

社会情勢の変化に対応した防火安全対策

Elite teams coming to your assistance from across the country

近年では、これまでは想定外であった使用形態の建築物や施設等が出現することで、甚大な人的被害を伴う火災や周辺住民の生活に重大な影響を及ぼす火災や爆発事故などの企業災害が発生しており、これらに対する迅速な防火安全対策が求められています。

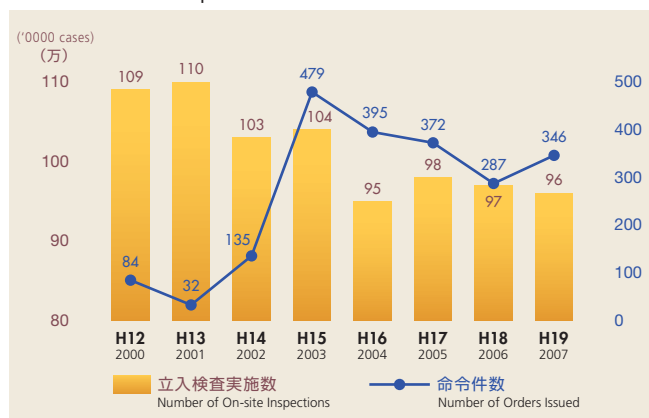
Fire prevention and safety policies to suit changes in social conditions
With the recent increase in buildings and facilities that are being used in unexpected ways, there have been a number of fires with extensive loss of human life, as well as corporate disasters such as fires and explosions that have had a major impact on the lifestyles of local residents. Fire prevention and safety policies that can respond quickly to these disasters are required.

消防庁においては、全国すべての救急隊に少なくとも救急救命士が1人配置できるよう、救急救命士の養成を積極的に推進しています。

The FDMA responds to the possibility of fire hazards occurring in buildings and facilities that are being used in new ways with the highest priority placed on human life by planning proposals of required safety policies, and implementing them.

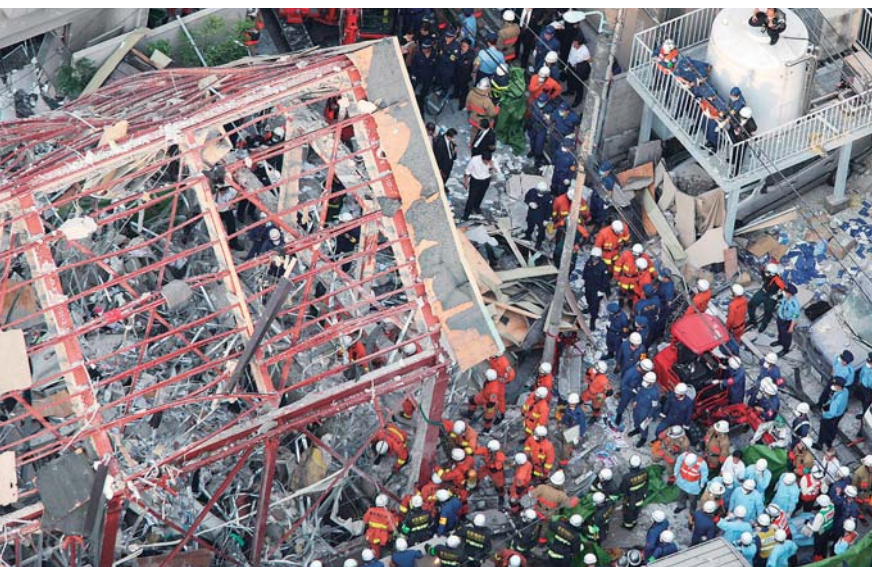
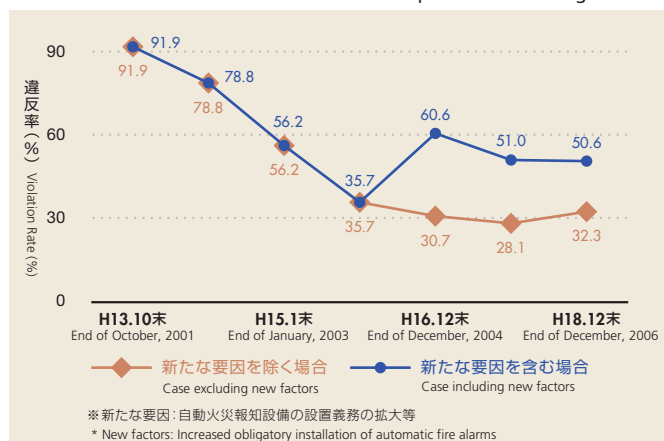
立入検査実施数と命令件数

