

FLAMMABLE OR COMBUSTIBLE LIQUID TANK STORAGE

Statistical analysis of fires at flammable and combustible liquid storage tank facilities including trends, ignition factors, equipment involved, area of origin, form of heat of ignition, form and type of material first ignited and level of fire origin. Mobile property type and trend data area provided for vehicle fires. Published incident descriptions are also included.

Executive Summary

This report examines fires at flammable or combustible liquid tank storage facilities and LP-Gas bulk storage plan (National Fire Incident Reporting System (NFIRS) Version 4.1 fixed property use codes 841 and 843, respectively). Each section contains trend data and annual averages for the five-year period from 1994 through 1998. Most of the statistics address fires in structures or outside and other fires. Limited information is provided on vehicle fires. Previously published incident descriptions are also included in the full package.

Only fires in these specific occupancies are included in the statistics. In some serious fires, the fire spread to other properties. Summary descriptions of large- loss or catastrophic fires will include the combination of properties, but these other properties will not be captured in the statistics for these specific occupancies. Similarly, most occupancies have facilities that support the property but are not related to its primary function. For example, a tank farm might include a small office with limited cooking equipment.

The statistics in this report are national estimates based on NFIRS and NFPA's annual Fire Department Experience Survey. NFIRS uses the same data classification system and codes to describe all types of fires. Specific codes cannot be broken down further. We do not know how many of the fires that started in "product storage areas, tanks or bins" actually started in tanks. Nor do we know how big the storage areas are. These statistics cannot answer all questions but are intended as a starting point to indicate areas that require additional research.

The data indicate that fires at flammable or combustible liquid storage tank facilities decreased markedly. It is also possible that the number of these facilities has decreased. Without additional information, it is impossible to tell if the risk of fires at these facilities has also decreased.

Previously published descriptions of fire incidents at these facilities are included in the full package after the statistical information. These incidents provide examples of some of the situations encountered. They show what can happen, not what typically does happen.

Flammable and Combustible Liquid Storage Tank Fires, by Year and Incident Type

