Environmental Report 2004
Helping to Keep the Earth Beautiful Forever

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At Nippon Chemi-Con, we’re all working to contribute to society and safeguard the environment.

While the 20th century was labeled the “century of mass production and mass consumption,” the 21st century might one day be called “the era of environmental preservation.” As such, environmental concerns have become increasingly important. In Japan and overseas, wide-ranging efforts are being made to protect the environment, but many difficult problems still remain.

At Nippon Chemi-Con, we have been conducting a wide range of activities to reduce waste, conserve energy, control chemical substances and minimize environmental risks in accordance with our responsibility to fulfill our corporate philosophy, the “contribution to the technology with attention to environment and people.” In product development, we strive to achieve a longer service life and smaller products, and ensure that the use of substances capable of generating an environmental burden are eliminated.

In issuing the Nippon Chemi-Con Environmental Report for fiscal year 2003, we would like to thank the suppliers, customers and local residents who are cooperating with our environment protection activities. We look forward to hearing your straightforward opinions regarding both our activities and this report.

Nippon Chemi-Con's Environmental Policy

1. Corporate Philosophy
“Contribution to the technology with attention to environment and people”

The Nippon Chemi-Con Group believes that conserving the global environment is one of the most important concerns facing us today. For this reason, we are making every effort to help bring about an environmentally sensitive society: that is a society with sufficient resources to ensure the health of our earth and of everybody living on it. To meet this goal, we are making a comprehensive effort to develop and utilize innovative new technologies.

2. Environmental Policy

Each organization in the Nippon Chemi-Con shall establish their own environmental policies in compliance with our corporate environmental policy, and conduct its conservation activities accordingly. The Nippon Chemi-Con Group:

(1) Structures business operations at every level for conserving the global environment by all available means.
(2) Recognizes the environmental effects of the Group's operations accurately, sets environmental goals and activity targets that are practicable from both technical and economical aspects and establishes action plans to implement continuous improvements aimed at conserving the global environment.

(3) Observes environmental laws, regulations, agreements, etc. and also devises and implements its own internal standards as required, so that the Group is continually motivated to meet everrising performance targets.
(4) Promotes the following in the Group's business:
   - Energy conservation
   - Resource conservation
   - Waste reduction and recycling
(5) Promotes the development and marketing of products that have a less impact on the global environment.
(6) Educates and enlightens our entire workforce in matters concerning environmental issues in order to heighten their awareness of environmental problems and their will to participating in environmental activities.
(7) Verifies the priority of the Group's environmental conservation performance by sufficient use of monitoring and checking functions.
(8) Implements measures that prevent the environmental risks, such as accidents involving pollution and disasters, and maintains systems that minimize the impact of such events if they materialize.
(9) Ensures that our staff cognizant with the conservation activities of the Group and releases to the public as much related information as possible in a constructive manner and has sufficient communication with the local community and everybody else involved.

July 1, 2003

Ikuo Uchiyama
President and COO
Nippon Chemi-Con Corporation
The creation of effective environmental preservation activities

To ensure a prompt global response to all environmental problems, the Nippon Chemi-Con Group has established the Nippon Chemi-Con Environmental Committee, which is chaired by the director in charge of environmental issues. This committee establishes company-wide policies, sets targets, and deliberates on key issues.

Four sub-committees operate under the Environmental Committee. These sub-committees examine specific topics, such as chemical substances control, chemical treatment control, and energy conservation. In addition, separate environmental liaison meetings are held regularly in connection with our four business areas in order to conduct activities and ensure follow-through on corporate environmental policy.

Moreover, the Environment Department, which coordinates and supervises company-wide environmental activities, manages and disseminates global environmental information, with the goal of involving all employees in environmental preservation activities.

Organizations Conducting Environmental Preservation Activities

Instilling Environmental Consciousness in Each and Every Employee

Promoting the Acquisition of ISO14001 Certification at All Our Domestic and Overseas Business Sites

Construction of EMS (Environmental Management System)

The Nippon Chemi-Con Group is working hard to obtain ISO 14001 certification at all of its domestic and overseas business sites in order to establish and adopt an effective environmental management system.

