

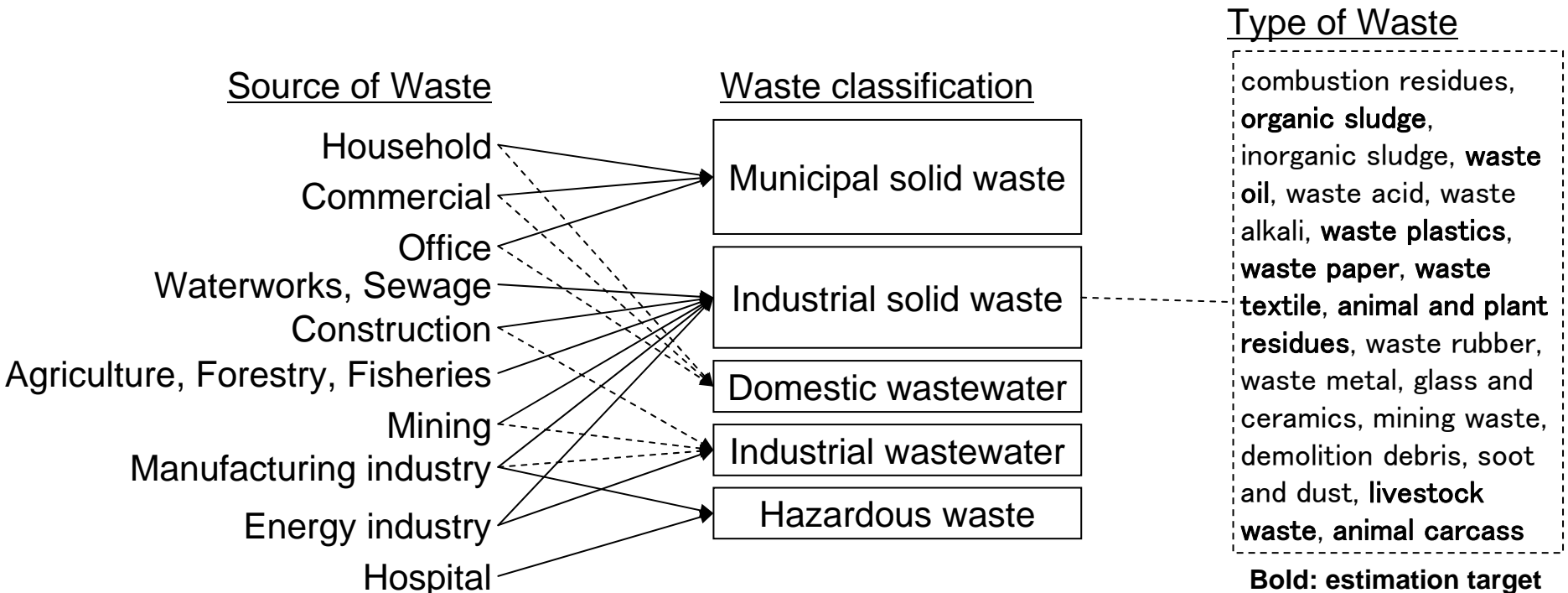
Country Report of Japan Management of Wastewater

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Waste in Japan

- Waste are classified into “municipal waste” and “industrial waste,” in according to Japanese regulations.
- Industrial waste is categorized twenty types of waste from business activities, provided for exclusively under the Waste Management Law.
- Municipal waste is other waste to be treated by municipalities and is classified into “municipal solid waste,” such as garbage from households, and “human excrement”.
- Wastewater and solid waste are treated separately.

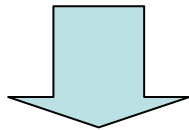


Water Pollution Control Law

Water Quality Conservation Law

Factory Wastewater Regulation Law

These laws (1958) were limited to those situations in which damage from water quality degradation had already occurred, and did not proactively prevent degradation of water quality. Consequently, the laws were unable to provide sufficient coverage with regard to environmental conservation.



