

Head Office and Hiratsuka Factory (HQ-Hp)

In March 2023, we relocated and integrated our head office functions from Minato-ku, Tokyo to the Hiratsuka Factory for the purpose of improving operational efficiency and reforming work styles by consolidating functions.

Business activities (Hp)

Design, basic research, development and evaluation of aircraft parts, sporting equipment, adhesives and sealants, conveyor belts, marine hoses, fenders and other industrial products



Total site area

255,656 m² (including Adhesives and Sealants Plant)

Number of employees (HQ-Hp)

2,454 (as of March 2023)

Location (HQ-Hp)

2-1, Oiwake, Hiratsuka City, Kanagawa 254-8601, JAPAN

Contact for consultation and complaints

General Affairs Group, Hiratsuka Facilities Dept. Tel: +81-463-35-9501 Fax: +81-463-35-9746

Message from the General Manager



Tomoaki Miyamoto

While continuing to serve as a “base for the dissemination of technologies and monozukuri manufacturing expertise throughout the Yokohama Rubber Group,” the Hiratsuka Factory is also aiming to be a “factory that maintains the affection and unwavering trust of both customers and the community,” in line with Yokohama Rubber’s CSR Vision. Within this strategic framework, in the environmental sphere the Hiratsuka Factory is focusing in particular on reducing leakage and noise pollution, which can have a pronounced negative impact on the local environment, to zero, while in regard to safety the Hiratsuka Factory will be striving to eliminate accidents that are serious enough to require employees to take time off work, by ensuring that everyone who works at the Hiratsuka Factory puts safety first; in addition, as a factory belonging to a company that plays a key role within the automotive industry, the Hiratsuka Factory will also be seeking to reduce road accidents in which people are injured to zero. In terms of disaster prevention, we are working to improve the level of fire and disaster prevention based on our internal guidelines, and to build a BCP to prepare for

disasters as a priority issue.

Furthermore, in every aspect of our business operations our actions will embody not only strict adherence to compliance-related regulations, we also act with the motto of "coming home with a smile every day" with an awareness of compassion for people, customer satisfaction, employee satisfaction and social contribution.

In FY2022, as in the previous year, activities will continue to be conducted within COVID-19, and unfortunately we have had to cancel various events that serve as opportunities for exchange. Despite these circumstances, we are continuing to carry out steady activities within the company, such as seedling cultivation at the Millennium Woods.

We have also completed the relocation of our head office in March 2023.

We will make preparations for the new office to be appreciated by employees and customers who commute to Hiratsuka, as well as by the local community.

We will also continue to engage in various CSR activities to contribute to the development of the Hiratsuka area.

Organizational Governance

Publicizing and sharing policies and issues

In that it represents a combined location, the Head Office and Hiratsuka Factory hosts multiple business departments, production plants and R&D facilities. Close attention is thus paid to thoroughly publicizing policies and issues that involve the entire company. We also strive to improve communication.

We strive for smooth plant management by making the director's policies and safety and environmental policies known at the morning meeting each term, and by making various performances known and sharing topics, etc. at the monthly plant meeting.

Improved functionality through management systems

We appropriately operate safety and environment in accordance with OSHMS and ISO 14001 management systems. We also implement continuous improvement through the PDCA cycle in the management system.

Human Rights

We provide opportunities for all employees to take compliance studies and learn about respect for human rights.

In addition, the Corporate Compliance Department has distributed to each employee a compliance card that describes the "Action Guidelines" to be followed by all employees of the Yokohama Rubber Group, in order to raise the level of awareness of respect for human rights.

Labor Practices

To ensure compliance with laws and regulations, we conduct monthly compliance training for each department, striving to increase employee knowledge and awareness.

In addition, in order to realize appropriate working hours, labor and management check working hours, etc., and the top management of labor and management conducts patrols to ensure proper management of work styles.

Furthermore, to improve the workplace environment, labor and management discuss items for improvement and promote improvements. In response to COVID-19, remote work is encouraged and a remote work environment has been created. Through these various measures, we are continuing to create an environment in which employees can work with peace of mind.

Promotion of gender equality

In fiscal 2022, the ratio of female staff in career-track positions stood at 21.2%.

We will continue to promote the hiring of female employees and promote work-life balance through the use of childcare leave and shorter working hours, the use of hourly paid leave system, flextime system and telecommuting system.

Promotion of employment of people with disabilities

As of the end of December 2022, the employment rate of persons with disabilities was 3.23%.

We will continue to promote the employment of people with disabilities and work to create a workplace environment where people with disabilities can work with vigor and enthusiasm.

Occupational safety and health management

Since the Hiratsuka Factory acquired Occupational Safety and Health Management System (OSHMS) certification in July 2010, we have conducted OSHMS-based occupational safety and health management. This work has been mainly built around continuous risk assessment and KY (Hazard Prediction) activities, etc.

When new operational processes are introduced or changes are made to existing operations, we hold “open work observations,” which allow many employees to witness work practices and identify hidden risks. We do this so as to further work improvement that makes work practices even safer.

Furthermore, we comply with safety and health statutory requirements, and proactively promote both employees’ acquisition of qualifications and educational activities. We also work to develop human resources and prevent disasters.

Traffic Safety

In order to reduce the number of traffic accidents, we provide traffic safety guidance and conduct road safety seminars for all employees twice a year. Each month, we conduct traffic safety education and other activities at each workplace.

Furthermore, three times a year before long vacations, we raise awareness of traffic safety by showing an educational video about traffic safety in the cafeteria during lunch time. We are aware of our responsibility as a company that plays a part in the automotive industry, and are working to prevent traffic accidents.

Health management

We follow up to ensure that 100% of our employees receive the various medical examinations required by law, including regular medical checkups and special medical checkups.

We also provide mental health care to employees who have concerns about their work or private lives by offering counseling opportunities by Industrial counselors.

COVID-19 infection control measures were continued to prevent the spread of infection within the company.

The Environment

Environmental management

The Hiratsuka Factory continues to operate environmental management based on ISO 14001 environmental management system certification, which was acquired in July 1999.

From fiscal 2012, it converted to an environmental management system integrating the entire company as one site of Yokohama Rubber. We will continue to deploy activities based on the company-wide environmental policy.

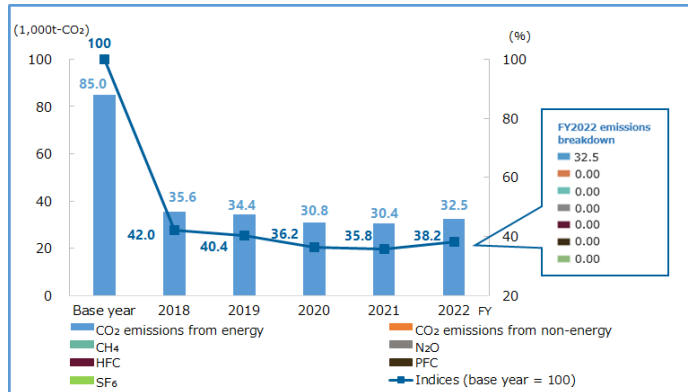
As the Hiratsuka Factory holds a wide range of business organizations, from plants with different production methods to the technical research and development department of the entire company, it divides them into 10 environmental blocks to advance daily environmental improvement activities under the Hiratsuka Factory Environmental Policy in compliance with the company-wide environmental policy.

Environmental data

Reduction of greenhouse gas emissions

Greenhouse gas emissions

Hiratsuka Factory



※The base year is defined as 1990 except for HFC, PFC and SF₆, where the base year is 1995 as per the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the "Calculation and Reporting Manual for Greenhouse Gas Emissions" issued by the Ministry of the Environment and the Ministry of 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).

Effective use of resources / Reduction of waste

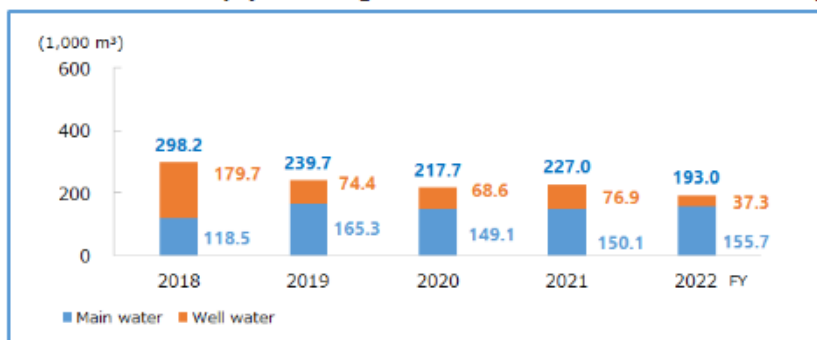
Waste output

Hiratsuka Factory



Water Usage

Hiratsuka Factory (including the Adhesives and Sealants Plant)



Measures for discharges into water, air and soil

Data related to water contamination

Drain	Item	Regulatory values	Voluntary standard values	FY2022 results		
				Average	Maximum	Minimum
Hiratsuka Factory	pH	5.0~9.0	5.18~8.7	7.8	8.3	7.3
	BOD concentration (mg/l)	600	430	55.25	100	18
	SS concentration (mg/l)	600	190.0	48	86	16
	Animal and plant oil concentration (mg/l)	30	15.0	6.4	27	1
	Mineral oil concentration (mg/l)	5	3.1	1	1	1

※In accordance with the Hiratsuka Municipal Sewerage Ordinance.

Air pollutants (NOx, SOx)

Substance	NOx emissions (t/year)	SOx emissions (t/year)
Hiratsuka Factory	2	—


Facility	Substance	Regulatory values	Voluntary standard values	FY2022 results		
				Average	Maximum	Minimum
Hiratsuka Factory Boilers 1	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	22 4.4	22 4.4	22 4.3
Hiratsuka Factory Boilers 2	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	22.5 4.5	23 4.5	28 4.4
Hiratsuka Factory Boilers 3	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	22 4.8	23 4.9	21 4.7
Hiratsuka Factory Boilers 4	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	23 4.9	24 5.1	22 4.6
Hiratsuka Factory Boilers 5	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	23 4.4	23 4.6	23 4.2
Hiratsuka Factory Boilers 6	Nox (ppm) Soot and dust (g/h)	150 635.4	31.0 51.9	23 4.7	23 4.9	23 4.5

※In accordance with the Air Pollution Prevention Law and Kanagawa Prefectural Ordinance.

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Hiratsuka Factory verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.

Regarding the handling of substances pursuant to the PRTR Law, please refer to

 [the Safety Evaluation Table of Domestic Production Bases.](#)

Pollution prevention

We have established self-administered values that are even stricter than regulated targets so as to strictly observe all environmental laws and ordinances concerning air pollution, water contamination and noise, etc. We take steps to monitor and measure these values.

Furthermore, to ensure that no sensory discomfort resulting from noise, vibrations and odors, etc. is caused to neighborhood residents, we have established monitoring points outside the factory grounds and are working to prevent such issues.

With respect to PCB waste within the factory, it is suitably handled in accordance with the relevant laws and regulations.

Use of sustainable resources

We are taking steps to reduce overall volumes year-on-year by placing a top priority on the goals and targets of the ISO 14001 management system with respect to reductions in industrial waste, organic solvents, greenhouse gas emissions and water usage.

Alleviating and adapting to climate change

During "Energy Saving Month" in February and "Environment Month" in June, we set up priority measures in each of our original operations and report on energy saving achievements, while division managers of each block conduct environmental patrols.

Environmental protection, recovery of natural habitats

Since fiscal 2013, we have been conducting biodiversity conservation activities to protect water resources in the local Kaname River system. Employees have participated in a series of hands-on monitoring activities to examine the environment of the Kaname River, with a cumulative total of 346 employees taking part.

Currently, activities are being conducted in a satoyama in the city located upstream of the Kaname River. Specifically, with the objectives of recharging the water source of the Kaname River and restoring the original landscape of the satoyama, we are conducting conservation activities in collaboration with local groups and university laboratories, including the installation of handmade biotopes, and monitoring changes in the ecosystem.

Furthermore, since FY 2017, we have installed a dragonfly pond on the Hiratsuka Factory premises as a familiar activity site to observe the connections among dragonflies and other living creatures. In March 2017, the Hiratsuka Factory received the "Association for Business Innovation in Harmony with Nature and Community Certificate® (ABINC certification)" as a biodiversity-conscious plant in recognition of these biodiversity activities and the ongoing CO₂ absorption and fixation amount survey conducted in conjunction with the growth of the Yokohama Forever forest planted around the plant in 2007.



False bindweed growing wild on the grounds



Golden Orchid (effect of the Forever Forest activities)



ABINC logo mark

Fair Operating Practices

Impartial and fair selection of business partners

To ensure fair selection of suppliers, we conduct a survey on whether or not there are any personal relationships between the targeted suppliers and our employees when we hire new suppliers.

Other selection is based on economic rationality, taking into consideration the supplier's quality, price, supply stability, technological development capabilities, and CSR and environmental considerations.

Establishment of a "Procurement Code of Conduct" and its thorough implementation

With the "Basic Procurement Policy", we prepared the "Procurement Ethics (Rules for Procurement Staff)" to indicate matters to be noted by procurement staff when conducting fair and impartial transactions and unethical practices that must not be engaged in. These ethics were combined with the "Basic Procurement Policy" to become the "Procurement Code of Conduct".

We are working to ensure comprehensive awareness of compliance issues through workplace-based classes, which are held on a regular basis.

Deployment of CSR activities for business partners

In 2022, we held an online (webinar-style) CSR supplier briefing session for the first time.

The briefing covered such topics as "CSR Report, CSR Guidelines," "Mid-Term Environmental Plan," "Corporate Social Responsibility and Human Rights," and "Workplace Safety," and was attended by 398 suppliers.