Number of On-site Inspections and Number of Orders Issued



小規模雑居ビルの違反是正状況

Number of Violation Corrections in Small Multiple-tenant Buildings



平成 19 年 東京都渋谷区温泉施設爆発火災
2007 Explosion and fire at a hot spring facility in Shibuya Ward, Tokyo



平成 18 年 長崎県大村市認知症高齢者グループホーム火災
2006 Fire at home for dementia and elderly patients in Omura City, Nagasaki Prefecture



平成 19 年 兵庫県宝塚市カラオケボックス火災
2007 Fire at a karaoke booth in Takarazuka City, Hyogo Prefecture

大切な消防の使命

め、あらゆる防火安全施策を推進

responsibility of fire prevention

means” during fires and disasters

防火・防災管理制度

Fire prevention, disaster management system

消防法では、万一の火災の発生に備え、建築物の利用形態や消防法では、万一の火災の発生に備え、建築物の利用形態や規模・構造等による火災の危険性に応じて、防火管理者の選任や消防計画の作成などソフト面における対策と、初期消火・警報・避難・消防活動等を円滑に行うための消防用設備等に関する基準を定め、その設置と維持管理を義務づけるなど、防火安全対策を講じています。

また一定以上の大規模・高層ビル等については、大規模地震等の災害に備えて、防火管理者と同様に防災管理者を選任することや、事業所の従業員により構成された自衛消防組織の設置も義務化しています。

The Fire Services Act requires a range of fire prevention safety measures to be enacted in response to fire hazards due to usage, size and layout of the building in the event a fire occurs. These include the appointment of fire prevention chiefs and creation of firefighting plans in the software field, as well as setting of standards related to firefighting and other equipment to ensure that early firefighting efforts, warnings, evacuation and fire prevention activities are conducted smoothly, and the subsequent obligation to install and maintain these.

High-rise buildings and buildings that exceed a certain size require the appointment of a disaster prevention chief in addition to the fire prevention chiefs to prepare for a disaster such as a large-scale earthquake, and also requires the establishment of an in-house fire fighting team comprised of personnel from that particular office.

大規模地震等に対応した自衛消防力の確保 Creating in-house fire fighting team to tackle large-scale earthquakes

百貨店・旅館・ホテル・病院・学校・オフィスビル・工場・地下街 など ※共同住宅・倉庫等は除く

Department stores, hostels, hotels, hospitals, schools, office buildings, factories, underground shopping mall etc

* Excludes apartment buildings and warehouses

- 規模: ①延べ面積5万㎡以上
②5階以上かつ延べ面積2万㎡以上
③11階以上かつ延べ面積1万㎡以上
④地下街で延べ面積1千㎡以上

- Size: (1) Floor area of 50,000 m² or more
(2) Five floors or higher, and a floor area of 20,000 m² or more
(3) 11 floors or higher, and a floor area of 10,000 m² or more
(4) Underground shopping mall with a floor area of 1,000 m² or more

【防災管理者】

Disaster Management Chief

一定の防災管理に関する講習を修了した防災管理業務を推進する責任者

Personnel in charge who have completed certain disaster management courses and to implement disaster management operations

- 消防計画の作成
- 消防防災設備等の点検・整備
- 消火・通報・避難訓練の実施
- 防災に必要な構造・設備の維持管理
- 収容人員の管理
- 災害時の応急措置・避難誘導 ほか

- Creation of fire prevention plans
- Inspection and maintenance of fire prevention and disaster prevention equipment
- Conducting training for firefighting, warnings and evacuations
- Maintenance and operation of structures and facilities required for disaster prevention
- Management of building capacity
- Response measures and evacuation guidance during a disaster etc

消防計画作成・変更 届出

Submits
Created fire prevention plans and changes

【管理権原者】

Management Official

建物の所有者・事業所の経営者・賃貸人など管理について権限を有する者

Person with management authorities such as the building owner, business manager or tenant.

