

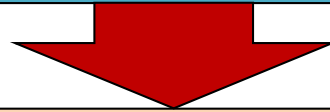
Overview of Hazardous Materials Regulations

Aims of hazardous materials regulations

Security regulations of materials (hazardous materials) with risks that include combustibility and inflammability, which are likely to cause fires.



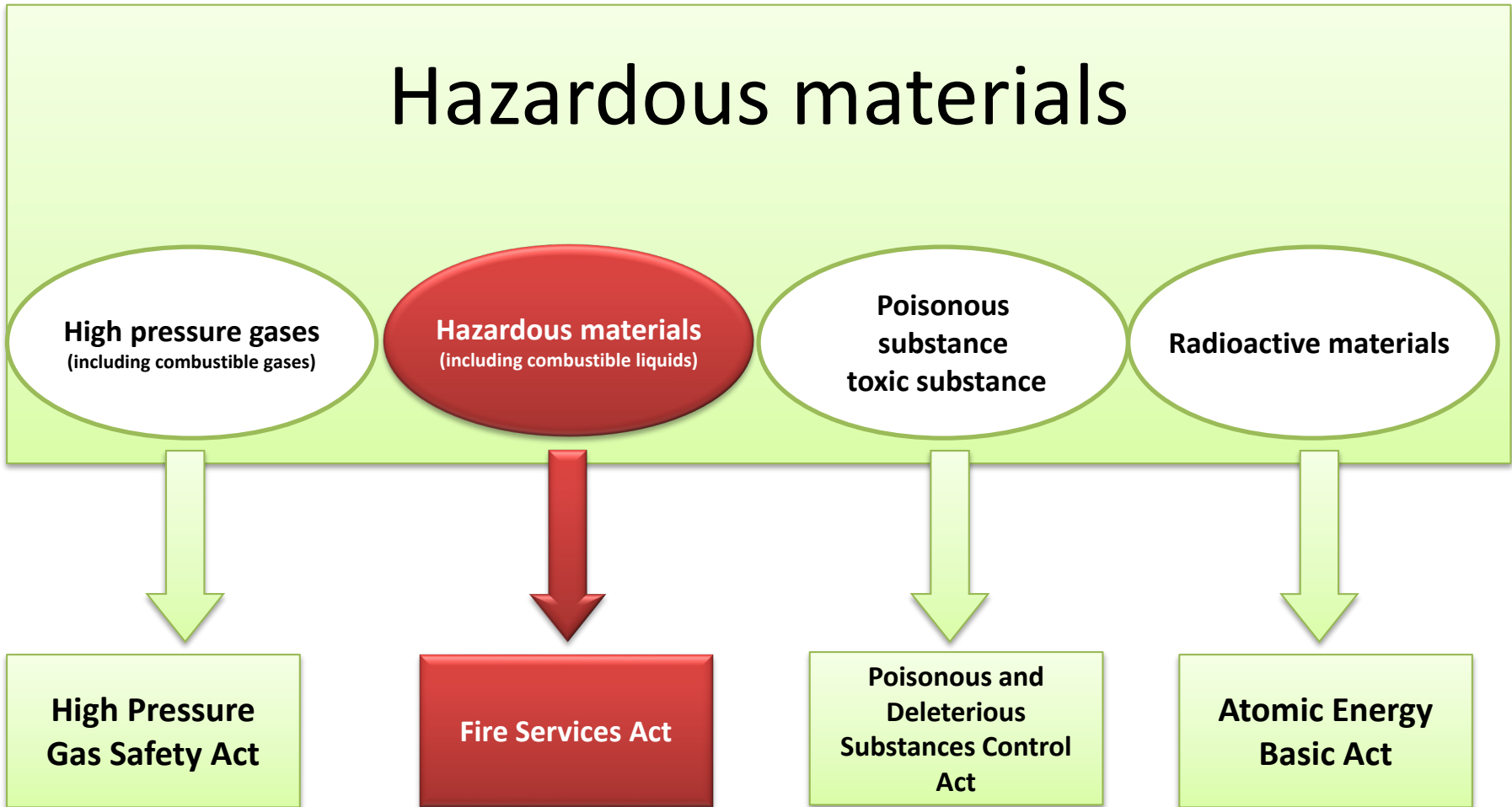
- **Prevention of fires**
- **Reduction of damage caused by disasters including fires**