取引先様への自己啓発結果まとめ

1. 自己啓発結果 (自働機部) 下欄の表は取引先ごとの記入です。

区分	項目	実施回数	参加者数	参加率
人権の尊重及び 労働環境の 改善	研修	0	23	0%
	セミナー	0	23	0%
	その他	0	23	0%
労働環境及び 安全の確保	研修	0	23	0%
	セミナー	0	23	0%
	その他	0	23	0%
	研修	0	23	0%
	セミナー	0	23	0%
環境対策・社会 貢献の促進	研修	0	23	0%
	セミナー	0	23	0%
	その他	0	23	0%
	研修	0	23	0%
	セミナー	0	23	0%
安全・商品質 量・サービス	研修	0	23	0%
	セミナー	0	23	0%
	その他	0	23	0%
	研修	0	23	0%
	セミナー	0	23	0%
透明性の高い 業務の遂行 と信頼性の 向上	研修	0	23	0%
	セミナー	0	23	0%
	その他	0	23	0%
	研修	0	23	0%
	セミナー	0	23	0%
社会・社会 貢献の促進	研修	0	23	0%
	セミナー	0	23	0%
	その他	0	23	0%
	研修	0	23	0%
	セミナー	0	23	0%
サプライヤー との関係	研修	0	23	0%
	セミナー	0	23	0%
	その他	0	23	0%
	研修	0	23	0%
	セミナー	0	23	0%
合計		0	666	0%

Consumer Issues

At our Head Office and Hiratsuka Factory, we are deeply involved in all corporate activities such as planning, manufacturing, evaluation, and sales of the products and services we deliver to our customers. We aim to realize a sustainable society together with our consumers in addition to tackling those tasks from the viewpoint of CS (Customer Satisfaction). Therefore, we value the valuable opinions we receive from our customers and strive to expand our communication by disseminating information about our corporate initiatives through various means.

Contact Information for Inquiries

The contact information for inquiries is disclosed at the following address on our official website.
<https://www.y-yokohama.com/global/contact/>

Community Involvement and Development

Regional activities

We have continuously participated in volunteer activities organized by local groups, such as tree planting and riverbank cleanup, but unfortunately we refrained from such activities in fiscal 2022 due to COVID-19.

Disaster-prevention activities

Unfortunately, due to the effects of COVID-19, the annual fire-fighting competition organized by the Hiratsuka City Hazards and Safety Committee was cancelled in fiscal 2022. We also refrained from activities in cooperation with the local community, such as supporting disaster drills at the Hiratsuka School for the Visually Impaired, which is located adjacent to the Hiratsuka Factory and with which we have a disaster countermeasure cooperation agreement. On the other hand, the annual disaster drills at the Hiratsuka Factory were conducted in the form of desktop drills to prevent the spread of COVID-19.

Regional contributions

- We continue to support Shonan Bellmare, a local J-League team, under our CSR partnership agreement.
- Once a month, employees carry out cleaning activities around the perimeter of the factory.

Regional exchanges

Unfortunately, we refrained from activities in FY2022 due to the COVID-19 disaster.

Results of a questionnaire survey about our local communication events

In consideration of preventing the spread of COVID-19, we have cancelled the regional communication meeting.

List of FY2022 Regional Contributions / Community Activities

Hiratsuka Factory History Tour

We have decided to cancel the Hiratsuka Factory history tour in consideration of preventing the spread of COVID-19.

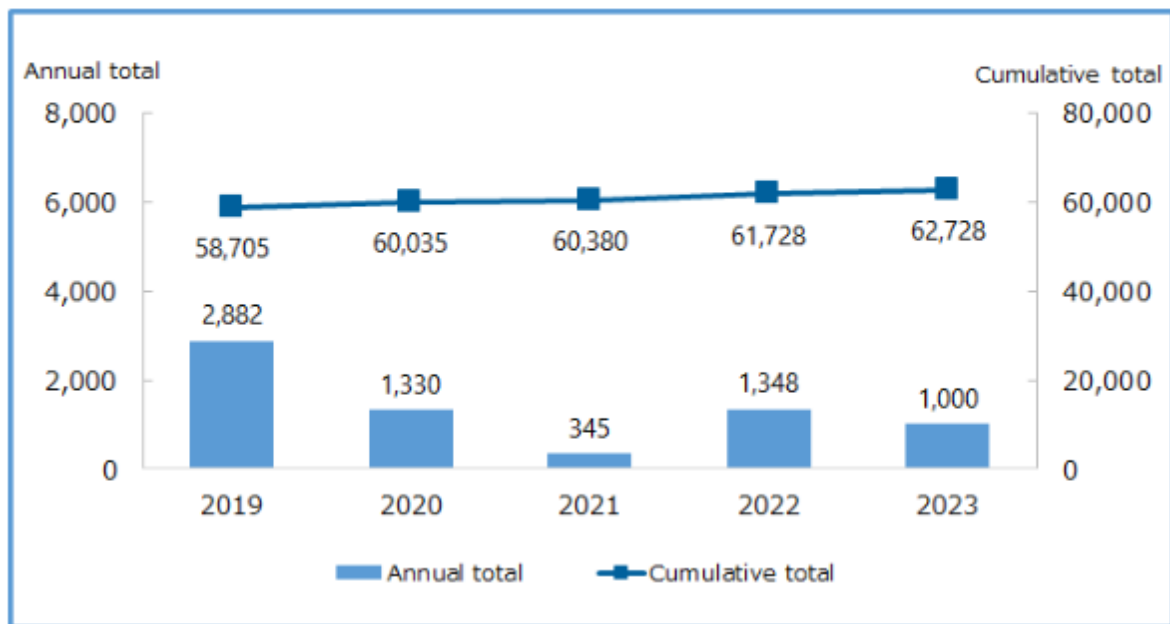
Volunteer activities

In consideration of preventing the spread of COVID-19, various volunteer activities have been cancelled or refrained from.

Provision of Yokohama Forever Forest seedlings

April 24, 2023: 1,000 seedlings for social welfare corporations

Number of seedlings provided by the Hiratsuka Factory for the Yokohama Forever Forest project



Support for education

We support Hiratsuka School for the Deaf and Hiratsuka School for the Blind as a member of their school management council.

Local event support, donations, and participation

We refrained from activities due to COVID-19.

Mie Plant (MP)

Business activities

Production of tires for trucks and buses, passenger cars

Total site area

264,000 m² ABINC→259,411m²

Number of employees

1,320 (as of December 2022)

Location

1038 Takabuku, Misono-cho, Ise City, Mie 516-8530, JAPAN

Contact for consultation and complaints

Operation Section

Tel: +81-596-28-3151 Fax: +81-596-28-3156

E-mail: katsuharu.omi@y-yokohama.com



Message from the General Manager



Mitsugi Dairaku

Yokohama Rubber has established “Deal fairly with society and value harmony with the environment” as its basic environmental policy, and it aims to be “a company having world-class strengths in technologies for protecting the environment.” Our Mie Plant is located in Ise City: the divine capital located along the Miya River, Japan’s purest river. In doing business in this region, we have a strong desire to protect this abundance of nature and to continue to develop together with the community.

Since our plant’s acquisition of ISO 14001 certification in 1998, we have addressed environmental preservation through the full participation of our employees, such activities being centered upon our environmental management systems. Concerning preservation of the environment, we have conducted ongoing improvements due to the establishment each year of objectives for reducing environmental burdens. Special activities that we can be particularly proud of include the operational improvements and reductions with respect to resource usage amounts achieved by the “Waste Elimination Force,” a group mainly comprised of female employees, and the efforts of the “Frontline Support Team,” who have helped to transform support so that we can view manufacturing sites through the eyes of the customer. Furthermore, through the activities of the “Forever Forest Project” and we have also concluded a new “Kigyo no Mori (the forests created by companies)” initiatives with Watarai Town, Watarai District, Mie Prefecture from fiscal 2021. We have been creating

forests and ensuring the conservation of water sources, such factors being valuable in the reduction of CO₂, disaster-prevention and the protection of living creatures. The total number of trees planted thus far reached 30,627 with the 15th planting of seedlings in fiscal 2022.

For the biodiversity conservation activities that we have been conducting since 2012, each team implemented a scaled-down version of the activities while taking measures against infection with COVID-19. Each team continued to enjoy their own activities while also preparing their own illustrated books of organisms and plants that they created.

In January 2016, we signed an agreement between Yokohama Rubber Mie Plant and Ise City regarding environmental education and have been working on it.

The tripartite collaboration of the Mie Plant's plant tour, tree-planting experience, biodiversity conservation activities, and Mie Kotsu's "Electric Bus Ride Experience and Lecture on Building a Low-Carbon Society" for five elementary schools in Ise City was abandoned due to COVID-19.

In addition, the Mie Plant employees' volunteer activities to support the reconstruction of Onagawa Town, Oshika District, Miyagi Prefecture, which started immediately after the Great East Japan Earthquake, have come to a standstill due to COVID-19.

Furthermore, the activities of local volunteers, along with those of the municipal government and residents' associations, are at a standstill.

These activities will be resumed while checking on the status of COVID-19. We will continue our efforts to be a plant that is loved and trusted by people in the region.

Organizational Governance

Thorough compliance policies

All Mie Plant employees are issued with "compliance cards" and are familiarized with the Yokohama Rubber Group compliance guidelines, and with the availability of contact points for discussing compliance-related issues.

Compliance committee meetings made up of managers are held monthly to share information and consider and implement stratified training.

Organizational self-corrective functions

We established a suggestions box in the plant's cafeteria, enabling us to receive feedback from employees. In addition, as we continue to operate the employees' web-based consultation service, which was established independently by the Mie Branch of the labor union, we carefully handle the opinions and requests we receive and continue to work with the Mie Branch of the labor union to make the service useful for the sound management of the organization.

Furthermore, we have started compliance training for all employees at least once a year.

Human Rights

Education on respect for human rights

We distribute "compliance cards" to employees to provide education on the importance of respect of human rights.

Labor Practices

The basics of safety and health

The Mie Plant obtained Occupational Safety and Health Management System (OSHMS) certification in accordance with Japan Industrial Safety & Health Association (JISHA) standards in 2006. This system is based on risk reduction and improvement activities in pursuit of intrinsic safety of equipment, as well as the creation of safe human resources with an emphasis on communication.

With respect to the safety and health policy of the plant, the basis of operation is as follows. "The basis of our corporate activities is to ensure the safety and health of our workers", and "To prevent occupational accidents and realize workplaces where employees can work comfortably in good physical and mental health, we will prioritize the safety and health of each and every employee by appropriately and effectively implementing and operating the occupational health and safety management system together with our employees".

Creating safe equipment

Using risk assessment methods, we are promoting the identification, evaluation and improvement of potential danger sources; we are also implementing measures that include the isolation of sources for danger from work areas and promoting the creation of people-friendly facilities.

Safety awareness

We pursue safety as a top priority under all circumstances. Specifically, we have shifted from collective guidance to individual guidance, and we conduct one-on-one safety education, dedicated safety time activities, and reviews of work procedures in open work observation.

In addition, we view successor development as a priority issue, and we are working to improve skills through various types of training.

We conduct activities suitable for the mind of each and every individual through thorough decluttering and organizing and the revitalization of communication.

Creating energetic workplaces

We give a variety of different awards even for small achievements. We do this irrespective of what job titles recipients hold. Numerous improvement suggestions from the factory floors have been successfully developed into safety enhancement measures by encouraging people to challenge themselves, rather than fear failure.

As part of our efforts to promote health, we have introduced a health app to help each and every employee work in good health. By planning and participating in "walking events" linked to the app to improve health, participants can have fun while becoming more aware of their own health and improving lifestyle-related diseases.

Additionally, in order to reduce the smoking rate among employees, we set a smoking rate of 49.7% in 2016 as a reference point, and have been implementing various initiatives since then.

We set a no-smoking day three mornings a month, and also planned a six-month no-smoking project aimed at reducing the smoking rate, resulting in a smoking rate of 43.2%.

In 2023, we plan to continue the activities, extend the time of the non-smoking day, and make people aware of the harmful effects of smoking in order to reduce the smoking rate.

As part of our local activities, we collaborated with the Ise Labor Standards Inspection Office and the local soccer club team FC-ISE-SIMA to disseminate fall prevention exercises to prevent falls and back pain, and soccer players conducted safety patrols at the Mie Plant.

We disseminate safety activities to the local community through publications in the Ise Labor Standards Inspection Office's official bulletin and mass media.

Employment of people with disabilities

Regarding the employment of people with disabilities, we continue to hold internships in order to deepen our relationships with local special needs schools. In 2022, due to the COVID-19 pandemic, we will only accept one time (one person). However, we were able to hire one person.

The Environment

Environmental management

Environmental Policy

Our goal is to embody consideration towards the global environment according to the norm of "Deal fairly with society and value harmony with the environment," which is declared in the management policy of the company.

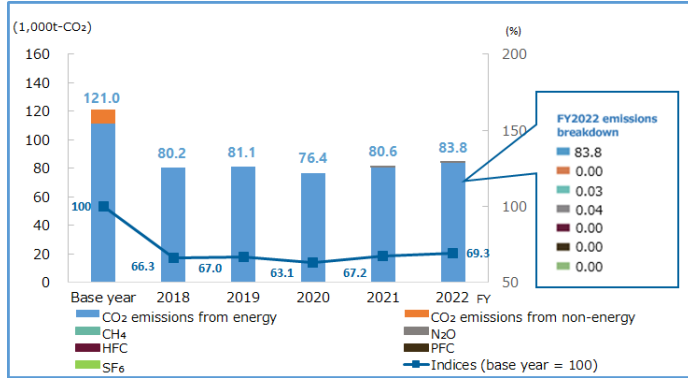
1. The Mie Plant, under the direction of senior management, works on measures taking the environment into consideration in all areas of our business.
2. The Mie Plant works to deepen channels of communication with its stakeholders; it also promotes cooperation with the value chain and contributes to both the local community and society.
3. In order to remain trusted by the community, we appropriately implement our environmental management system and continue our efforts to prevent environmental pollution and improve the environment. In addition, we will continue to reduce our environmental impact through chemical substance management, aiming for zero environmental risk.
We observe applicable laws, regulations and agreements.
4. We comply with related laws, regulations, agreements, etc., and continuously engage in environmental improvement activities.
5. To maintain biodiversity, we strive to protect and revitalize the indispensable nature of the local ecosystem and the Miya River which runs into Ise Bay, and we also participate actively in community environmental activities.
6. Aiming to maintain the trust of the local community by fostering harmony with the natural wonders of the divine capital of Ise, all of us working at the Mie Plant implement education and awareness raising.
7. We shall value information from residents when carrying out regular plant improvements.
8. To fully realize our environmental policy, we formulate environmental objectives and targets and draw up and implement environmental plans.
9. This Environmental Policy shall be made public.

January 1, 2023
Mitsugi Dairaku,
General Manager,
Mie Plant, The Yokohama Rubber Co., Ltd.