Following the acquisition of ISO 14001 certification by Singapore Chemi-Con in 1996, 22 of our business sites in Japan and overseas obtained certification.

We are now preparing two domestic and overseas operation sites, including a newly opened location, for certification approval.

The Environmental Management System

Overseas Affiliates

- Samyoung Electronics Co., Ltd. certified on December 19, 1997
- Qingdao Samyoung Electronics Co., Ltd. certified on February 27, 2001
- Chemi-Con (Wuxi) Co., Ltd. certified on March 4, 2004
- P.T. Indonesia Chemi-Con certified on April 20, 2000

- United Chemi-Con Inc. certified on March 24, 1999
- Taiwan Chemi-Con Corp. certified on May 29, 1998
- Chemi-Con (Malaysia) Sdn. Bhd. certified on November 21, 2002
- Singapore Chemi-Con (Pte.) Ltd. certified on December 4, 1996

Business Sites and Affiliates in Japan

- Marcon Electronics Co., Ltd. certified on June 22, 1998
- Marcon Denso Co., Ltd. certified on June 27, 2001
- Yamagata Electronics Corp. certified on May 19, 2004
- Niigata Plant certified on December 24, 1998
- Chemi-Con Advance Business Corp. Nagasaki Factory certified on December 20, 2002

- Iwate Electronics Corp.
- Chemi-Con Advance Business Corp. Iwate Factory certified on December 7, 2003
- Chemi-Con Miyagi Corp. certified on October 28, 1997
- Asahi Kaseikou Kogyo Co., Ltd. certified on March 19, 2001
- Chemi-Con Fukushima Corp. certified on January 28, 1998
- Fukushima Electrolytic Industry Corp. certified on March 27, 2002
- Takahagi Plant certified on February 19, 2003

(As of July 2004)
Environmental Efforts

Ensuring that the Activities of All Departments of the Nippon Chemi-Con Group Run Smoothly and are Coordinated, and Involving the Stakeholders in our Environmental Efforts

The relationship between products and the environment

The Nippon Chemi-Con Group’s mainstay products are aluminum electrolytic capacitors. They are used in consumer products such as TV sets and VCRs. These electric and electronic products use electric power for their operation. The consumption of electricity by the products results in a burden being placed on the environment. Then, when the products reach the end of their service lives, the electrolytic capacitors are disposed of together with the products, placing an additional burden on the environment.

The relationship between business activities and the environment

The product manufacturing process uses large amounts of water and electricity. The heat generated by the use of electricity and the waste water (after waste water treatment) are discharged from the factories. These elements have indisputable effects on the global environment.

The coordination of environmental activities

The Nippon Chemi-Con Group believes that inter-department collaboration is essential to encourage effective environmental preservation activities. Environmental activities lead to the reduction of environmental load when all departments—including the sales department providing information of the customers’ demands, the design and development departments, which realize the customers’ requests, the procurement department, which obtains the appropriate materials, the manufacturing department, which produces the products, and the facility department, which fabricates the manufacturing equipment—combine their efforts with regard to environmental preservation.

The coordination of environmental activities

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Working together with society

In addition to conducting environmental preservation activities within the Nippon Chemi-Con Group, it is our duty to involve customers, suppliers, residents living near our business sites, and shareholders in order to produce a greater level of achievement. We ask that our customers use eco-conscious products and that our suppliers develop and deliver materials that contain a minimal amount of environmentally hazardous substances. In order to continue our environmental activities, it is important that we seek the understanding and cooperation of our shareholders and the people living near our business sites. Each entity connected to our business plays an important role in the solving of environmental problems.
Improving the eco-consciousness of our products

Products that are distributed as a result of manufacturing activities are eventually disposed of or partially recycled after they have been used or have reached the end of their service lives. It is important to minimize the environmental burden created by products in all stages of their life cycle, ranging from their production (the reduction of energy and resources required for production) to their usage (power consumption, fuel consumption, etc.) to their disposal (preventing the outflow of harmful substances from products, an improvement to the recycling rate, etc.).

The practice of life cycle assessment (LCA) is now widely used for the evaluation of environment loads created by products throughout their entire life cycle, running from the processing of the raw material to production, transportation, usage, and disposal.

The Nippon Chemi-Con Group strives to reduce the environmental load of its products primarily by eliminating the use of hazardous substances.