- 防災管理者の選任
- 防災管理者に防火管理業務を実行させるための指揮、監督

- Appoints the Disaster Management Chief
- Instructs and monitors fire prevention management operations conducted by the Disaster Management Chief

防災管理者の選任・解任
自衛消防組織の設置等 届出

Submits
Disaster Management Chiefs appointments and dismissals Established in-house fire fighting teams

【自衛消防組織】

In-house fire fighting team

発災時の応急活動を行う事業所の従業員等により構成された消防組織

In-house fire fighting team comprised of personnel from business officers that provide emergency activities during a disaster

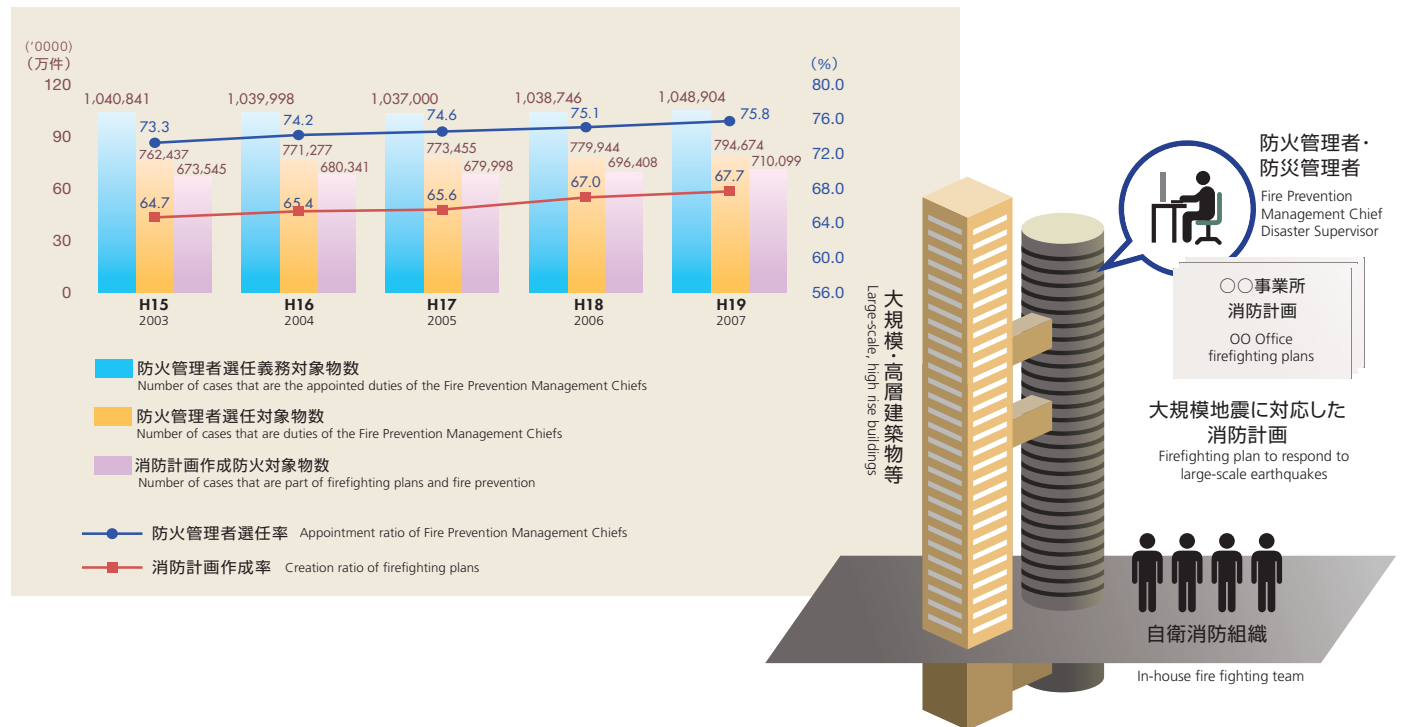
- 在館者の生命・身体保護
- 通報連絡
- 被害の拡大防止
- 避難誘導
- 救出・救護 ほか

