1. 水俣病資料館

Minamata Disease Municipal Museum

Exhibit Guide

Dear visitors to the Museum

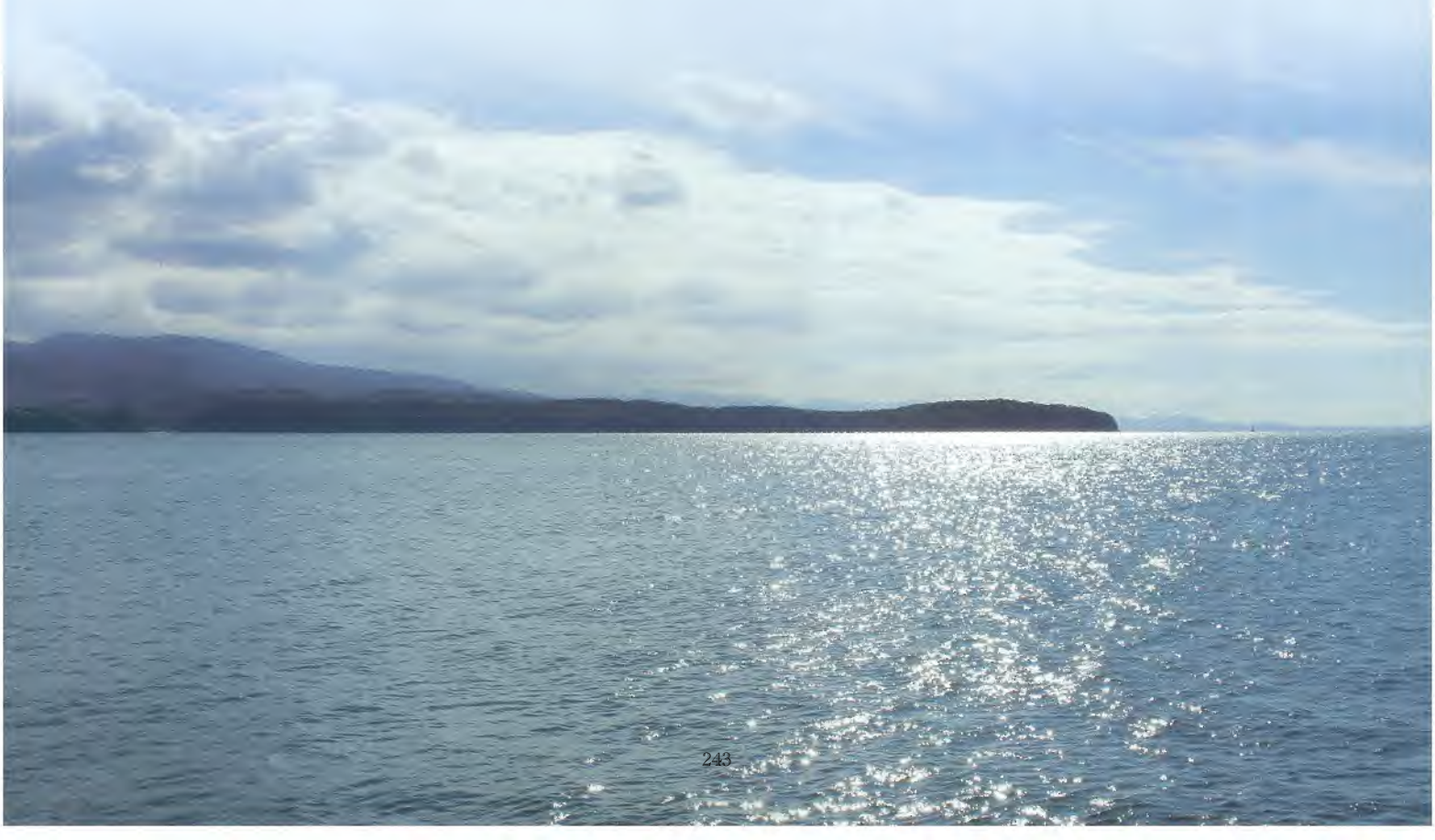
The Minamata Disease Municipal Museum opened in January 1993 with the aim of providing people with an opportunity to understand correctly how Minamata Disease broke out, developed and has been dealt with. Our sincere wish is that, by generating wider awareness of what occurred back then, we never let such a tragic incident of pollution happen again. The museum also plays a vital role as a special archive for housing valuable learning resources to be passed on to future generations.