In the case of aluminum electrolytic capacitors, which are our mainstay products, we are in the process of eliminating the lead content in the solder used for lead wires and replacing the polyvinyl chloride used in the sleeves with alternative materials. For lead wires, we have eschewed the practice of Sn-Pb solder plating in favor of Sn-Bi solder plating or 100% Sn solder plating. We are using PET sleeves and coated cases in lieu of polyvinyl chloride sleeves. The group has been expanding the line of eco-conscious products since it first announced a range of eco-conscious products in 1996.

Concerns about environmentally harmful substances have been on the increase in recent years. The laws and regulations have become increasingly strict in Europe, and customers have been expressing a stronger desire for eco-conscious products. In response, we have been placing an ever greater effort on the development and supply of eco-conscious products. We have already begun the mass production of eco-conscious products in order to meet customer demand. We completed the construction of a supply system for eco-conscious products on March 2004.

In addition to the reduction of hazardous substances, downsizing of products and extension of the service life contribute to a lowered environmental burden resulting from production and help to conserve resources.

Eco-Conscious Products

In compliance with the laws and regulations and in response to customer demand, the Nippon Chemi-Con Group is expanding its lineup of eco-conscious products.

Upon the request of customers, we can change conventional-specification aluminum electrolytic capacitors and other product series into eco-conscious models.
Environmental Preservation Activities on the Production Site
Active Approaches to Ensure Clean Production Activities

Reducing the environmental load at production sites
The Nippon Chemi-Con Group uses various approaches to attaining an environmentally friendly, clean production. Our mainstay products, aluminum electrolytic capacitors, require electrical power during all stages of the manufacturing process, from the processing of materials to the final assembly determined by the characteristics of the product. In particular, the production of aluminum electrode foils, when used as the main raw material, consumes a large amount of electricity, chemicals, and industrial water, and also discharges vast amounts of industrial waste, including acid and sludge.

Although it is of course not possible to totally eliminate the consumption of electricity and chemicals and the generation of waste, even slight cutbacks will contribute to a cleaner, more stable environment. At our production sites, we are promoting a policy of energy conservation by improving the energy-saving performance, efficiency, and speed of our production facilities. We also review the production processes and materials used in order to reduce the generation of waste.

Green Procurement and Green Purchasing
The Production of Eco-Conscious Products Starts with the Selection of Materials and Parts

“Procurement” and “Purchasing”
The Nippon Chemi-Con Group regards the acquisition of materials and parts necessary for the manufacturing of products as “procurement,” while “purchasing” refers to items and services not directly related to manufacturing, such as office equipment.

Since items procured and purchased have discrete effects on products, we use different environmental management standards for procurement and purchasing.

The raw materials and parts procured by the Nippon Chemi-Con Group are processed at the manufacturing stage, and our finished products are assembled within the final products of major product manufacturers, which are then bought and used by consumers around the world. As such, it is necessary for us to have an accurate level of information with regard to the chemical substances contained in our products. In order to achieve this, we must manage the chemical contents of the raw materials delivered by our suppliers, in addition to the stages of raw material production conducted by the manufacturers of the raw material.

Our group’s green procurement system is based on two key operations: the confirmation of environmental preservation activities conducted by our suppliers, and the management of chemical substances contained in the materials and parts that are delivered to us.

We procure a wide range of parts and materials from many suppliers in order to produce our products. As such, and in order to minimize the environmental burden, we strive to reduce the number of environmental load causing substances in raw materials, while keeping in mind the important role played by the environmental preservation activities of our suppliers.

As a part of our environmental efforts, we request that each supplier submits an “environmental preservation activity report” every year in an attempt to ensure the effectiveness of their activities. In addition, we also request the submission of a report of the chemicals contained in the parts and materials supplied in accordance with the “Nippon Chemi-Con Controlled Chemicals Manual” in order to ensure a strict level of management.

We hold “green procurement” meetings regularly and post a “green procurement” page on our Website aiming at the understanding and cooperation of our suppliers.

The reduction of energy consumption and improvement to the efficiency of the facilities
We are improving the power supply units of many machines in order to achieve better energy-saving performance. Our efforts relating to the improvement of the production yield have also paid dividends in the form of a reduction to the generation of waste.

