

CSR Report of Ibaraki Plant

Production of high-pressure hoses, sealing materials **Business activities:**

Total site area: 152,000 m²

Number of employees: 290 (as of March 2010)

1 Hatori-Nishi, Omitama City, Ibaraki 319-0198, JAPAN Location:

Tel: +81-299-46-1111



Message from the General Manager



Yasuhiko Tajima

The Ibaraki Plant commenced operations in 1973. At that time, it was the largest facility in Japan dedicated solely to production of high-pressure hoses. Since 1997 we have also been making sealing materials for the construction industry. In our bid to be respected as a top-level environmentally responsible enterprise in line with the GD100 medium-term management plan of the Yokohama Rubber Group, we are pursuing a range of environmental initiatives, particularly with regards to reducing energy consumption and industrial waste output and working towards Zero

Emissions targets. We have had significant success in reducing energy consumption via a combination of equipment modifications and minor but effective strategies such as spraying water over factory roof areas, fixing steam and air leaks, and shading external air-conditioner units with reed screens and hanging plants.

In 2008, the Ibaraki Plant was recognized as a model recycling plant by Ibaraki Prefecture, and this prompted a renewed commitment to continue our efforts to achieve the Zero Emissions targets. We are also dedicated to engaging with the local community through participation in local events and activities, which we hope will help to improve awareness of and appreciation for the work of the Ibaraki Plant.

Here at the Ibaraki Plant, we want to be a top-level environmentally responsible enterprise that is both respected and admired throughout the region. To this end, we are strengthening our environmental management systems and galvanizing the entire workforce in helping to minimize pollution and improve the environment on an ongoing basis.

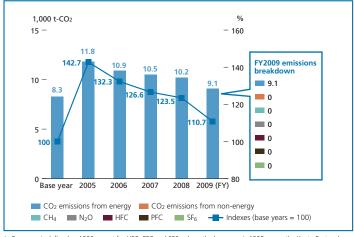
Environmental Initiatives

Environmental Policy in FY 2010

- (1) To manifest world-class strengths in technologies for protecting the environment, the Ibaraki Plant incorporates environment-friendly measures in all business activities.
- (2) In order to be a plant that is trusted, we work to improve our environmental management, and endeavor continuously to prevent environmental pollution and improve the environment.
- (3) In order to make the plant one of the best in the world, we will do everything we can do to improve to environment.
- (4) We promote waste reduction, recycling and green purchasing for energy and resources conservation as a means to combat global warming.
- (5) We observe applicable laws and regulations, and agreements, and carry out environmental preservation efforts accordingly.
- (6) In carrying out our environmental policies, we have set environmental targets and goals, and are working on them systematically
- (7) We review the policies, purpose and targets once a year.
- (8) We educate and enlighten our employees and all people working for the plant so that they fully understand the plan, and to improve their own awareness and actions.
- (9) We strive to live and prosper with the local community, in harmony and fusion with nature.
- (10) Our environmental policies are available to the public on request.

Combined greenhouse gas emissions and their indices (base years = 100)

Steady decline since FY2005.



Base year is defined as 1990 except for HFC, PFC and SF6, where the base year is 1995 as per the Kyoto Protocol Base year's defined as 1990 except for FIFC, FFC, and SFo, where the base year's 1995 a per the Ryoto Protocol Greenhouse gases (GHG) calculated in accordance with the Calculation and Reporting Manual for Greenhouse Gas Emissions (Ministry of the Environment, Ministry of the Economy, Trade and Industry). Note that GHG emissions associated with purchased power in FY2009 were calculated using the table of Emission Coefficients by Power Company (Ministry of the Environment). Calorific heating values and emission coefficients have been revised in accordance with March 31, 2010 amendments to the Act on the Promotion of Global Warming Countermeasures.

PRTR substances

(Unit: tons/year) Safety Evaluation: VII-5 Toxicity Annual Converted Rank (effect on people) Rope Transfer (effect Specified chemical substance 30 Bisphenol A type epoxy resin (liquid) 0.000 0.104 2.005 176 Organic tin compounds 3.048 0.184 0.000 272 Bis (2-ethylhexyl) phthalate 1.657 0.000 0.134 338 m-tolylene diisocyanate 19.883 0.000 0.404 1.044 227 Toluene 1.044 1.044 0.000 10.44 D 27.637 1.044 0.826 10.44

Air-quality-related data (major facilities)

Facility	Substance	Regulation	Self- imposed control value	FY2009 result		
	Substance			Average	Maximum	Minimum
Ibaraki Plant Boiler	Sulfur oxide (K-value) Nitrogen oxide density (ppm) Soot and dusts density (g/m³N)	10 250 0.2	0.28 119 0.014	0.12 59 0.0035	0.13 68 0.004	0.11 51 0.003

According to the Air Pollution Prevention Law and the Environmental Pollution Prevention Agreement with Minori Town.

Incinerators were phased out in July 1999.