- Protecting the lives and people in the building
- Contacting others with warnings
- Preventing further damage
- Evacuation guidance
- Rescue and evacuation etc

消 防 機 関 Fire Prevention Organizations

防火管理者選任状況等の推移

Trends in appointment of Fire Prevention Management Chiefs



TOPICS 3



住宅用火災警報器

Residential fire alarms

建物火災の約9割を占める住宅火災による死者数は、平成15年以降5年連続で1,000人を超える高い水準で推移しており、そのうち約6割が65歳以上の高齢者で、高齢化の進展とともにさらなる増加が懸念されています。

また、住宅火災の逃げ遅れによる死者が約6割と圧倒的に多く、火災の早期発見に有効な住宅用火災警報器の設置が急務であることから、消防庁では、全戸設置に向けた取り組みを強化し、住宅火災の死者低減に向け取り組んでいます。



住宅用火災警報器
Residential fire alarms

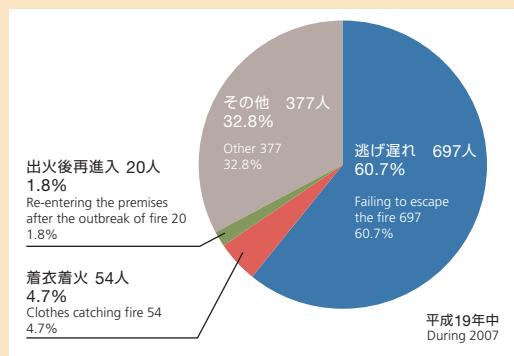
The number of fatalities due to residential fires, which make up approximately 90% of fires that occur in buildings, is extremely high at more than 1000 people continuously for five years 2003. Approximately 60% of those fatalities involve elderly persons aged 65 years or older, and there are concerns over further increases with the shift to an aging society.

A surprisingly large number of fatalities, approximately 60%, were due to people who failed to escape from fires. The installation of residential fire alarms, which are effective for the early detection of fires, has become increasingly important, and the FDMA has increased efforts to ensure that every house has an alarm installed. This is just one way of reducing the number of fatalities due to residential fires.



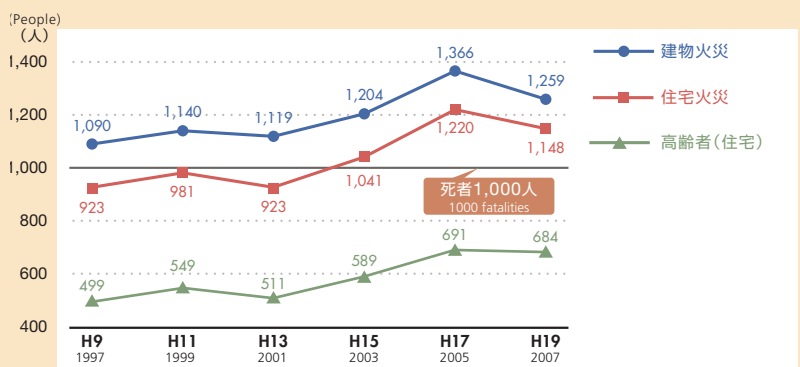
住宅火災の経過別死者発生状況

Number of fatalities as residential fires progress



火災による死者の推移 (自殺者等を除く)

Trends of fatalities due to fires (excluding suicides etc)



