

Tochigi Plant / Environmental Report 2005

Business Summary: Vehicle manufacturing and parts casting, axel manufacturing, and final drive unit manufacturing

Location: 2500 Kamigamo, Kaminokawa-machi, Kawaguchi-gun, Tochigi, Japan

Start of Operations: October 1968

Number of Employees: 6,100

ISO 14001 Certification: December 1997

Environmental Slogan: To make continuous efforts to preserve the water and environment surrounding the plant



General Manager
Tochigi Plant
Kiyoshi Higuchi



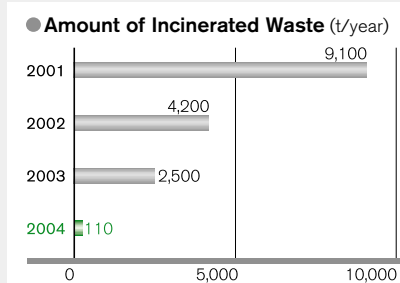
Tochigi Plant

K. Higuchi

Major Results in FY 2004

Zero Emissions

We were able to sharply reduce the amount of total waste to 110t/year due to looking for new recycling trader throughly to reduce the amount of incinerated waste, there-by far surpassing our target of 250t/year by fiscal year 2004.



Energy Conservation Activity

February is Energy Conservation Month, and in connection with our energy-saving activities, we gave an award for "energy-saving proposal" and held a "Case study of Energy conservation improvement" presentation. We propose, and have executed 2117 improvement items so far. And we won "The Energy Conservation Center Superior Award" in "Case Study of Improvement" presentation that was the one The Energy Conservation Center, JAPAN sponsored. It became the 14th prize that we received.



Case Study Presentation

Risk Reduction Activities

In order to prevent environmental accidents beforehand, and to make the environmental impact when the accident occurs a minimum, we have continuously been executing "Environmental education" and "Training for the environmental accident". Employees in the cooperation companies of Nissan have also been given "Environmental education", so that all members working plants can share their experience on the importance of environmental preservation.



Training for the Environmental Accident

FY 2004 Objectives and Results

Objective	Target	Result	Comment
Environmental preventive measures	1. Zero environmental accident	+	Able to keep "Zero environmental accident" by the meaningful education for environmental preservation and equipment measures to value the environment.
	2. The implementation rate of the improvement plan=100%	+	We executed measures of five items that required improving according to schedule.
Zero emission of waste	Reduction in amount of incinerated waste to less than 250t/year, 98% reduction from the level of FY 1999	+	By searching out a new recycling trader, the amount of incinerated waste has been reduced to 110t/year.
Energy conservation	Reduction: more than 269,000 GJ/year, by various activities to reduce amount of heat	+	Achieved reduction of 279,100GJ/year by improving 2,117 energy-saving items. We aim at the reduction of 359 kt-CO ₂ in FY 2005.
Reduction of water usage	1% reduction from the level of FY 1999 Reduction volume more than 60,000t/year	+	Achieved a reduction of 389,000t /year by improving equipment etc.
PRTR substance reduction	Various activities to support reduction policy Reduction volume more than 70t/year	+	Achieved a reduction of 264t /year by introducing water-based paint.

*Environmental Accident: A spill above legal requirements leaving the plant grounds.

Communication with the Community

Environmental Facilities Tour

By holding the Tochigi Town and Village Heads meeting, and offering tours to organizations such as the Tochigi Consumer Organization Liaison Council and local people in surrounding areas, we continue to foster information exchange and deeper understanding of our environmental efforts.



Environmental Facilities Tour

Shirasagi Festival

With more than 30,000 participants every year, this festival provides the best opportunity for us to open up lines of communication with the community. We further deepen communication with the community by widely advertising for volunteers to participate in the festival.



Shirasagi Festival

Local Environmental Protection

On an ongoing basis, our employees take time during their lunch breaks to pick up litter along the public road bordering our plant. This hands-on activity has become part of new employee training as a way of raising awareness about the importance of environmental conservation and of teaching how to put that awareness to good use.



