

# SECTION THREE – CONSTRUCTION AND FIRE CODES

## CHAPTER 38: Local Fire Department

### Purpose and Applicability of Regulations

Manufacturers frequently use or produce products that are flammable, combustible, and/or hazardous. Therefore, good communication between the company and its local fire department is necessary to prevent or properly respond to any emergency. The lives of the employees, nearby residents, and firefighters responding to the emergency are all at stake. Often manufacturers make changes to their processes that increase the potential for fires and spills of regulated materials. For example, a facility may install a new coating line that uses flammable paints and thinners. Therefore, manufacturers should routinely invite fire officials to their facilities to ensure that operational changes are done safely and performed in accordance with the fire code adopted by the municipality.



*Note: There are many regulations pertaining to the storage, usage, and transportation of materials. Each regulation targets a specific group of material that exhibits certain characteristics. Appendix B contains definitions of the various regulated groups of material found in the material storage, usage, and transportation regulations. These defined terms appear throughout this chapter in bold lettering. In some instances, multiple agencies use the same term to describe a regulated group of material; however, its definition differs. Such terms will be followed by a dash and the acronym of the defining agency or regulation. For example, the Michigan Occupational Safety and Health Act (MIOSHA) and the Michigan Fire Prevention Code, Public Act 207 of 1941, as amended (Act 207) have differing definitions for the term “flammable and combustible liquids.” Therefore, the MIOSHA and Act 207 definitions of flammable and combustible liquids will appear as “**flammable and combustible liquids-MIOSHA**” and “**flammable and combustible liquids-Act 207**,” respectively.*

### Agencies and Their Laws and Rules

#### Emergency Planning

Local fire departments are an active participant in three related emergency planning requirements:

1. Firefighter Right-to-Know.
2. Hazardous Waste Operations and Emergency Response (HAZWOPER).
3. Superfund Amendments and Reauthorization Act (SARA) Title III.

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## **SECTION THREE: Construction and Fire Codes**

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### **Fire Prevention**

Two state acts give local fire departments the authority to regulate manufacturers and other commercial establishments:

The Michigan Fire Prevention Code, Act 207 of 1941, as amended ([Act 207](#)) gives local fire departments and the Department of Labor and Economic Growth's (DLEG) Office of Fire Safety limited authority to conduct fire inspections of manufacturers.

The State Construction Code Act, Act 230 of 1972, as amended ([Act 230](#)) gives local units of government the authority to adopt and enforce the state building code, which is the International Building Code with Michigan amendments. The state building code, which is one of four codes that comprise the construction code (electrical, plumbing, and mechanical being the other three) contains fire prevention requirements (see Chapter 37 for more information).

### **Open Burning**

Fire Chiefs, under authority of Part 515 (Forest Fire Prevention) of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended ([Act 451](#)) have the authority to issue burning permits for the open burning of certain materials. R 336.1310 promulgated pursuant to Part 55 (Air Pollution Control) of Act 451 identifies which materials can be open burned.

## **38.1 Introduction**

All manufacturers should contact their local fire departments to make sure they are complying with all applicable fire safety regulations. If you are not sure which fire department has jurisdiction over your facility, call the municipal office where you pay your taxes and they should be able to give you the name and phone number of the fire chief. The fire chief is the one in charge of the fire department. Sometimes the fire department that responds to a fire or emergency is located in a municipality different from the one where the facility is located.

Fire departments around the state differ greatly in the number of employees, positions (full-time, part-time, and volunteer), and services they provide. Typically, the larger the population being served by the fire department, the more services they provide. Large municipalities have a fire department consisting of a full-time fire chief, full-time fire marshal (head of the fire prevention division of the department), HAZMAT response team, and full-time firefighters. Contrast this to a small, rural fire department that consists of a part-time fire chief and volunteer firefighters.

Responding to fires and accidents is a critical responsibility of the local fire department. However, they have numerous other responsibilities that are of equal importance. The following is a brief summary of some of the services offered and regulations enforced by the fire department that directly or indirectly impact manufacturers.

