

Kyushu Plant/Environmental Report 2006

Business Summary: Vehicle manufacturing

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

Start of Operations: April 1975

Number of Employees: 4,600

ISO 14001 Certification: March 1999

Environmental Slogan: Let's protect our precious sea and natural environment, and keep our progress in harmony with the community where we operate



General Manager
Kyushu Plant
and Vice President
Kenzo Kawase



Kyushu Plant

Major Results in FY 2005

Reducing CO₂ Emissions

With the aim of meeting the objectives of the Nissan Green Program—a mid-term environmental action plan meant to realize Nissan's corporate philosophy of a "symbiosis of people, vehicles and nature"—employees in each process organized an "Energy Conservation Family" team, which then identified and implemented methods for reducing energy use.

Annual CO₂ emissions for the entire Kyushu plant in fiscal 2005 totaled 128,748 tons, bettering the target level of 129,636 tons. The total is equivalent to 88% of the total in fiscal 2004.

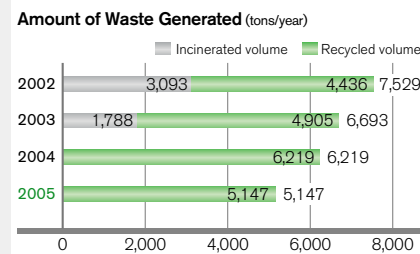
A major reduction

We reduced energy consumption in the bumper-painting plant by cutting down on heating and cooling, and controlling moisture better.

Resource Recycling Activities

To help achieve the goal of recycling all waste, we stopped using the incinerator in February 2004. During fiscal 2005, we conducted the activities noted below to reduce the generation of waste. The result was a total of 5,147 tons of waste, bettering our target figure of 5,300 tons.

- (1) Reduced the amount of sludge from treated wastewater
- (2) Reduced the amount of parts packing materials
- (3) Reduced the amount of paint sludge



Reducing Substances with Environmental Impact

Our revamped Number One paint line* became fully operational in January 2006. By using water-based paint and other measures, we cut the generation of volatile organic compounds by 42%. Our efforts to reduce the load on the environment are ongoing.

* The paint line incorporates three processes: the application of a rust-prevention film layer, an undercoat below the exterior layer, and an exterior coating that gives the car its color and glossy appearance.



The new paint line

FY 2005 Objectives and Results

Objective	Target	Result	Comment
Environmental communication with the community	Partnership activities with the authorities 3 times/year	+ 3 times	Conducted clean-up activities 3 times/year in collaboration with the town of Kanda.
	Revision of Kyushu plant website 2 times/year	+ 2 times	Revised environmental website of Kyushu plant 2 times/year
	We recorded a satisfaction rating of 90 points or higher from visitors touring the wastewater treatment facility.	+ 90 points	Three tours of the wastewater treatment facility were conducted and were accorded an overall satisfaction rating of 90 points by participants. Improvements were adopted based on suggestions and wishes submitted by participants.
Prevention of environmental accidents	Minor environmental accident* 4 times or less/year (One-third number of accidents generation in fiscal 2004)	+ 4 times	We met our target, and we will continue to reduce the number of accidents by considering equipment, training and maintenance.
Improvements of indirect services related to the environment	Progress rate of plans more than 90%	+ 100%	Improvement example: The amount of waste edge steel has been reduced, by devising how to pierce the steel sheet.
Creating a corporate culture that values the environment	(1) Starting Monthly Environment newsletters to raise staff awareness of the environment	+ Monthly	Each monthly issue has themes such as "zero waste emissions" and "reducing CO ₂ emissions," and these contents were utilized as educational materials.
	(2) Environment cleanup movement Collecting aluminum cans	+ Monthly	We collected aluminum cans and donated the funds gained from recycling them to welfare facilities such as the Yukuhashi No. 2 Meeting House and primary schools.

* Minor environmental accident: Accident in which oil and waste fluid leak on-site due to equipment failure. To lose the possibility of the outflow to the outside of the plant completely, we manage minor environmental accidents so as to make these fluids never effuse outside.

Communication with the Community

Local Cleanup Activities

We continue to actively participate in cleanup activities with other local businesses.

- (1) **May 15 and November 29, 2005:** Cleanup along Shirashi Beach (about 100 participants each time)
- (2) **Second Monday of each month:** Cleanup of prefectural road around plant (about 60 participants each time)
- (3) **October 20, 2005:** Cleanup of Kouno Shima island (about 80 participants)

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 Environmental Facilities to the Public

Tours of wastewater treatment facilities
November 3, 2005:

Open house day (approx. 2,000 visitors)
In addition, we received occasional visits from business affiliates and government administrators.



Nihama Festival

This festival is held annually with the dual aims of establishing a harmonious relationship with the local community and invigorating our employees. In fiscal 2005, we held the festival on September 11 in the parking lot of the plant. Attracting approximately 46,000 visitors, the festival was considered a great success. As part of our interaction with local residents, we also jointly sponsored a handmade-electric car race with the town of Kanda.



