

CSR Report of Onomichi Plant

Business activities: Production of tires for off-road construction vehicles
Total site area: 193,000m²
Number of employees: 405 (as of December 31, 2011)
Location: 20 Higashi-Onomichi, Onomichi City, Hiroshima 722-0051, JAPAN

Contact for consultation and complaints:

Plant Control Section
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Message from the General Manager



Matsutaro Maeda

The Onomichi Plant is dedicated exclusively to large construction / mine vehicle tires. We have always advanced effective use of production resources and made efforts to reduce and recycle industrial waste in order to become a company that is kind to the global environment and admired by the region. In 2009 we achieved a recycling rate of 100% and continued to achieve that target in 2011. We will continue to advance further reductions in the generation of industrial waste and elimination of energy waste and continue around-the-clock improvements to become a company that is kind to the global environment and achieve the basic policy of the Mid-Term Management Plan for 2017, when the Company celebrates its 100th

anniversary, becoming “a company having world-class strengths in technologies for protecting the environment”.

On the other hand, as part of our contributions to local communities and communication activities, we will promote such projects as opening to the public a “Dinosaur Park” on the premises of the plant, receiving plant visits by children and students, actively participate in regional cultural activities and events and actively contribute to the environment by advancing the YOKOHAMA Forever Forest project, etc.



OR Tires



Advancement of Environmentally Friendly Management

Environmental management

The plant executed pollution control agreements with Hiroshima Prefecture and Onomichi City and placed top priority on observance of agreement targets. We also make efforts to extract, implement countermeasures and improve places where environmental risks occur by environmental risk management.

As for CO₂ emissions reduction, we implemented “Green Curtain” making from FY2011 and the project received a commendation from the Mayor of Onomichi City.

In order to build up the ISO14001 Management System, we increased the planned number of internal auditors and now 77 internal auditors are registered and we intend to increase the number in the future.

Onomichi Plant Environmental Policy

Yokohama Rubber Corporation aims to be “a company having world-class strengths in technologies for protecting the environment”.

- (1) The Onomichi Plant addresses measures in consideration of the environment in all of its activities.
- (2) The Onomichi Plant has strengthened its Environmental Management System in order to become a plant trusted by local communities and continues to advance management with a proactive stance in order to prevent environmental pollution and improve the environment.
- (3) The Onomichi Plant continues its education and enlightenment programs so that each one of its employees and members understands the Policy and acts accordingly.
- (4) Toward realization of a low carbon society, the Onomichi Plant will promote prevention of global warming, energy savings and recycling of resources.
- (5) The Onomichi Plant will maintain and continue reductions of industrial waste and 100% recycling of resources to contribute to the realization of a resource saving society.
- (6) In order to realize the Environmental Policy, the Onomichi Plant sets environmental objectives and targets and will carry these out as planned. Environmental objectives and targets and the plan will be reviewed once a year.
- (7) The Onomichi Plant complies with related laws and regulations and agreements, etc., and makes efforts toward environmental preservation aiming at harmony with local communities and contributions to local communities and society.
- (8) The Onomichi Plant will continue to promote the YOKOHAMA Forever Forest project and build up a disaster prevention base in the region and evergreen forests to contribute to environmental protection of the Seto Inland Sea and conservation of biodiversity.
- (9) The Policy will be published at the request of the public.