The elimination of lead and polyvinyl chloride
In production processes of aluminum electrolytic capacitors, we have modified our equipment to eliminate polyvinyl chloride and lead from lead wires.

Green procurement

Green purchasing

When we purchase office equipment and products other than the raw materials used for our products, we seek products that are environmentally friendly. For example, we have established copy paper standards involving the percentage of paper that is recycled and the whiteness of the paper, and only buy paper products that meet these standards.

Our company has produced these original guidelines based on the Law on Promoting Green Purchasing and green procurement network standards, and we will use these guidelines to promote our policy of green purchasing.
As previously mentioned, the production of aluminum electrolytic capacitors, our mainstay products, requires a large amount of electric power. Our group consumes a volume of electric power equivalent to that of 40,000 households. As such, a reduction of even 1% of the amount of electric power consumed makes a significant difference.

Our focus is on energy-saving activities because we believe the efforts we make toward minimizing the power consumption can contribute to a decrease in the environmental burden.

The following graphs show the amounts of energy consumed by our group, expressed by the volume of carbon dioxide emissions. In fiscal year 2003, it shows an increase of approx. 35% when compared with fiscal year 2001, as a result of expansion in businesses, but the comparison of unit energy consumption in production shows an actual decrease of approx. 7.5%.

### Energy Conservation

**The Daily Activities Aimed at Reducing the Level of Energy Consumption**

The following graphs show the amounts of energy consumed by our group, expressed by the volume of carbon dioxide emissions. In fiscal year 2003, it shows an increase of approx. 35% when compared with fiscal year 2001, as a result of expansion in businesses, but the comparison of unit energy consumption in production shows an actual decrease of approx. 7.5%.

*Total volume of carbon dioxide emissions and breakdown for different years (Unit: t-CO₂)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Kerosene</th>
<th>Class-A heavy oil</th>
<th>LPG</th>
<th>City gas</th>
<th>Waste (oil, plastic waste)</th>
<th>Waste (paper, wood chips, etc.)</th>
<th>Electricity</th>
<th>Gasoline</th>
<th>Light oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>10,480</td>
<td>39,817</td>
<td>404</td>
<td>5,758</td>
<td>761</td>
<td>93</td>
<td>226,056</td>
<td>773</td>
<td>115</td>
</tr>
<tr>
<td>2002</td>
<td>11,499</td>
<td>48,792</td>
<td>514</td>
<td>6,987</td>
<td>1,568</td>
<td>38</td>
<td>259,070</td>
<td>720</td>
<td>118</td>
</tr>
<tr>
<td>2003</td>
<td>10,782</td>
<td>52,759</td>
<td>565</td>
<td>7,063</td>
<td>367</td>
<td>62</td>
<td>310,061</td>
<td>601</td>
<td>164</td>
</tr>
</tbody>
</table>
Resource Conservation
Promoting the Effective Use of Resources in an Effort to Preserve the Environment

In the Nippon Chemi-Con Group’s manufacturing activities, the resource that is consumed the most is water. Water is an essential element in all our lives. We are aware that we must encourage an efficient use of water, which is a natural resource important not only for humans but also for all living things on the planet. Moreover, if all the pieces of paper our group uses each year were to be stacked on top of each other (converted to A4-size paper), the resulting tower would be about 1.5 km high! We encourage the recycling and reuse of paper, and strive to use such resources efficiently in order to contribute to the preservation of the environment.

Trends in quantity of water consumed by entire Nippon Chemi-Con Group

<table>
<thead>
<tr>
<th>Year</th>
<th>Tap water (t)</th>
<th>Industrial water (t)</th>
<th>Underground water (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>4,123,986</td>
<td>282,574</td>
<td>5,336,404</td>
</tr>
<tr>
<td>2002</td>
<td>3,597,816</td>
<td>5,442,546</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>7,102,717</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annual use quantity (t)