Water Pollution Control Law (1970)

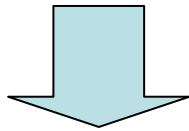
1. Measures to overcome "catch-up" administrative attitude
 - Shift from specified-area regulation to national regulation
 - Uniform wastewater standards + more stringent prefectural effluent standards
2. Regulations tightened to ensure strict compliance with standards
 - Direct penalties for violations
3. Unification of the legal system in principle



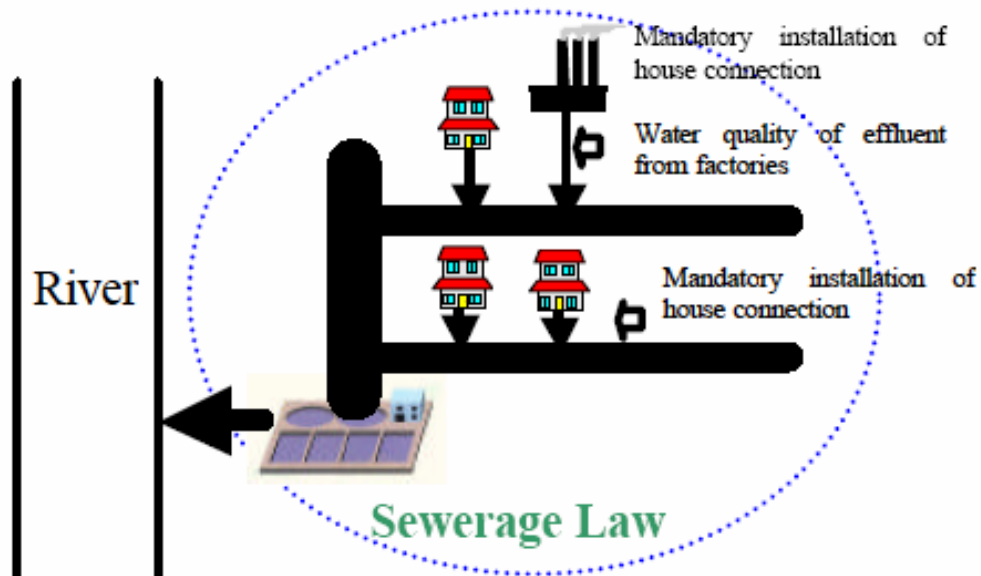
The Ashio Copper Mine at the time of the poisoning incident
(Source: Mainichi Newspaper web site)

Sewerage Law

- Under the Sewerage Law enacted in 1901, local government is to conduct sewage works but budgetary measures were lacking. For this reason, although local governments began sewage works, they were faced by financial difficulties.
- Although construction of sewers and treatment facilities was implemented by local government, house connection and conversion to flush toilets for households were left to residents. When sewage works were started, such financial burdens held back the development of house connection and flush toilets.
- When hazardous wastewater is discharged from factories into the sewerage system, it could damage sewerage facilities and harm treatment capacity of treatment facilities.
- The installation, maintenance and management of individual treatment tanks were completely left to residents.



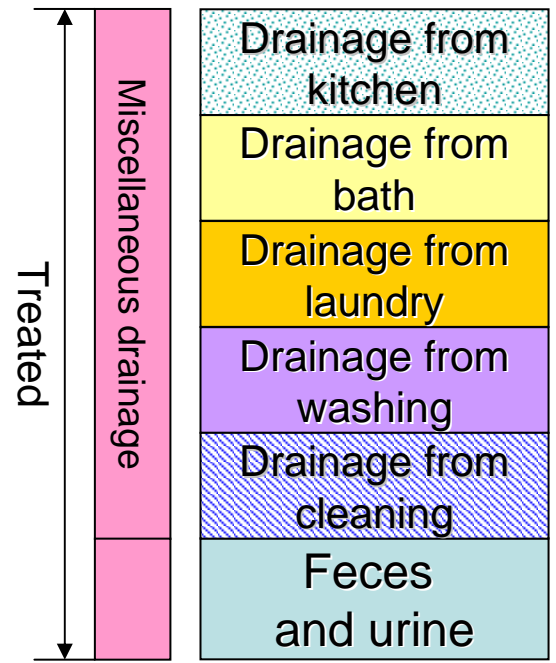
The Sewerage Law was revised in 1958 to provide a legal basis for the collection of user fee for local government, make the installation of house connection and the conversion to flush toilets mandatory, also regulate the water quality of effluent from factories and other facilities into the sewerage system.



Johkasou Law

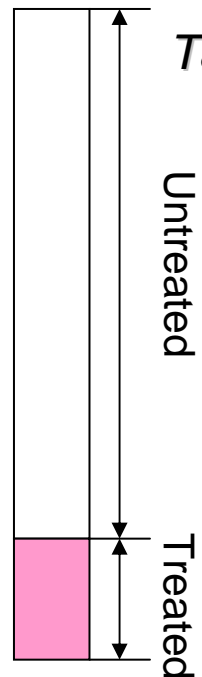
Gappei shori johkasou

- Both miscellaneous drainage and feces and urine are treated
- Only gappei-shori johkasou has been permitted to be newly established after April in 2001.

