



Houston Fire Department Life Safety Bureau (LSB)



LSB Standard No. 17, Rev. 05

Tire Chipping and Shredding Operations

Supersedes: LSB Standard No. 17, Rev. 04, 05/01/2012

Effective Date: 11/02/21



LSB Standards are established in accordance with provisions of the City of Houston *Fire Code*. They are subject to the administrative sections covering alternative materials and methods, modifications, and the Board of Appeals.

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Tire Disposers, Chipping and Shredding Operations and Tire Byproduct Storage

Section 17.1 – General

17.1.1 Scope.

The provisions of this standard shall apply to all tire disposers, tire chipping operations, tire shredding operations and scrap tire and tire byproduct storage facilities.

17.1.2 Purpose.

The purpose of this standard is to provide guidelines for tire disposers and associated operations and to ensure compliance with the standards and codes of the City of Houston.

17.1.3 Plans.

A tire disposer shall submit to the Fire Marshal plans for all tire chipping operations, tire shredding operations and scrap tire and tire byproduct storage facilities. Plot plans shall indicate locations of fire department access roads throughout the site, layout of combined storage areas and fire areas, pile height and diameter, and location, type and separation distances from all exposures.

17.1.4 Permit.

An operational permit is required to establish a tire disposal facility or conduct or maintain storage of scrap tires and tire byproducts that exceed 2,500 cubic feet total volume of scrap tires.

An operational permit is also required for tire chipping and shredding operations.

Permit Office contact information is as follows:

The Houston Permitting Center

1002 Washington Avenue

Houston, Texas 77002

Hours of operation: 8:00am to 3:30pm (CST)

Monday through Friday

Office phone: (832) 394-8811

To E-mail Customer Service Questions: hfd.permitoffice@houstontx.gov

Link to City Wide Fee Schedule: www.houstoncityfees.org

Section 17.2 – Definitions

17.2.1 Tire Disposer.

A tire disposer is any person who, in compliance with all applicable state, federal, and local rules and regulations, disposes of or converts tires to other purposes. This definition includes, but is not limited to, a person who:

1. Disposes of tires as waste or as fuel in a landfill, by incineration, or by other means.

2. Reduces tires into basic components for oil, carbon black, rubber, road paving, or other marketable salvage material by shredding, grinding, or chemically treating the tires.
3. Converts tires into other useful items such as doormats and sandal shoes.

Section 17.3 – Inside Building Storage

17.3.1 Permit.

A permit shall be required for indoor storage of new or scrap tires or tire byproducts, and the facility shall be classified in the appropriate occupancy classification. Please refer to Section 17.1.4 of this standard for contact information.

17.3.2 Plans.

Where an owner of a facility plans to change the use of an existing facility changes to include tire chipping operations, tire shredding operations, and/or facilities for the storage of scrap tires and tire byproducts, the owner or the owner's agent shall submit plans to the Houston Permitting Center for review for compliance with the Construction Code. In addition, plot plans shall be submitted to the Fire Marshal for all tire chipping operations, tire shredding operations and facilities for the storage of scrap tires and tire byproducts. Plot plans shall include fire department access roads throughout, area division of piles, pile height and width, and all exposures.

17.3.3 Storage and Operations Inside of a Building.

Storage and operations inside of a building shall be based upon standards established in NFPA 13.

Section 17.4 – Outdoor Storage and Use

17.4.1 Area Division.

Every outdoor area used for storage or operation of tire chipping or shredding shall be divided into single storage and fire area combinations by a driveway that is 30 feet in width and main aisles 10 feet in width.

17.4.2 Area Limitation.

Within a single storage area or fire area, no material shall be stored more than 35 feet from any driveway nor more than 15 feet from a main aisle.

17.4.3 Height Limitation.

The height of storage piles shall be limited to 13 feet, except that in single storage areas bordered on three (3) long sides by driveways or main aisles the height of storage piles may be increased to 30 feet.

17.4.4 Drainage.

Stored materials shall be arranged to facilitate and promote drainage from stored materials.

17.4.5 Access to a Single Fire Area.

Each single fire area shall have access to a public street by a driveway (fire lane), or unobstructed way, at least 30 feet in width and in compliance with LSB Standard No. 03, "Fire Department Access."

17.4.6 Screening of Property.

The entire property shall be surrounded by a fence at least 6 feet in height constructed of noncombustible material or by another suitable means to prevent access of any unauthorized persons. An adequate number of gates as determined by the Fire Marshal shall be provided in the surrounding fence or other barrier to provide ready access for fire apparatuses. Access gates shall be provided in accordance with LSB Standard No. 04, "Access Control Gates."

17.4.7 Buildings in Storage Areas.

Buildings in outdoor storage areas that are within 50 feet from the nearest storage pile shall be of 1-hour rated construction as required by the City of Houston *Building Code*.

17.4.8 Maintenance of Premise.

The entire storage site shall be kept free from accumulation of unnecessary combustible materials. Weeds and grass shall be kept mowed to a height acceptable to the fire code official. Regular procedures shall provide for the periodic cleanup of the entire area. Weed burners and any type of burning are prohibited.

17.4.9 Heating Equipment.

No heating equipment shall be allowed in any storage or use area.

17.4.10 Vehicles.

All vehicles shall be garaged in one or more buildings that are separate or detached from storage, shredding or tire chipping operations, or parked in designated areas located 50 feet from such storage, shredding, tire chipping operations. All fuel handling shall be done in accordance with applicable provisions of the *Fire Code*.

17.4.11 Fire Protection.

Fire protection shall be provided in accordance with this section.

17.4.11.1 Water Supply.

A fire protection system consisting of approved monitor nozzles, water supply system, and fire hydrants capable of supplying the required flow shall be provided to within 150 feet of all portions of the yard in accordance with NFPA Standard No. 24.

17.4.11.2 Fire Extinguishers.

A minimum of one 4-A, 30-B:C portable fire extinguisher shall be provided for every 50 feet of unobstructed path of travel in accordance with LSB Standard No. 01, "Installation and Maintenance of Portable Fire Extinguishers."

17.4.12 Fire Department Notification.

Means shall be provided on site at all times for contacting the fire department in event of an emergency. There shall be no delays in reporting fires. The fire department shall be immediately notified of all fires by telephoning "9-1-1".

17.4.13 Texas Commission on Environmental Quality (TCEQ) Notification.

The owner of any tire chipping and shredding operation or owner's agent shall notify the TCEQ of all tire chipping and shredding operations and shall conduct its operation in accordance with TCEQ regulations and other state and local ordinances. Where there is a conflict between this standard and other state and local requirements, the most restrictive requirements shall prevail. Compliance with TCEQ rules does not assure approval for a fire department permit.

References

1. City of Houston *Fire Code*
2. City of Houston *Building Code*
3. National Fire Protection Association (NFPA) Standard 13, "Standard for the Installation of Sprinkler Systems"
4. Life Safety Bureau (LSB) Standard No. 01, "Installation and Maintenance of Portable Fire Extinguishers"
5. Life Safety Bureau (LSB) Standard No. 03, "Fire Department Access"
6. Life Safety Bureau (LSB) Standard No. 04, "Access Control Gates"

All reference materials used under this Life Safety Bureau standard shall be in accordance with the most current adopted City of Houston *Construction Code*.