

Chapter 6.

Comprehensive Lessons from the Minamata Disease Affair

We must recognize honestly that we have committed grand mistakes in the historical process of the Minamata disease affair. These mistakes included structural ones such as the ideal way of the administration and business activities.

Outbreaks of Minamata disease were derived from the structure of modern society in which the development of scientific technology and chemical substances was continued in pursuit of the development and convenience of industry.

Environment certainly continues to send signals of the risk to us, but we neglected them and did not conduct any effective countermeasure against the spread of damages. The subsequent accurate follow-up was not conducted, either. These situations resulted in irreparable damages to the inhabitants' health and induced deadly environmental disruption. Moreover, the tragedy was repeated twice.

The most rigid lessons obtained from Minamata disease are as follows: On the ground of scientific disputes about decision of the pollution source and the causative factor for the disease, it took 12 years for the Governmental policy to have been politically and socially decided, because the relations in the competence among ministries and offices also became a difficulty in the decision, and pollution and damages spread during the period, inducing further outbreaks of the second Minamata disease.

The causative companies were uncooperative in inspection of the cause, and concealed facts. The companies and industry were protected by the chemical industry world and MITI with authorities of the academic world. It becomes a serious problem what roles the Governmental and local administrations, politics, the public prosecutors office, and the mass media played in a series of these acts.

1. The actual setting must be directly observed, and the approach to the affair must be initiated from sincere hearing from the inhabitants.

The starting point of the approach of the local and governmental administrations to the affair is sincere hearing of complaints of abnormal events in environment and humans in the actual setting from the inhabitants. On the basis of the data, opinions of specialists for healthy and environment must be requested, then fair and prompt evaluation should be made.

2. Protection of health against damages must have priority over everything, and the administrative decision is required according to the certainty of the cause.

It is fundamental that the administration secures activities of investigators to investigate for the purpose of inspecting the cause and carries out measures to counter damages by its evaluation and on the responsibility of the administration. In many cases, however, of fatal emergency conditions, there is no time for the cause to be determined. All the conclusions made remain uncertain.

The person, who has the responsibility for solution of a problem, must think that protection of human health has the priority over everything, and after the cause was confirmed to a certain degree, the person must decide and carry out the effective and appropriate countermeasures considered according to individual occasions promptly, widely, and actively. Nor an administrative official nor a politician is permitted to escape from the responsibility for the decision and the implementation.

Useless deferment of countermeasures may eventually lead to criminal acts that may induce more serious damages.

3. Collection and presentation of information in various scenes are necessary.

It is important, just in the early stage after the outbreak, to collect information in various wide-ranging fields from the transectional aspect of organization on the basis of the viewpoint of inspection of the cause, rather than the means of approaching to events. The related information in the past must also be thoroughly collected, and the information must be presented to the persons concerned.

In the process of inspection of the cause, the information kept by companies and the administration must be opened to investigators and the victims. For the problems such as environmental ones particularly, to which interdisciplinary studies are needed, exchange of information among investigators regardless of special field is essential.

The administration must promote active effort and opening of information to the public by companies about environment by introducing the PRTR system, etc.

The experience of Minamata disease indicates that preventive countermeasures against environmental pollution and opening of information to public for the purpose of preventing damages will lead to the interests of companies themselves from a long-term viewpoint.

4. Companies have the social responsibilities

It is clear that companies have the responsibilities for their social existence and that their activities should not be designed only to pursue interests. Therefore, it is axiomatic that such an activity of company as will damage human life is absolutely prohibited every time. The Minamata disease affairs were criminal acts caused by activities of the companies without consciousness of the social responsibilities.

Epilogue.

Problems with Environmental Pollution, Which Man is now Confronted with--Conclusions--

The methylmercury compound, the cause of Minamata disease, was generated as a byproduct without industrial utility value and drained in the process of production at a chemical plant. There has been no process that a trace of the methylmercury compound drained in environment exerts harmful action to humans and animals via the biological condensation. With such experience as a momentum, international countermeasures against the safety of chemical substances (International Programme on Chemical Safety) were established. The result that the methylmercury compound had influence on fetuses via the placenta has also disproved common sense of toxicology up to that time.

At present, 100,000 kinds of chemical substances are used as raw materials and materials of products at factories over the world. A considerable proportion of them are considered to have the fixed possibility to exert harmful influence on human health and ecosystem through pathways in environment (environmental risks), although there is difference in extent of the influence. For these enormous chemical substances, the man power or budget, which is required for checking their environmental risks, is not adequate, and the environmental risks of many chemical substances are not yet evaluated adequately under the present situation.

Moreover, harmfulness, which was not predicted at the time of production, may also be discovered owing to advances in science, as in endocrine-disturbing chemical substances (environmental hormones) and flon, although the harmfulness is much different from Minamata disease in terms of the character and importance of the risk of damages to individuals. At present, there are also apprehensions about the influence of long-term exposure to low-concentration chemical substances on ecosystem, the spread of pollution through a plurality of environmental media (air, water, soil, etc.), and the complex influence of chemical substances from a viewpoint of earth environmental preservation.

Nowadays, chemical substances are utilized in various forms and are inseparable from the people's life. However, they have both sides, useful and harmful, and problems with chemical substances are further complicated. With regard to the countermeasures, control alone of drainage and emission is inadequate. Total management from the environmental aspect, which includes the substances used in products and used/abolished as products, is needed. Since the harmful influence of chemical substances remains scientifically unclear in many points, opening of necessary information and individuals' wise acts based on the information are required from a viewpoint that how the environmental risks of chemical substances should be avoided or the risk should be reduced.

When we turn our eyes to various foreign countries including developing countries, there are still a number of areas in which there may be risks of pollution with mercury, e.g., use of mercury for gold refining, pollution with mercury in coal, drainage of mercury from plants, etc.

In order to counter such problems with chemical substances inside and outside Japan, so that the failure like Minamata disease will not be repeated, we must learn the experience in the past, particularly the history of many victims induced as a consequence of the absence of any particular countermeasures, or the history of efforts to have overcome the failures, and must put the hard experience to practical use as lessons.

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