Environmental data

Reductions in greenhouse gas emissions

Greenhouse gas emissions



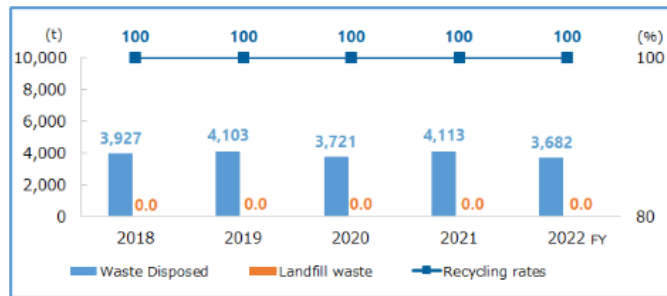
※The base year is defined as 1990 except for HFC, PFC and SF₆, where the base year is 1995 as per the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the "Calculation and Reporting Manual for Greenhouse Gas Emissions" issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

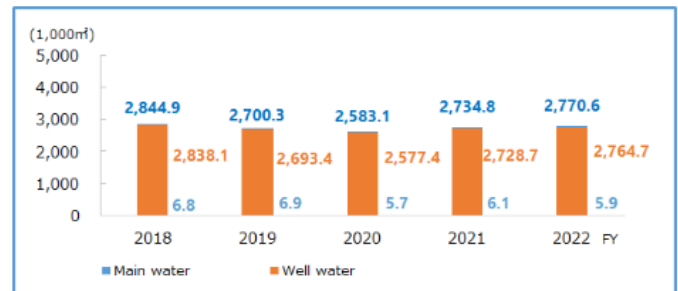
Note that GHG emissions associated with purchased power were calculated using the Table of Emission Coefficients by Power Company (Ministry of the Environment).

Effective use of resources / Reduction of waste

Waste output



Water usage



Measures for discharge into water, air and soil

Data related to water contamination

Drain	Item	Regulatory values	Voluntary standard values	FY2022 results		
				Average	Maximum	Minimum
Mie Plant Drain 1	pH	6.0~8.0	6.5~7.8	7.3	7.5	7.2
	BOD concentration (mg/l)	20	5	1.4	2.8	0.7
	COD concentration (mg/l)	20	5	1.5	2.8	0.7
	SS concentration (mg/l)	40	5	1.3	2	1
	Oil concentration (mg/l)	2	1.6	0.5	1	0.5
Mie Plant Drain 2	pH	6.0~8.0	6.5~7.8	7.3	7.4	7.2
	BOD concentration (mg/l)	20	5	1	4.4	0.5
	COD concentration (mg/l)	20	5	1.6	3.6	0.5
	SS concentration (mg/l)	40	5	1.3	4	1
	Oil concentration (mg/l)	2	1.6	0.6	1.1	0.5

※In accordance with the Environmental Pollution Prevention Agreement concluded with Ise City.

※Discharge point: Hinokijiri River

Air Pollutants (NOx, SOx)

Substance	NOx	SOx
Amount of emission (t/year)	1	—

Facility	Substance	Regulatory values	Voluntary standard values	FY2022 results		
				Average	Maximum	Minimum
Mie Plant Cogeneration 1	SOx emissions (m ³ N/h)	3.4	1	0.41	0.52	0.35
	NOx (ppm)	100	90	22	28	14
	Soot and dust (g/m ³ N)	0.05	0.01	0.002	0.003	0.001
Mie Plant Cogeneration 2	SOx emissions (m ³ N/h)	3.4	1	0.413	0.46	0.392
	NOx (ppm)	100	90	10	14	8
	Soot and dust (g/m ³ N)	0.05	0.01	0.002	0.002	0.001
Mie Plant Boiler 3	SOx emissions (m ³ N/h)	1.0	1	0.02	0.02	0.02
	NOx (ppm)	130	120	59	67	51
	Soot and dust (g/m ³ N)	0.1	0.01	0.005	0.005	0.005
Mie Plant Boiler 4	SOx emissions (m ³ N/h)	1.5	1	0.037	0.04	0.03
	NOx (ppm)	130	120	63	69	59
	Soot and dust (g/m ³ N)	0.1	0.01	0.005	0.005	0.005

※In accordance with both the Air Pollution Control Act and the Environmental Protection Agreement concluded with Ise City.

Reporting on chemical substance management status

The Mie Plant verifies whether all materials handled at the plant (raw materials, secondary materials, and auxiliary materials) contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed. Regarding the handling of substances pursuant to the PRTR Law, please refer to

➤ [the Safety Evaluation Table of Domestic Production Bases.](#)

In addition, to enhance the overall level of chemical substance management, we conduct compliance verification by implementing chemical substance assessment that covers risk of adverse impact on employee health, risk of explosion or fire in relation to equipment and machinery, and environmental risk.

Efforts for Biodiversity Conservation Activities

At the Ominato Coast, one of our biodiversity activity bases, our employees gave an annual class for 4th graders of Minato Elementary School. The class included a talk on the creatures of the Ominato Coast, removal of non-native species of Japanese knotweed, and beach cleanup.

Efforts for Biodiversity Conservation Activities

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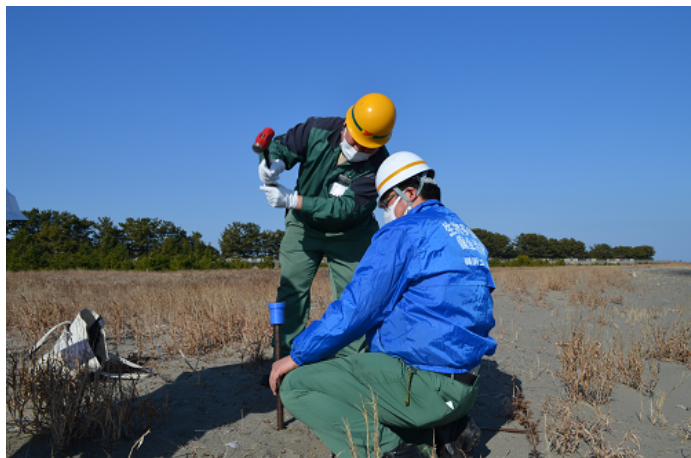


Coastal cleanup at a delivery class



Group photo of the delivery class

Due to COVID-19, the annual tree-planting experience and biodiversity conservation activity experience could not be held, but preparations are underway to hold these events in FY2023. We are also making preparations to hold the semi-annual activity report meeting.



Monitoring (sandy soil survey)



Sea turtle hatching survey (September)

Noise, vibration and odor

Noise

Noise management is implemented at the boundary of the premises of the plant (18 points) and autonomous measurement is conducted once a month.

In addition, measurements are conducted by an outside company twice a year at the boundaries of the factory premises (at four locations).

Vibration

Vibration management is implemented at the boundary of the premises of the plant (14 points) and autonomous measurement is conducted once a month.

Odor

Twice a year, external contractors conduct measurements at the factory site boundaries (4 locations).

Our response involves the installation of deodorizing vaporizers in building ducting.

Comments and information from local residents from the past and our response

We installed the third and fourth phases of anti-scattering nets at the site boundary to prevent leaves from trees on the plant site from being blown into neighboring residences by the wind.

We also disinfect trees in the spring and fall to prevent insects from flying into neighboring houses every year.

Fair Operating Practices

Certification of new business partners

Guidelines are established on compliance with human rights, legal compliance, and safety and environmental activities, etc. when business is to be commenced with a new business partner. Based on such points, the approval processes for the appointment of a new procurement partner are undertaken, and interviews are conducted while various materials are referred to. It is through this process that business partners are selected.

Communication with business partners

Implementation was postponed due to COVID-19.

The CSR Study Meeting was held via the web.

Consumer Issues

Safety and quality of our products and services

Using as a pillar the principle of “creating quality through the eyes of the customer,” at the Mie Plant we promote the continuous improvement of products and services by leveraging the quality management system ISO/TS 16949 (moved to ISO 9001 and IATF 16949 from June 2018) as our operational basis. We regularly confirm the effectiveness of this system through internal systems audits and external reviews that are conducted every six months.

In addition, by using “Quality Maintenance Activities” to ensure effective self-directed quality management throughout the entire production process, etc., we position quality as customer safety while working to ensure that all employees are conscious of the “eyes of the customer” being on them.

With respect to products, we are actively working to further reduce our environmental impact by increasing the production ratio of tires with reduced rolling resistance, improved wear life, superior rehabilitation, and ultra-wide base tires.

Community Involvement and Development

Relationship with local societies

Regional exchanges

We were planning to hold the event, but it was cancelled due to COVID-19.

Social contribution activities

Due to COVID-19, we had to cancel all events, but only made donations to the Ise City Council of Social Welfare, which we have done every year.

We received a report of our gratitude that they have purchased one activity vehicle using the savings they have made through continued donations.

Despite the COVID-19 pandemic in 2022, blood donations were held three times in January, May, and October, as usual, with 120 people volunteering.

Regional volunteers

May 21: Zero garbage early morning cleaning (around Oharai Town)

July 3: 27th Setagawa Tanabata Grand Cleaning

Oct 10: Exhibited at Ise City Environmental Fair

Dec 4: Volunteer water supply at the Oise-san Marathon

Opening of facilities

We have lent our grounds for use by a regional soccer club (ISE YAMATO).

Environmental activities

Feb: Acquired Association for Business Innovation in Harmony with Nature and Community (ABINC)

certification Mar 25: Corporate Forest Tree Planting

Apr 6: 15th period-1 tree planting

May 9: 15th period-1 tree planting

May 23: Cleaning of Ominato Beach in Ise City

Oct 28: Corporate Forest Tree Planting

Nov 11: Toba City Toshijima Nasa Beach Cleaning



Corporate forest tree planting

Plant tour and workshop

In fiscal 2022 as well, due to the COVID-19 pandemic, factory tours for nearby elementary schools, companies, and organizations were prohibited. As the mood of self-restraint gradually faded towards the end of the year, one company visited us.

Please contact us below if you would like to participate in a plant tour and workshop.

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

Hours: 8:00 a.m. to 5:00 p.m.

Contact: Sugihara, Operation Section, General Affairs

Tel: +81-596-28-3151

Mishima Plant (SP)

Business activities

Production of tires for passenger cars

Total site area

112,000 m²

Number of employees

1,012 (December 2022)

Location

8-1 Minami-Futsuka-machi, Mishima City, Shizuoka 411-0832, JAPAN

Contact for consultation and complaints

Mishima Plant Operation Division

Tel: +81-55-975-0800

Fax: +81-55-976-4322



Message from the General Manager



Toshinari Matsumoto

The Mishima Plant is located in Mishima City in the North Izu area of Izu Peninsula UNESCO Global Geopark in eastern Shizuoka Prefecture. Mt. Fuji, a World Heritage site, can be seen to the north from the plant, and the area is blessed with magnificent scenery and bountiful blessings. The plant mainly manufactures tires for passenger cars and light trucks. We are also the only company in the Yokohama Rubber Group that manufactures racing tires for motorsports.

The plant is surrounded by clear water that is part of the natural abundance of Mt. Fuji and the Izu Geopark, and thanks to the tree planting of the Yokohama Forever Forest Project that the Yokohama Group has been engaged in since 2007, it has been possible to see fireflies in the early summer in the tree planting areas in front of the plant in recent years. Meanwhile, residential areas have been developed in the area surrounding the plant as a result of the convenience of the proximity to the Mishima-Futsukamachi Station on the Izuhakone Railway, which means that in addition to control and management of exhaust, drainage, and sound, response to sensory issues such as odors is required, and these are being steadily addressed.

While Yokohama Rubber is aiming to contribute as a member of the global community, the plant is aiming to contribute as a member of the local community.

We would like to foster the abundant natural wealth of the region through participation in clean-up activities around the plant and the Rakujuen section of the Izu Geopark that are currently underway as well as environmental conservation and

observation through environmental conservation near the IzuJukan Expressway/Tamazawa IC and biodiversity activities at the Goten River that flows along the west side of the plant.

In FY2022, we are continuing the infection prevention measures of COVID-19, avoiding the 3 secret measures and thoroughly enforcing the basics of gargling, washing hands and wearing masks.

In the future as well, we will work hard to build trusting relationships with all stakeholders in an aim to be a plant that is loved by the region.

Organizational Governance

Corporate Governance and Compliance

The Mishima Plant has also developed its activities in line with Yokohama Rubber's important task of becoming "a company that contributes to the earth, earning the unwavering trust of society. In addition, as a priority issue of reducing environmental risks and contributing to the local community while strengthening the environmental management system, we are deepening communication with stakeholders, preventing environmental pollution and sensory pollution, regularly reviewing past environmental troubles and near misses, and continuously promoting environmental improvement through proactive management.

Corruption prevention

In working to give employees a thorough understanding of our compliance policies as such relate to the prevention of quality fraud, education in compliance issues has been conducted for the entire workforce.

Human Rights

Education on respect for human rights

We distributed "compliance cards" to all employees so as to enlighten and educate them about human rights. In addition, we conducted compliance education related to human rights to ensure understanding and thoroughness. We offer employment irrespective of gender, age or disability.

Promotion of employment of people with disabilities and workforce diversity

Currently, we have 12 employees with disabilities.

As of December 2022, of a total of 685 employees at the plant, 35 are women, and 39 are elderly individuals (persons aged 60 or over).

Labor Practices

Occupational safety and health

Recognizing that securing the safety and health of our employees and employees of partner companies are the foundations of corporate activities, the plant acquired OSHMS (Occupational Safety and Health Management System) certification in November 2010 as a means to realize a safe, healthy and comfortable workplace. We promote safety and health activities by identifying risks through risk assessment activities and reducing risks through countermeasures and improvements, based on 3S activities and KY before work with the participation of all employees.

Employee diversity

In 2022, Zero employees took nursing care leave and 25 employees took parental leave.

Work-life balance

The second and fourth Fridays of even month are designated as “Happy Family Life Days,” and employees are encouraged not to work overtime on these days.

Human resources cultivation and training in the workplace

To enhance the knowledge and skills required of employees, we implement level-based training that is conducted according to years of experience and position. We have made a plan to provide the right training at the right time. In 2022, despite the impact of COVID-19 infection spread prevention measures, we continued to implement thorough infection prevention measures and conducted group training for 47 employees and Mishima Plant's own role-based training for 12 employees, for a total of 59 employees.

The Environment

Environmental management

Mishima Plant Environmental Policy

Following the principle of dealing fairly with society and valuing harmony with the environment, we shall embody “Caring for the Future” for the global environment and assert our world-class strengths in technologies to protect it.