January 1, 2012

Matsutaro Maeda
 General Manager,
 Onomichi Plant

Environmental data

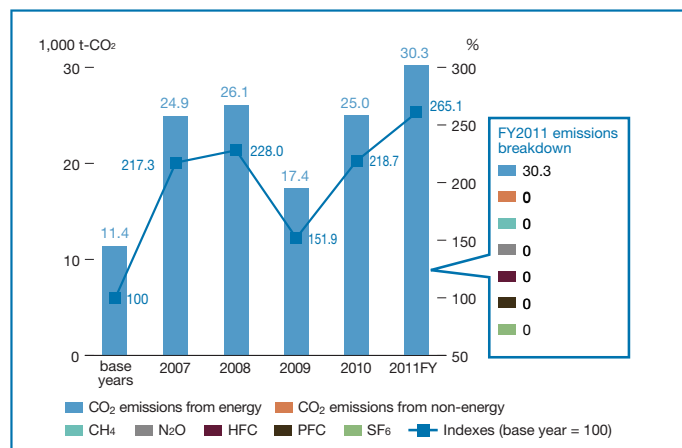
■ Reduction of greenhouse gas emissions

• Energy usage

Main energy usage consists of electricity and heavy oil and city gas for boiler fuel.

• Greenhouse gas emissions

Electricity accounts for 57%, heavy oil 42%, city gas 0.5%, and other fuels for vehicles, gas and propane gas account for 0.5% of the total emissions. In order to reduce the environmental load, we promote reduction activities by turning boiler fuel into city gas and reductions of greenhouse gas emissions and setting reduction targets for greenhouse gas emissions (total amount).

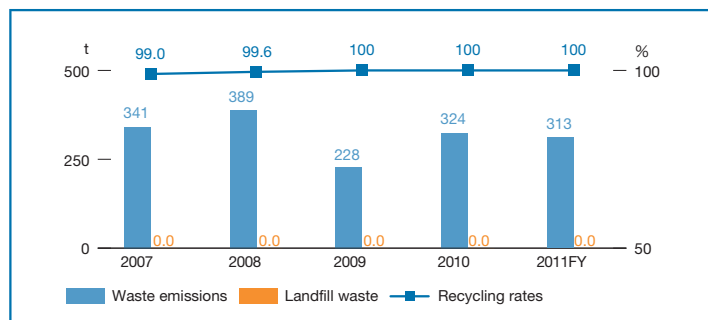


* Base year is defined as 1990 except for HFC, PFC and SF₆, where the base year is 1995 as per the Kyoto Protocol.
 * Greenhouse gases (GHG) calculated in accordance with the Calculation and Reporting Manual for Greenhouse Gas Emissions (Ministry of the Environment, Ministry of the Economy, Trade and 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).
 * In FY2011, as the closing of accounts period was April to December, it is counted for January to December, by duplicating the data for January to March.

■ Effective use of resources/ Reduction of waste

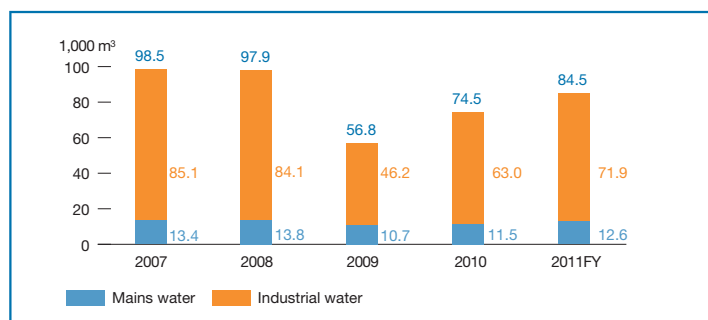
• Waste output

From 2009, the Onomichi Plant has maintained a recycling rate of 100%.



• Use of water

The Onomichi Plant collects industrial water from the Numatagawa River water system (river water) flowing in Hiroshima Prefecture. Water is collected from the city waterworks of Onomichi City. For the purpose of water usage reductions, we have implemented improvement measures by setting reduction targets.



■ Measures for discharge into water, air and soil

• Data related to water contamination

Rainwater is discharged into public water areas and discharge amounts are managed. Life system water is discharged into the sewage system of Onomichi City.

In FY2011, in order to prevent environmental pollution of public water areas, we carried out improvements in installation of emergency shutoff valves at two points of the rainwater drainage channel outlets. In order to strengthen management of the water quality regulation discharge targets from the sewage system, we improved out continuous PH and water temperature monitoring system by installing an adjustment tank at the final discharge outlet.

