

History of Environmental Preservation Activities

Period	Major events
1970 – 1989	<ul style="list-style-type: none"> ● The Committee for the Prevention of Pollution is established. ● Wastewater treatment facilities are completed at Sagami Plant. ● A permit for industrial waste disposal business is obtained. ● The Hazardous Substance Management Committee is formed. ● The Environment Compliance Section is set up. ● The Energy Conservation Committee is established. ◆ Receives the National Industrial Health Week Prize from the Kumamoto Labor Standards Bureau in recognition of Aso Plant's efforts.
1990 –1995	<ul style="list-style-type: none"> ◆ Sagami Operation Center records 5.4 million hours of Class 1 no-accident operation and receives a record-making certificate from the director-general of the local labor standards bureau. ◆ Sagami Operation Center is officially commended by the Kanagawa Prefecture Environmental Preservation Council for its environmental preservation activities. ◆ Aso Plant wins an official commendation from the Kumamoto Prefecture Association for the Safety of Hazardous Goods. ◆ Gotemba Plant is officially commended by the Shizuoka Prefecture Federation of Labor Standards Associations as an excellent place of business in terms of industrial health. ● Start recycling of used stripping solution by users. ◆ Aso Plant receives the Excellent Place of Business Award from the Kumamoto Prefecture High-pressure Gas Safety Association. ◆ Sagami Operation Center wins the Best Award for Electricity Use Rationalization from the Kanto Region Electricity Use Rationalization Committee. ● The ISO Office is set up. ◆ Ikuno Plant receives the Industrial Health Excellence Award from the Tajima Labor Standards Association.
1997	<ul style="list-style-type: none"> ◆ Utsunomiya Plant is officially commended by the Governor of Tochigi for its efforts in preventing disasters caused by hazardous substances. ● Natural gas boiler facilities are introduced at Sagami Operation Center.
1998	<ul style="list-style-type: none"> ● The Safety Control Section is set up. ● The Committee for Promoting Acquisition of ISO14001 Certification is formed. ◆ Utsunomiya Plant is officially commended by the Tochigi Labor Standards Bureau for its efforts to raise the level of industrial health. ◆ Aso Plant wins official recognition at the Kumamoto Prefecture Industrial Safety and Health Convention. ● Environmental policies are established. ● Environmental manuals are developed.
1999	<ul style="list-style-type: none"> ◆ Ikuno Plant receives the Industrial Safety Excellence Award from the Tajima Labor Standards Association. ● Sagami Operation Center, Koriyama Plant and Yamanashi Plant are designated as Class 2 Energy Management Plants. ◆ Koriyama Plant is officially commended by the Fukushima Labor Standards Bureau for its superior business operations. ● Koriyama, Utsunomiya and Gotemba Plants acquire ISO14001 certification.
2000	<ul style="list-style-type: none"> ● Used solvent collection and refining started. ◆ Aso Plant receives the National Industrial Safety and Health Week Superiority Award from the Kumamoto Labor Standards Bureau. ● The Eco Ice environment-friendly air-conditioning system is incorporated into the new head office building. ● Aso and Ikuno Plants acquire ISO14001 certification.
2001	<ul style="list-style-type: none"> ● Yamanashi Plant acquires ISO14001 certification. ◆ Aso Plant is officially commended by the Association for the Safety of Hazardous Goods at the National Convention for the Safety of Hazardous Goods. ● A biotope is created in Gotemba Plant.
2002	<ul style="list-style-type: none"> ◆ Ikuno Plant receives the Industrial Health Superiority Award from the Tajima Labor Standards Association (April). ◆ Kumagaya Plant wins official recognition by the Saitama Prefecture Federation of the Associations for the Safety of Hazardous Goods (May). ◆ Utsunomiya Plant is officially commended by the Kanto-Koshinetsu Region Federation of the Associations for the Safety of Hazardous Goods (May). ● Cogeneration systems are introduced at Koriyama Plant. ● Battery-powered forklifts are introduced at Distribution Control Center. ● The 2002 Environmental Report is published (October).
2003	<ul style="list-style-type: none"> ◆ Koriyama Plant is officially commended by the Koriyama Regional Fire Fighting and Disaster Prevention Association (May). ◆ Kumagaya, Shonan, Yamanashi and Aso Plants respectively receive a certificate confirming continuous no-disaster operation from the Japan Chemical Industry Association (May).

Aso Plant



Utsunomiya Plant



◆ Indicates that Tokyo Ohka Kogyo received an award or prize.

Glossary

■ A Recycling-based Society

As opposed to a society characterized by mass production, mass consumption and mass disposal, a recycling-based society refers to a society that aims to achieve both environmental preservation and pursuit of economic efficiency by reducing the volume of waste material generated and promoting its reuse and recycling while at the same time minimizing the input of new resources.