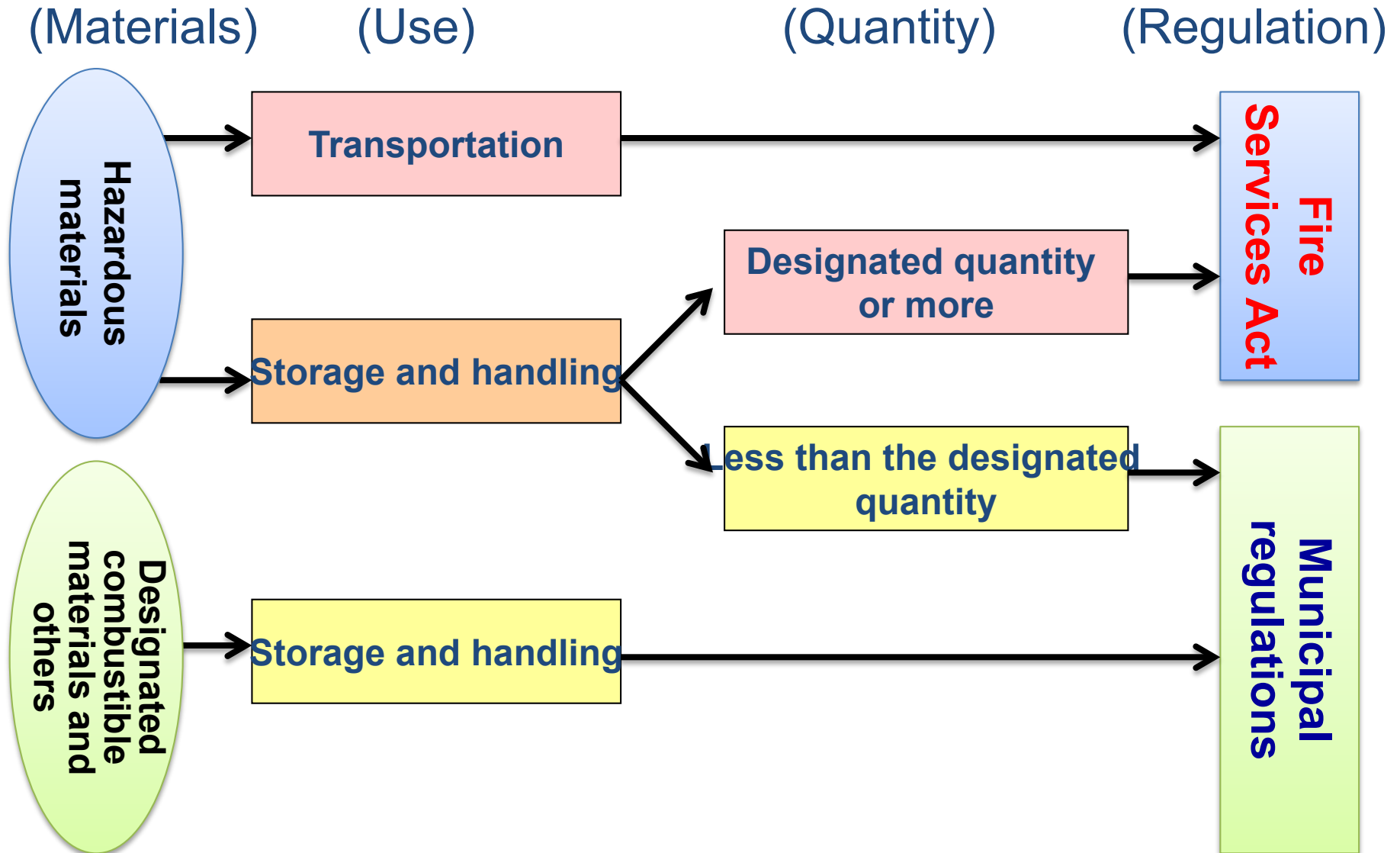
To maintain peace and order
To promote social and public welfare

(Article 1 of the Fire Services Act)

Laws to Regulate Hazardous Materials



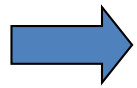
System of Hazardous Materials Regulations



Classification of Hazardous Materials

Hazardous materials are listed in the Appended Table 1 of the Fire Services Act, and their properties are listed in the nature column of said table, according to the categories specified in said table.