Substance	Regulation	Self-imposed control value	FY2011 result		
			Average	Maximum	Minimum
PH	More than 5-less than 9	5 or more - 8.7 or less	72	8.9	6.9
BOD density(mg/l)	Less than 600	Less than 465	122	280	8.8
COD density(mg/l)	Less than 600	Less than 200	57	160	22
SS density(mg/l)	5 or less	Less than 2.0	1	1	1
Oil density(mg/l)	30 or less	Less than 29.0	12	47	1

* Regulation targets are in compliance with the Onomichi City Sewage System Ordinances

• Soil contamination

Components of underground water are autonomously measured once a year to monitor the status of soil contamination.

• Air pollutants (NO_x, SO_x, Soot and Dust)

Measurement is made by boiler twice a year to monitor pollutant emission amounts.

In FY2011, fuel of the No. 2 Boiler was changed from heavy oil A to city gas. In FY2012, we will change the fuel of the No. 1 Boiler to city gas in order to reduce emissions of hazardous substances and greenhouse gas.

Substance	NO _x	SO _x
Amount of emission (t/year)	4	16

Facility	Substance	Regulation	Self-imposed control value	FY2011 result		
				Average	Maximum	Minimum
Onomichi Plant Boiler 1	Sulfur oxide emissions (m ³ N/h)	5.00	Less than 0.68	0.19	0.20	0.18
	Nitrogen oxide density (ppm)	200	Less than 123	90	110	70
	Soot and dusts density (g/m ³ N)	0.100	Less than 0.011	0.0065	0.011	0.002
Onomichi Plant Boiler 2	Sulfur oxide emissions (m ³ N/h)	3.68	Less than 0.008	0.0163	0.023	0.0095
	Nitrogen oxide density (ppm)	150	Less than 120	84	93	74
	Soot and dusts density (g/m ³ N)	0.100	Less than 0.05	0.0025	0.003	0.002

* In compliance with the Air Pollution Control Act and Pollution Control Agreements with Hiroshima Prefecture and Onomichi City.

Report of the status of management of chemical substances (response to PRTR Law)

Once a year, we report to the national government (Prefecture) the subject substances of which the handling amount is more than the standard amount provided by the PRTR Law.

Designated No.	Specified chemical substance	Amount to treat *1	Emission *2	Transfer *3	Safety Evaluation:IV-4			
					Toxicity Rank (effect on people)	Annual Converted Emissions (effect on people)	Toxicity Rank (effect on ecosystem)	Annual Converted Emissions (effect on ecosystem)
86	cresol	0.660	0.000	0.006	B	0.0	C	0.0
132	cobalt and its compounds	0.973	0.000	0.008	A	0.0	—	0.0
155	N-(cyclohexylthio)phthalimide	3.240	0.000	0.028	D	0.0	B	0.0
230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	262.500	0.000	2.244	D	0.0	B	0.0
258	1,3,5,7-tetraazatricyclo[3.3.1.1 ^{3,7}]decane, hexamethylenetetramine	4.898	0.000	0.042	—	0.0	—	0.0
300	toluene	0.520	0.450	0.000	C	4.5	C	0.5
333	hydrazine	0.342	0.342	0.000	A	342.0	B	34.2
372	N-(tert-butyl)-2-benzothiazolesulfenamide	94.080	0.000	0.804	B	0.0	A	0.0
392	n-hexane	2.871	2.483	0.000	C	24.8	—	0.0
405	boron compounds	0.010	0.000	0.000	D	0.0	—	0.0
438	methylnaphthalene	52.482	0.262	0.000	—	0.3	—	0.0
Total		422.576	3.537	3.132		371.592		34.650

*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



Safe and Healthy Workplace Environment

Occupational safety and health

We carried out activities for acquisition of Occupational Safety and Health Management System (OSHMS) certification in FY2011, and acquired certification on January 20, 2012 and we will remove dangers and hazards by thoroughly conducting risk assessments.