While over two decades have passed since the museum opened, the supreme court of Japan ruled that the central and Kumamoto prefectural governments were responsible for not preventing the expansion of Minamata Disease. Two remedies for victims were provided before and after the ruling. In addition, livelihood support programs for fetal and infantile Minamata Disease patients along with restoration and revitalization initiatives have been launched based on the Minamata-Ashikita Regional Promotion Plan. However, various disputes regarding Minamata Disease remain unsolved.

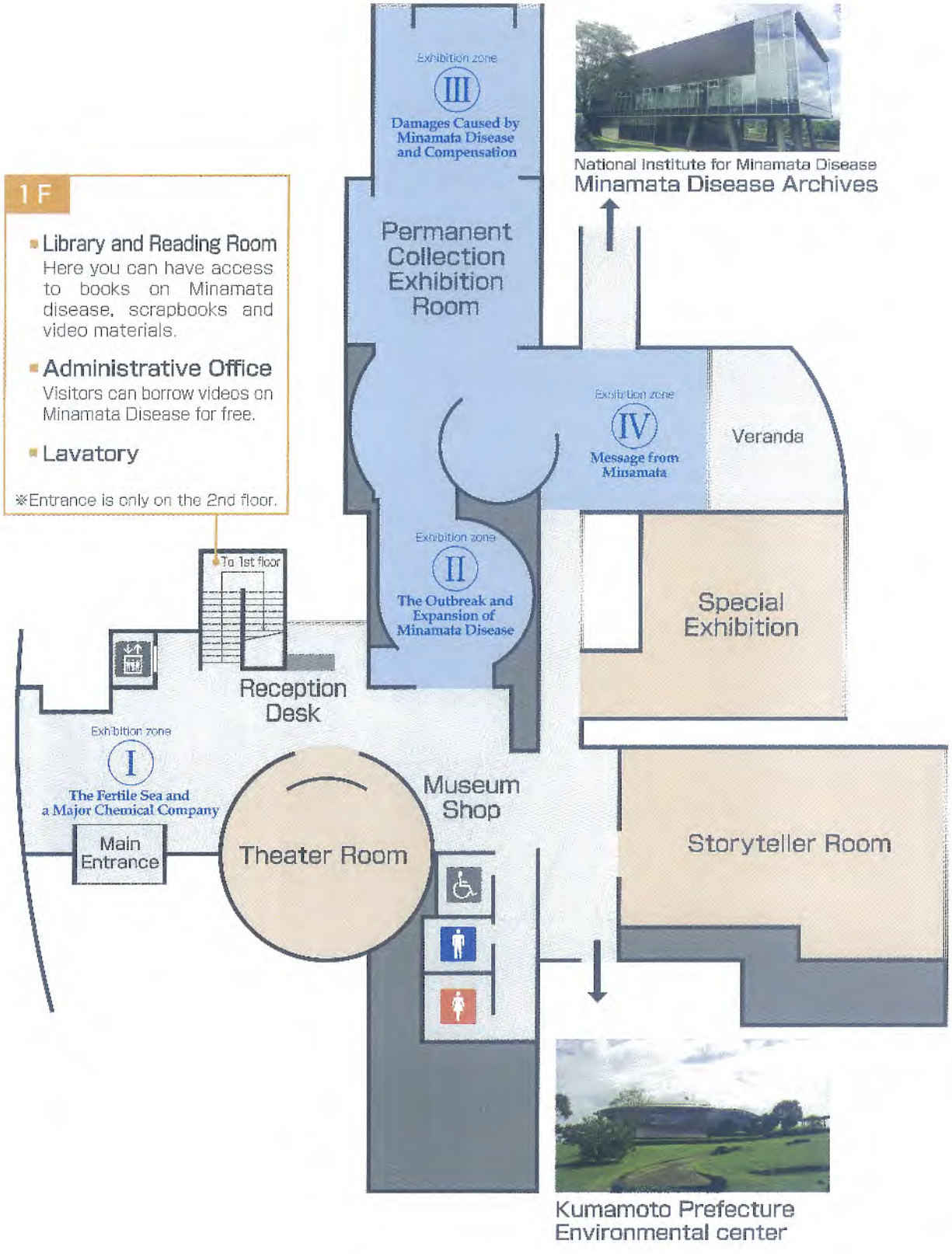
The museum has been through a major renovation for the first time since its establishment. This is part of our efforts to help children, who bear the future on their shoulders, gain a better understanding of the issues based on an enhanced set of exhibitions.

