

# Collaboration of Local Government and Business Entity for the first time in Japan for preventing pollution measures - Pollution Prevention Agreement and Environmental Conservation Agreement -

Industrial Zone of Yokohama Bay Area (Present)

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Source: Amano Studio

## Agreement between Local Government and Business Entity concluded prior to the enactment of the relevant laws



Source: Port and Harbor Bureau, City of Yokohama

### Project Summary

During the period of Japan's high economic growth, especially in the sixties up to the eighties, Yokohama faced serious environmental pollution.

At that time, the city was reclaiming the coastal area in Negishi Bay to provide land on which power plants and petroleum refineries, among others, would be built, a scenario the people thought would cause further environmental degradation. In those days, too, under the Japanese legal system, local governments were not authorized to regulate pollution sources such as factories. Despite this limitation and because of the worsening environment, the Yokohama City government in 1964 negotiated and entered into a "Pollution Prevention Agreement" with a thermal power plant company, which wanted to build on the

reclaimed land. For the first time in Japan, such an agreement was reached. Since then, Yokohama City has entered into similar agreements with other companies to prevent pollution and conserve the natural environment of the city.

In the course of time and with the changes in the country's legal system and the people's circumstances, Yokohama City decided to fine-tune the "Pollution Prevention Agreement" and sign "Environmental Conservation Agreements" with companies to comply with relevant laws and meet the needs of society.

By 2012, Yokohama City has entered into various agreements with 28 companies to deal with the issues of global warming, ecological conservation, and landscape improvement, among others.

Through years of collaboration with business entities, Yokohama's environment has improved dramatically based on compliance with the rules and regulations of relevant laws, with the terms of the "Pollution Prevention Agreement" and the "Environmental Conservation Agreement" for industrial pollution sources, in addition to the development of sewerage systems for domestic pollution sources.

Recently, however, the "Pollution Prevention Agreement" is just a part of the overall strategy to protect the environment; Yokohama City is now implementing the "Environmental Management Plan (2011-2025)" to revitalize the city's economy while ensuring the development of an attractive, sustainable city.

# Pollution Prevention Agreement and Environmental Conservation Agreement

## Outline of the Pollution Prevention Agreement

While in the beginning, agreements only covered new facilities or expansion of existing ones, eventually they were made to cover existing facilities as well. The contents of earlier agreements include but are not limited to the following:

- ✓ General pollution prevention measures;
- ✓ Control of raw materials and fuel;
- ✓ Improvement of production processes;
- ✓ Control of pollutants;
- ✓ Monitoring and reporting of emissions, effluents, etc.;
- ✓ Public disclosure of information;
- ✓ The right of city officials to enter business facilities and conduct on-the-spot inspection; and
- ✓ Prior consultations, etc.

## Activities of Stakeholders in Executing Agreements

In the course of finalizing agreements, stakeholders carried out the following activities:

- ✓ Companies planned, designed, and presented optimum technologies to develop, operate, and manage their facilities;
- ✓ The public, supported by local medical associations, held environmental conservation conferences to gather scientific data and information, establish linkage with city authorities, and discuss relevant issues; and
- ✓ City authorities invited experts to develop their technical capacity for and knowledge in preparing agreements and evaluating their contents.

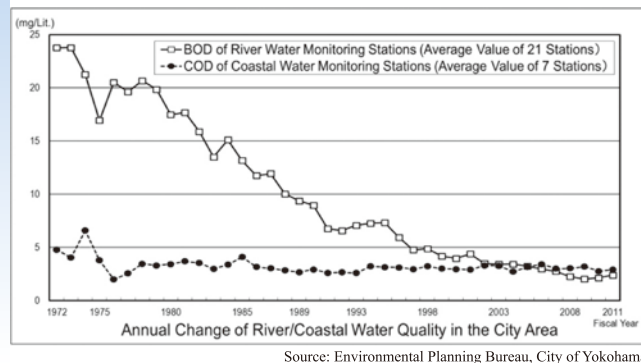
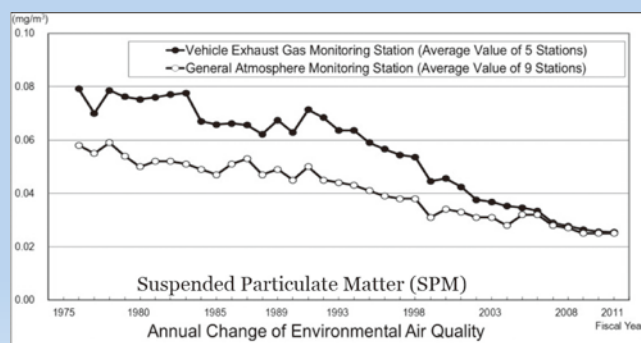
## A Clean Coal-fired Power Plant Developed in the Metropolitan Area

The Isogo thermal power plant, the first power plant that entered into a “Pollution Prevention Agreement” with Yokohama City, was built in the sixties. In accordance with government policy at that time, the plant was designed as a coal-fired power plant, but it already adopted a clean technology developed by Japan’s highly advanced technological minds. The features of the existing plant are as follows:

- ✓ The coal-fired thermal power plant has a total power generation capacity of 1,200 MW;
- ✓ Using ultra supercritical pressure boiler systems, the plant has a power generation efficiency of 43%;
- ✓ With such highly advanced technology, emission levels of sulfur oxide (SO<sub>x</sub>) and nitrogen oxide (NO<sub>x</sub>) have been measured at less than 20 ppm, which is almost the same as that of a gas-fired power plant; and
- ✓ Other pollution control measures are used to ensure that the plant is environment-friendly, such as coal ash recycling, wastewater treatment, and noise control.

## Environmental Improvement in Yokohama

With the enforcement of laws on pollution control since the late sixties, the local government and the business community have had to implement pollution control measures. But even before laws requiring such were enacted, Yokohama had already required factories to implement control measures based on pollution prevention agreements both parties had signed. Consequently, the environmental quality in the city in the early seventies greatly improved. Nowadays, ambient air and public waters in various monitoring points comply with environmental standards.



## Evolution of the Agreement

The “Pollution Prevention Agreement” has evolved and its contents have changed following the revisions to the “Environmental Conservation Agreement” which now include emerging environmental impacts harmful to men, as well as a wide range of global and urban environmental issues such as global warming, ecological conservation, biodiversity preservation, and landscape improvement, to name a few.

Isogo Thermal Power Plant