Education and training for employees

- We conduct sensory training of all employees (including responsible managers) (once a month).
- Responsible managers provide employees with person-to-person education (once every three months).
- Employees regularly attend emergency rescue seminars (40 to 50 persons a year).

* As of December 2011, 128 persons attended.

Responses in case of disasters

- We organized a self-protection fighting force with the members of the plant and conduct evacuation drills for all employees of the plant once a year and from FY2011, we have conducted tsunami evacuation drills once a year.
 - We conduct night evacuation drills for all shifts.
- Emergency contacts and emergency evacuation routes are posted at every process of the plant to make thoroughly known to all employees.



Onomichi Plant Safety and Health Policy

Basic Policy

With recognition that the securing of safety and health of employees and members are the foundations of corporate activities, by proper application of the Management System, we aim at realizing zero disasters and a comfortable workplace by making a zero danger workplace by each employee placing priority on safety.

Safety and Health Policy

- (1) Each employee and member places priority on safety, clarifies risks by employees at all positions and managerial ladders participating and acting and improves safety and health activities aiming at a zero danger workplace.
- (2) By proper implementation and operation of the Occupational Safety and Health Management System (OSHMS), run PDCA to visualize and eliminate potential dangers related to work and equipment and continue to reduce risks.
- (3) Complying with related laws and regulations, including the Labor Safety and Health Law and secure the safety of employees based on the internal regulations and standards.
- (4) With an understanding that "Arrangement and consolidation is a basis for safety & health", managers and supervisors lead promotion of 2S.
- (5) Form good communications and build up culture by managers and supervisors calling out to each employee.
- (6) Promote a comfortable work environment and make efforts for health care to alleviate fatigue and stress of employees and maintain and improve mental health.
- (7) Make thoroughly known to all employees and members the importance of safety and health and conduct necessary education and training and certification of ability.
- (8) Make efforts to prevent traffic accidents as a company playing a role in the automotive industry.

January 1, 2012

Matsutaro Maeda

General Manager, Onomichi Plant



Safety and Quality of our Products and Services

Communication with customers

We always accept plant visits by client manufacturers and dealers and have them visit the manufacturing site and confirm the quality of products.

Response to complaints

If any information related to nonconformity arises in the market, we collect the actual item and conduct analysis of the tire to investigate the cause.

Results are reported to the customer via the department in charge. Many of the nonconformities are caused by use conditions, but if they are caused by manufacturing factors or design factors, we make an effort to prevent recurrence by quickly carrying out countermeasures.



Human Rights and Labor Practices

Respect for human rights

In order to create a workplace where employees can work cheerfully, happily and energetically, we maintain close collaboration with the Compliance Promotion Office regarding harassment and if any problem occurs, we will promptly respond.

Promotion of employment of people with disabilities

Four disabled persons are engaged in operations of the plant. We continue to recruit disabled persons.

Relationship with business partners

For business partners, we determine whether there are any problems related to doing business with them, such as human rights problems.



Credibility with our Business Partners

Communication with business partners

In collaboration with the Materials Procurement Department and Raw Materials Procurement Department, we collect opinions and requests from business partners and make efforts to respond to them. We also respond to the questionnaires of business partners.



Stakeholder Communication

Relationship with local societies

We open to the public Dinosaur Park from 9:00 a.m. to 4:30 p.m. every day as a place of recreation for people in the region. In July 2010, we installed a restroom exclusively for visitors to Dinosaur Park (corresponding to wheelchairs) allowing visitors to spend a more comfortable time. In FY2011, a total of 1,973 persons visited the Park.



Factory tour and workshop

We accept requests for factory tour from schools and companies from time to time.

Holding Day: Day when plant is in operation: from Monday to Friday
(Except for year end and New Year holidays, consecutive holidays in May and August)

Hours: 9:00 a.m. to 3:00 p.m.

Inquiries: Onomichi Plant, Operation Section Tel: +81-848-46-4580



Corporate Governance and Compliance

Responsible managers provide compliance education for employees (once a month)

Corruption prevention

We strictly respond to corruption.