## 38.2 Emergency Planning

Fire departments are involved in three emergency planning requirements:

1. Firefighter Right-to-Know.
2. Hazardous Waste Operations and Emergency Response (HAZWOPER).
3. Superfund Amendments and Reauthorization Act (SARA) Title III.

Compliance with these three requirements calls for interaction between the fire department and manufacturers. Together, the three requirements are designed to protect firefighters, employees, and the public from spills, fires, and explosions involving regulated materials. The following discussion of the requirements focuses on this important relationship between the fire department and manufacturers.

### 38.2.1 Firefighter Right-To-Know

The Hazard Communication/Employee Right-to-Know Law (see Chapter 13) requires employers to educate employees about dangerous materials they work with. Fire departments, just like other employers, must protect their employees (firefighters) from the dangers associated with exposure to hazardous chemicals. Specifically, Section 14(i) of the Michigan Occupational Safety and Health Act (MIOSHA), Public Act 154 of 1974, as amended (Act 154) requires the chief of an organized fire department to prepare and disseminate to each firefighter information on facilities within their jurisdiction that use or produce hazardous chemicals.

Section 5(p) of the Michigan Fire Prevention Code, Public Act 207 of 1941, as amended gives fire departments the authority to survey businesses within their jurisdiction about the types of chemicals they have on site. This allows the fire department to gather information about each chemical so that the requirements of MIOSHA can be met.

Typically, letters and attached survey forms from the fire chief are sent out to businesses asking for information about the type and quantity of chemicals used or produced on-site. The survey may be followed up with a request for additional information such as Material Safety Data Sheets.

The fire chief then develops a plan for those facilities that use or produce **hazardous chemicals**. These plans are made available to the firefighters. Plans need to be updated every five years or whenever conditions change at the site. If the facility is uncooperative; i.e., they refuse to properly complete, update, and/or return the survey form, the fire chief may refer the matter to the Department of Labor and Economic Growth, Michigan Occupational Safety and Health Administration (MIOSHA) for follow up and enforcement.

### 38.2.2 HAZWOPER

As stated in Chapter 23, the Hazardous Waste Operations and Emergency Response (HAZWOPER) Rule of the MIOSHA General Industry Occupational Health Standards requires facilities that use or produce **hazardous substances-MIOSHA** to prepare emergency action or response plans and train employees who respond to uncontrolled releases of **hazardous substances-MIOSHA**. Since fire departments are often the first responders to releases of **hazardous substances-MIOSHA**, the fire chief must provide the necessary training to firefighters and develop emergency response plans for each facility within their jurisdiction that handles **hazardous substances-MIOSHA** above certain thresholds.

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To develop emergency response plans, fire chiefs need to get specific information from each facility. Planning elements include:

- Planning and coordination with outside parties.
- Evacuation routes and procedures.
- Emergency medical treatment and first aid.

The plan required under HAZWOPER and the plan required under Firefighter Right-to-Know each ensures safety to the emergency responder. Therefore, one plan for each site can be developed by the fire chief to satisfy both requirements.

Another part of HAZWOPER requires the employer to train all employees who may encounter or respond to a hazardous material incident. The level of training depends upon the anticipated level of involvement. Under HAZWOPER there are four levels of training, listed in order of increasing involvement and training: (1) first responder awareness level; (2) first responder operations level; (3) hazardous materials technician; and (4) hazardous materials specialist. The greater the potential hazard, the more extensive and stringent the training requirement. Most firefighters go through first responder operations level training.

Some municipalities around the state have created hazardous material response (HAZMAT) teams, which are groups of individuals trained to handle and control actual or potential leaks and spills of **hazardous substances-MIOSHA**. Individuals within the HAZMAT have gone through the hazardous materials technician level of training. Because of the training and resources involved in forming and maintaining HAZMAT teams, some municipalities have entered into mutual aid agreements that provide HAZMAT services to a region. For example, the City of Lansing Fire Department's HAZMAT team responds to chemical-related emergencies in Lansing, as well as nearby East Lansing, Delta Township, and Meridian Township due to an agreement reached between the four municipalities.