■ Biotope

Biotope is a German term made up of the word "bio" meaning "life", and the word "top" meaning "place". The compound word means "a certain limited place where wild animals and plants live".

■ BOD

Biochemical oxygen demand (BOD) refers to the volume of oxygen required when pollutants in the water (organic substances) are turned into inorganic substances or gases through the action of microorganisms. BOD is a major indicator used when evaluating the degree of contamination of rivers and other water bodies. A higher value for BOD means that the water involved is more contaminated.

■ Cogeneration System

A cogeneration system is an energy supply system that effectively utilizes waste heat generated at the same time that power is generated as a heat source for hot water supply, heating and other purposes. It significantly enhances energy utilization efficiency when compared to conventional power generation systems.

■ Composting

Composting is the process of turning sludge, raw garbage and other kinds of organic waste into fertilizer using microorganisms to ferment the waste. Compost thus created can be used as an agricultural fertilizer and soil conditioner.

■ Eco Fund

The Eco Fund is a general term for investment trusts in which, in addition to the traditional measures for investment in stocks, such as total market value, business scale and financial position, corporate efforts to address environmental issues are used as one of the evaluation criteria for choosing stocks in which investments should be made.

■ Environmental Accounting

Environmental accounting is a system for understanding environmental preservation-related investments made by, and expenses incurred by, businesses and other organizations, as well as the effects of such investments, in quantitative terms (currency or physical quantity) and communicating such information to stakeholders. It is different from the accounting system as stipulated in the Commercial Code.

■ Environmental Audits

Environmental audits involve the systematic, corroborative, periodic and objective assessment of compliance by a business with environmental laws and regulations, implementation of its environmental policies and achievement of its environmental objectives and goals. In Japan, they constitute an essential precondition for acquiring ISO14001 certification.

■ Environmental Performance

Environmental performance evaluation is a method of evaluating, in qualitative and quantitative terms, environmental activities and results achieved by an organization in accordance with its environmental policies, objectives and goals.

■ Greenhouse Effect Gas

Greenhouse effect gases are gaseous bodies present in the atmosphere, which transmit sunlight well but absorb infrared rays emitted from the ground and sea surfaces. They are believed to cause global warming. At the Third Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change held in Kyoto in 1997, six kinds of greenhouse effect gases – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF₆) – were chosen as the target of reduction efforts.

■ ISO14001

The ISO14001 standards relate to international standards that provide for requirements that have to be met by businesses and other entities when they establish an environmental management system (EMS) within their organization. The International Organization for Standardization (ISO) created these standards.

■ JIS Z 7250

The JIS Z 7250 standards are the section of the Japanese Industrial Standards (JIS) that provides for the items, content of descriptions and overall structure for material safety data sheets (MSDS).

■ MSDS

Material Safety Data Sheets refer to documents that include basic information on chemical products, including the names of chemicals contained and their content ratios, as well as information on how to handle them, their danger and hazard levels, their effects on the environment, safety measures to be taken, etc. In order to promote improvements in appropriate management by industrial companies of such chemicals, MSDSs are distributed by chemical product suppliers to the users or handling entities for each product.

■ PCB

One kind of organic compound, polychlorinated biphenyl (PCB) was formerly considered a chemical that excelled in terms of heat resistance and electrical insulation and was used for thermal media, insulating oils, paints and other applications. However, due to their lack of degradability and high toxicity, PCB production was discontinued in 1972. Nevertheless, there is little progress in its disposal, and managers responsible for its storage are required to place it under strictly controlled conditions.

■ PRTR

The Pollutant Release and Transfer Register (PRTR) is a system for collecting and officially announcing data on the sources and how much of hazardous chemicals have been released into the environment or carried out of the plant as waste material.

■ Recycle

Recycling refers to using waste material as a resource instead of burying it in the ground or destroying it by fire. This is done in order to save resources and prevent environmental pollution. Recycling efforts include material recycling, which involves collecting waste material and recycling it to produce new raw materials for products, and thermal recycling, which involves collecting waste material and reusing it as fuel.

■ Reduce

Reduce refers to reducing the volume of waste material generated. This involves minimizing the volume of materials put into the manufacture of products with the aim of keeping the volume of materials discarded as small as possible.

■ Reuse

Reuse involves using manufactured goods, containers and other products repeatedly with the aim of reducing the volume of waste material generated and conserving resources.

■ Unit Requirement

The unit requirement is a value obtained by converting the volume of consumption for a certain resource, such as the volume of energy consumed, into a value based on a certain standard unit, such as a unit of sales or production volume. In this report, the unit requirement is expressed as an index calculated with the fiscal 2000 level at 100%.

■ Zero Emissions

The concept of zero emissions aims at establishing a new production system in which all members of society endeavor to eventually reduce all kinds of waste material to zero by, for example, recycling waste material generated by production activities in one industry or using it as raw materials for other industries. This concept was proposed by the United Nations University.