1. Under leadership of top management, Mishima Plant will globally initiate environmentally-conscious measures in all of its activities, and will put this into practice across its entire organization
2. Mishima Plant will deepen communication with its stakeholders and will strive to make contributions to local communities and to society as a whole by promoting collaboration to working with the value chain.
3. Mishima Plant will strengthen its environmental management system and will aim to achieve zero environmental risk by continually striving to help improve the environment by using approaches to mitigate its impact with chemical substance management, prevent environmental pollution, and reduce sensory nuisances.
4. Mishima Plant will comply with all related laws, regulations, and agreements as well as endeavor to continually implement activities that help improve the environment.
5. Mishima Plant will promote decarbonization measures, such as energysaving activities and the introduction of renewable energy, and strive to conserve and recycle resources in order to realize a carbon-neutral and circular economy.
6. Mishima Plant will strive to conserve biological diversity and use biological resources sustainably in its business activities.
7. Mishima Plant will promote harmony with local communities as part of its commitment to work with and become a company that is trusted by local communities.
8. Mishima Plant will provide education and awareness to all people working at the factory so that they understand and act on this policy.
9. Mishima Plant shall publish this policy.

July 1, 2023
Toshinari Matsumoto,
General Manager,
Mishima Plant, Yokohama Rubber Co., Ltd.

In line with our principle of “Deal fairly with society and value harmony with the environment”, we declared an environmental policy, adopting the environmental management system of ISO 14001. In order to reduce the environmental burden, we established reducing industrial waste and reducing greenhouse gas emissions as major tasks and actively strive to improve our production process and eliminate energy waste. As regards other measures, we established autonomous management targets to respond to legal regulations and operate within the autonomous management targets. In response to sensory pollution such as noise, odor, and vibration, three deodorizers are in operation and spraying 24 hours a day during operation as odor countermeasures. We have received cooperation from 28 residents (as of December 2022) living in the four towns surrounding the plant as environmental monitors, and have visited them once a month to report on the situation at their homes and conduct interviews, leading to improvements. However, in order to prevent the spread of COVID-19, we refrained from visiting them in person. Instead, we refrained from visiting them directly. Instead, we distributed direct mail and CSR reports, and responded to inquiries by phone. As part of our efforts to contribute to the regional environment, we have planted 29,646 trees (as of December 2022) in the YOKOHAMA Forever Forest Project, which is also a company-wide activity, as well as in a tree-planting event at Otsuchi Gakuen in Otsuchi Town, Iwate Prefecture. In Shizuoka Prefecture, we have been supporting Kakegawa City's “Creating a Forest of Hope” seawall, but in 2022, this event was held only by companies in Kakegawa City.



Tree planting event with Otsuchi Gakuen, Otsuchi Town, Iwate Prefecture



Kakegawa City seawall “Creating a Forest of Hope” (2019)



Concerning the protection of biodiversity, we have conducted team surveys of the upper, middle and lower reaches of the Goten River (in our neighborhood). Those activities have involved measurements of water quality, ecological observations being undertaken.

We have observed a wide variety of living creatures live in the river, including dragonfly nymphs (e.g. *Calopteryx atrata*, *Macromia amphigena*), fish (e.g. *Opsariichthys platypus* and *Nipponocypris temminckii*), reptiles such as Soft-shelled turtle and Chinese pond turtle and the symbol birds of Mishima City, such as Kingfishers, which are rare in a factory surrounded by houses. On the other hand, there is a lot of garbage dumped in the river, and we have been cleaning the river after monitoring in order to contribute in some small way to keep the Goten River beautiful.

However, river vegetation was wiped out by river dredging at the end of 2016, and the diversity of the river disappeared. Therefore, in May 2019, the Numazu Civil Engineering Office of Shizuoka Prefecture, Mishima City, and the Mishima Plant signed a River Friendship agreement, and in 2020, we conducted activities with government participation twice a year to regenerate vegetation and create a comfortable environment for aquatic life in the Goten River.

In addition, as a result of cleaning up the agricultural waterway in front of the main gate of the plant, fireflies began to inhabit the river in 2012, and a firefly viewing party was held every year in May.

In 2019, we welcomed 281 visitors, but due to measures to prevent the spread of COVID-19 infection, we have decided to cancel the event in 2022. In the future, we intend to build on such biodiversity protection activities.



catfish (esp. the Amur catfish, *Silurus auratus*)



Soft-shelled turtle and Red-eared slider (at the outlet of the final factory drain)

We planned to hold four activities in 2022, but all of them were canceled due to bad weather and Typhoon No. 15.

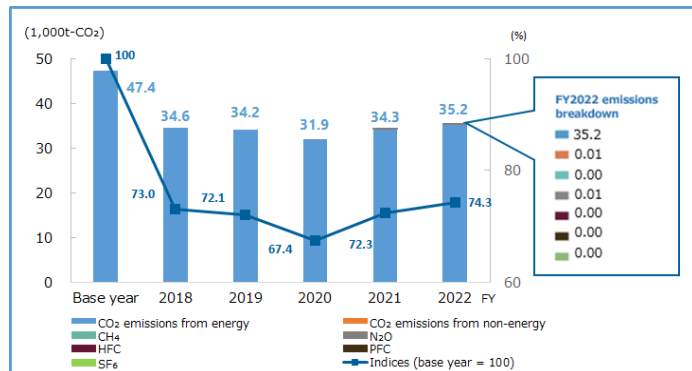
River Friendship collaborative activities



Environmental data

Reductions in greenhouse gas emissions

Greenhouse gas emissions



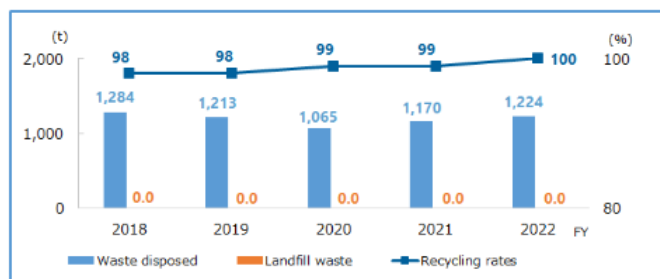
※The base year is deemed as 1990 except for HFC, PFC and SF₆, where the base year is 1995 as per the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the “Calculation and Reporting Manual for Greenhouse Gas Emissions” issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

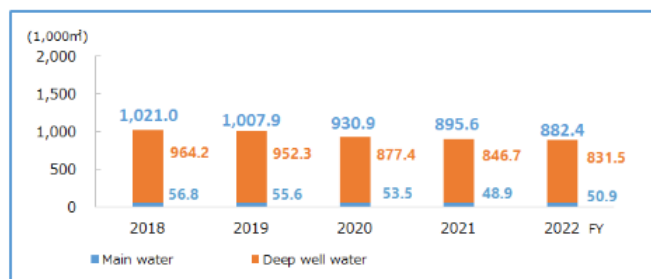
Note that GHG emissions associated with purchased electric power in FY2009 were calculated using the Table of Emission Coefficients by Power Company (Ministry of the Environment).

Effective use of resources / Reduction of waste

Waste output



Water usage



The plant derives 90% of its total water usage from underground water. The remainder is from city waterworks.

Measures for discharge into water, air and soil

Data related to water contamination

The water used at the plant is discharged into the Goten River after being treated in the plant's treatment facilities.

Item	Regulatory values	Voluntary standard values	FY2022 results		
			Average	Maximum	Minimum
pH	※5.8~8.6	6.2~8.2	7.6	7.8	7.4
BOD concentration (mg/l)	15	4 or less	1.4	2.7	0.6
COD concentration (mg/l)	★120	5 or less	2.3	5.4	1.3
SS concentration (mg/l)	20	8 or less	1.0	1.0	1.0
Oil concentration (mg/l)	2	1 or less	1.0	1.0	1.0

※Agreement on Environmental Protection with Mishima City; Star marks are according to the Water Pollution Prevention Law. (regulatory value of BOD is the max. concentration)

※Discharge point: Goten River

Air pollutants (NOx, SOx)

Substance	NOx	SOx
Amount of emission (t/year)	55	—

Facility	Substance	Regulatory values	Voluntary standard values	FY2022 results		
				Average	Maximum	Minimum
Mishima Plant Cogeneration	NOx*1(ppm)	100	80	54	62	47
	Soot and dust (g/m ³ N)	0.05	0.01	0.005	0.005	0.005
Mishima Plant Boiler	NOx*2(ppm)	130	65	29	37	20
	Soot and dust (g/m ³ N)	0.1	0.02	0.005	0.005	0.005

※According to the Air Pollution Prevention Law and recommended values set by Mishima City.

※1 Data are expressed based on a 16% oxygen content conversion value.

※2 Data are expressed based on a 5% oxygen content conversion value.

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Mishima Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.

Regarding the handling of substances pursuant to the PRTR Law, please refer to

➤ [the Safety Evaluation Table of Domestic Production Bases.](#)

Fair Operating Practices

Relationship with business partners

In 2022, due to COVID-19 infection prevention measures, we did not hold a CSR study session with our suppliers. We sent the revised version of the CSR Procurement Guidelines to our suppliers and collected signatures of approval.

Date: November 17th to the end of December 2022

Target: 102 companies that do business with the Mishima Plant

Main revision details:

- Added items on the three pillars of the environment (carbon neutrality, circular economy, coexistence with nature)
- Some additions to human rights, compliance, environment, local communities, and information disclosure

We received responses from 99 companies that understood Yokohama Rubber's CSR and procurement policies and agreed with our commitment to "build relationships of trust with our business partners based on fair and impartial transactions, and strive for mutual prosperity and mutual development." .

Consumer Issues

Communication with customers

To customers who tour the plant, we introduce our acquisition of the Automotive Industry Quality Management System Standard ISO/TS 16949.

Furthermore, in response to inquiries received from customers to whom we have delivered products, we make reports to them based on our quick investigation of the relevant matters.

Community Involvement and Development

Responses to comments and complaints received

We have held plant visits for local residents and environmental monitors twice a year (spring and fall), and explained our environmental initiatives to them. In fiscal 2022, we distributed a CSR site report with the participation of four people to prevent the spread of COVID-19 infection.

Thanks to effective explanations of the Mishima Plant's environmental measures and a willingness to listen to local residents' views, in 2022 there were no complaints from local residents.

Relationship with local societies

- We used to participate in the annual cleanup service work at Rakujiyuen, a public park in Mishima City organized by the Mishima District Environmental Preservation Promotion Council, but in 2022 we participated in a small group to prevent the spread of COVID-19 infection. (Held twice a year, in May and October; canceled due to rain in May, 30 participants in October)
- In FY2022, the use of gymnasiums and the premises of dormitories for single employees located within the business sites was also banned from last year as a measure to prevent the spread of COVID-19 infection. In 2021, 0 gymnasiums and 0 bachelor dormitory grounds have been leased to local residents.
- In 2022, 0 gymnasiums and 0 bachelor dormitory grounds have been leased to local residents.
- Blood donations cooperation is held twice a year at the plant, and employees as well as people related to partner companies donate blood; however, in fiscal 2022, we suspended this activity to prevent the spread of COVID-19.
- As a business that cooperates with the fire brigade, seven of our employees are registered with the Mishima City Fire Brigade as special function members. These employees continued to be available to respond to fires in the community.

Plant tours and workshops

In FY2022, we accepted 10 plant tours, with a total of 89 visitors (up 54 from the previous year) touring the Mishima Plant. Since Jun 2022, we have resumed small-scale factory tours exclusively for those living in Shizuoka Prefecture.

Plant Tour Information

When: Plant tours are offered on days on which the plant is in operation (Mondays to Fridays).

Excludes year-end and New Year holidays and the consecutive holiday periods in May and August.

Hours: 8:00 a.m. to 4:00 p.m.

Contact: Mishima Plant, Operation Section Tel: +81-55-975-0800

※1. Please note that we may not be able to accept applicants depending on the usage status of the conference room or the schedule of the person in charge of acceptance.

Shinshiro Plant (TP)

Shinshiro Plant

Business activities

Production of tires for passenger cars

Total site area

223,879 m²

Number of employees

855 (as of December 2022)

Location

1 Furuyashiki, Noda-Aza, Shinshiro City, Aichi 441-1343, JAPAN

Contact for consultation and complaints

General Affairs Division Tel: +81-536-22-2251 Fax: +81-536-23-0353



Shinshiro Plant

Shinshiro-Minami Plant

Business activities

Production of tires for passenger cars

Total site area

110,998 m²

Number of employees

373 (as of December 2022)

Location

10-24 Oiri, Hitokuwada-Aza, Shinshiro City, Aichi 441-1338, JAPAN

Contact for consultation and complaints

General Affairs Division Tel: +81-536-22-2251 Fax: +81-536-23-0353



Shinshiro-Minami Plant

Message from the General Manager

The Shinshiro Plant is located in Shinshiro City, the gateway to the nature-rich Okumikawa region. The plant manufactures passenger car tires, including the BluEarth fuel-efficient tire, an environmentally friendly product, the ADVAN flagship tire,



Ken Hayami

the GEOLANDAR SUV tire, and the iceGUARD studless tire, all of which are Yokohama Rubber's flagship tires.

In 1999, we obtained ISO14001 certification, and strive to always operate our plants in consideration of the environment of both the plants and the local community, aiming for the "top level of environmental contribution" as a core plant of Yokohama Rubber. In cooperation with the local community, we have concluded an environmental preservation agreement with Shinshiro City and operate our plants in consideration of the living environment by conducting water quality inspections of plant effluent and noise measurements in the vicinity of our plants.

In the Forever Forest activities, we have completed the tree-planting activities in and around the plant premises, and have now expanded the activities to include governments, NPOs, and other companies not only in Aichi Prefecture but also in Shizuoka and Gifu Prefectures, participating in a total of 60 events in FY2022 and providing a total of approximately 10,000 seedlings.

Since the start of tree-planting activities in 2009, the total number of seedlings planted in our plants and provided to local communities has reached about 278,000.

The plant uses a large amount of water resources in the region in the process of producing tires. The employees ask themselves, "we have received a gift from nature but what can we do for the environment?" We have continued to conduct biodiversity surveys at the water source of the Toyokawa River system as well as conducting water quality surveys at the plant's drainage outlets.

We started an activity called the "Firefly Project" to "bring back fireflies to the Intake River. The project started with the cultivation of river snails, which are food for fireflies, on the factory premises, followed by surveys of aquatic organisms and releases of river snails by employees and neighboring elementary schools.

We have created biotopes in the fallow fields of Yotsuya Senmaida, and have been actively engaged in activities to conserve endangered species in Aichi Prefecture.

In FY2022, we plan to continue our biodiversity preservation activities and continue to protect the rich nature, water resources, and organisms that live there.

In late 2022, we were able to resume social events inviting local residents to the plant, although the number of participants was limited.

We will continue our efforts to operate the plant in a way that is rooted in the local community.