危険物施設における総合的な事故防止対策

Comprehensive accident prevention measures in place at facilities with dangerous materials

火災危険性の高いガソリンや軽油などの危険物を取り扱う危険物施設は、工場や石油タンクなどの産業施設からガソリンスタンドなどの身近な施設まで、様々なかたちで全国に存在します。これらの施設での事故が社会・経済に与える影響は大きく、さらに切迫する大規模地震に備えるためにも、危険物施設における事故防止対策の推進が急がれます。

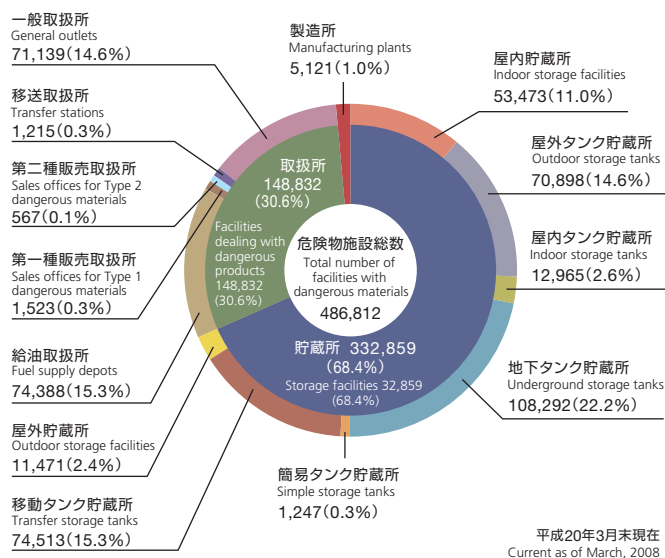
消防庁では、危険物施設等における災害の多様化に対応し、事故を未然に防げるよう、保安上の基準等の整備を図るとともに、官民一体となった事故防止対策を推進しています。

Facilities that handle dangerous materials such as highly flammable gasoline and diesel are present in all shapes and forms around the country, ranging from industrial facilities including plants and petroleum tanks, to more familiar facilities such as gasoline stands. Accidents at these facilities can have a major social and economic impact. Accordingly, accident prevention measures are rapidly being implemented at facilities with dangerous materials in preparation for these accidents, as well as an imminent large-scale earthquake.

The FDMA is ready to handle a variety of different disasters that can occur at facilities with dangerous materials. To prevent unexpected accidents from occurring, the agency works to maintain a comprehensive list of safety standards, as well as implementing accident prevention measures that apply to both public and private sectors.

危険物施設数の状況

Number of facilities with dangerous materials



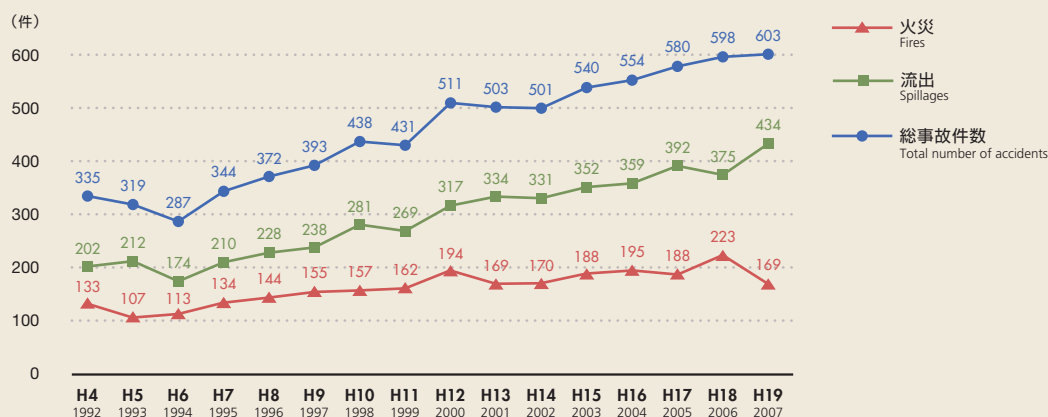
ガソリンスタンド (給油取扱所)
Gas station (fuel supply depot)