We have also reaffirmed our determination to focus on our role as an information center for Minamata Disease, and to also serve as a support base for Minamata citizens who value the environment, lives and human rights. By doing so, we hope to contribute in every way we can to addressing global environmental challenges.

We would truly appreciate your continued support and encouragement.



2nd Floor, Exhibition Room Guide



1. The Fertile Sea

Fishermen Scene

Minamata, located on the southern tip of Kumamoto Prefecture, is blessed with the natural beauty of the sea and mountains. The Yatsushiro Sea (Shiranuhi Sea) to the west is surrounded by mainland Kyushu on one side and the Amakusa Islands on the other. Water rich in nutrients flows from the mountains into the calm sea, especially the Minamata Bay area, which is a fish spawning ground with natural fish reefs (the kind of rocky seabed areas fish prefer), making it a fisherman's paradise with a seemingly endless catch from the sea.

Utase Sailing Ship

Sardine Fishing

Seaside Lifestyle

It is said that this region has had a fishing industry since ancient times, and that many local fishermen ran small businesses which were half fishing and half farming. There are many small fishing villages dotted throughout the Minamata Bay region, with people leading self-sufficient lifestyles in mutual harmony with the bountiful sea.

Ship launching scene in the Meiji period

Setting out to sea

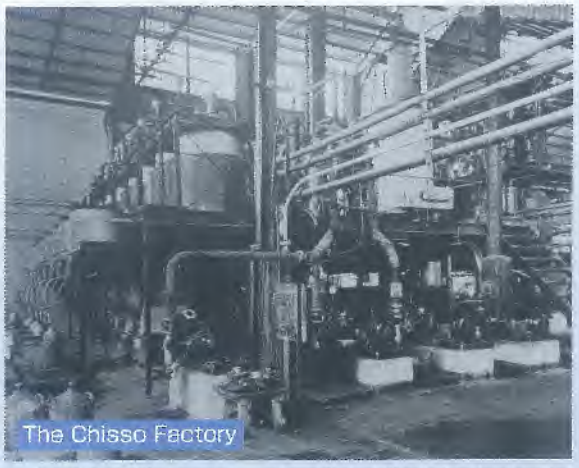
A Meal Scene

2. Major Chemical Company Chisso Corporation and Minamata City

In 1908, the Chisso (※1) Minamata Factory was completed. Chisso subsequently went on to become a major company that supported the Japanese economy, leading to growth in the local population. Minamata (※2) developed into an industrial city and the economic and social influence of the company grew.