Organizational Governance

Compliance education

We conduct compliance education for new employees and regular employees who join the company mid-term to raise their awareness of legal compliance, and for managers and supervisors, we educate them on how to treat their subordinates and how to lead them to comply with laws and regulations.

We also hold CSR study meetings with our business partners to reaffirm our social contribution activities and compliance with laws and regulations, thereby strengthening relationships of trust.



Human Rights

Promotion of employment of people with disabilities

As of the end of December 2022, 27 people (2.82% of the workforce) were employed.

We will continue to expand the employment of people with disabilities and enhance the selection of work and the work environment to suit their individuality.



Special-needs Classroom Teachers and People with Disabilities Held Workplace Discussion Meetings (Work experience for students is suspended after FY2020)



Labor Practices

Safety and health measures

Based on the recognition that ensuring the safety and health of employees and subcontractors is the foundation of our corporate activities, we obtained certification for OSHMS (Occupational Safety and Health Management System) conforming to the JISHA (Japan Industrial Safety and Health Association) method in December 2011 as a means of achieving a safe, healthy, and comfortable workplace. Since then, we have continued the certification.

We have been developing the following activities based on the four pillars (one-to-one dialogue, near-misses, hazard prediction, and risk assessment), which are centered on interactive communication between the work system and workers.

- Sharing of issues through the Health and Safety Committee (once a month)
- Environmental and safety subcommittee meetings for subcontractors, safety patrols by subcontractors and the facilities section, labor-management council meetings, and meetings of safety managers (once a month for each).
- Regular safety follow-up by factory top management
- Strengthen management of overwork
- Preventing accidents that have occurred in the past from fading out

Education and training for employees

Safety education for employees begins with safety and health education at the time of employment, followed by one-on-one dialogues with employees by role holders, sensory training, risk assessment practical training sessions, and safety person certification and development training.



New employee hands-on safety drills

Responses in case of disaster

In response to disasters, regular disaster drills are conducted in accordance with the annual activity plan for fire and disaster prevention. During drills, a self-defense firefighting organization headquarters is set up and firefighting and rescue drills are conducted to ensure a comprehensive response. We also engage in earthquake disaster drills, BCP drills, and nighttime evacuation drills, assuming various patterns.

Emergency life-saving skills training was suspended after 2020 due to the prevention of the spread of COVID-19 infection, but is scheduled to resume this year.



Disaster Drill at Shinshiro South Plant

The Environment

Environmental Policy of Shinshiro Plant, Yokohama Rubber Co., Ltd.

The Shinshiro Plant, as the core plant of Yokohama Rubber Co., Ltd., will be a pioneer, aiming to become “a company having world-class strengths in technologies for protecting the environment, embodying consideration towards the environment”.

1. By manufacturing products with heart and technology, we contribute to happiness and affluence and continue to practice “prevention of environmental pollution and sensory discomfort” and “improving the protection of the environment” by pre-emptive management, in an aim for zero environmental risks.
2. All departments and related companies constituting Shinshiro Plant shall build up and maintain a mechanism in accordance with the environmental management system established by themselves and improve environmentally friendly management under the leadership of top management.
3. We will deepen communications with all stakeholders that comply with the related laws, regulations, agreements and contracts, etc., and strive for regional contribution and social contribution.
4. We will contribute to the realization of a carbon neutral society by practicing energy-saving activities and promoting decarbonization measures such as the introduction of renewable energy. We will also contribute to the realization of a recycling-oriented society by promoting resource conservation and recycling.
5. In order to realize this policy, we establish environmental objectives and targets, carry out the plan deliberately and securely promote them by visualization of the results. Also, the policy, objective and goal are subject to review on a quantitative basis, and revised as necessary.
6. We cherish natural lives in the Shinshiro region in the Toyo River water system with rich water and strive for protection of biodiversity.
7. In harmony and fusion with rich nature of Shinshiro-shi, “Yama-no minato” and through “Yokohama Forever Forest” activities, we aim at regional contributions and coexistence of humans and nature through planting activities and planting instruction and furnishing seedlings.
8. We will provide thorough education and enlightenment activities so that all workers at the Shinshiro Plant can understand the policy and act accordingly.
9. This Policy shall be published.

January 1, 2023
Ken Hayami
Plant General Manager,
Yokohama Rubber Co., Ltd., Shinshiro Plant

Reductions in greenhouse gas emissions

1. Active introduction of environmentally friendly high-efficiency products

In accordance with our mid- to long-term energy conservation plan, we are replacing transformers, fans/pumps, and lighting fixtures with LED fixtures and air conditioning equipment with high-efficiency equipment.

In FY2022, 14 units of 15 horsepower air conditioning equipment were replaced with CDP4.0 high-efficiency equipment. In addition, approximately 400 Hf fluorescent lamp fixtures were replaced with LED base lights.

Solar panels rated at 1,135 kW were installed on the roof of the distribution warehouse at the south factory, and construction is underway for operation starting in August 2023.

In addition, we will continue to study fuel conversion and the introduction of power generators at the South Plant in order to drastically reduce GHG emissions.

Furthermore, in FY2023, we will also consider solar power generation on the roof of the main distribution warehouse with an eye toward FY2024 and beyond.

2. Advancement of energy-saving activities

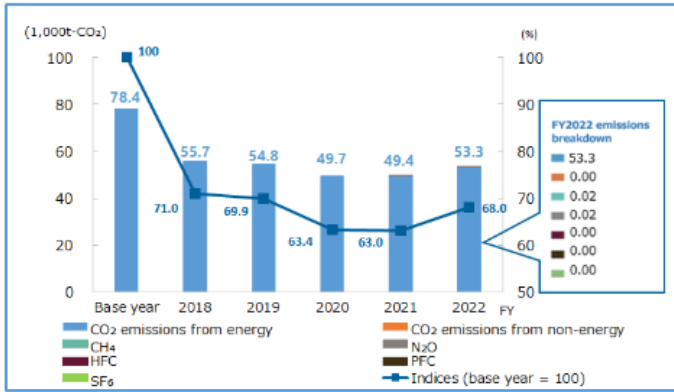
In addition to increasing the efficiency of the supply side, we are repairing leaks of steam, industrial water, and factory air on the consumption side, as well as augmenting heat insulation. 40 low-voltage operating transformers are scheduled to be upgraded to higher efficiency in FY2023.

In monthly meetings of energy conservation subcommittees where all process managers gather, we strive to share problems and introduce individual initiatives in an effort to educate the public.

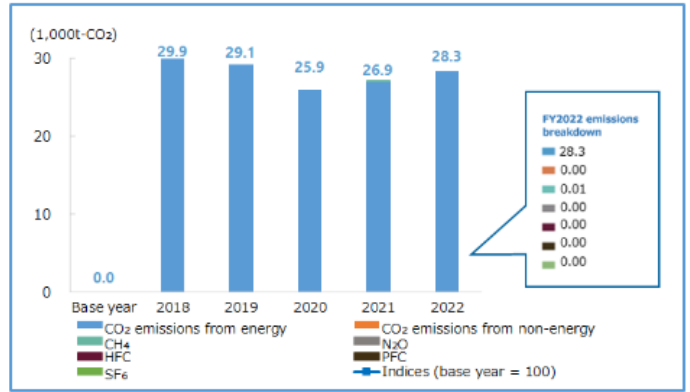
Environmental data and explanations

Reductions in greenhouse gas emissions

Shinshiro Plant



Shinshiro-Minami Plant



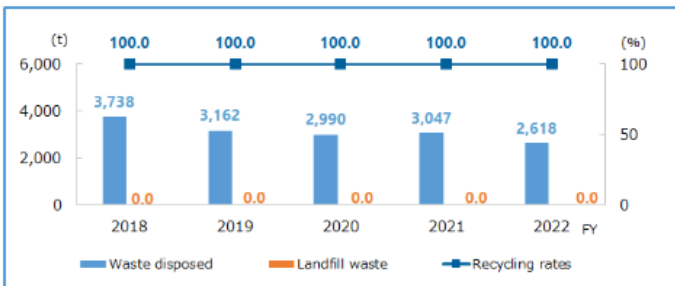
※The base year: In principal it is 1990. For HFC, PFC and SF₆, the base year is 1995 according to the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the “Calculation and Reporting Manual for Greenhouse Gas Emissions” issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
 Note that GHG emissions associated with purchased power were calculated using the Table of Emission Coefficients by Power Company (Ministry of the Environment)

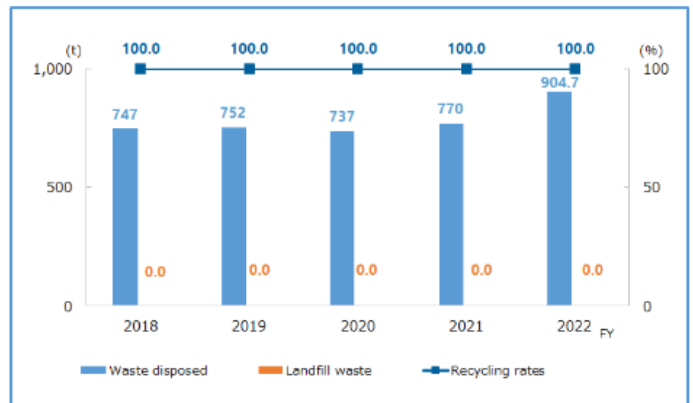
Effective use of resources / Waste reductions

Waste output

Shinshiro Plant

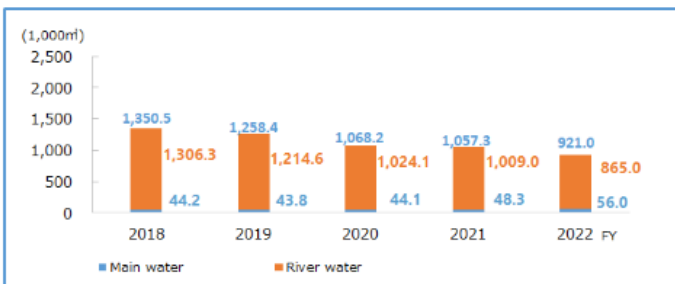


Shinshiro-Minami Plant

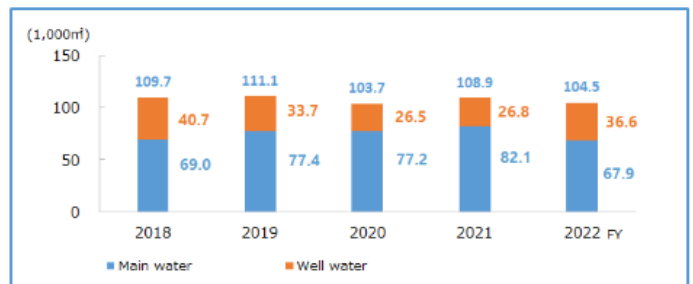


Water usage

Shinshiro Plant



Shinshiro-Minami Plant



Shinshiro Plant: uses main water and draws industrial water from the Toyo River and Noda River, a branch of the Toyo River.

Shinshiro-Minami Plant: uses main water and draws industrial water from well water.

Measures for discharge into water, air and soil

Data related to water contamination

Shinshiro Plant: twice a month, monitors twenty items of water contamination within self-regulated targets set under the ordinances of and agreements with Aichi Prefecture and Shinshiro City.

Drain	Item	Regulatory values	Voluntary standard values	FY2022 result		
				Average	Maximum	Minimum
Drain 1	pH	5.8~8.6	6.5~8.0	7.4	7.5	7.2
	BOD concentration (mg/l)	20	9.0 or less	1.8	7	0.5
	COD concentration (mg/l)	20	11.0 or less	2.5	6.8	1.3
	SS concentration (mg/l)	20	6.0 or less	1.4	3	1
	Plant and animal oil concentration (mg/l)	10	1.0 or less	0.5	0.5	0.5
	Mineral oil concentration (mg/l)	2	1.0 or less	0.5	0.5	0.5
Drain 2	pH	5.8~8.6	6.5~8.0	7.6	7.7	7.4
	BOD concentration (mg/l)	20	9.0 or less	2.5	7.5	0.5
	COD concentration (mg/l)	20	11.0 or less	2.4	5.9	1.1
	SS concentration (mg/l)	20	6.0 or less	1.1	2	1
	Plant and animal oil concentration (mg/l)	10	1.0 or less	0.5	0.5	0.5
	Mineral oil concentration (mg/l)	2	1.0 or less	0.5	0.5	0.5

※In compliance with the Pollution Control Agreement, and Aichi Prefecture Ordinances.

※Shinshiro Plant Discharge point (Name of rivers) Noda River

Shinshiro-Minami Plant: once a month, monitors twenty items of water contamination within self-regulated targets set under the ordinances and agreements with Aichi Prefecture and Shinshiro City.

Drain	Item	Regulatory values	Voluntary standard values	FY2022 result		
				Average	Maximum	Minimum
Drain 1	pH	5.8~8.6	6.5~8.0	7.4	7.7	7.2
	BOD concentration (mg/l)	20	12.0 or less	5.8	9.2	0.5
	COD concentration (mg/l)	20	11.0 or less	6.2	8.7	1.7
	SS concentration (mg/l)	20	6.0 or less	2	3	1
	Plant and animal oil concentration (mg/l)	10	1.0 or less	0.5	0.5	0.5
	Mineral oil concentration (mg/l)	2	1.0 or less	0.5	0.5	0.5
Drain 2	pH	5.8~8.6	6.5~8.0	7.5	7.8	7.3
	BOD concentration (mg/l)	20	12.0 or less	6.1	13	0.5
	COD concentration (mg/l)	20	11.0 or less	5.7	8.5	1.8
	SS concentration (mg/l)	20	6.0 or less	2	4	1
	Plant and animal oil concentration (mg/l)	10	1.0 or less	0.5	0.5	0.5
	Mineral oil concentration (mg/l)	2	1.0 or less	0.5	0.5	0.5

※In accordance with the Pollution Control Agreement, and Aichi Prefecture Ordinances.

※Shinshiro-Minami Plant Discharge point (Name of rivers) Kuroda River

Air pollutants (NOx, Sox)

Substance	NOx emissions (t/year)	SOx emissions (t/year)
Shinshiro Plant	25	—
Shinshiro-Minami Plant	11	3

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Shinshiro Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.

Regarding the handling of substances pursuant to the PRTR Law, please refer to

➤ [the Safety Evaluation Table of Domestic Production Bases.](#)

In addition, as part of efforts to improve the level of chemical substance management, we conduct chemical substance risk assessments to identify risks of adverse effects on workers' health, explosions and ignition of facilities and equipment, and environmental risks, and confirm compliance with laws and regulations.

