

Yokohama Plant / Environmental Report 2005

Business Summary: Manufacturing of vehicle engines and axles

Location: 2 Takara-cho, Kanagawa-ku, Yokohama, Kanagawa, Japan

Start of Operations: July 1935

Number of Employees: 4,000

ISO 14001 Certification: July 1998

Environmental Slogan: Realizing a "recirculation society", creating an environmentally friendly facility, protecting the global environment, and caring for Yokohama's natural setting



General Manager
Yokohama Plant
Toshiharu Sakai

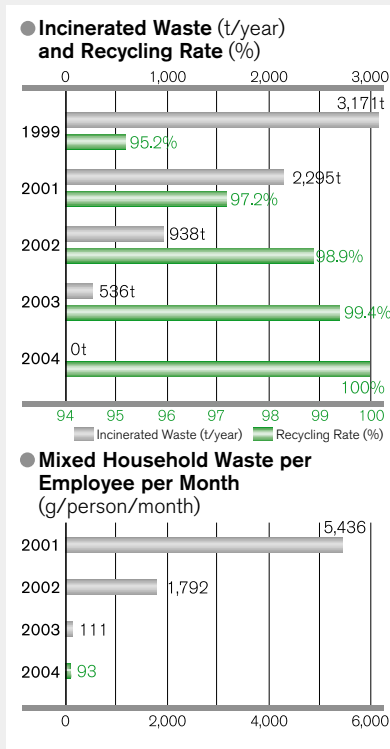


Yokohama Plant

Major Results in FY 2004

Zero Emissions

Since FY 2001, we began implementing zero emissions activities for waste and have attained "zero" direct landfill disposal for the past 4 consecutive years. In FY 2004 we achieved "zero" amount of incinerated waste, all of which led to a recycling rate of 100% as stated in our "Zero emission achievement declarations." Since FY 2003, all employees from 182 departments have been actively involved in a program called "One Employee, One Month, One Hundred Grams" to separate out mixed household waste. Through this program, we were able to surpass our reduction goal, resulting in a monthly total of 93g of waste generated per person. In FY 2005, we plan to promote further evolution of resources utilization activities.



Energy Conservation Activities

The following measures were taken through a collaborative project involving an energy conservation committee with representatives from each department, which led to the reduction in the amount of energy use:

1. Reduction of the electric power used when the plant is in operation on days off.
2. Reduction of the energy used while the plant is not in operation, such as break times and shift changes.
3. Identification and implementation of energy-conserving technical items with the cooperation of "NESCO", the special team that aims for the promotion of company-wide, cross-sectional energy conservation.
4. Raising employee awareness through PR activities such as holding hands-on events for energy conservation.

Environmental Risk Reduction Activities

Because the Yokohama plant, which is surrounded by the sea, make a special effort to improve the quality water drained from the plant. We aim to reduce the COD in the drain to a present half as shown in "Agreement of environmental preservation" with Yokohama city.

Then we added a biological treatment process to one of our wastewater treatment facilities in FY 2004. We plan to develop this process at other plants in FY 2005 in our continuative efforts to improve water quality.

FY 2004 Objectives and Results

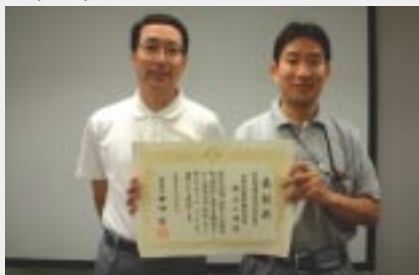
| Objective | Target | Result | Comment |
|--|---|--------|--|
| Environmental preventive measures | Zero environmental accident* | + | Regular environmental measurement on; • States of compliance with regulations • Operational states of plant facilities Promotion of environmental education |
| Energy conservation | Reduction in amount of heat 120,000 GJ/year | + | Starting by reducing the use of electric power on days off, achieved excellent results in the reduction of energy due to overall activities at the plant and energy conservation project activities. |
| Zero emission of waste | Achievement to "Zero" incinerated waste | + | We achieved "zero" amount of incinerated waste in FY 2004 and reduced the amount of household waste to 93g per person per month in accordance with our "zero emission achievement declarations." |
| Reduction in use of hazardous chemical substances | Reduction in chemical use; verification of chemicals prior to use (efforts for non-chlorinated, etc.) | + | Made efforts to reduce the use of chemicals and switch to less harmful products through innovations in the manufacturing process and verification of chemicals prior to use. |
| Cooperation and coexistence with local communities | Guest Hall/engine museum management | + | The Guest Hall came the second anniversary in establish. The number of visitors at this year was approximately the same as last year. |
| | Summer Festival/plant open house | + | These are regular annual events jointly held with the community |
| Creating a corporate culture that values the environment | Implementation of "Director Patrols" (once a month) | + | Held monthly to prevent environmental accidents and raise plant-wide environmental awareness. |

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

Communication with the Community

Yokohama City Environmental Preservation Grand Prix Award

Last year we won the "Community Relations Plant Award." This year, for the second year in a row, we were recognized for our environmental education and zero waste emissions activity in connection with the "One Employee, One Month, One Hundred Grams" initiative, and received the "Yokohama City Environmental Preservation Grand Prix Award." Starting with our "resources utilization activities," we plan to continue to proactively carry out environmental efforts.