Trends in quantity of resources consumed by entire Nippon Chemi-Con Group

<table>
<thead>
<tr>
<th>Year</th>
<th>Metal (t)</th>
<th>Packaging materials (t)</th>
<th>Miscellaneous (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1,359</td>
<td>4,420</td>
<td>1,747</td>
</tr>
<tr>
<td>2002</td>
<td>3,565</td>
<td>3,519</td>
<td>3,520</td>
</tr>
<tr>
<td>2003</td>
<td>2,982</td>
<td>11,264</td>
<td>13,445</td>
</tr>
</tbody>
</table>

Annual use quantity (t)

Breakdown of quantity of consumed resources in 2003 (Unit: t)

- **Metal**
  - Aluminum (foil, tab, etc.) 11,906t
  - Non-ferrous metals other than aluminum 236t
  - Iron, stainless steel 1,303t

- **Plastics**
  - Polyvinyl chloride (PVC) 775t
  - Thermo-plastics other than PVC 357t
  - Thermosetting plastics 240t
  - Rubber 2,147t

- **Packaging materials**
  - Corrugated cardboard, paper 3,895t
  - Plastics 688t

- **Miscellaneous**
  - Organic materials other than those on left 1,174t
  - Inorganic materials other than those on left 8t

Trends in office paper usage

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (sheets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>13,856,000</td>
</tr>
<tr>
<td>2002</td>
<td>15,685,000</td>
</tr>
<tr>
<td>2003</td>
<td>15,108,000</td>
</tr>
</tbody>
</table>
Waste Reduction and Recycling
Adopting a Broader Vision to Promote the Reuse of Waste

When production activities consume resources, waste is generated as a by-product. The most effective way to reduce waste is to use fewer resources, but recycling and reuse can also contribute significantly to the decrease of waste generation. Recent technological advances have enabled the recovery of certain materials that could not previously be separated from waste. However, in many cases, the use of advanced technologies requires a large investment in equipment and facilities.

We use an environmental accounting system to evaluate the cost-effect balance and obtain accurate information on the environmental effects so that we can carry out efficient waste reducing activities. Within the company, we promote recycling and reuse, and also strive to reuse leftover production materials, packaging materials, and other such materials.

As shown in the following graphs, the recycling amount in fiscal year 2003 accounts for a large portion of total amount of waste discharged. This is because we made efforts to improve the recycling rate of acid used to electrochemically treat the aluminum foil that is the chief material of aluminum electrolytic capacitors (introduction of acid recovery equipment, etc.).

The rate of recycling that makes up the total waste of Nippon Chemi-Con Group is 86.4%.
The importance of chemical substances control

The manufacturing industry uses various chemical substances in its products and during its production processes. Some chemical substances have an adverse effect on human health and the natural environment. In Japan and overseas, chemicals known to have high levels of toxicity are prohibited from use or required to come under strict management guidelines. The regulations for chemical substances have become more rigorous in recent years both inside and outside Japan, and conducting corporate activities in compliance with these regulations is essential. The Nippon Chemi-Con Group has also strengthened the management of chemical substances. We market products in conformity with the law and the requirements of the customer, and constantly provide information regarding the chemical substances we use in our products.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Control standard and others</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The purchasing of raw materials, parts, etc.</td>
<td>• “Green Procurement Standards” (control of chemical substances) • Management standards for controlled substances used in raw materials, parts, and subsidiary materials. • Regulations concerning purchasing.</td>
<td>• We check and prevent the inflow of environmentally hazardous substances in the raw material stage by classifying controlled substances into groups of prohibited substances (19 substance groups) and notification-requiring substances (71 substance groups). We also request the necessary analysis data.</td>
</tr>
<tr>
<td>The control of chemical substances within the Nippon Chemi-Con Group</td>
<td>• “Chemical Substance Handling Regulations” • “New Chemical Substance Evaluation Procedures” • PRTR Application Procedures” Others</td>
<td>• We designate the management levels for chemical substances that are handled within the group. • We specify the method for evaluating chemical substances that are newly introduced into production processes. • We stipulate the regulations based on the PRTR Law.</td>
</tr>
<tr>
<td>Response to customers and shareholders</td>
<td>• “Environmental Policy” (the disclosure of information) • Business contracts • Agreements, warranties</td>
<td>• We present a report of the chemical substances contained in our products. • We provide analysis data and composition data.</td>
</tr>
</tbody>
</table>

Notification according to the PRTR Law

The Law Concerning Reporting, etc., of Release to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management (PRTR Law) was established: It has been required documentation of release and transfer amounts of target chemical substances of the preceding year since 2001.