Litter Collection

Environmental Data

Air Quality (Air Pollution Control Law and ordinances)

Unit: NOx: ppm, Soot and dust: g/m³N, Dioxins: mg-TEQ/m³N

Substance	Facility	Legal Limit	Measured Value
NOx	Boiler	190	120
	Paint oven	230	36
	Diesel engine	950	850
	Heating furnace	200	130
	Melting furnace	180	120
Soot and dust	Boiler	0.15	0.013
	Paint oven	0.2	0.002
	Diesel engine	0.1	0.028
	Heating furnace	0.2	0.014
	Melting furnace	0.2	0.009
Dioxins	Aluminum furnace	5	0.008

*Measured values are the maximum measured values in FY 2004.

Wastewater Quality (Wastewater Pollution Control Law and other ordinances)

Unit: mg/L (except pH)

Item	Legal Limit	Measured Value		
		Maximum	Minimum	Average
pH	5.8-8.6	7.9	6.8	7.3
BOD*	25	12.1	1.0	2.3
SS*	50	9.5	1.0	2.0
Zinc	5	0.2	0.1	0.1
Soluble iron*	3	0.5	0.1	0.1
Soluble manganese*	3	0.1	0.1	0.1
Chromium	2	0.1	0.1	0.1
Fluoride	8	0.5	0.2	0.2
Nitrogen	20	7.0	1.5	4.9
Phosphorous	2	0.6	0.1	0.4

*Tochigi prefectural ordinance

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

PRTR Substances

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

Substance number	Chemical substance	Amount handled	Air	Water	Waste	Landfilled by Nissan	Recycled	Chemically changed	Product
1	Water-soluble zinc compounds	653	0	2	83	0	0	0	569
9	2-(ethylhexyl) adipate	1,185	0	0	0	0	0	59	1,126
16	2-Aminoethanol	346	0	69	0	0	0	277	0
25	Antimony and its compounds	15,840	0	0	0	0	0	0	15,840
29	Bisphenol A	10,000	0	0	0	0	0	10,000	0
30	Bisphenol A type epoxy resin (liquid)	5,253	1,757	0	0	0	0	486	3,010
40	Ethyl benzene	52,256	35,556	0	0	0	970	9,816	5,914
44	Ethylene glycol monoethyl ether	1,404	1,151	0	0	0	0	253	0
63	Xylene	1,487,298	487,274	0	0	0	901,417	71,900	26,707
67	Cresol	1,200	0	0	0	0	0	1,200	0
68	Chromium and trivalent chromium compounds	11,875	0	0	0	0	0	0	11,875
109	2-(diethylamino)ethanol	256	0	51	0	0	0	204	0
224	1,3,5 trimethylbenzene	13,401	10,225	0	0	0	180	2,996	0
227	Toluene	423,987	149,315	0	0	0	246,559	23,120	4,994
232	Nickel compounds	537	0	13	341	0	0	0	183
260	Pyrocatechol	19,300	0	0	0	0	0	19,300	0
266	Phenol	11,650	0	0	0	0	0	11,650	0
270	Di-n-butyl phthalate	1	1	0	0	0	0	0	0
272	Bis (2-ethylhexyl) phthalate	57,714	0	0	0	0	0	2,765	54,949
283	Hydrogen fluoride and its water-soluble salts	3,194	100	247	296	0	2,551	0	0
299	Benzene	7,671	4	0	0	0	0	0	7,667
304	Boron and its compounds	2	0	0	0	0	0	0	2
309	Poly (oxyethylene) nonyl phenyl ether	600	6	134	57	0	0	403	0
310	Formaldehyde	3,438	2,791	0	0	0	0	648	0
311	Manganese and its compounds	300,654	0	46	372	0	0	0	300,236
346	Molybdenum and its compounds	7,475	0	0	0	0	0	0	7,475
179	Dioxins	0.057	0.057	0	0	0	0	0	0
Total		2,437,191	688,179	562	1,149	0	1,151,677	155,078	440,545

*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



FAIRLADY Z



FUGA

Nissan Motor Co., Ltd.

[For inquiries, please contact]

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