保管庫 (屋内貯蔵所)
Storage (indoor storehouse)

危険物施設における火災・流出事故発生件数の推移

Trends in the number of accidents and spillage accidents involving dangerous materials



原子力災害対策

Disaster countermeasures for nuclear power plants

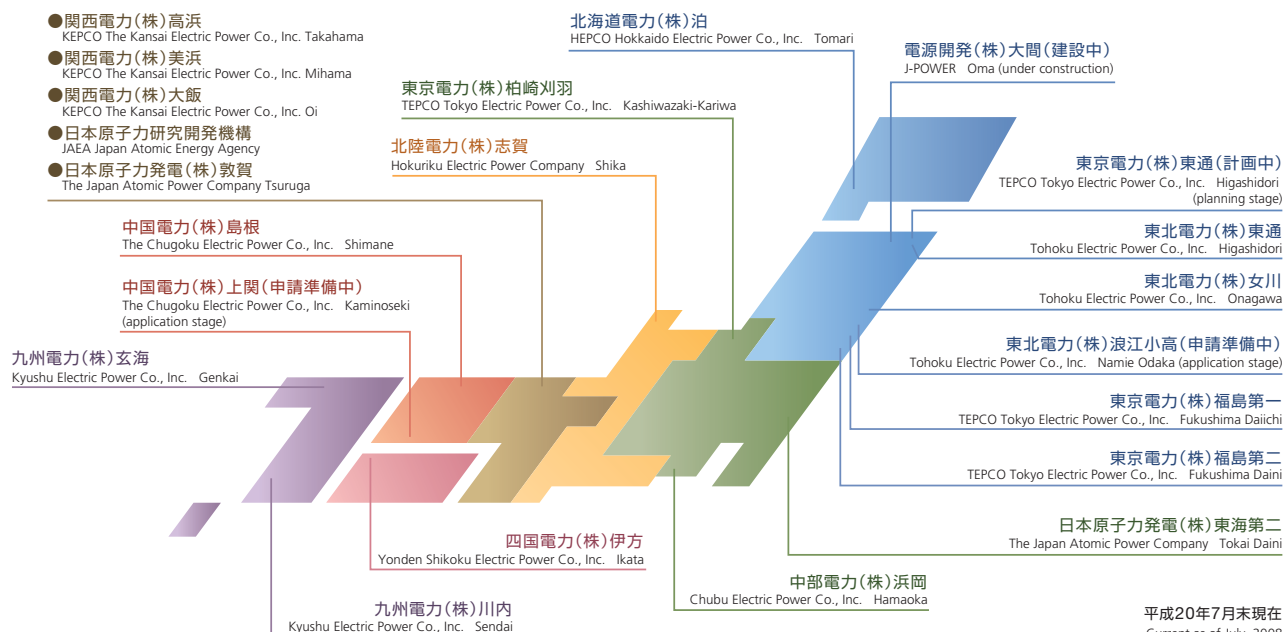
消防庁では、万が一の原子力災害に備えて、関係省庁と連携し、原子力防災体制の整備を推進しています。また原子力施設の火災等への対策として、消防機関と原子力事業者がより適切かつ連携のとれた消火活動等を実施できるよう、消防活動対策マニュアルの見直しや実践的な消防訓練のあり方に関する検討を行うなど、原子力施設における防火安全対策の充実強化を図っています。

The FDMA has disaster prevention systems in place for nuclear power plants through the collaboration of various associated agencies, in preparation for any possible disaster at a nuclear power plant. As part of countermeasures to combat fires at nuclear power plants, the FDMA conducts reviews of firefighting activity policy manuals and studies into the way practical firefighting training should be carried out. This enables firefighting organizations and nuclear power plant operators to execute firefighting activities appropriately and in a coordinated manner. The FDMA is committed to improving and strengthening fire prevention and safety measures implemented at nuclear power plants.