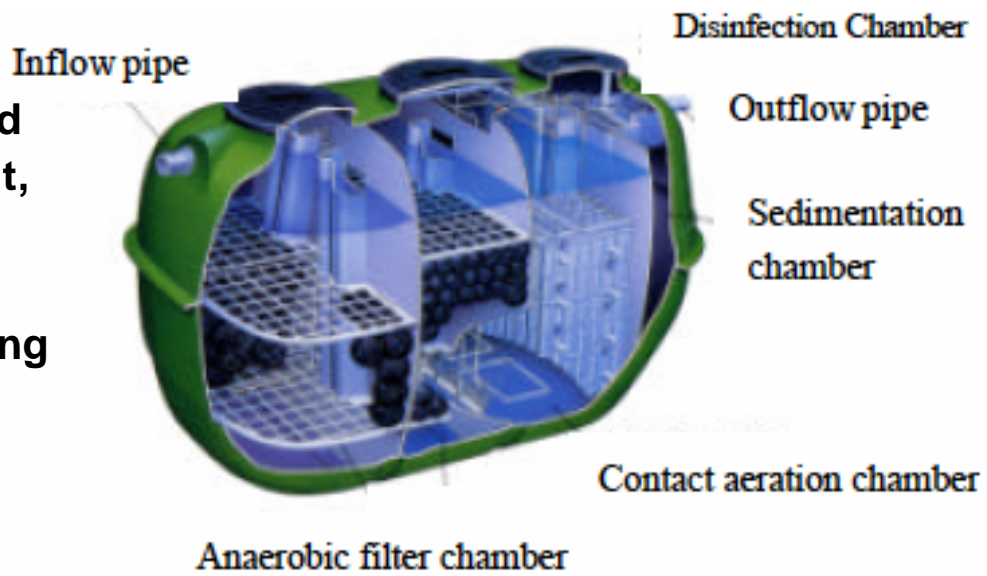


Tandoku shori johkasou

- Only feces and urine are treated



In 1983, the Johkasou Law was established to regulate the manufacture, establishment, inspection, and cleaning of individual treatment tank. Also, in 1994, regulations established localities as the basic regulating body for the installation and management of Johkasou.