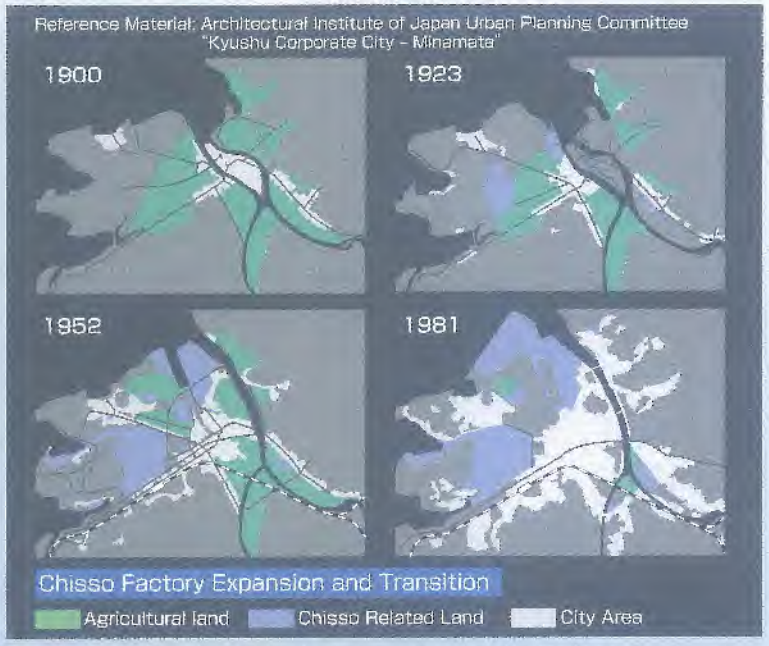
※1 The company name was Japan Nitrogenous Fertilizer Company until January 1950, and then became the New Japan Nitrogenous Fertilizer Company until January 1965, before becoming the Chisso Corporation. For this exhibition, we have standardized the name to "Chisso". Furthermore, in March 2011, in order to designate management directives of subsidiaries as well as compensate victims, the company separated into the new parent company Chisso, and production subsidiary (JNC Co., Ltd).

※2 Minamata was first designated as a village on April 1, 1889, and in December 1912 was designated as a town, before its designation as a city in April 1949. For this exhibition we have standardized the name to "Minamata City".



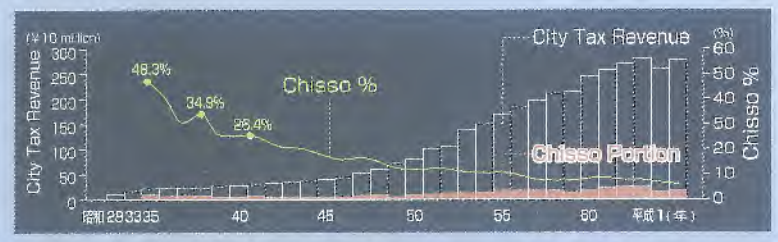
The Chisso Factory

In 1932, Chisso was one of the first in Japan to start producing Acetaldehyde, a material used in the manufacture of plastics and other chemical products, and boasted a high level of research and development.



By the 1930s, Chisso had grown into a leader in Japan's chemical manufacturing industry, and the Minamata factory became an increasingly important part of the city, at its peak providing the city with half of its tax revenue. 25% of the city area was occupied by Chisso related operations.

Kaisha-yuki san



With the development of the Chisso Minamata Factory, the city flourished and developed into an industrial city. Chisso organized concerts and sports festivals, and citizens greatly benefitted from Chisso's prosperity, both socially and culturally. Chisso employees were called "Kaisha-yuki san" (Company goers) and were the envy of all. Many locals worked at Chisso or related companies, and Chisso became an indispensable part of Minamata City and the surrounding region.

The Hyakken Drainage Outlet

Highly toxic methylmercury, created in the acetaldehyde manufacturing process of Chisso Minamata Factory, flowed into Minamata Bay mainly through a drainage outlet in the Hyakken district of Minamata City.
Abnormalities were confirmed in creatures around the Minamata Bay area, and large quantities of sedimentary sludge containing mercury began to accumulate on the seabed. This was the beginning of Minamata Disease.