^{*1:} Amounts of 1 ton or more are listed (excluding dioxin). As for substances designated as Class 1 Specified Chemicals such as benzene, amounts of 0.5 tons or more are listed

^{*2:} Emission = Air + public water + soil

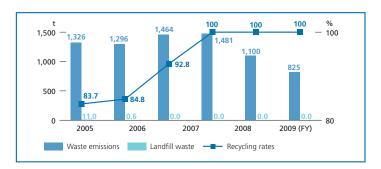
^{*3:} Transfer = Waste + public sewage

Environmental Initiatives

■ Waste output

The preliminary Zero Emissions target of less than 1% emissions was achieved in FY2005. Total Zero Emissions was achieved in FY2006 and has been maintained ever since.

The 100% target for recycling and reuse of resources was achieved in FY2007 and has been successfully maintained since.



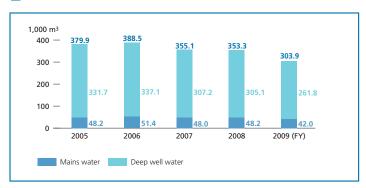
■ Water-quality-related data (major facilities)

BOD levels exceeded our voluntary standards on one occasion. The increase in BOD was attributed to the lipolytic agent used to break down oils that rise to the surface in the oil separator. Though used in diluted form, the lipolytic agent, which contains a high proportion of organic substances in the form of palm oil fatty acids, had been added to the separator still at a high concentration. This caused a spike in BOD and COD concentrations in the periodic factory wastewater sample taken on August 5. We have taken steps to prevent a repeat of this problem by rectifying the cause of the oil leak.

Drain	Substance	Regulation	Self-imposed control	FY2009 result		
Drain			value	Average	Maximum	Minimum
Ibaraki Plant	PH BOD density (mg/l) COD density (mg/l) SS density (mg/l) Oil density (mg/l)	5.8 - 8.6 10 10 15 3	7.0 - 8.2 4.2 5.4 3.5 0.8	7.7 1.8 2.1 1.2 0.5	8.1 4.5 4.9 3.2 0.8	7.4 1.0 1.0 1.0 0.5

 $^{^{\}star} \ \text{According to Ibaraki Prefectural regulations and the Environmental Pollution Prevention Agreement with Minori Town.}$

Use of water



Working with Local Communities

Feedback received during FY2009

No feedback was received during FY2009.

Blood donation drive and donations to the Red Cross Fund

(1) April 2009 On-site blood donation drive (27 contributors) (2) November 2009 On-site blood donation drive (17 contributors) (3) August 2009 Donation to the Ibaraki chapter of Red Cross Japan (¥10,000)

Traffic safety and 5 S's campaign

Permanent traffic safety supervisors

• Students from the local Hatori Elementary School are supervised by Ibaraki Plant employees on their way to and from school.

5 S's in the local region

- We strive to meet and greet local residents, and are dedicated to keeping the front entrance area tidy and rubbish-free.
- Clean-up days are organized every month by section managers on a rotating roster to tidy up the roadside area from the front of the factory to the level crossing on the JR Joban line.





Hamatite clean-up day





Roadside clean-up day

Working with Local Communities

Educational programs and community use of facilities

- (1) February 2010: "Preparing for Working Life" presentation by Ibaraki Chuo High School (3 R's, etc.)
- (2) July September 2009: Factory tours for local high school students focusing on production management (42 participants)



Factory tour

- (3) Factory tour for representatives from the Chamber of Commerce (22 participants)
- (4) February 2010: Factory tour and classroom sessions for Noba Elementary School students (52 participants)



Classroom session

(5) Baseball ground on plant site used by local clubs (three times per month x 12 months = 36 times)

Contributing to the local community

July 2009	Donation to the Minori Taiko Supporters' Fund	Minori Taiko Supporters' Fund		
September 2009	Donation of 15 hats to the Omitama Industry Fair	City of Omitama		
September 2009	Donation of 40 packs of five CB notebooks to the Hatori Elementary School Sports Day	Hatori Elementary School		
September 2009	Sponsorship of the Minori Kindergarten Sports Day (notebooks)	Minori Kindergarten		
October 2009	Advertising in the program of the 28th Farm Village Festival	Farm Village Festival Organizing Committee		
November 2009	Sponsorship donation to the 26th Festival of the Takaba Meeting Center	Takaba District		
November 2009	Donation to the Agricultural Promotion Fund of the Ibaraki Conference of Agricultural and Farmers' Groups	Ibaraki Conference of Agricultural and Farmers' Groups		
February 2010	Representation at the conference on Traffic Safety Study Session	Conference on Traffic Safety		

Omitama Marathon

Employees from the Ibaraki Plant took part in the Omitama Marathon in February 2010, thereby contributing to activities in the local region.



Marathon runners from Ibaraki Plant



Heading towards goal in the Omitama Marathon



The second phase of planting took place on May 26, 2009. Some 80 employees helped to plant 2,800 seedlings that they had cultivated from acorns.





Employee perspective: Noboru Asaba

After learning that that our own company is diligently conducting tree-planting projects in Japan and overseas to protect global resources, my desire to help the environment in any small way possible grew. I want to "return the favor" for all the gifts we continuously receive from the Earth.