平成 19 年 黒煙を上げる柏崎刈羽原子力発電所 3 号機所内変圧器
2007 Transformer within Unit 3 at the Kashiwazaki-Kariwa nuclear power plant emitting black smoke

原子力発電所立地地点移 Locations of Nuclear Power Plants



平成20年7月末現在
Current as of July, 2008

石油コンビナート災害対策

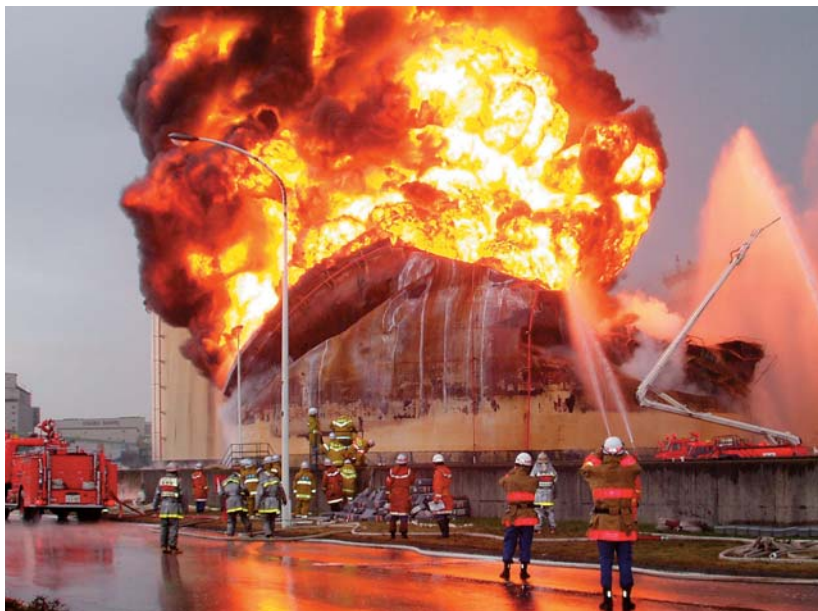
Disaster countermeasures for petroleum complexes

危険物や高圧ガス等の可燃性物質が大量に集積する石油コンビナートでは、消防法や石油コンビナート等災害防止法などにより、様々な保安上の規制を行っています。しかし、近年、施設の腐食等劣化に伴う事故等が多く発生しており、また、新たな地震対策上の課題にも対応する必要があります。

消防庁では、石油コンビナート災害を防止できるよう、石油タンクの耐震基準の強化、施設の適切な維持管理の推進、毎分1万リットル以上の放射能力をもつ大容量泡放射システムをはじめとする防災資機材の配備とその維持管理等の徹底を通じて、災害の予防、消防力の充実強化を図っています。

Petroleum complexes, home to the stores of vast quantities of dangerous and high pressure flammable gases, employ various safety regulations in accordance with the Fire Service Act and the Law on the Prevention of Disasters in Petroleum Industrial Complexes and Other Petroleum Facilities. Yet there have been a large number of accidents in recent years involving corroding and aging facilities, and there is always the need to comply with issues presented by new earthquake countermeasures.

To prevent disasters occurring at petroleum complexes, the FDMA has began installing firefighting equipment and applying stringent operation and maintenance standards, including increased earthquake-proof standards for petroleum tanks, promotion of appropriate operation and maintenance of facilities, and large-scale foam jet systems capable of spraying more than 10,000L of foam per minute. The result is improvements for preventing disasters and increases in firefighting capabilities.



平成15年十勝沖地震によるナフサタンクの全面火災
(ナフサ：原油を蒸留したもので、粗製ガソリンとも呼ばれる)

2003 Complete destruction of naphtha tanks due to the Tokachi offshore earthquake
(naphtha: a distillation product from petroleum, and is also called crude gasoline)



大容量泡放射システム
High capacity foam jet system

石油コンビナート事故発生件数（種別ごと）の推移

Trends in the number of accidents at petroleum complexes