The current Hyakken Drainage Outlet


Diorama scale: 80% ※Current waterway measurements
Diorama expression: Recreated from past photographs
Floor projection: Video image recreated based on testimonies from nearby residents.

3. Official Recognition of Minamata Disease

It was cats and birds in a tranquil fishing village which first showed signs of abnormalities. Then, residents started to present symptoms of a serious condition, the cause of which was unknown.
On May 1, 1956, the Chisso Hospital reported to the Prefectural Health Department Minamata Office that patients with unknown cerebral symptoms had been hospitalized. This day was later to be known at the day of Official Confirmation of Minamata Disease.

Cats dancing, birds falling from the sky, dead fish floating

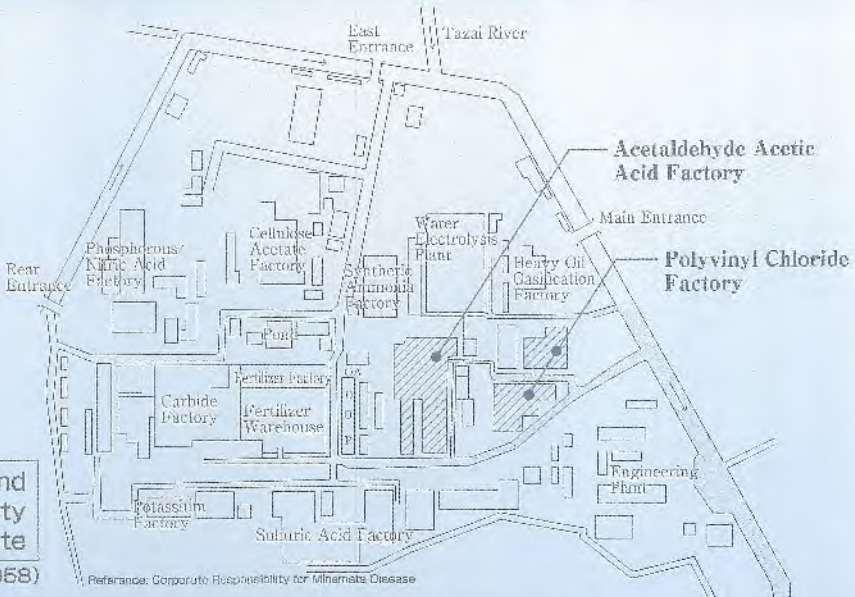
May 1, 1956

Infants with a strange disease in the Azatsukiura district of Minamata City

The Head of the Chisso Hospital Hajime Hosokawa reported to the Minamata Prefectural Public Health Office that four patients with unknown cerebral symptoms had been hospitalized. The written report made on May 4 by the Public Health Office Chief to the Prefectural Public Health Department Head still remains.