The Nippon Chemi-Con Group submitted a report on the targeted 13 business sites for 14 types of chemical substance in 2003 as shown below.

The types of chemical substance and targeted business sites increased with this year’s report, since the lower limit of amounts handled changed from 5 to 1 t.

Report of the release and transfer of specified chemicals stipulated in the PRTR Law (Fiscal year 2003) (Unit: kg)

<table>
<thead>
<tr>
<th>Name of Class I designated substance</th>
<th>No.</th>
<th>Name of business site</th>
<th>Amount of release</th>
<th>Amount of transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Released into the atmosphere</td>
<td>Released into public water area</td>
</tr>
<tr>
<td>Antimony and its compounds</td>
<td>25</td>
<td>Marcon Electronics</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Epoxy resin of bisphenol A</td>
<td>30</td>
<td>Marcon Electronics</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>43</td>
<td>Chemi-Con Iwate Corp.</td>
<td>0</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemi-Con Miyagi Corp.</td>
<td>0</td>
<td>6.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemi-Con Fukushima Corp.</td>
<td>0</td>
<td>340</td>
</tr>
<tr>
<td>Silver and its water-soluble salt</td>
<td>64</td>
<td>Marcon Electronics</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cobalt and its compounds</td>
<td>100</td>
<td>Marcon Electronics</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dichlorofluoromethane</td>
<td>144</td>
<td>Asahi Kasei Co., Ltd.</td>
<td>1,900</td>
<td>0</td>
</tr>
<tr>
<td>Dicyanamide</td>
<td>145</td>
<td>Watanabe Chemical Inds. Corp., Nagoya Factory</td>
<td>3,300</td>
<td>0</td>
</tr>
<tr>
<td>Tetrahydroxymethylphthalic anhydride</td>
<td>202</td>
<td>Marcon Electronics</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Toluene</td>
<td>227</td>
<td>Marcon Electronics</td>
<td>7,600</td>
<td>0</td>
</tr>
<tr>
<td>Lead and its compounds</td>
<td>230</td>
<td>Marcon Electronics</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marcon Denso Co., Ltd.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemi-Con Sealing Rubber Corp.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>p-nitrophenol</td>
<td>239</td>
<td>Chemi-Con Iwate Corp.</td>
<td>0</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemi-Con Miyagi Corp.</td>
<td>0</td>
<td>1.0</td>
</tr>
<tr>
<td>Hydrogen fluoride and its water-soluble salts</td>
<td>263</td>
<td>Takahagi Plant</td>
<td>0</td>
<td>1,800</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nagoya Plant</td>
<td>190</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hidaka Electron Co., Ltd.</td>
<td>11</td>
<td>6,300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Takahagi Plant</td>
<td>0</td>
<td>3,700</td>
</tr>
<tr>
<td>Boron and its compounds</td>
<td>304</td>
<td>Marcon Electronics</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemi-Con Iwate Corp.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Iwate Electrolytic Industry</td>
<td>45</td>
<td>4,400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fukushima Electrolytic Industry</td>
<td>160</td>
<td>3,700</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemi-Con Fukushima Corp.</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>Manganese and its compounds</td>
<td>311</td>
<td>Marcon Electronics</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Recognizing Environmental Preservation as Our Important Social Responsibility

Fulfilling our corporate responsibility to society and working toward the reduction of the burden placed on the environment

Needless to say, all companies must abide by the laws and regulations. The Nippon Chemi-Con Group understands that compliance with the environmental laws and regulations is one of the highest priorities in our environmental management activities, and conducts its auditing and monitoring accordingly.

Results of investigation of soil at Ome Factory based on the Tokyo Metropolitan Ordinance on Environmental Preservation and the Nature Conservation Ordinance

During the razing of Ome Factory, we performed environmental assessment based on the above ordinance, and found discharges over the environmental standard in soil and part of groundwater. We have therefore been performing the following environmental improvement from July, 2004. There was no spread of contamination outside the premises:

- **Location**: Higashi-Ome 1-167-1, Ome-City, Tokyo; Site area: 20,932.91 m²
- **Investigation results**: We carried out investigation in 136 blocks in accordance with the Tokyo Metropolitan Ordinance on Environmental Preservation and Soil Pollution Control Plan.