Shinshiro Plant

Facility	Substance	Regulatory values	Voluntary standard values	FY2022 result		
				Average	Maximum	Minimum
Boiler 1	SOx emissions (m ³ N/h)	Regulations in Article 3	0	0	0	0
			100	68	71	64
	Nox (ppm)		130	0.003	0.005	0.001
	Soot and dusts (g/m ³ N)		0.1			
Boiler 2	SOx emissions (m ³ N/h)	Regulations in Article 3	0	0	0	0
			100	64	68	60
	Nox (ppm)		130	0.001	0.001	0.001
	Soot and dusts (g/m ³ N)		0.1			
Cogeneration	SOx emissions (m ³ N/h)	Regulations in Article 3	22.63	0	0	0
			90	55	68	30
	Nox (ppm)		100	0.001	0.001	0.001
	Soot and dusts (g/m ³ N)		0.05			
Warm-water Boiler A	Nox (ppm)	150	120	39	41	36
	Soot and dusts (g/m ³ N)	0.1	0.030	0.001	0.001	0.001
Warm-water Boiler B	Nox (ppm)	150	120	37	38	35
	Soot and dusts (g/m ³ N)	0.1	0.030	0.001	0.001	0.001

※ In compliance with the Air Pollution Control Law, Aichi Prefecture Ordinances and the Shinshiro City Pollution Control Agreement.

Shinshiro-Minami Plant

Facility	Substance	Regulatory values	Voluntary standard values	FY2022 result		
				Average	Maximum	Minimum
High-pressure Boiler 3	SOx emissions (m ³ N/h)	Regulations in Article 3 180 0.3	4.37	0.02	0.023	0.016
	Nox (ppm)		150	71	75	66
	Soot and dusts (g/m ³ N)		0.1	0.002	0.002	0.001
High-pressure Boiler 4	SOx emissions (m ³ N/h)	Regulations in Article 3 180 0.3	4.3	0.02	0.024	0.017
	Nox (ppm)		150	75	80	69
	Soot and dusts (g/m ³ N)		0.1	0.001	0.001	0.001
High-pressure Boiler 5	SOx emissions (m ³ N/h)	Regulations in Article 3 180 0.3	4.33	0.021	0.022	0.019
	Nox (ppm)		150	69	73	65
	Soot and dusts (g/m ³ N)		0.1	0.005	0.008	0.001
4t Boiler 1	SOx emissions (m ³ N/h)	Regulations in Article 3 180 0.3	2.24	0.034	0.058	0.01
	Nox (ppm)		150	93	100	86
	Soot and dusts (g/m ³ N)		0.1	0.001	0.001	0.001
4t Boiler 2	SOx emissions (m ³ N/h)	Regulations in Article 3 180 0.3	2.12	0.021	0.03	0.011
	Nox (ppm)		150	98	110	85
	Soot and dusts (g/m ³ N)		0.1	0.001	0.001	0.001

※In compliance with the Air Pollution Control Law, the Shinshiro City Pollution Control Agreement and the Environmental Preservation Agreement with Shinshiro City.

Fair Operating Practices

CSR activities with business partners

Two CSR briefings for suppliers were held in webinar format (Zoom). (Twice in April 2022)

Webinar content: (about 1 hour in duration)

1. Greetings from the President ESG Management (from Yokohama Transformation 2023 (YX2023))
2. CSR Report and CSR Guidelines
3. Mid-term environmental plan and initiatives
4. Business and Human Rights
5. Workplace Safety
6. About the Business Consultation Service
7. Q&A (If you have any questions, please use Zoom's message function)

※No photos of the CSR Study Session in 2022 because of the webinar format.

Consumer Issues

Communication with customers

We provide products of reliable quality to our customers through quality management based on ISO/IATF16949 certification, which is the automotive industry quality management system standard (QMS). We also introduce our quality initiatives through plant tours for Japanese and overseas automakers, dealers, and general customers. This year's event has been cancelled due to the prevention of the spread of COVID-19 infection.

For the current fiscal year, the meeting was held as needed while taking into consideration the prevention of the spread of COVID-19 infection.

Responses to complaints

In response to inquiries received from customers with respect to products, we quickly investigate matters and issue reports. In the event that it is determined that issues have occurred during manufacturing, we initiate quick responses and work hard to prevent any reoccurrences.

Community Involvement and Development

Yokohama Forever Forest Project

We provide tree seedlings and tree-planting guidance to the Aichi Prefecture Natural Environment Division's Shinshiro Shitara Ecosystem NW Council for satoyama-ization tree planting, tree planting in prefectural parks in Aichi and Shizuoka prefectures, and local tree planting.

The tree-planting seedlings are grown in our plant by collecting seeds from trees native to the area.

Yokohama Forever Forest Project (FY2022)

Jan 11	138 seedlings donated [Shizuoka Prefectural Forest Park] *Red pine forest regeneration tree planting
Jun 12	8 seedlings donated to Aichi Prefectural 【Higashimikawa Furusato Park】 *Distribution of greening trees
Jan 14	3 seedlings donated to Shinshiro City Ebi [Tosenji Temple] *Tree planting in the temple
Feb 12	20 seedlings donated to Sengen Shrine in Kanazawa-cho, Toyokawa City *Tree planting in the precincts of the shrine
Feb 18	80 seedlings donated to Tominaga Shrine in Nagashino-cho, Shinshiro City *Tominaga Shrine's Chinju no Mori tree-planting
Mar 1	62 seedlings donated to Donguri Mongoli (NPO) *Tree-planting at Ghibli Park P in Expo 2005 Aichi, Japan
Mar 14	57 seedlings donated to Local residents *Greening tree distribution
Mar 28	104 seedlings donated to (NPO) Jomon Gakko *Tidal Barrier Forest Planting in Hamamatsu City, Shizuoka Prefecture
Apr 6	48 seedlings donated to Nagashino Development Committee *Obigawa Satoyama Park tree planting
Apr 12	355 seedlings donated to Kasuga Cherry Blossom Society *Kasugayama Park tree planting
Apr 15	47 seedlings donated to Chisato Local Land Study Group in Shinshiro City *Park tree planting
May 3-4	1,082 seedlings donated to Higashimikawa Furusato Park in Aichi Prefecture *Tree planting in the park
May 5	518 seedlings donated to Aichi Prefectural 【Higashimikawa Furusato Park】 *Tree planting in the park
May 12	430 seedlings donated to Kasuga Cherry Blossom Society *Kasugayama Park tree planting
May 20	134 seedlings donated to Higashimikawa Furusato Park in Aichi Prefecture *Tree planting in the park
May 20	14 seedlings donated to Aichi Prefectural 【Higashimikawa Furusato Park】 *Distribution of greening trees
Jun 6	469 seedlings donated to Aichi Prefectural 【Higashimikawa Furusato Park】 *Tree planting in the park
Jun 9	155 seedlings donated to Donguri Mongoli (NPO) *Tree-planting at Ghibli Park P in Expo 2005 Aichi, Japan
Jun 9	200 seedlings donated to Donguri Mongoli (NPO) *Nagoya Girl Scouts tree planting
Jun 9	100 seedlings donated to Donguri Mongori (NPO) *Nakatsugawa City, Gifu Prefecture 【Forest of Water Source】 Tree planting

Jun 12	365 seedlings donated to Higashimikawa Furusato Park in Aichi Prefecture *Tree planting in the park
Jun 19	175 seedlings donated to Aichi Prefectural 【Higashimikawa Furusato Park】 *Tree planting in the park
Jul 14	20 seedlings donated to NPO Misono Yume Mura Koshitai *Tree-planting at the Oomurasaki Butterfly Dance Village
Aug 30	60 seedlings donated to Donguri Mongori (NPO) *Toei Town 【Forest of Water Source】 Tree planting
Aug 30	60 seedlings donated to Donguri Mongoli (NPO) *Tree-planting at Expo 2005 Aichi, Japan
Sep 6	28 seedlings donated to Yoshikawa, Shinshiro city *Tree planting at the district community center
Sep 8	33 seedlings donated to Honokuni Nature Sommelier Association *Tree planting in Higashimikawa Furusato Park
Sep 29	100 seedlings donated to Donguri Mongoli (NPO) *Tree-planting at Expo 2005 Aichi, Japan
Sep 29	40 seedlings donated to Donguri Mongori (NPO) *Nakatsugawa City, Gifu Prefecture 【Forest of Water Source】 Tree planting
Oct 13	20 seedlings donated to Donguri Mongori (NPO) *Toei Town 【Forest of Water Source】 Tree planting
Oct 23	784 seedlings donated to Higashimikawa Furusato Park in Aichi Prefecture *Tree planting in the park
Oct 30	77 seedlings donated to Community Center Festival at Nakamarket, Shinshiro City *Tree planting in the Center
Oct 30	400 seedlings donated to Aichi Prefectural 【Higashimikawa Furusato Park】 *Tree planting in the park
Oct 30	490 seedlings donated to Shinshiro Shitara Ecosystem NW Council *Biodiversity 2030 tree planting at Misono, Toei-Town in Satoyama
Nov 11	40 seedlings donated to Toei Town *Tree planting at Ikoi no Hiroba
Nov 16	40 seedlings donated to Donguri Mongori (NPO) *Toei Town 【Forest of Water Source】 Tree planting
Nov 19	3 seedlings donated to Okazaki City [Ishihara Forest Road Council] *Tree planting around the biotope
Nov 19	50 seedlings donated to Shizuoka Prefectural Forest Park *Tree planting in the park by Shizuoka Prefecture forest supporters
Dec 3	55 seedlings donated to Shizuoka Prefectural Forest Park *Tree planting in the park by Shizuoka Prefecture forest supporters
Dec 9	10 seedlings donated to Donguri Mongori (NPO) *Toei Town 【Forest of Water Source】 Tree planting
Dec 14	10 seedlings donated to Hachina Elementary School, Shinshiro City *Wanpakuyama Tree Planting (environmental class)
Dec 26	60 seedlings donated to Donguri Mongoli (NPO) *Tree-planting at Expo 2005 Aichi, Japan
Dec 26	20 seedlings donated to Donguri Mongori (NPO) *Nakatsugawa City, Gifu Prefecture 【Forest of Water Source】 Tree planting

Collaboration with another company, Autobacs

In cooperation with Autobacs, we provide seedlings free of charge to local residents to familiarize them with trees.

Jun	37 seedlings donated to Autobacs Toyohashi Store
Jun	55 seedlings donated to Autobacs Toyokawa Store
May	115 seedlings donated to Autobacs Toyohashi Store
May	30 seedlings donated to Autobacs Toyokawa Store
May	77 seedlings donated to Autobacs Gamagori Store
July	95 seedlings donated to Autobacs Gamagori Store
July	117 seedlings donated to Autobacs Toyohashi Store
July	44 seedlings donated to Autobacs Toyokawa Store
July	131 seedlings donated to Autobacs Toyohashi Store
Sep	307 seedlings donated to Autobacs Toyohashi Store
Nov	77 seedlings donated to Autobacs Toyohashi Store
Nov	132 seedlings donated to Autobacs Toyohashi Store
Nov	1,765 seedlings donated to Autobacs Okazaki-minami Store

In FY2022, we provided 9,946 saplings for Satoyama planting and greening tree distribution, and 46 people participated in tree-planting volunteer activities on 10 occasions.



Shinshiro Shitara Network Council: Support for bus tours to experience tree planting

Biodiversity protection activities

Our plants use a lot of river water to produce tires. We have been asking ourselves, "Is it enough for us to just receive water resources from nature? What can we do about it? With this in mind, we started biodiversity conservation activities focusing on water in 2012, and next year will mark the 11th year since then.

As for activities in FY2022, the impact of the COVID-19 disaster has gradually faded, and the number of people involved in activities has increased.

We will continue to collaborate with the government, universities, NPOs, and other companies by interacting with the Yotsuya Senmaida Preservation Society, one of our activity sites, and participating in the Shinshiro Shitara Ecosystem Network Council promoted by Aichi Prefecture. Yokohama Rubber's Shinshiro Plant will continue to contribute to biodiversity in the Shinshiro Shitara area by providing and planting broadleaf trees and seedlings grown from local seeds through the Forever Forest activities.



Activity site> Shinshiro Plant Biotope



Activity site> Noda River (Jointly with Elementary Schools)



Activity site> Kuroda River



Activity site> Yotsuya Senmaida

Relationship with local societies

On June 29, 2022, the roundtable meeting for wardens and environmental monitors around the plant was held for the first time in three years since 2019. The meeting was held in the midst of measures to prevent the spread of infection while the spread of infection tends to subside, but we received valuable opinions and will link them to improvements at the plant. It was also held at the Shinshiro Rally (March 2022), but due to COVID-19, this year's event was also held without spectators.

Onomichi Plant (OP)

Business activities

Production of tires for large construction vehicles, mining vehicles and industrial vehicles.

Total site area

193,000m²

Number of employees

425 (as of December 2022)

Location

20 Higashi-Onomichi, Onomichi City, Hiroshima 722-0051, JAPAN

Contact for consultation and complaints

Plant Control Section

Tel: +81-848-46-4580

Fax: +81-848-46-4579



Message from the General Manager



Tetsuro Murakami

The Onomichi Plant is situated overlooking the islands of the Setouchi Shimanami Sea Route and is Yokohama Rubber's main production plant for tires for large construction/mining and industrial vehicles.

We conduct our activities with the aim of "becoming a company with world class technologies for protecting the environment," as stated in Yokohama Rubber Environmental Policy, and based on "bright, happy and vigorous" activities and cherishing greetings and the "5S" activities. With regard to environmental matters, we have carried out the improvement of equipment, the reviewing of mechanisms, and repeated educational activities for the purpose of preventing a recurrence of any past environmental trouble. Such has also been carried out in order to realize a reduction of environmental risk, a reduction of greenhouse gas emissions and a reduction of industrial waste.

Meanwhile, in terms of contribution to the local community and communication activities, we have been taking into consideration the status of COVID-19, opening the "Dinosaur Park" on the plant premises to the public, accepting children, students, and guests for plant tours, participating in local cultural activities and events, and promoting the "Heisei no Mori" project in Otsuchi Town, Iwate Prefecture. We continue to actively participate in local cultural activities and events, and

promote the creation of a " Forever Forest" in the town of Otsuchi, Iwate Prefecture. Furthermore, we commenced a biodiversity protection survey in 2013, and we have been continued our measures to maintain and improve biodiversity, both here on the plant premises and in the neighboring watercourses.