Subject of Estimation

6.A Solid Waste Disposal on Land

- 6.A.1 Controlled Landfill Sites
- 6.A.3 Other Controlled Landfill Sites

6.B Wastewater Handling

- 6.B.1 Industrial Wastewater
- 6.B.2 Domestic/commercial wastewater

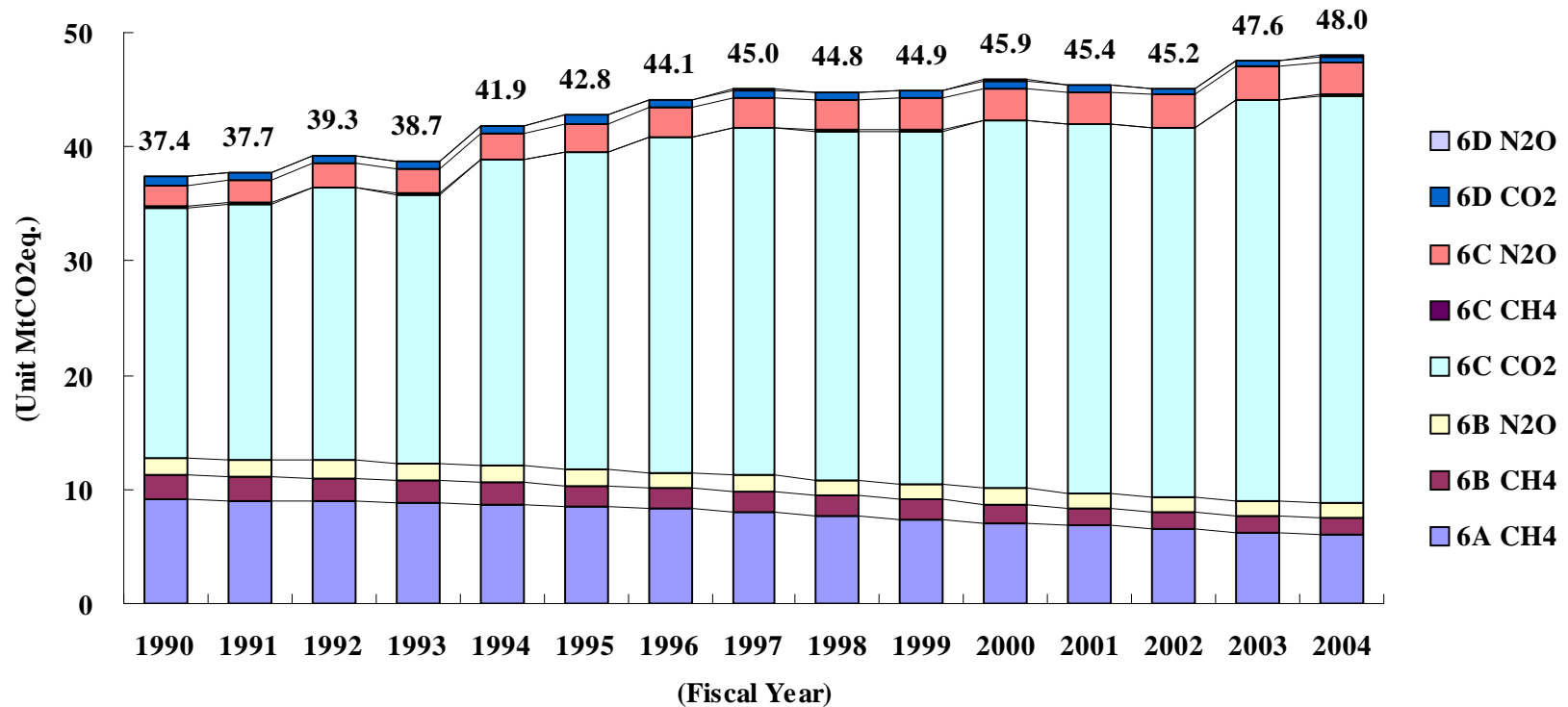
6.C Waste Incineration

- Incineration
- Used as raw materials or fuels

6.D Other

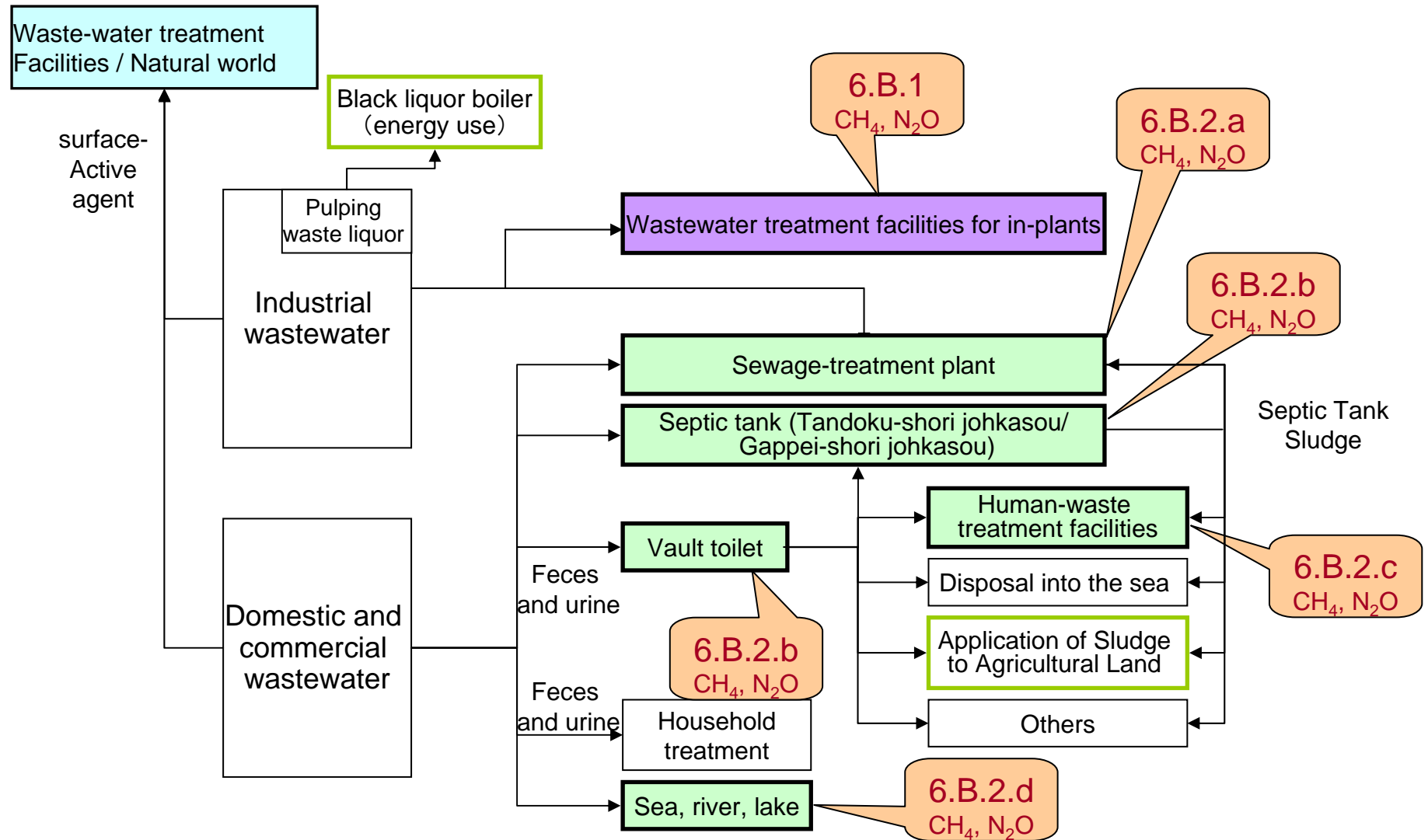
- Decomposition of Petroleum-Derived Surfactants