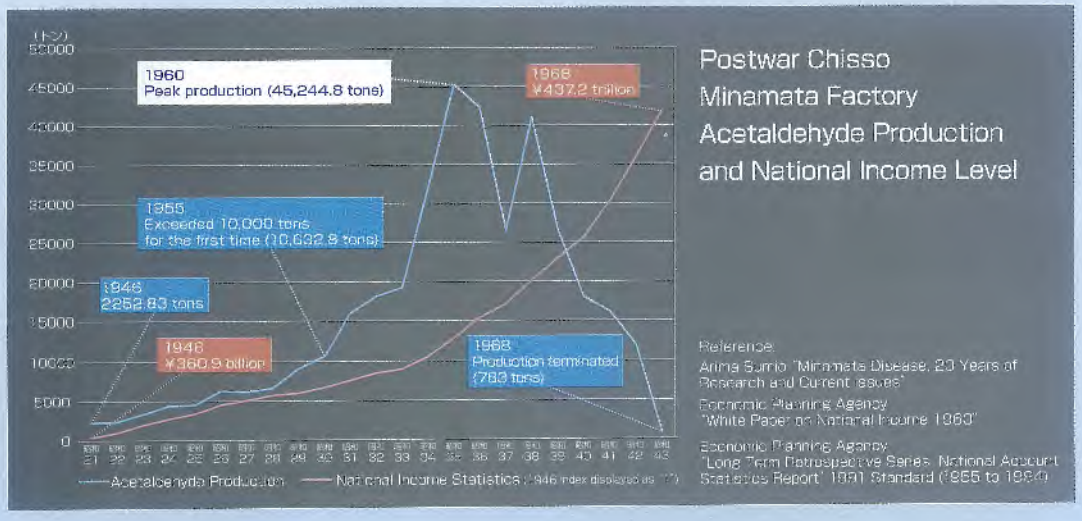
4. Uncontrolled Factory Effluent

From a very early stage after the Official Confirmation of Minamata Disease, fishermen and some researchers suspected the wastewater discharge from the Chisso Factory to be the cause of the strange disease, resulting from polluted marine life. However, Chisso continued to discharge toxic wastewater.
Why did they disregard these speculations and continue to pump wastewater?



Minamata Factory Diagram and Acetaldehyde Facility Wastewater Discharge Route
(until September 1958)

Reference: Corporate Responsibility for Minamata Disease



Postwar Chisso Minamata Factory Acetaldehyde Production and National Income Level

Reference
Anna Sumio "Minamata Disease, 23 Years of Research and Current Issues"
Economic Planning Agency "White Paper on National Income 1960"
Economic Planning Agency "Long Term Retrospective Series, National Account Statistics Report" 1991 Standard (1955 to 1990)

5. Expansion of Damage

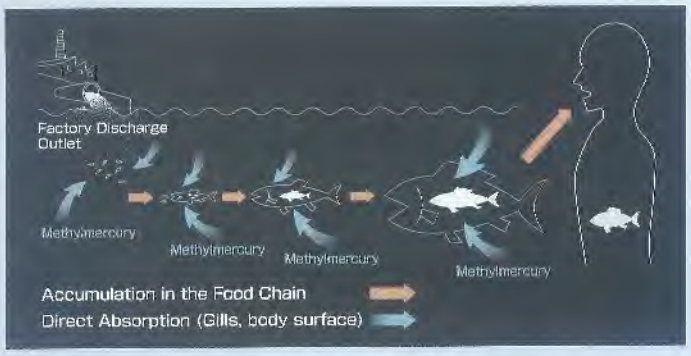
Even after Kumamoto University announced its theory that organic mercury was the substance causing the disease, it was not designated as the cause, and wastewater continued to be discharged, inflicting further damage.
What was behind this expansion of damage?

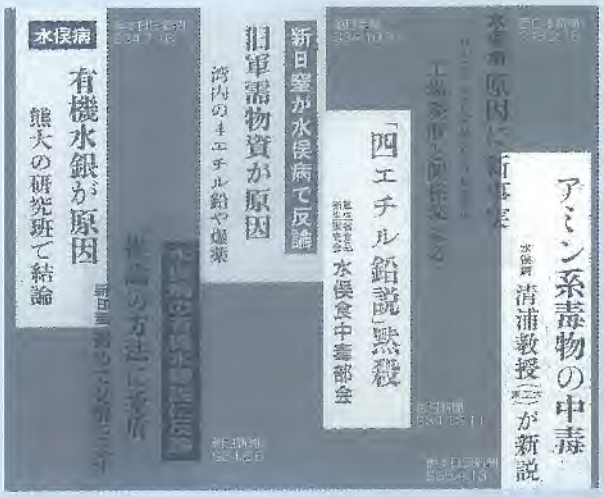
The Cat Experiment

In order to determine the cause, an experiment was conducted whereby fish from Minamata Bay were fed to cats. In March 1957, Kumamoto University conducted experiments at the request of the Prefectural Public Health Department Chief, during which a cat came down with the disease, and the same was confirmed in similar experiments that followed.
At the same time, Chisso held in-house experiments in which water from the factory discharge outlet was added to cat food, which was then fed to cats. In October 1959, a cat (No.400) came down with the disease, but this fact was not disclosed.