In terms of biodiversity conservation surveys, we have been continuing our efforts since 2013 to maintain and improve the biodiversity of the plant grounds and neighboring water bodies.

Yokohama Rubber's Onomichi Plant will continue to contribute to society in consideration of the global environment, and will conduct its business activities with the aim of becoming a business site that is trusted and loved by everyone.

Organizational Governance

Under the factory policy to promote safety, environment, and quality improvement, we make employees aware of the policy through regular morning meetings, and promote PDCA (Plan-Do-Check-Act) of specific improvement measures at annual, quarterly, and monthly meetings. In our day-to-day operations, by carrying out our work according to carefully documented standard operating procedures, we are able to implement a management system that prevents improper working methods, and we also undertake ongoing improvement.

In addition, compliance education is provided to managers and staff every month to raise awareness of the importance of compliance among all employees.



Morning meeting



TPM instruction

Human Rights

Respect for human rights

In order to create a pleasant workplace where employees can work cheerfully, happily and energetically, we conduct workplace education, covering a variety of areas including information management, workplace bullying and harassment prevention, etc., every month. The content of this training involves the management of information and other issues such as workplace bullying, etc. We also maintain close collaboration with the Corporate Compliance Department regarding compliance-related reports and consultations, and if a problem occurs, we will promptly respond to it.

Labor Practices

Occupational safety and health measures

The plant obtained Occupational Safety and Health Management System (OSHMS) certification and has continued its certification activities. In FY2022, there were 0 lost time injuries, 1 lost time injury, and 10 minor injuries. Many accidents (75%) were caused by careless and unreasonable movements and falls, and we took steps to prevent recurrence by reviewing work procedures, deploying them in other sections, and conducting safety patrols. Moreover, by focused safety education activities, the revision of standard operating procedure (SOP) manuals through open work observations, individual education based on safe employee evaluation, the undertaking of one-on-one training between deputy work supervisors and workers, mutual advice, and daily "KYT" Hazard Prediction Training activities, we are working to heighten the consciousness of our employees with respect to safety.

In addition, we are continuing to take measures to reduce the risk of high-risk areas caused by equipment through comprehensive safety inspections.

Onomichi Plant Safety and Health Policy Basic Policy

Based on the recognition that the safety and health of all workers is the foundation of corporate activities, we will work to prevent occupational accidents and create healthy and comfortable workplaces.

Action Guidelines

1. We will educate all plant workers on the importance of safety and health, provide the necessary education and training, instill a safety-first mindset, and build a culture of safety to develop human resources capable of taking action to ensure safety.
2. Reduce risks by prioritizing and systematically improving issues extracted from risk assessments and daily near-misses in terms of laws, regulations, safety, disaster prevention, and the workplace environment by breaking them down into personnel, equipment, and operations.
3. We will improve the work environment in the workplace through education and activities so that 5S activities (Seiri, Seiton, Seiso, Seiketsu, and Shitsuke) can be practiced voluntarily.
4. We will promote the creation of a comfortable work environment through the improvement of the work environment and mutual communication, and work to improve the mental and physical health of our employees.
5. As a business involved in the automotive industry, we proactively engage in activities that contribute to the prevention of traffic accidents thus aim to achieve the distinction of recording zero harmful accidents.

Jan-2023
Tetsuro Murakami
General Manager, Onomichi Plant

Education and training for employees.

- We conduct monthly open work observation using standard work manuals and abnormal work procedures to identify potential hazards in the work and review the standard work manuals and abnormal work procedures afterwards.
- Furthermore, when the standard work manuals and abnormal work procedures are reviewed, one-on-one training is conducted between the supervisor and the worker to confirm the level of understanding of the training content.
- We provide training at the "sensory training center" for employees to actually experience the hazards of work. Once a year, the Safety and Health Section staff conducts a hands-on training for employees who have been with the company for less than three years.
- Three members of the Safety and Health Section have recently acquired certification as first-aid instructors and are now able to conduct training at their own plants.
Although the COVID-19-related training has been slow, we plan to increase the number of certified lifesaving instructors by actively holding more lifesaving courses in the future.

Responses in case of disaster

- We conduct a comprehensive evacuation drill once a year to ensure that we can respond quickly in the event of a natural disaster. In addition, since natural disasters can occur in the middle of the night, nighttime evacuation drills are also conducted for all employees.
- All employees are given instructions on how to use a fire extinguisher in the event of a fire or other emergency situation. Drills are also conducted using water fire extinguishers (for training purposes).

Promotion of employment of people with disabilities

Three disabled employees are performing clerical and light-duty duties at the plant, and will continue to work toward hiring new employees in FY2023.

Work-life balance

In aiming to improve the work-life balance of our employees, we manage overtime and promote the use of at least five paid holidays per year.

The Environment

Yokohama Rubber operates an environmental management system that is completely integrated throughout the entire company and makes efforts toward reducing risks by risk identification, countermeasures and improvements in areas exposed to environmental risks, through environmental risk management, implements its operations in compliance with relevant laws and ordinances, including the Pollution Control Agreement between the Onomichi Plant, Hiroshima Prefecture and Onomichi City, and looks to reduce risks by spreading awareness of nonconformities and small incidents at other Yokohama Rubber facilities. We are also implementing improvements to achieve ongoing enhancement of environmental performance, including a reduction of industrial waste and reduction of GHG emissions by promotion of energy savings. As a result of a plan to increase our internal audit staff according to corporate policy so as to further strengthen the ISO 14001 management system, we currently have 81 internal audit staff registered. We will further increase the number of staff according to our plan.

As one of our environmental activities, we have participated in the "Green Curtain Contest" sponsored by Onomichi City, and have won consecutive awards and been inducted into the Hall of Fame.

Onomichi Plant Environmental Policy

In line with Yokohama Rubber's management policy "Deal fairly with society and value harmony with the environment," we strive to embody genuine consideration for the global environment, and to be a top-level business in terms of our contribution to the environment.

1. The Onomichi Plant addresses measures in consideration of the environment in all of its activities under the leadership of top management, and it implements world-class environmental activities.
2. The Onomichi Plant continues its education and enlightenment programs so that each one of its employees understands this Policy and acts accordingly.
3. The Onomichi Plant has strengthened its Environmental Management System in order to become a plant trusted by local communities and it continues to advance management with a proactive stance in order to prevent environmental pollution and improve the environment, while aiming to reduce environmental risk to zero.
4. The Onomichi Plant complies with related laws, regulations and agreements, etc. It promotes harmony with local communities, and works to make both a regional and social contribution.
5. To achieve carbon neutrality, the Onomichi Plant will promote energy-saving activities. We will promote less use and reuse of resources to realize a recycling-oriented society.
6. We will maintain the lush green Forests of Forever Forest on the site and contribute to the preservation of the biodiversity of the Seto Inland Sea.
7. In order to realize the Environmental Policy, the Onomichi Plant shall implement effective environmental management coordinated with its efforts to safeguard the local environment.
8. This Policy shall be published.

1-January 2023
Tetsuro Murakami

General Manager, Onomichi Plant

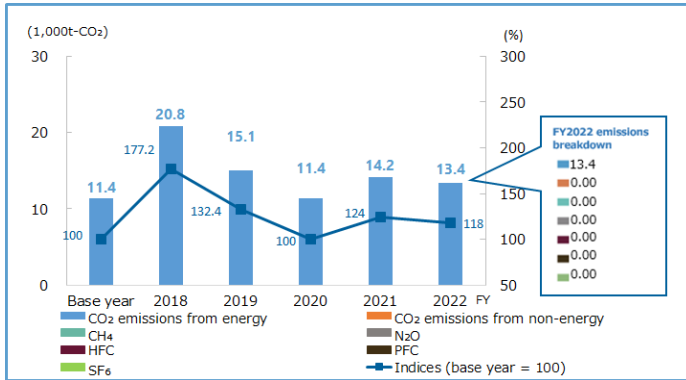
Environmental data

Reductions in greenhouse gas emissions

The plant's major energy sources are electricity and the city gas which is used as boiler fuel. Of the energy used in fiscal 2022, electricity accounted for 54.0%, city gas for 45.4% and other fuel sources 0.6%.

Greenhouse gas emissions

In order to reduce environmental loads, we have made efforts toward reducing GHG emissions by reduction targets for GHG emissions (total amount). In fiscal 2022, our energy-saving activities progressed as planned.



※The base year is defined as 1990 except for HFC, PFC and SF₆, where the base year is 1995 as per the Kyoto Protocol.

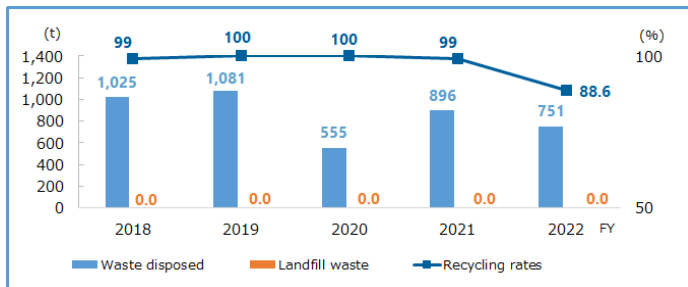
※Method of calculation of greenhouse gases (GHG): this is in compliance with the "Calculation and Reporting Manual for Greenhouse Gas Emissions" issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

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).

Effective use of resources / Reduction of waste

Waste output

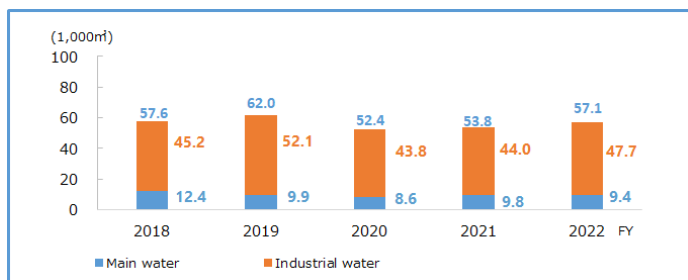
landfill disposal, resulting in a recycling rate of 88.6%.



Water usage

The Onomichi Plant collects industrial water from the Numata River water system (river water) that flows in Hiroshima Prefecture.

Water is collected from the city waterworks of Onomichi City. We are working to reduce the amount of water use by circulating plant cooling water. Furthermore, we have implemented improvement measures by setting reduction targets.



Measures for discharge into water, air and soil

Data related to water contamination

Our plant mainly uses water from the Numata River water system in Hiroshima Prefecture.

We discharge rain water into a public body of water and life system water is discharged into the sewage system of Onomichi City. The water quality of discharges is managed by setting voluntary standard values.

Item	Regulatory values	Voluntary standard values	FY2022 result		
			Average	Maximum	Minimum
pH	More than 5-less than 9	5.4 or more-8.6 or less	7.4	7.8	7
BOD concentration (mg/l)	Less than 600	Less than 315	11.2	21	5.7
SS concentration (mg/l)	Less than 600	Less than 200	5.6	10	2
Plant and animal oil concentration (mg/l)	5 or less	Less than 2.0	1	1	1
Mineral oil concentration (mg/l)	30 or less	Less than 24.0	1.1	2	1

※Regulatory values are in compliance with the Onomichi City Sewage System Ordinance. Voluntary standard values were changed in September 2012.

Air pollutants (NOx, SOx, soot and dust)

Sooty smoke is measured twice a year by each individual boiler in order to monitor emissions and the density of pollutants. As a result of switching the fuel of boilers to city gas, emissions of Sulfur oxides into the air are now minimal. Thus, the Pollution Control Agreement was amended in March 2013. As a result of this development, the measurement of SOx is no longer necessary.

Item	NOx	SOx
Amount of emission (t/year)	3	—

Facility	Substance	Regulatory values	Voluntary standard values	FY2022 result		
				Average	Maximum	Minimum
Onomichi Plant Boiler 1	NOx (ppm) Soot and dust (g/m ³ N)	150 0.10	123 or less 0.011 or less	65 Less than 0.015	72 Less than 0.002	58 Less than 0.001
Onomichi Plant Boiler 2	NOx (ppm) Soot and dust (g/m ³ N)	150 0.10	120 or less 0.05 or less	91 Less than 0.001	100 Less than 0.001	81 Less than 0.001

※In compliance with the Pollution Control Agreement with Hiroshima Prefecture and the Pollution Control Agreement with Onomichi City.

Soil contamination

In order to monitor the status of contamination of soil by specified hazardous substances, we voluntarily measure and monitor the constituents of groundwater once every few years.

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Onomichi Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.

Regarding the handling of substances pursuant to the PRTR Law, please refer to

[the Safety Evaluation Table of Domestic Production Bases.](#)

Biodiversity conservation activities

As biodiversity conservation activities, we had planned to conduct conservation of the Fujii River near the plant, which flows into the Seto Inland Sea, as well as monitoring surveys of birds on the plant grounds and conservation activities three times a year.

In FY2022, activities in February were cancelled in order to comply with COVID-19, and were conducted twice in May and October.



Monitoring activities within the grounds of the plant



Monitoring activities at the Fujii River Water Park



Bird observation on the plant premises (white-winged teal)

Fair Operating Practices

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 then respond to them sincerely. We also respond appropriately to questionnaires received from business partners.

Furthermore, we are constantly hosting plant tours both by manufacturers who purchase our products and sales agents. These tours give the visitors an opportunity to inspect the production frontlines and to confirm the quality of our products.

Consumer Issues

Responses to complaints

When defect information is received from the market, we analyze the usage conditions and the failed tire to determine the cause. The results of the analysis are reported to the customer via the department in charge. 74 analysis reports were submitted in fiscal year 2022. The majority of the failures were caused by usage conditions, but in cases where the failure was due to manufacturing or design factors, we promptly implement countermeasures to prevent recurrence.

Community Involvement and Development

Relationship with local societies

As a place of recreation for people in the region, we open the Dinosaur Park to the public every day, from 8:00 a.m. to 4:30 p.m. In order to make the house more comfortable, the area around the cherry tree roots has been cleared.

In fiscal 2022, a total of 2,780 persons visited the Dinosaur Park.

We received one group for a plant tour.



The Dinosaur Park is open to the public

Participation in local activities

In FY2022, most events were cancelled due to the COVID-19 disaster.

Sponsorship of Onomichi Truck Festival (September) was cancelled.

Onomichi Lantern Festival (October) 8 volunteers participated in preparation and clean-up



Blood donation activities by employees (Cancelled due to COVID-19)

Beautification activities around the plant (once a month) (95 participants)

Fujii River Evening Festival (June 2022) was cancelled



Fujii River Evening (June 3, 2023)

Plant tour and workshop

We accept requests for plant tours from schools and companies from time to time.