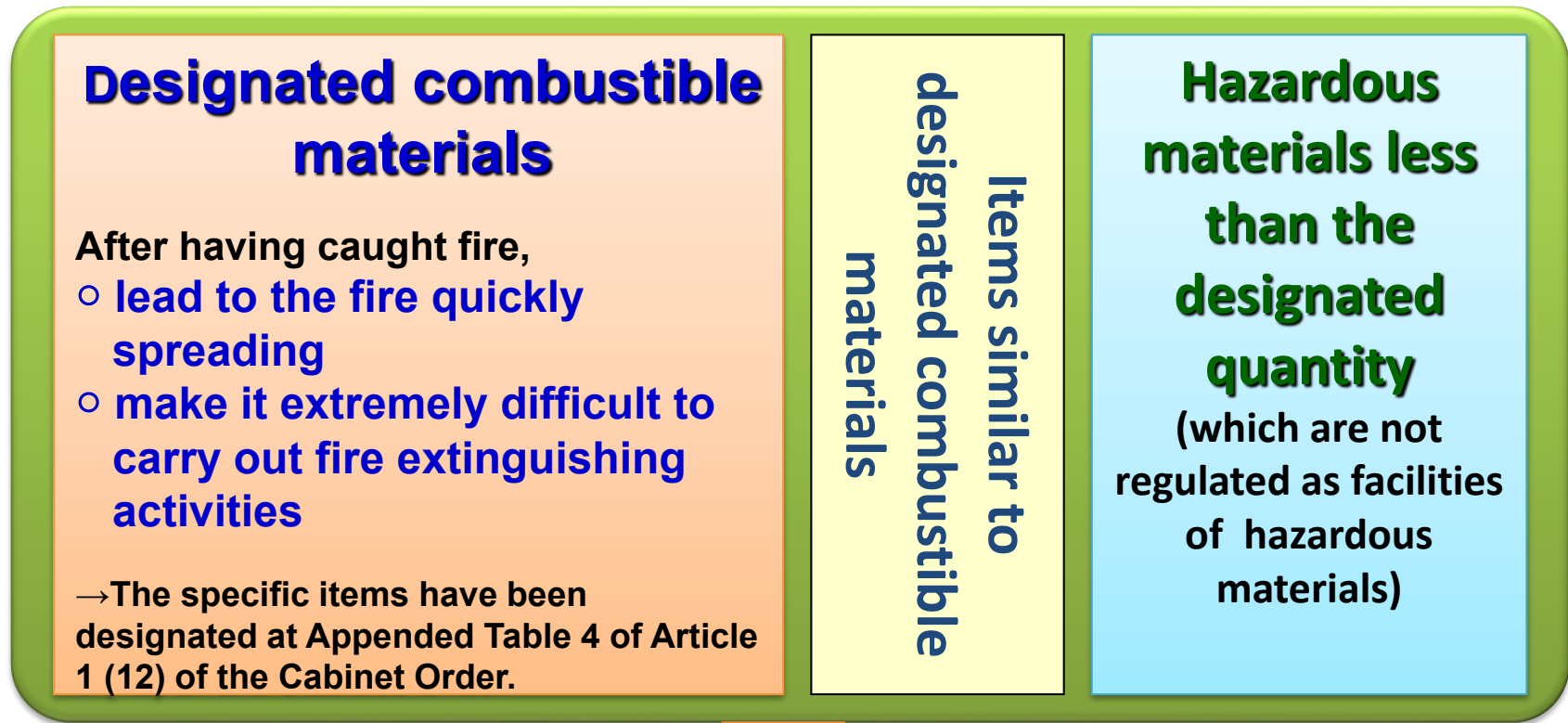
(Article 2-7 of the Fire Services Act)



Hazardous materials are classified into six categories in accordance with their chemical and physical properties

- ◆ **Category I** (Oxidizing solids)
- ◆ **Category II** (Combustible solids)
- ◆ **Category III** (Spontaneously combustible substances and water-reactive substances)
- ◆ **Category IV** (Inflammable liquids)
- ◆ **Category V** (Self-reactive substances)
- ◆ **Category VI** (Oxidizing liquids)

Designated Combustible Materials and Others



Controlled by municipal regulations (including fire prevention ordinance) (Article 9 - 4 of the Fire Services Act)

- Technical standards covering storage and handling
- Technical standards covering the location, structure and equipment of facilities where designated combustible materials and others are stored or handled, and others

Details of Regulations

For storage and handling of hazardous materials of the designated quantity or more,
(1) Hardware regulations that cover technical standards for the location, structure and equipment at facilities

(2) Software regulations that cover storage methods of hazardous materials

(3) Safety systems from three perspectives including improving the knowledge and skill of those who handle hazardous materials, hazardous materials have been regulated in a rational way in order to safely provide them to the people of Japan.

○Manufacturing facilities
(including petroleum refining plants)



○Storage facilities
(including petroleum tanks)



○Handling facilities
(including gas stations)



Obligation to conform to the standards

(1) Criteria for hardware

- Location
Safe distance, owned empty land
- Structure
Building material, tank material
- Facilities
Fire fighting equipment, ventilation equipment, and lightning protection devices

(2) Criteria for software

- Restriction on uses of fire
- Entry restriction
- Prevention of leaking, overflowing, and scattering of hazardous materials

(3) Safety system

- Hazardous material engineers
- Hazardous material supervisors
- Hazardous material managers
- Hazardous material security personnel
- Private fire brigades
- Preventive rules
- Regular inspections