Mercury Pollution Mechanism

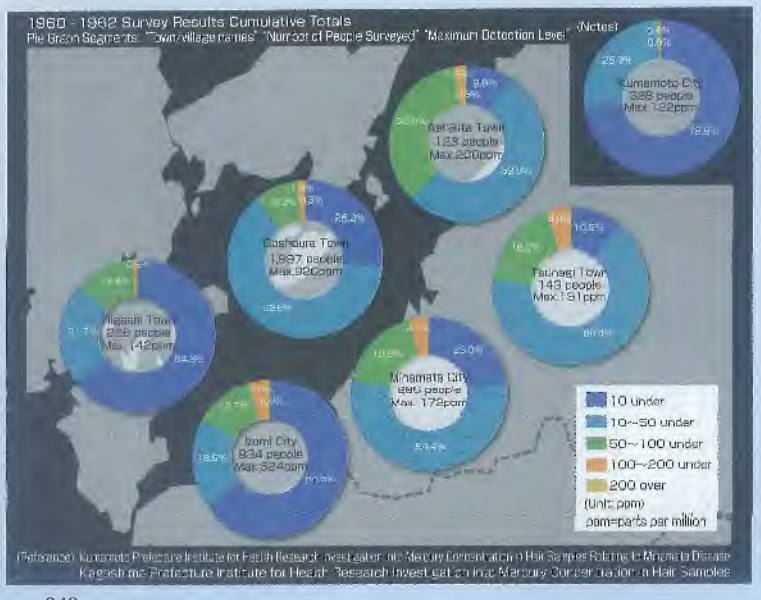
Methylmercury, which was discharged into the sea, accumulated in the bodies and on the surface of marine life in the food chain, damaging the health of those who consumed large quantities of seafood. Due to Minamata Bay being a calm inland sea, the methylmercury did not disperse, and accumulated rapidly in high concentrations in fish, shellfish and other marine life. This is said to be a reason for this expansion in damage.





Red Herrings in Determining the Cause (Newspaper Headlines at the Time)

The Kumamoto University Medical Faculty Research Team announced its Organic Mercury Theory, but Chisso was quick to refute it. In September of the same year, the Japan Chemical Industry Association suggested the cause might be explosives, and in 1960 a professor of the Tokyo Institute of Technology came up with the Amine Poisoning Theory. This multitude of theories became a hindrance in determining the true cause of Minamata Disease.



Hair Sample Concentration Map

Minamata Disease broke out and proliferated as a result of Japan's pursuit of economic convenience and wealth.The environment sent out a number of warning signals to humans that something was amiss. And yet, Chisso, the company responsible for this tragedy, turned a blind eye to these, and the government and prefecture also failed to act in time.Why did they not stop pumping industrial waste into the sea?

The fact of the matter is that this kind of action would have meant an immediate suspension of the company's operations.To have done so may have caused hardship to Chisso's employees and related companies.People were worried how they would get by.They felt that maintaining their own standard of living was more important than the lives and health of others.It was this kind of mindset that allowed the pumps to remain turned on.

We need to reflect seriously on and learn from the major errors which took place back then.The future is in our hands, and each and every one of us must think about how to make the world a better place for all.

6. Distressed Victims

Workers were stricken with the disease and income from the fishing industry collapsed, medical bills skyrocketed and the families of fishermen were forced into poverty. The victims began to demand compensation from Chisso, and the company paid a fixed amount to the families of the victims. Nevertheless, the cause of Minamata Disease had yet to be confirmed.

The Amount of Medicine a Minamata Disease Designated Patient (Male, in his 50s) Used in 6 Months

This was not medicine to treat Minamata Disease, but only to ease the symptoms. The amount and type of medicine varies from person to person. Ongoing medical costs placed a huge burden on families at the time.