Lecture on Waste Reduction

In the training association, which is sponsored by the Resource and Waste Recycling Bureau of Yokohama City, we introduced the efforts on waste reduction in the company and the activities at Yokohama Plant to the self-governing bodies in local.



Nissan Summer Festival Environmental Booth Exhibition, Yokohama City

In connection with Yokohama City's "Yokohama G30" waste reduction plan, we have made proactive efforts to reduce the amount of waste in the area through recycling. Resources and Waste Recycling Bureau of Yokohama City and local members of the community participated in the NISSAN Summer Festival, providing us with an opportunity to support the "Yokohama G30" initiative.



Environmental Data

Air Quality (Air Pollution Control Law and ordinances)

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

| Substance | Facility | Air Pollution Control Legal Limit | Measured Value |
|---------------|------------------|-----------------------------------|----------------|
| NOx | Boiler | 150 | 42 |
| | Paint oven | 230 | 29 |
| | Gas engine | 300 | 26 |
| | Heating furnace | 180 | 50 |
| | Melting furnace | 180 | 50 |
| Soot and dust | Boiler | 0.05 | 0.002 |
| | Paint oven | 0.1 | 0.003 |
| | Gas engine | 0.04 | 0.001 |
| | Heating furnace | 0.1 | 0.022 |
| | Melting furnace | 0.1 | 0.014 |
| Dioxins | Aluminum furnace | 5 | 0.4 |

*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 | Wastewater Pollution Control Legal Limit | Measured Value | | |
|--------------------|--|----------------|---------|---------|
| | | Maximum | Minimum | Average |
| pH(-) | 5.8-8.6 | 7.7 | 6.8 | 7.2 |
| COD* | 60 | 20 | 2 | 11.13 |
| COD (total) (Kg/d) | Area 2 | 64.8 | 38 | 3.0 |
| | Area 3 | 92.1 | 80.1 | 8.0 |
| | Area 4 | 7 | 1.8 | 0.2 |
| BOD* | 20 | 20 | 2 | 11.3 |
| SS*2 | 20 | 13 | ND | 4 |
| Oil* | 5 | 2 | ND | 1 |
| Copper | 3 | 0.09 | ND | 0.02 |
| Zinc | 3 | 0.28 | ND | 0.09 |
| Fluoride | 8 | 0.7 | ND | 0.3 |
| Soluble iron | 10 | 0.6 | ND | 0.3 |
| Soluble manganese | 1 | 0.2 | ND | 0.1 |
| Total nitrogen | 30 | 16 | 5.9 | 1.1 |
| Total phosphorous | 8 | 0.4 | ND | 0.1 |
| Dioxins (pg-TEQ/L) | 10 | 0.00083 | 0.00083 | 0.00083 |

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

• ND indicates below minimum quantifiable limits.

*More strict than what is required by independent supervision.

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 | 287 | 0 | 0.86 | 0 | 0 | 36 | 0 | 250 |
| 16 | 2-Aminoethanol | 14 | 0 | 5 | 0 | 0 | 0 | 9 | 0 |
| 40 | Ethyl benzene | 23,974 | 20.5 | 0 | 0 | 0 | 0 | 23,954 | 0 |
| 63 | Xylene | 111,506 | 56 | 0 | 0 | 0 | 0 | 111,451 | 0 |
| 227 | Toluene | 213,758 | 852 | 0 | 0 | 0 | 0 | 212,906 | 0 |
| 230 | Lead and its compounds | 176 | 0 | 0 | 0 | 0 | 11 | 0 | 165 |
| 232 | Nickel compounds | 237 | 0 | 5.7 | 0 | 0 | 151 | 0 | 81 |
| 272 | Bis (2-ethylhexyl) phtalate | 4,471 | 0 | 156 | 0 | 0 | 0 | 4,315 | 0 |
| 299 | Benzene | 15,696 | 127 | 0 | 0 | 0 | 0 | 15,570 | 0 |
| 304 | Boron and its compounds | 62 | 7.3 | 25 | 0 | 0 | 29 | 0 | 0 |
| 309 | Poly (oxyethylene) nonyl phenyl ether | 5,477 | 0 | 190 | 0 | 0 | 0 | 5,287 | 0 |
| 311 | Manganese and its compounds | 4,369 | 0 | 0 | 0 | 0 | 0 | 0 | 4,369 |
| 346 | Molybdenum and its compounds | 81 | 0 | 0 | 0 | 0 | 81 | 0 | 0 |
| 179 | Dioxins | 10.9 | 10.9 | 0.0011 | 0 | 0 | 0 | 0 | 0 |
| Total | | 380,121 | 1,073 | 383 | 0 | 0 | 309 | 373,490 | 4,864 |

*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



MR18DE Engine (installed in the TIIDA Latio)

VK45 Engine (installed in the Cima)

Nissan Motor Co., Ltd.

[For inquiries, please contact]

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