Nissan-Sponsored Major Sporting Events

We sponsor sports events every year to deepen the friendship between Nissan and the local community and to support local youth.

- (1) **Volleyball Tournaments**
Sylvia Cup, June 19, 2005—This tournament drew 20 teams and approximately 250 participants from the districts of Keichiku and Kokura-Minami.
Nissan Cup, January 29, 2006—69 teams and approximately 950 people participated in the Cup.
- (2) **Table Tennis Tournament**
March 19, 2006—Approximately 1,200 participants from Fukuoka Prefecture attended this tournament.
- (3) **Tennis Tournament**
August 6 and 7, 2005—Nearly 200 people from the districts of Keichiku and Kita-Kyushu competed during the event.
- (4) **Badminton Tournament**
December 4, 2005—This tournament attracted approximately 350 participants from the Keichiku and Kita-Kyushu districts.
- (5) **Track and Field Meet**
July 23, 2005—About 950 participants from the district of Keichiku competed at this meet.

Environmental Data

Air Quality (Air Pollution Control Law and ordinances)

Substance	Facility	Legal Limit	Measured Value
NOx	Boiler	230	121
	Paint oven	230	32
	Gas turbine	70	45
Soot and dust	Boiler	0.10	0.0052
	Paint oven	0.15	0.0076
	Gas turbine	0.05	0.0009

Unit: NOx: ppm, Soot and dust: g/m³N

* Measured values are the maximum measured values in FY 2005.

Wastewater Quality (Water Pollution Control law and other ordinances)

Item	Legal Limit	Measured Value		
		Maximum	Minimum	Average
pH	5.8-8.6	7.2	6.6	6.9
COD	160	8.3	6.8	7.6
COD total volume kg/d	126	29.2	ND	15.6
BOD	20*	11.0	ND	2.1
SS	60*	ND	ND	ND
Oil	5	ND	ND	ND
Zinc	5	1.9	0.45	0.9
Fluoride	8	2.1	0.81	1.5
Soluble manganese	10	2.0	1.6	1.8
Total Nitrogen	120	26	11	15.8
Total Phosphorous	16	6.1	2.0	3.6

Unit: mg/L (except pH)

*Measurements of items other than those listed above were below minimum quantifiable limits

*ND indicated values lower than the minimum quantifiable limits * Indicates a Fukuoka prefectural ordinance

PRTR Substances

Substance number	Chemical substance	Amount handled	Amount (kg/year)						
			Air	Water	Waste	Landfilled by Nissan	Recycled	Chemically changed	Product
1	Water-soluble zinc compounds	25,802	0	77	3,277	0	0	0	22,447
16	2-Aminoethanol	19	0	0	0	0	0	19	0
30	Bisphenol A type epoxy resin	10,212	0	0	0	0	0	154	10,059
40	Ethyl benzene	277,518	120,627	0	0	0	102,970	28,758	25,162
43	Ethylene glycol	1,138,696	16,969	0	0	0	0	4,247	1,117,480
44	Ethylene glycol monoethyl ether	53	52	0	0	0	0	1	0
63	Xylene	835,424	254,763	0	0	0	198,045	50,203	332,413
68	Chromium and trivalent chromium compounds	3	0	0	0	0	0	0	3
69	Chromium hexavalent	1	0	0	0	0	0	1	0
101	2 ethoxyethyl acetate	36	31	0	0	0	0	3	2
224	1,3,5 trimethylbenzene	37,227	25,681	0	0	0	7,323	4,223	0
227	Toluene	397,034	142,306	0	0	0	89,788	16,596	148,344
230	Lead and its compounds	15	0	0	3	0	0	8	4
231	Nickel	8	0	0	0	0	0	0	8
232	Nickel compounds	4,644	0	109	2,931	0	0	0	1,604
242	Nonylphenol	26	23	0	0	0	0	3	0
266	Phenols	137	124	0	0	0	0	14	0
269	Di-n-octyl phthalate	1	0	0	0	0	0	0	0
270	Di-n-butyl phthalate	12	0	0	0	0	0	12	0
272	Bis (2-ethylhexyl) phthalate	2,058	1	0	0	0	0	95	1,962
299	Benzene	11,385	6	0	0	0	0	0	11,380
307	Poly (oxyethylene) = alkyl ether (alkyl C = 12-15)	355	0	7	0	0	0	348	0
309	Poly (oxyethylene) nonyl phenyl ether	321	0	0	0	0	0	321	0
310	Formaldehyde	2,541	2,205	0	0	0	0	335	0
311	Manganese and its compounds	6,204	0	87	717	0	0	0	5,400
Total		2,749,735	562,788	280	6,928	0	398,125	105,343	1,676,269

*PRTR: Pollutant 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 and those that contain 1% or more of other substances are measured, and substances that contain carcinogens handled in quantities of over 500kg per year, or other substances of over 1 ton, are reported to the local government, but information on additional substances is included in this chart. *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



Murano



Presage



Lafesta



X-TRAIL

Nissan Motor Co., Ltd.

[For inquiries, please contact]

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