  - **Soil**: Boron (excess over standard: 42/136 blocks; maximum 120 times); Hexavalent chromium (excess over standard: 1/136 blocks; maximum 2.6 times); Arsenic (excess over standard: 1/136 blocks; maximum 4.6 times); Lead (excess over standard: 8/136 blocks; maximum 5.6 times);
  - **Groundwater**: Boron (on premises: excess over standard value 8/8 locations; maximum 88 times. Border of premises: 2/2 locations; less than standard value);

**Environmental improvement**: Soil recovery construction is being performed, along with the razing of building. Construction method: Dig through the soil in the blocks that showed excess over the environmental standard, remove them, and fill with non-contaminated soil. Pump up the contaminated groundwater, and clean it until it is less than the standard value.

**Construction period**: Approx. 9 months (July, 2004 to March, 2005, scheduled to end)

* Details can be seen on our website: [http://www.chemi-con.co.jp](http://www.chemi-con.co.jp)
Environmental Accounting

In Order to Enable the Effective and Productive Use of Management Resources for Environmental Preservation Activities

Our basic principle of “environmental accounting”

In order to carry out environmental preservation activities, a company must allocate management resources such as personnel, goods, and money. In order to preserve the environment and observe the law, sizable amounts of management resources are sometimes required. To ensure the effective and productive use of allocated management resources, a quantitative evaluation of the costs and results of environmental preservation activities is essential. The practice of “environmental accounting” is used as one of the methods for such assessment.

The establishment and application of an environmental accounting system

Environmental accounting is a system that quantitatively measures and analyzes the cost and effects of environmental preservation measures, and shows the results. The cost of this method of accounting includes company expenses related to the preservation and protection of the environment. The effects, on the other hand, can be gauged as environmental preservation effects or as economic effects brought about by environmental preservation measures. The Nippon Chemi-Con uses the economic effect comparison system for calculation: We calculate the economic effects, and compare the cost and effects in terms of their monetary value.

The direct and indirect economic effects are calculated separately. Direct effects include those that are objectively calculable, such as the amount of energy saved, and the volume of waste reduced. Indirect effects are those that are difficult to measure in terms of their monetary value, such as the enhancement of the corporate image, law-conforming performance, and the reduction of risks. The monetary value of these effects are used only internally as reference data, since they cannot be determined as objective data.

The tables below show the calculations of costs and effects for environmental preservation at the Nippon Chemi-Con main office and six major branch offices since fiscal year 2000, based on the above concept.

Environmental accounting is still being developed as a method of investigating systems, and we need to adopt it after further improving it. Nippon Chemi-Con promotes future improvements in the system and makes efforts to grasp more accurately costs/effects, and also wishes to try out devices with which the effects on environmental preservation itself can be calculated.

Provisional environmental accounting results (Nippon Chemi-Con main office and six branch offices)

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<tr>
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</thead>
<tbody>
<tr>
<td>Investment and measures evaluated</td>
<td>65 cases</td>
<td>52 cases</td>
<td>50 cases</td>
<td>49 cases</td>
</tr>
<tr>
<td>Total amount of investment for evaluated cases</td>
<td>1,264</td>
<td>1,174</td>
<td>938</td>
<td>279</td>
</tr>
<tr>
<td>Environment-related amount of the above investment</td>
<td>261</td>
<td>214</td>
<td>240</td>
<td>101</td>
</tr>
<tr>
<td>Cost in the fiscal year (A)</td>
<td>46</td>
<td>72</td>
<td>34</td>
<td>18</td>
</tr>
<tr>
<td>Normal management cost (B)</td>
<td>634</td>
<td>732</td>
<td>751</td>
<td>777</td>
</tr>
<tr>
<td>Total (A) + (B)</td>
<td>680</td>
<td>804</td>
<td>785</td>
<td>795</td>
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</tbody>
</table>

The analysis of the calculation results

For the purpose of our evaluation, we extracted the portion of the investment in facilities and equipment and implemented measures which were thought to have resulted in environmental preservation effects. With regard to the investment in facilities and equipment, we estimated the monetary amounts by using coefficients and percentage factors, calculated the annual depreciation expenses by means of a year-on-year comparison, and added the auxiliary expenses incurred in producing those improvements. We then determined the “total environmental cost in the fiscal year.” In contrast, the effects that can be converted into a monetary value (defined as “direct effects”) are calculated and indicated as “energy conservation,” “resource conservation,” and other such conservation categories.