### ***38.2.3 Superfund Amendments and Reauthorization Act (SARA) Title III***

As mentioned in Chapter 5, Title III of the Superfund Amendments and Reauthorization Act (SARA), also known as the Emergency Planning and Community Right-to-Know Act, is intended to improve local hazardous materials emergency response capabilities. Specifically, Sections 302-303 of SARA mandates the establishment of a local emergency planning committee (LEPC) in each county. The LEPC includes representation from the local fire department. The LEPCs are required to develop site specific emergency response plans for sites within their jurisdiction that have one or more **extremely hazardous substances** above a given threshold quantity. These plans, which serve primarily to protect the public from exposure to chemical releases, include emergency response and notification procedures, training programs, and evacuation plans.

Under Section 304 of SARA, local fire departments, the LEPC, and the National Response Center must receive immediate notification if a facility accidentally releases a chemical that:

- Is on the list of **extremely hazardous substances** or on the list of **hazardous substances-CERCLA**.
- Exceeds the corresponding reportable quantity.
- Has the potential for off-site exposure.

Finally, Sections 311 and 312 of SARA Title III require facilities that have on-site substances needing a Material Safety Data Sheet (MSDS) above certain thresholds to comply with two reporting requirements that involve the local fire department:

- The MSDS or a categorized list of the substances must be submitted to the local fire department; LEPC; and the Department of Environmental Quality (DEQ), Michigan SARA Title III Program. This submission is required only once, unless changes are made in the hazardous materials your facility stores.
- Facilities must fill out either Tier One or Tier Two forms to annually report information about their hazardous materials inventory. Copies of the forms must be submitted to the local fire department, LEPC, and the Michigan SARA Title III Program.

Again, more information about SARA Title III is found in Chapter 5.

### **38.3 Building and Fire Prevention Codes**

Manufacturers should have two main concerns when it comes to preventing fires within their facilities. First, make sure the initial construction of new, or the modification of existing buildings and structures, conforms to the state building code. The building code will address fire prevention and hazards. Secondly, ensure that the subsequent operation and maintenance of the building complies with either a national fire prevention code that is adopted by the local municipality or the State Rules for Fire Prevention that are promulgated under authority of Michigan Fire Prevention Code, Act 207 of 1941, as amended (Act 207) in the event the local municipality does not adopt a fire prevention code.

#### **38.3.1 Building Codes**

As mentioned in Chapter 37, the State Construction Act, Public Act 230 of 1972, amended (Act 230) gives local units of government the option of enforcing the state building code, which is the International Building Code with Michigan amendments, or permitting the state to enforce the state building code.

The building code, which contains regulations adhered to during the construction of new buildings and alterations to existing buildings, addresses fire and hazard issues. When a business submits plans and specifications for new construction, the local building department reviews the plans concurrently with the fire marshal.

#### **38.3.2 Fire Prevention Codes**

Many local units of government adopt a national fire prevention code. Fire prevention codes pertain to the subsequent operation and maintenance of the building that ensures the prevention of fire and the protection of life from exposure to the dangers of fire and explosion. The codes address such fire safety issues as fire protection systems (i.e., fire alarms, fire suppression systems), fire exits, use and maintenance of specific equipment and processes, and storage and handling of flammable and combustible materials. Many of the national building codes have companion fire codes. For example, the companion fire code for the International Building Code is the International Fire Code.

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Fire marshals from municipalities conduct routine inspections to ensure compliance with the locally adopted fire prevention code. If there is not a fire code adopted by the local jurisdiction, the State Rules for Fire Prevention, which reference the National Fire Protection Association (NFPA) Standard No.1, are applicable. These rules are enforced by the DLEG, Bureau of Construction Codes and Fire Safety.

Some of the potential hazards a local fire marshal may look for are found on page 38-7.

