

Kyushu Plant / Environmental Report 2004

Business Summary: Automobile manufacturing

Location: 1-3 Shinhama-cho, Kanda-machi, Miyako-gun, Fukuoka, Japan

Start of Operations: April 1975

Number of Employees: 5,000

ISO 14001 Certification: March 1999

Environmental Slogan: Let's protect our precious sea and nature, and keep our development along with the area.



General Manager
Kyushu Plant
Masataka Nogawa




Kyushu Plant

Major Results in FY 2003

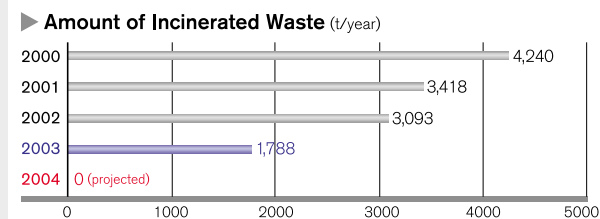
Zero Emissions

With the goal of discontinuing use of the waste incinerator at the Kyushu plant within fiscal year 2003, we have been making efforts to reduce the amount of waste generated and recycle all waste, while reducing the number of substances with an environmental impact used at our plant. We were able to cease use of the waste incinerator by the end of February 2004.

Waste Reduction

As a result of the following activities, we have reduced the volume of incinerated waste to 1,788t/year:

1. Recycling of sludge and waste plastic
2. Reduction of plastic bags used for parts packaging
3. Reduction of paint residue due to improved coating efficiency, etc.



Energy Conservation

In working toward achieving our energy conservation goals, our efforts have centered on the "Energy Conservation Family," our energy conservation promotion team, which crosses departmental boundaries in a joint effort to achieve real improvements.

FY 2003 Goals and Results

We were able to reduce the amount of heat by 155,100 GJ, surpassing our target of 122,000 GJ.

1. We were able to cut electrical power by 1,178MWh (12,100 GJ) by properly adjusting the transmission voltage on days that the plant is not in operation.
2. We were able to reduce the use of electrical power by 1,690MWh (17,300 GJ) by upgrading the compressor to a highly efficient model and carrying out more finely tuned control.

External Awards Received

1. Kyushu Bureau of Economy, Trade and Industry Director's Award – Electrical Engineering Section, Plant with Superior Energy Management
2. Energy Conservation Center Chairman's Award for "Reduction in electrical power use due to adjustment of transmission voltage on days of non-operation"

FY 2003 Objectives and Results

Objective	Target	Results	Comments
Environmental preventive measures	Zero environmental accidents*	+ (Zero)	Through review of the liquid leaks due to faulty equipment, we have implemented measures to counter equipment and system failure.
Zero Emission of Waste	Reduction in amount of incinerated waste to less than 2700t	+ (1,788t)	By promoting recycling activities and reducing waste products, we were able to cease the use of the waste incinerator in February 2003.
Energy Conservation	Reduction in amount of heat 122,000 GJ/year	+ (155,100 GJ/year)	Honored with the Kyushu Bureau of Economy, Trade and Industry Director's Award, and the Energy Conservation Center Chairman's Award in recognition of our achievements in energy conservation.
Improvement in environmental aspects	Environmental aspects evaluation	Achievement rate: 100%	+ Conducted environmental impact assessment of manufacturing and maintenance work, identified and standardized those with environmental risk.
	Environmental aspects improvement	Achievement rate: more than 90%	+ Conducted environmental impact assessment of office work, identified 12 works as significant environmental aspect and conduct improvement activities. All activities for improvement achieved 100%.
Creating a corporate culture that values the environment	Environmental seminars	2 times/year	+ Activities revolving around the theme of vehicle and waste recycling were held twice.
	Environmental meetings with suppliers	2 times/year	+ Conducted two informational exchange sessions with 25 parts manufacturers.
Cooperation and coexistence with local communities	Partnership activities with the authorities	3 times/year	+ Conducted cleanup activities three times/year in collaboration with the town of Kanda.
	Environmental communication with the community	6 times/year	+ Held a Plant Open House and offered tours of our wastewater treatment plant.

*Environmental Accident: A spill above legal requirements leaving company grounds

Communication with the Community

Beautification Activities in Collaboration with Kanda

We actively participate in beautification activities with the town of Kanda as well as with area businesses.

1. October 21 Cleanup of Kouno Shima
2. November 14 Cleanup along Shiraishi Beach
3. February 9 Cleanup of the prefectural road surrounding the plant

In addition, as the administrative agent of the Kanda Port Beautification Council, we are promoting various activities associated with the beautification of the Kanda port (PR activities, activities to expand membership, inspection tour activities, etc.).

Opening Facilities to the Public

We held tours to introduce our plant's water treatment facility.

1. PR Activities

We introduced our water treatment facility and announced the commencement of facility tours at various external gatherings.

2. Plant Tours

At our November 3 open house, approximately 200 people joined the observational tour of our water treatment facility.

Shinhamma Festival

This festival is held annually with the aim to establish a harmonious relationship with the local community and to invigorate our employees. In fiscal year 2003, the festival was held in the parking lot of the plant on September 14 and with approximately 32,000 visitors, the event was a great success. Because members from the Kanda Executive Committee were involved in all the planning stages, we also saw even more open lines of communication with the local community as compared to previous years.



Nissan-sponsored Sports Events

Nissan sponsors sports events every year to deepen the friendship between Nissan and the local community.