We evaluated 49 investments and action plans in fiscal year 2003. The cost of investment in environmental preservation decreased when compared with the previous year, but the effects increased for energy- and resource-saving aspects. The introduction of investment in production equipment with higher energy efficiency and recycling of sludge yielded good results.
Raising the Standards of Environmental Awareness and Education
Doing Our Best to Protect the Environment

In order to promote effective environmental preservation activities it is important to raise the employee’s awareness of the environment. To that end, a process of continuous and repeated education is necessary.

The Nippon Chemi-Con Group raises employees’ awareness and provides education at various stages of the employees’ employment.

As part of its awareness-raising activities, the company publishes a monthly newsletter that includes an “Ecology Information Center” environmental article that discusses various global environmental problems and the environmental activities of the company. We have also established an environmental information BBS on our homepage and are transmitting information on the latest environmental movements, etc.

Our group provides regular education to employees to deepen their understanding of environmental issues. All new employees undergo a process of environmental training to learn about our environmental policy, the trends of laws and regulations in countries around the world, and the requirements of the customer. At our production sites, we provide education and training related to ISO14001.

Environmental Communication with Local Residents
Strengthening the Relationship between Our Business Sites and the Local Community

The domestic production facilities of the Nippon Chemi-Con Group are located mainly in the Tohoku region and include such prefectures as Iwate, Miyagi, Fukushima, Yamagata, Ibaraki, and Niigata. Close communication with local communities is vital to enable the smooth and continuous production operations of these plants. Our company actively conducts environmental activities, such as environment cleaning campaigns and environmental-related events.
A Word from the Chairman of the Environmental Committee

The Nippon Chemi-Con Group acquired certification of ISO 14001—the international standard of environment management—at 22 of our business sites, and we have been operating the EMS (Environment Management System) for nine years. The activities and responsibility for environmental preservation demanded for contemporary corporations cover even “product environmental assurance”—the typical example is EU legal requirements—in addition to “reduction in the level of emissions to environment.” We are entering an age when the production and sales activities of corporations will be impossible without environmental preservation activities.

In this social situation, we are seeking the ideal attitude as a vibrant corporation: We quickly and positively respond to changes, taking literally the concept that the 21st century will be the “century of the environment.”

Our environmental preservation activities absolutely require the understanding and cooperation of customers, suppliers and all.

We hope that people will understand the ideas and activities introduced in this environmental report and cooperate with us. Anticipating such understanding and cooperation, we are aiming at more intensive environmental preservation activities and making efforts for a better global environment. We are looking forward to hearing your frank opinions on this report.

Satoshi Kikuchi
Director
(Chairman of Environmental Committee)
Nippon Chemi-Con Corporation

Company Outline

Company name: Nippon Chemi-Con Corporation
Main office location: 5-6-4, Osaki, Shinagawa-ku, Tokyo
Representatives: Hikokichi Tokiwa, Chairman and CEO
                Ikuo Uchiyama, President and COO
Date of foundation: 1931
Domestic business sites: 3 main facilities, 13 offices, and 18 subsidiaries
Overseas business sites: 15 locations in 9 countries
Business line: The manufacture and sale of aluminum electrolytic and other capacitors, precision parts, and electronic equipment.
Number of employees: 802
Capital: 15,750 million yen

A note on the design of this publication

“We are aiming to coexist with nature while keeping up with an electronics industry that is constantly being diversified and upgraded.” Based on this concept, the cover of this report features an insect using an eco-friendly electrolytic capacitor (with lead-free leads and PET outer sleeve specifications) manufactured by the Nippon Chemi-Con Group.

A word from the editor

We devised the layout and design of this report and used data that are more accurate than those of last year, in order to show how our business activities and environmental preservation activities interact with society in an easily understood manner.