

Environmental Conservation Initiatives

History of Environmental Conservation Activities

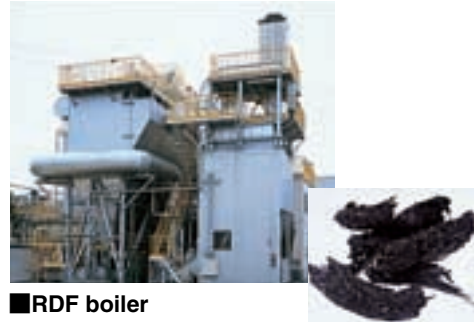
Nitto Denko has been involved in environmental conservation activities with emphasis on preventing air pollution by organic solvents since the 1960s. In 1996 the company established its corporate environmental policy based upon environmental management. Nitto Denko ranks environmental conservation as one of the most important themes for company management. The company has been involved in earnest environmental conservation activities such as compiling an environmental budget including introduction of its own original system of environmental accounting and reduction of waste, and hopes to realize total low cost through effective use of resources.

Recovery and reuse of organic solvent gases



■ Reuse (rectification) unit

Conversion of industrial waste to refuse-derived fuel (RDF) (solid fuel derived from waste).



■ RDF boiler

■ RDF

Recovery and reuse of solvents and pure water used for high-polymer separation membranes at Nitto Denko.



■ RO unit for recovering solvents

1970

Incineration of organic solvent gases



■ Deodorizing furnace (with waste heat boiler)

- Began production of solvent-free adhesive tape



■ Solvent recovery unit

1980

- Unit for reuse (rectification) of recovered solvents installed
- Deodorizing furnace (incinerator of organic solvent gases) installed
- Industrial waste converted to refuse-derived fuel

Concentration and deodorizing of rarefied organic solvent gases



■ Concentration/deodorizing unit

1990

- 1992
 - Established environment committee
 - Established company packaging committee
 - Nitto U-tech Corp. established (recycling business expansion)

- 1993
 - Comprehensive company environment department established
 - Voluntary plan drawn up

- 1994
 - Specified chlorofluorocarbons banned

- 1995
 - Regulation concerning control of chemical substances established
 - Regulations concerning preliminary study of safety of raw materials, products and intermediate chemicals established

- 1996
 - Corporate environmental policy established
 - Adopted use of clean energy (LPG)

- 1997
 - ISO 14001 certification obtained (Obtained for all domestic production facilities in fiscal 1998)

- 1998
 - Trichloroethylene banned
 - Adhesive Tape Research and Technology Center established
 - Heat cycle exhaust treatment system installed
 - Began converting garbage to compost

- 1999
 - Co-generation system installed
 - Began operating PRTR system
 - Tetrachloroethylene banned
 - Published environmental report



■ Adhesive Tape Research and Technology Center in Toyohashi plant

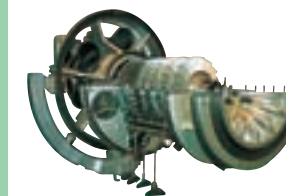


■ Heat cycle exhaust treatment system



■ Garbage disposal facilities

Co-generation system that makes effective use of generated heat



■ High-efficiency turbine that serves as the heart of the system

2000

- 2000
 - Environmental budget and environmental accounting system introduced
 - Environmental budget compilation policy established
 - Elimination of waste discharge achieved at Toyohashi Plant*

*This was achieved only for the month of March 2001, but is scheduled to be achieved for the entire year beginning in fiscal 2001. Company standards define "elimination of waste discharge" as being achieved when a minimum of 98 percent of industrial waste is recycled.



■ Deodorizing furnace installed at Nitto group company Nitto Shinko Corp.

- Themes for fiscal 2001
 - Activities to eliminate discharge of waste to be expanded to all Nitto group companies
 - Initiatives to enhance resource productivity
 - Introduction of green procurement system
 - Introduction of life cycle assessment (LCA)



■ Green procurement guidelines