Emissions estimate and trends



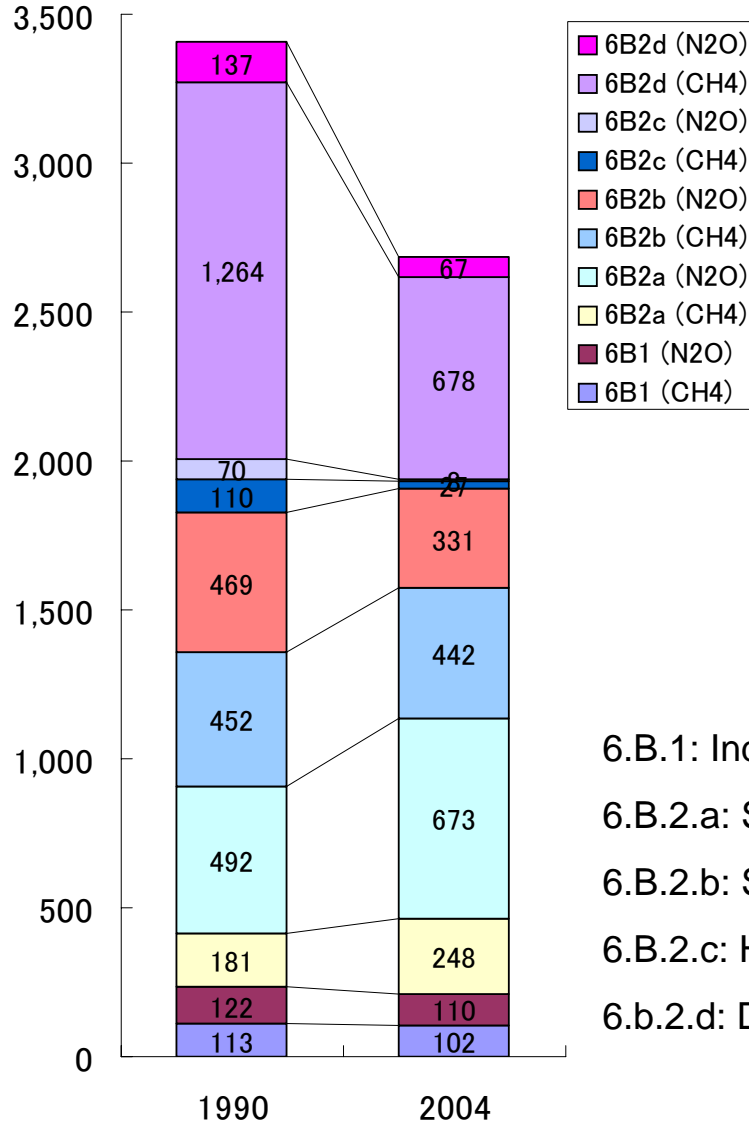
- Emissions from the waste in FY2004 increased by 28.7% compared to FY1990, represented 2.8% of total GHGs emissions in FY2004.
- The main reason for emission increasing is due to an increment of incinerated waste. Though the total amount of waste has been almost stable.

Management flow of Wastewater



6.B Wastewater handling

(Gg-CO₂eq)



- CH₄ and N₂O emissions from '6.B Wastewater handling in 2004FY was 2,686 Gg CO₂eq, which have decreased by 21.2% since 1990FY.

6.B.1: Industrial Wastewater

6.B.2.a: Sewage Treatment Plant

6.B.2.b: Septic tank and vault toilet

6.B.2.c: Human-Waste Treatment Plant

6.b.2.d: Decomposition of untreated waste water discharged