### 38.4 Storage of Flammable and Combustible Liquids

The DEQ, Waste and Hazardous Materials Division, Storage Tank Unit (STU), regulates the installation and operation of aboveground storage tanks that store **flammable and combustible liquids-Act 207** with a flashpoint of less than 200° Fahrenheit. It also regulates the underground storage of all petroleum liquids and **hazardous substances-CERCLA**. Even though only aboveground storage tanks that have a capacity of greater than 1,100 gallons and underground storage tanks have to be registered, there are other STU regulations that apply to all size containers of **flammable and combustible liquids-Act 207**. Local fire marshals should refer manufacturers to the STU for more information about these regulations (see Chapter 4.3).



The aboveground storage of **flammable and combustible liquids-MIOSHA** with a flashpoint greater than 200° Fahrenheit can be regulated under the fire prevention code adopted by the local municipality and/or by the **MIOSHA General Industry Safety Standards - Part 75, Flammable and Combustible Liquids** (see Chapter 34 for more information about this standard).

### 38.5 Burning Permits

Fire chiefs, under authority of Part 515 (Forest Fire Prevention) of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended (Act 451) have the authority to issue burning permits for open burning of certain materials. Part 55 (Air Pollution Control) of Act 451 identifies which materials can be open burned provided that the person obtains necessary open burning permits from the local fire chief. However, Part 55 of Act 451 prohibits all open burning activities at commercial establishments, including manufacturing sites. See Chapter 1.2 for more information about open burning.



No

No 17378

RE-INSPECTION DATES

Table with 3 columns and 2 rows for re-inspection dates.

Fire Prevention Division

INSPECTION REPORT

DATE:

Form with fields for Facility Name, Address, Facility Number, Responsible Party, Property Owner, Construction Type, Current Permits, Use Group, Zip, Phone No, Title, City, Capacity, District No, Haz. Mat, and Type of Inspection.

- BLDG. EXT. - OUTSIDE STORAGE
1. Access drives/fire lanes clear/posted
2. Addresses posted
3. Protection of gas equip.
4. Fire hydrants clear
5. Outside storage orderly
6. Exit discharge clear
7. Fire dept. connection valves clear & secure
8. Canopy height posted
9. Keysafe
INTERIOR - EXITS, PASSAGEWAYS, LIFE SAFETY
10. Doors - locked, blocked, inoperative
11. Corridors - passageways, obstructed, improperly maintained
12. Aisles, cross aisles to be maintained, full width at all times
13. Stairs, towers, obstructed, defective, improperly maintained
14. Door devices - panic hardware, defective, inadequate
15. Exit passageways - inadequately lighted
16. Exit lights
17. Prohibited hardware - slide bolts, key locks, etc.
18. Emergency lighting
GENERAL HAZARDS
19. Hazardous accumulation rubbish, debris, waste materials to be removed
20. Stock-merchandise improperly stored to retard spread of fire
21. Interior finishes-decorations-tents, remove or flameproof
22. Ventilation systems to be cleaned, repaired, installed
23. Combustible lint & dust to be removed from equipment, walls, beams, floor, disposed of in proper manner
24. Storage/Stock too high 24"
25. Heat producing device clearance 36"
26. Improper - prohibited device
ELECTRICAL
28. Wiring-switches-plugs defective, to be replaced
29. Extension cords/multi outlet devices
30. Proper clearances maintained 36"
31. Breaker locks/identification
32.