1. **Volleyball Tournaments (elementary school students)**
Silvia Cup, June 22 – the tournament was held with 21 participating teams (approximately 250 participants) from the districts of Keichiku and Kokura-minami.

Nissan Cup, January 25 – the tournament was held with 74 participating teams (approximately 900 participants) from the districts of Keichiku, Kita-Kyushu and Chikuhou.

2. **Table Tennis Tournament**

March 14 – the tournament was held with approximately 1200 participants from within Fukuoka Prefecture.

3. **Tennis Tournament**

August 9, 10 – the tournament was held with a total number of approximately 220 participants from the districts of Kita-Kyushu and Keichiku.

4. **Badminton Tournament**

December 7 – the tournament was held with a total number of approximately 180 participants from the district of Keichiku and Kita-Kyushu.

5. **Track and Field Meet**

August 24 – the meet was held with approximately 700 participants from the district of Keichiku.

Environmental Data

Air Quality (Air Pollution Control Law and ordinances) Unit: NOx: ppm, Soot and dust: g/m³ N, Dioxins: ng-TEQ/m³ N

Substance	Facilities	Legal Limits	Measured Value
NOx	Boilers	230	110
	Heating furnaces	230	54
	Incinerators	250	150
Soot and dust	Boilers	0.10	0.006
	Heating furnaces	0.15	0.007
	Incinerators	0.15	0.004
Dioxins	Incinerators	5	0.32

Measured values are the maximum measured values in FY 2003

Wastewater Quality (Waste Water Pollution Control Law and other ordinances) Unit: mg/L (except pH)

Item	Legal Limits	Measured Values		
		Maximum	Minimum	Average
pH	5.8~8.6	7.3	6.5	6.8
COD*	15	9.4	5.6	6.9
BOD	20	2.5	ND	1.0
SS	25	ND	ND	ND
Oil*	2	ND	ND	ND
Zinc	5	1.8	0.60	1.0
Fluoride	8	3.7	1.8	2.8
Soluble iron	10	ND	ND	ND
Soluble manganese	10	1.6	1.5	1.5
Total nitrogen	120	19	10	15
Total phosphorous	16	9.2	1.7	4.4

*Indicates environment conservation agreement (Fukuoka Prefecture, City of Kanda, Nissan) • Measurements of items other than those listed above were below minimum quantifiable limits • ND indicated values lower than the minimum quantifiable limit

PRTR Substances

Unit: kg/year (Dioxins: ng-TEQ/year)

Substance number	Chemical substance	Amount handled	Air	Water	Waste	Landfilled by Nissan	Recycled	Chemically changed	Product
1	Water-soluble zinc compounds	25,332	0	76	3,217	0	0	0	22,039
16	2-Ethynol amine	84	0	0	0	0	0	83	0
30	Bisphenol A mold epoxy resin	32,430	0	0	0	0	0	855	31,575
40	Ethyl benzene	273,649	104,591	0	0	0	112,353	22,562	34,144
43	Ethylene glycol	1,338,095	25,784	0	0	0	0	6,562	1,305,749
44	Ethylene glycol monoethyl ether	12	11	0	0	0	0	1	0
63	Xylene	1,021,463	338,695	0	0	0	362,153	65,908	254,706
68	Chromium and trivalent chromium compounds	12	0	0	0	0	0	0	12
101	2 ethoxyethyl acetate	39	33	0	0	0	0	6	0
224	1,3,5 trimethylbenzene	39,823	27,667	0	0	0	6,904	5,252	0
227	Toluene	654,986	174,492	0	0	0	190,822	20,741	268,931
230	Lead and its compounds	883	0	0	269	0	0	0	614
231	Nickel	52	0	0	0	0	0	0	52
232	Nickel compounds	4,983	0	120	3,169	0	0	0	1,694
270	Di-n-Butyl Phthalate	9	0	0	9	0	0	0	0
272	Bis (2-ethylhexyl) phthalate	3,856	0	0	0	0	0	116	3,739
299	Benzene	12,059	42	0	0	0	0	0	12,017
304	Boron and its compounds	90	8	9	73	0	0	0	0
307	Poly (oxyethylene) = alkyl ether (C = 12 -15)	433	433	0	0	0	0	0	0
309	Poly (oxyethylene) nonyl phenyl ether	2,027	0	0	0	0	0	2,027	0
310	Formaldehyde	4,608	3,956	0	0	0	0	652	0
311	Manganese and its compounds	7,137	0	300	2,412	0	0	0	4,425
346	Molybdenum and its compounds	1	0	0	0	0	1	0	0
179	Dioxins	1,591	6	0	0	0	1,585	0	0
Total		3,422,063	675,712	505	9,149	0	672,233	124,766	1,939,697

• PRTR : Pollution Release and Transfer Register. This system calculates the extent to which the production, use, and storage of chemical substances result in the release and transfer of those substances into the environment. The PRTR Law was originally enacted in July 1999 in Japan. • According to PRTR law, raw materials that contain 0.1% or more of carcinogen (designated type 1 chemical substances) and those that contain 1% or more of other substances are measured. All are reported to the local government, but information on additional substances is included in this chart (all types of dioxin are stated). • As the figures are rounded to the first place, the sum of air, water, waste, or buried by Nissan, recycled, chemically changed, and made into products may not necessarily be the same as the sum of the amount handled or total.

Major products



TEANA



X-TRAIL

NISSAN MOTOR CO., LTD.

[For inquiries, please contact]

Kyushu Plant Administrative Department

tel: +81(0)93-435-1111

fax: +81(0)93-435-1511