics shall be isolated in accordance with Table FM-1508.2 with a fire separation assembly having a minimum fire-resistance rating of 1 hour. HPM gas shall be isolated from HPM liquids and solids



by a fire separation assembly having a minimum fire resistance rating of 1 hour in accordance with Table FM-1508.2.

Table F-1508.2  
Minimum separation between materials<sup>a,d,e</sup>

Material	Toxics	Acids	Bases	Flammables	Oxidizers	Water-reactive	Pyrophoric
Toxics	—	1 hour	1 hour	1 hour	1 hour	1 hour	1 hour
Acids	1 hour	—	S	S <sup>b</sup>	S	S	S <sup>b</sup>
Bases	1 hour	S	—	S	S	S	S
Flammables	1 hour	S <sup>b</sup>	S	—	S	not permitted <sup>f</sup>	S
Oxidizers	1 hour	S	S	S	—	S	S <sup>b</sup>
Water-reactive	1 hour	S	S	not permitted <sup>f</sup>	S	—	S
Pyrophoric	1 hour	S <sup>b</sup>	S	S	S <sup>b</sup>	S	—

Note a. For separation of HPM gases from HPM liquids and solids see paragraphs (H)(2)(FM-1508.2) through (H)(2)(c)(F-1508.2.3) of this rule.

Note b. Separation by not less than 20 feet (6096 mm) shall be provided as an alternative to a noncombustible partition.

Note c. A separate storage room is required.

Note d. S = noncombustible partition. The partition shall extend not less than 18 inches (457 mm) above and to the front and rear of stored material.

Note e. 1 hour = 1-hour noncombustible fire separation assembly except where materials are stored in approved gas cabinets.

(a) FM-1508.2.1 Quantities in HPM storage rooms: The quantity of HPM located within each HPM storage room shall not exceed the amounts permitted by this code. The quantity of HPM oxidizers shall comply with Tables F-1508.2.1(1) through FM-1508.2.1(4) of this rule. Highly toxic liquids shall be considered AS flammable liquids. Corrosive liquids shall be considered as Class 3 flammable liquids. Highly toxic solids shall be considered as flammable solids.

The quantities of HPM gases shall not exceed the following: oxidizers, 20,000 cubic feet (560 m<sup>3</sup>); corrosives, 30,000 cubic feet (840 m<sup>3</sup>); and flammables, 15,000 cubic feet (420 m<sup>3</sup>). Toxic gas quantities shall be considered as flammable gases.

Table FM-1508.2.1(1)  
Storage of Class I oxidizers in containers<sup>a,b</sup>

Container storage criteria	HPM inside room or HPM cutoff room
Noncombustible containers	
Combustible containers in piles	no limit
Length (feet)	no limit
Width (feet)	50
Height (feet)	20
Distance between piles (feet)	3
Distance to walls (feet)	2
Quantity limit per structure (tons)	no limit

Note a. See paragraph (B)(F-3802.0) of rule 1301:7-7-38 of the Administrative Code for definition of class I oxidizers.

Note b. 1 foot = 304.8 mm; 1 ton = 908 kg.

Table FM-1508.2.1(2)  
Storage of Class 2 oxidizers in containers<sup>a,b</sup>

Container storage criteria	HPM inside room	HPM cutoff room
Structure limit (tons)	200	2,000
Pile limit (tons)	20	100
Height limit (feet)	10	12
Distance between piles (feet)	aisle width equal	to pile height
Distance to incompatible storage (feet)	12	see Table F-1508.2
Distance to wall (feet)	2	2

Note a. See paragraph (B)(F-3802.0) of rule 1301:7-7-38 of the Administrative Code for definition of class 2 oxidizers.

Note b. 1 foot = 304.8 mm; 1 ton = 908 kg.

Table FM-1508.2.1(3)  
Storage of Class 3 oxidizers in containers<sup>a,b</sup>

Container storage criteria	HPM inside room	HPM cutoff room
Structure limit (tons)	100	1,200
Pile limit (tons)	20	60
Height limit (feet)	8	10
Distance between piles (feet)	aisle width equal	to pile height
Distance to incompatible storage (feet)	10	see Table F-1508.2
Distance to wall (feet)	4	4

Note a. See paragraph (B) (F-3802.0) of rule 1301:7-7-38 of the Administrative Code for definition of class 3 oxidizers.

Note b. 1 foot = 304.8 mm; 1 ton = 908 kg.

Table FM-1508.2.1(4)  
Storage of Class 4 oxidizers in drums, containers and cases<sup>a,b</sup>

Piles	
Length (feet)	10
Width (feet)	4
Height (feet)	8
Distance between piles (feet)	8
Quantity limit per structure (tons)	no limit

Note a. See paragraph (B)(F-3802.0) of rule 1301:7-7-38 of the Administrative Code for definition of class 4 oxidizers.



Note b. 1 foot = 304.8 mm; 1 ton = 908 kg.

(b) FM-1508.2.2 Electrical requirements: Electrical wiring and equipment located in HPM cutoff rooms containing flammable liquids or gases shall be designed for ~~class I, division I~~, hazardous locations, in accordance with NFPA 70 listed in rule 1301:7-7-44 of the Administrative Code.

(c) F-1508.2.3 Special hazards: Energy-consuming equipment shall not be installed or operated unless such equipment has been tested and approved specifically for the hazardous atmosphere that develops.

(I) Section F-1509.0 Emergency plan

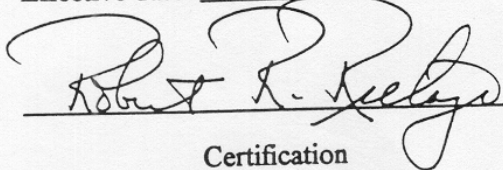
(1) F-1509.1 Plans and diagrams: Plans and diagrams shall be maintained in approved locations indicating: the particular plan for each area; the amount and type of HPM stored, handled and utilized; locations of shutoff valves for HPM supply piping; locations of emergency telephones; and locations of exits.

(2) F-1509.2 Plan updating: Plans and diagrams shall be maintained up to date, and the fire department shall be informed of all major changes.

(3) F-1509.3 Emergency response team: Responsible persons shall be designated as the on-site emergency response team and trained to be liaison personnel for the fire department. These persons shall aid the fire department in preplanning emergency responses, identifying locations where HPM is stored, handled and utilized, and be familiar with the chemical nature of such material. An adequate number of personnel for each work shift shall be designated.

(4) F-1509.4 Emergency drills: Emergency drills of the on-site emergency response team shall be conducted at regular intervals but not less than once every three months. Records of drills conducted shall be maintained.

Effective date: January 3, 2000

  
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Certification

November 17, 1999  
Date

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Certification

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Date

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