- FIREWALLS, DOORS, CURTAIN WALLS, PARTITIONS & CEILINGS
33. Fire wall penetrations
34. Ceiling tiles missing
35. Fire doors/Hdwe/Fusible links
36. Signage where needed
37. Fuse links damaged/painted/missing
38. Coordinators/astragals
39. Fire dampers
40. Corridor integrity
41.
SPECIAL PROCESSES/HAZARDS/EQUIPMENT/OTHER
42. Cutting and Welding equip.
43. Cylinder storage
44. Ventilation
45. Manifold systems
46. No-Smoking posted
47.
DIPTANKS
48. Controls - operational
49. Overflow/drain
50. Protection
51. Location/Separation
52. Parts washer
53.
SPRAY PAINTING
54. Protection
55. Booth/Area/Room location
56. Explosion proof wiring
57. Adjacent storage
58. Ducts/fans/discharges
59. Maint./cleaning
60. Ignition devices
61. Posted signs
62. Service Co.
63. Service Date
FLAMMABLE LIQUIDS - GASES - SOLIDS - EXPLOSIVES
64. Not properly stored - handled - processed
65. Storage rooms - premises not properly marked/maintained
66. Tank location not in accord with applicable standards
67. Existing above ground storage tanks maintained, diked, marked & located
68. Valves/dispensing equipment to be approved type - maintained

- FLAMMABLE LIQUIDS - GASES - SOLIDS - EXPLOSIVES
69. Cabinet required
70. Safety cans
71. Bonding & grounding
72. Proper posting/No smoking
73. Explosion wiring where needed
74. Storage room suppression
75. Haz. mat. MSDS/RTK
76.
SERVICE STATIONS
77. U/G tank fill pipes
78. U/G tank spill prot.
79. Dispensers/posting
80. Hoses - piping - nozzles
81. Impact valves
82. Intercommunications
83. Fire suppression/6 months maint.
84. Emergency controls
85. Breakers identified
86. Service Co.
87. Service Date
SPRINKLER SYSTEMS/ALARMS/EXTING.
88. Suppression/standpipe maintenance
89. Service Co.
90. Service Date
91. Sprinkler system design/density
92. Suppression system obstruction
93. Valve identification
94. Valve security/monitoring/repair
95. Alarm system monitoring/repair
96. Suppression system monitoring/repair
97. Smoke and heat detection
98. Storage too high 18"
99. Fire extinguishers location/mounting
100. Fire extinguisher I.D.
101. Fire extinguisher adequate
102. Service Co.
103. Service Date
HOOD/DUCT SYSTEMS
104. Dry Chemical
105. CO
106. Halon
107. Wet System
108. Signage
109. Alarm
110. U.L. 300
111. Service Co.
112. Service Date

Misc. Violation List Below... Premises and equipment in good order - no visible hazards observed this date. The following orders are issued for the correction of violation items checked above. These violation items shall be complied with forthwith. A reinspection will be conducted on or about the date shown in the box at the upper left corner of this form. WARNING: Fire or injury resulting from failure or delay to comply with this notice will be attributed to negligence on the part of the responsible party or parties.

## WHERE TO GO FOR HELP

**SUBJECT:** All questions concerning fire safety

**CONTACT:** Chief of the local fire department. The Department of Labor and Economic Growth, Office of the State Fire Marshal, compiles and publishes a directory of local fire departments.

[www.michigan.gov/dleg](http://www.michigan.gov/dleg) (select "Construction Codes & Fire Safety," "Administration/State Fire Marshal," then "State Fire Marshal")

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**SUBJECT:** Hazardous materials training courses

**CONTACT:** Michigan State Police, Hazardous Materials Training Center  
(517) 322-1190

[www.michigan.gov/msp](http://www.michigan.gov/msp) (select "Education, Training & Careers," "Law Enforcement Training & Resources," then "Hazardous Materials Training")

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**SUBJECT:** Fire prevention codes

**CONTACT:** DLEG, Bureau of Construction Codes and Fire Safety, Office of Fire Safety  
(517) 322-1123

[www.michigan.gov/dleg](http://www.michigan.gov/dleg) (select "Construction Codes & Fire Safety," "Administration/State Fire Marshal," then "State Fire Marshal")

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**SUBJECT:** Additional fire prevention code information

**CONTACT:** National Fire Protection Association (NFPA)  
(800) 344-3555

[www.NFPA.org](http://www.NFPA.org)

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**SUBJECT:** Additional fire safety information

**CONTACT:** United States Fire Administration

[www.usfa.fema.gov](http://www.usfa.fema.gov)