12.7 Systems of Compensation and Prevention for Pollution-Related Health Damage

12.7.1 Frequent Occurrence of Health Damage Followed by the Yokkaichi Pollution Lawsuit, and the Establishment of the System for Pollution-Related Health Damage Compensation

Looking back air pollution problems in Japan and counter measures for them, we can not forget the fact that there have been many health damage-related tragedies. From the early stages of the high economic growth period, many residents in industrial cities all over Japan, including Yokkaichi, began suffering from respiratory illnesses thought to have been brought about by air pollution, and the rates of outbreaks in such cities was as much as, and sometimes over, 2 to 3 times that in unpolluted areas. One of the actions taken by residents who suffered from illnesses related to air pollution was the Yokkaichi Lawsuit, which was brought before the courts in September 1967. The decision of the court in July 1972 rejected the plea of the accused enterprise that they had "employed prevention measures based on the latest technology at the time"; and stated that the enterprise could have known that its emission of air pollutants would be harmful to the lives and bodies of human beings. The decision further stated that "the best technology and knowledge in the world must be mobilized to devise prevention measures, without regard to the economical efficiency", that "if such measures are neglected, then there will be no way to avoid accidents (no-fault liability for compensation)", and that "the causal relationship is clear from the results of epidemiological examinations."

As a result of this decision, a civil law system of compensation for damages was set up, and the Pollution-Related Health Damage Compensation Law put into effect in June 1973 as a law to provide a radical system of compensation for victims.

12.7.2 Recognition of the victims and Compensation, and the Expense Bearing

This law framed a system of understanding of exactly who can be recognized as a victim in such cases, stating that when those who have lived in or commuted to work in areas which have been designated (designated areas) to have frequent occurrences of illnesses related to marked air pollution for over a certain amount of time have been exposed to the air pollution (conditions of exposure), have contracted chronic bronchitis, bronchial asthma, asthmatic bronchitis, emphysema or have had recurring bouts of such illnesses (designated illnesses), then there can be said to be a causal relationship between the person's illness and the air pollution.

A report from the Central Council on Pollution Control Measures, set down the necessary requisites for "designated areas" as those areas which have a "marked amount of air pollution" and "where there have been frequent outbreaks of related illnesses". One typical example is when the level of air pollution amounts to an average yearly value for sulfur dioxide of over 0.05 ppm and when the prevalence of the illness is over 2 to 3 times the natural prevalence of the illness.

Health damage victims who have been recognized by the prefectural governor, according to the law, may be presented with indemnity to compensate for medical treatment expenses and for the earnings they lost due to
contracting the illness. The Compensation Law of Pollution-Related Damage also stipulates that the pollution-related health and welfare programs necessary to promote the welfare of these victims be implemented in order to help those whose health has been damaged by designated illnesses to recover, maintain and promote their health and well-being.

The expenses necessary to implement this system of compensation to victims whose health has been damaged by air pollution are to be determined by enterprises' rates of contributing to the emissions of air pollutants, and the ratio of expense bearing between stationary sources and mobile sources in factories and enterprises is to be 8:2 considering the national amounts of sulfur oxides and nitrogen oxides among all air pollutants. Expenses for stationary sources, which take up 80 percent of the overall total are to be born by all the nation's factories and establishments over a certain size, and individual factories and establishments are to bear the expenses according to their own emissions levels, using sulfur oxides as an index.

There were only 12 areas designated for the implementation of this system in the beginning, but this number gradually expanded to include 41 areas in 1978, and the number of recognized sufferers reached over 100,000 persons in 1988. Consequently, the total amount of compensation benefits on a yearly basis has exceeded 100 billion yen.

### 12.7.3 System Reform Accompanying Improved State of Pollution

Advances were made in air pollution control measures after the inauguration of this compensation system and there was such a remarkable improvement in the amount of pollution caused by sulfur dioxide, which had been used as one of the main indices of pollution for this system, that environmental standards were attained in almost all areas. A change can be seen to have occurred in the mode of air pollution, on the other hand, as the attainment of environmental standards for air pollution caused by nitrogen oxides and suspended particulate matter, has remained low, however, and has shown no marked fluctuations. More specifically, if you look at the changes in the state of pollution in yearly averages according to the continuous monitoring stations, you can see that the figures for sulfur dioxide have gone from 0.030 ppm (1973) to 0.010 ppm (1987), the figures for nitrogen dioxide have gone from 0.025 ppm (1973) to 0.028 ppm (1987), and the figures for suspended particulate matter have gone from 0.059 mg/m³ (1974) to 0.041 mg/m³ (1987).

After the final area was designated in 1978, a period of pure increase in numbers ensued and for every year period since then there have been roughly 9,000 newly-recognized patients and 6,000 persons leaving the system, leaving a yearly increase of 3,000 persons becoming involved with the system.

Under these conditions, the Central Council on Pollution Control Measures initiated an investigation of the management of the current system in the autumn of 1983, and issued a report in October 1986, based on the following 3 foundations: (1) that the designations of all previously designated areas be removed, (2) that recognized sufferers continue to receive compensation payments, and (3) that integrated environmental protection measures be promoted. As a consequence, the Compensation Law of Pollution-Related Damage was reformed in 1987, and all previous designations of pollution areas were removed in March 1988.

Accompanying the removal of these designations, the 14 years-long (1974-1988) recognition of new designated area was terminated. 110,000 patients were recognized at the time of this removal, and the total 180,000
Had been recognized as patients by the time of removal of designation. The total amount of compensation benefits, from the inauguration of the system until its dissolution in 1987, was one trillion yen. Even after the dissolution of the area-designations, compensation benefits continued for those who had already been recognized as sufferers, and while they were receiving treatment for the designated illness. In the year of 1995, there were roughly 74,000 recognized patients, and the expenses for their compensation summed up to 89 billion yen. The cumulative expenses until that time was roughly 1 trillion and 800 billion yen.

12.7.4 From Individual Patient Compensations to Health Damage Prevention Programs Directed at Entire Areas

No new pollution patients has been recognized after the dissolution of the area designations. The government, based on the consideration that they cannot deny the possible influence of present air pollution on chronic lung disease patients, determined to strengthen and promote the policies to prevent outbreaks of health damage due to air pollution, to advance research and investigations on the impact of air pollution on people's health, and to construct environmental protection surveillance systems. The government also decided that the expenses for the implementation of these health damage prevention programs were paid from the working profits of an endowment fund (50 billion yen) reserved by the government, the enterprises who construct the facilities which emit air-polluting substances and those which carry the air-pollution relating activities during 1988-1994.
(12.1) References

(12.2) References

(12.3) References

(12.4) References
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12) Nagayuki Yokoyama, Atmospheric Environment Simulation; Atmospheric Flow and Diffusion (1992)
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(12.6) References