Available days: Days when plant is in operation: from Monday to Friday

(Except for year end and New Year holidays, and consecutive holidays in May and August)

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

Contact: Onomichi Plant, Plant Control Section

Tel: +81-848-46-4580

A 30-minute walk from Higashi-Onomichi Station.

Ibaraki Plant (IP)

Business activities

Production of high-pressure hoses, sealing materials

Total site area

152,000m²

Number of employees

267 (as of the end of December 2022)

Location

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

Contact for consultation and complaints

Tadashi Kamimura, Plant Management Division

Tel: +81-299-46-1111

Fax: +81-299-46-0235

E-mail: tadashi.kamimura@y-yokohama.com



Message from the General Manager



Takashi Kojima

The Ibaraki Plant began operations in 1974, followed by the construction of a second plant in 2001 and a third plant in 2009, and has continued to this day as a plant for the production of high and low pressure hoses for hydraulic and automotive piping applications.

We are committed to becoming a top-level environmentally friendly company that embodies "Caring for the Future" for the sake of the global environment, based on our management policy of "valuing fairness to society and harmony with the environment".

In addition, we are promoting various activities to harmonize and integrate with the rich natural environment of Ibaraki, and to contribute to the local community and society in order to achieve this symbiosis, in addition to our environmental policy.

Furthermore, the planting of trees at the plant, which began in 2008, was completed in 2012, we continue to grow seedlings. We donate these saplings to both local and outside organizations for their tree-planting events.

As part of our biodiversity activities started in 2013, we have conducted bird watching, insect watching, and vegetation surveys inside the plant, as well as water quality and aquatic life surveys of the Sonobe River at the outlet of plant effluent three times a year to investigate the impact of the plant effluent on nature. Although we have recently suspended large-

scale activities due to the impact of COVID-19, we have been publicizing these activities to the local community in order to improve communication.

Additionally, our biodiversity activities have been recognized, in that in 2019 we were certified and continue by ABINC as a Living Creature Coexistence Office®.

We further strengthen our environmental management systems at the Ibaraki Plant, and push forward with the total-employee participation model, both with regard to those activities that make an environmental contribution, and with regard to the prevention of environmental trouble.

Organizational Governance

Decision-making processes and structures

The following three items have been established with respect to the structuring of the plant's safety culture:

1. Greet your guests properly
2. Keep your appearance neat and tidy
3. Be sure to point and call properly

With respect to the plant's safety, environment and quality policies, such are established in accordance with corporate policy. Concerning their orientation, such is decided through the meetings system.

Human Rights

Consideration of human rights by suppliers

The April 2022 study session was held on the web due to the COVID-19 disaster. The content of this meeting was the following 6 topics.

1. ESG Management
2. CSR Report and CSR Guidelines
3. Workplace Safety
4. Business Consultation Service
5. Mid-term Environmental Plan and Initiatives
6. Companies and Human Rights

Complaint resolution

There were no reports submitted to the Corporate Compliance Department in 2021, and no consultations requested.

Labor Practices

Creating a safe and healthy workplace environment

Based on the recognition that the basis of corporate activity is assuring the safety and health of both our employees and those of cooperating companies, Occupational Safety and Health Management System (OSHMS) certification in accordance with Japan Industrial Safety & Health Association (JISHA) standards was obtained, and safety and health management has been implemented. This was done as a means by which to realize a safe, comfortable, and healthy workplace.

As a future company-wide plan, we are considering a mid-term transition to ISO 45001 (Occupational Health and Safety Management System), and this plant will be preparing for the switchover in October 2025.

In addition, each section is conducting risk assessment and risk reduction activities for existing facilities. 12 risk level IV and V cases were addressed in FY2022, and 118 risk level III cases were addressed in FY2023.

Circle activities

We reduce all kinds of losses such as reduction of equipment breakdowns, quality defects, and improvement of workability. And, circle TPM improvement activities are being conducted to allow employees to make their own workplaces more comfortable and easier to work at. We are working to vitalize these activities through the holding of events including regular announcements on the results of improvements and bulletin board contests.

Human resources development and training

Work training is undertaken by our assignment of more senior workers to instruct both new hires and fixed-term employees. This one-on-one training increases individual skill levels because training results can be reviewed and revisited.

In addition, veteran employees systematically provide guidance on employee skills to ensure that product manufacturing skills are passed down from generation to generation.

Promotion of employment of people with disabilities

As part of our promotion of the employment of disabled people, we currently have one disabled employees working actively in the plant.

We will continue to implement improvements to create a barrier-free workplace, so as to foster the employment of disabled people.

Work-life balance

Two days a week, Wednesdays and Fridays, have been established as days with specified hours for leaving work.

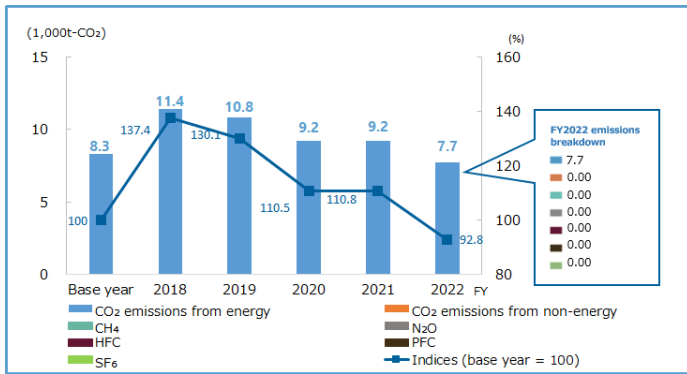
The Environment

Environmental data

Reductions in greenhouse gas emissions

Greenhouse gas emissions

Greenhouse gas emissions have been gradually decreasing since fiscal 2010.



※The base year is defined as 1990 except for HFC, PFC and SF₆, where the base year is 1995 as per the Kyoto Protocol.

※Method of calculation of greenhouse gases (GHG): this is in compliance with the “Calculation and Reporting Manual for Greenhouse Gas Emissions” issued by the Ministry of the Environment and the Ministry of 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).

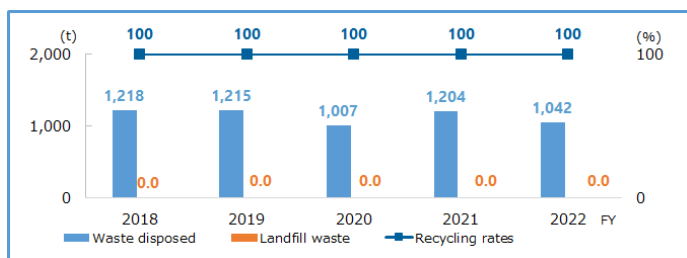
Effective use of resources / Reduction of waste

Waste output

From fiscal 2006, we have continued complete zero emissions.

Waste landfill

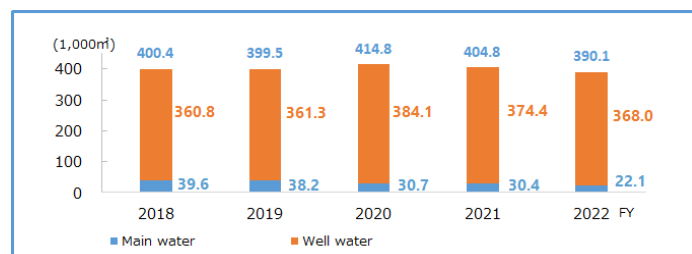
In fiscal 2007, we achieved a recycling rate of 100% and we have maintained that rate since.



Water usage

The plant uses 400,000 tons of water a year.

Sources consist of underground water of about 90% and city waterworks of 10%.



Measures for discharge into water, air and soil

Data related to water contamination

The plant discharges about 430,000 tons of wastewater a year into the Sonobe River.

Item	Regulatory values	Voluntary standard values	FY2022 result		
			Average	Maximum	Minimum
pH	5.8~8.6	6.7~8.2	7.6	8.1	7.2
BOD concentration (mg/l)	10	6.5	2.4	5.3	1
COD concentration (mg/l)	10	5.5	1.7	2.8	1
SS concentration (mg/l)	15	5	1	1	1
Mineral oil concentration (mg/l)	3	0.8	0.5	0.5	0.5

※Ibaraki Prefectural Ordinance and Environmental Protection Agreement with Omitama City

※Discharge point: Sonobe River

Soil contamination

We conduct groundwater analysis (shallow well) once a year and confirmed that the standard values were within the laws and the ordinances of Omitama City.

Air pollutants (NO_x, SO_x)

Measurements are conducted twice a year, and we have confirmed that the results are within the standards set out in all laws and in Omitama City Ordinances.

Substance	NOx	SOx
Amount of emission (t/year)	1	0.3

Facility	Item	Regulatory values	Voluntary standard values	FY2021 result		
				Average	Maximum	Minimum
Ibaraki Plant No.1-No.3 Boiler	SOx emissions (K-value)	17.5	10 or less	0.32	0.54	0.16
	NOx (ppm)	260	125	45	59	12
	Soot and dusts (g/m ³ N)	0.3	0.1	0.004	0.006	0.003

※The Air Pollution Control Act and Environmental Protection Agreement with Omitama City.

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Ibaraki Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.

Regarding the handling of substances pursuant to the PRTR Law, please refer to

➤ [the Safety Evaluation Table of Domestic Production Bases.](#)

Noise reduction

Noises are measured at 15 places on the border of the plant premises once a month. We can confirm that the results are within the standards set out in Omitama City Ordinances (below 55db).

Preventing pollution

So as to prevent risks to the environment, once a year we conduct drills and tests in response to predicted emergency scenarios (such scenarios include oil leaks occurring from heavy oil storage tanks and solvent cans being upset during transportation, etc.).

Industrial Waste Reduction Initiatives

To reduce industrial waste, we promote activities to reduce product and semi-finished product scraps and waste separation mainly by each process manager. We are working to reduce the amount of waste by recycling waste plastics used in manufacturing processes.

Alleviating and responding to climate change

As energy saving activities, we are promoting the use of LED lighting, improvement of air conditioning efficiency by adopting MiRACLE coils, and horizontal deployment of heat insulation and heat retention.

We also conduct energy conservation patrols every month and continue to make repairs mainly to air, steam, and water leakage points.

During Energy Saving Month activities, all employees participated in energy saving promotion activities, making suggestions and improvements related to energy waste.

Environmental protection, and recovery of natural habitats

Concerning the Sonobe River into which discharges from this plant flow, biodiversity protection surveys have been conducted at a frequency of two times a year. During these surveys, we have monitored water quality, aquatic life, plants and birdlife, etc. We have also taken steps to eliminate certain species of introduced plant and aquatic life.

In addition, starting in 2019, we have organized a new "Survey on the Living Environment of the Grey-faced buzzard (*Butastur indicus*)" to survey the vegetation and small animals (amphibians and reptiles) in the plant, focusing on the Grey-faced buzzard, which is as a Vulnerable, as one of the indicators for environmental conservation.

With the cooperation of the Omitama Wildlife Society and the Wild Bird Society of Japan, Ibaraki Prefecture, we will continue to exterminate and monitor invasive alien species three times/year.



Vegetation Survey



Water quality survey



Aquatic organism survey



Bird survey



Endangered species II " Asian Hazel " found in the plant



The " Gray-faced Buzzard-Eagle " confirmed during biodiversity preservation activities

Fair Operating Practices

Thorough statutory compliance

The managers mainly responsible for placing orders with subcontractors have participated in seminars dealing with the improvement of subcontracting transactions. In addition, all personnel acting as subcontractor contact persons attended the subcontractor study sessions organized by the Indirect Materials Procurement Department that were held at the plant, reinforcing their understanding of legal requirements.

Consideration of supplier labor, safety and workplaces

Business dealings are conducted that are fair, transparent, openly competitive and suitable.

Thorough compliance

At the 10th CSR Study Meeting, the following information was shared.

1. Yokohama Rubber's CSR Activity Policy
2. Workplace Safety
3. Corporate and Human Rights
4. Supplier Consultation Desk

As education within the company, we hold compliance seminars at a frequency of once a month.

Consumer Issues

Responses to complaints

If any complaints are raised about products, we quickly collect the actual item and investigate the causes and prepare reports to make a response satisfactory to the customer.

Community Involvement and Development

Coexistence and shared prosperity with the local community

We had planned to hold a round-table discussion on biodiversity conservation activities, but due to the outbreak of COVID-19, we decided to postpone the meeting in the plant and distribute related materials.

Employment creation

In FY2022, we hired six new employees and six mid-career hires from high schools near the plant.

Regional contributions

Due to the COVID-19 infectious disease outbreak, events such as the Hatori Fureai Plaza and the Omitama City Fureai Festival were cancelled in FY2022 as well.

At the Green Festival 2022 held on November 23 in Naka City, Ibaraki Prefecture, 100 saplings were provided free of charge as gifts for visitors at the booth of the Ibaraki Prefecture Forestry and Forestry Association.

The Otsuchi Gakuen "Furusato Department" tree-planting event, in which we are participating as volunteers, was held on April 28 while taking measures against COVID-19 infection, and 62 saplings were provided free of charge.

The provided saplings were planted in the Shonan International Village Meguri no Mori project and distributed as gifts to participants.



Seedlings donated to Silva, a non-profit general incorporated association

Discussion for local residents regarding our activities to help safeguard biodiversity

Although we had planned to hold a meeting with local residents to discuss biodiversity conservation activities, we decided to hold the meeting in writing, considering the safety of local residents as our first priority.

Relationship with local societies

As part of our efforts to foster close communication with local government authorities and local corporations, we attend the regular meetings of the local corporation association to exchange views and share information with the Mayor, local councilors and the managers of other local corporations. (The annual meeting hosted by the Minosato Area Business Liaison Association, February: 13 companies participated in writing) hosted by the Minosato Area Business Liaison Association, February: 13 companies participated in writing)

Plant tours

We only conducted a tour for job seekers (high school students) in July 2022.

While looking at the situation of COVID-19, we are being promoted to communicate with neighboring areas.

Nagano Plant (GP)

Business activities

Production of hydraulic-hose fitting and auto-hose fitting parts, and the production of self-sealing assemblies, coupling assemblies, hydraulic-hose assemblies, and auto-hose assemblies



Total site area

28,169 m²

Number of employees

352 (as of June 2023)

Location

9100 Kawano, Toyooka-mura, Shimoina-gun, Nagano 399-3201, JAPAN

Nagano Plant (Takamori)

Total site area

19,809 m²

Location

548 Yoshida, Takamori-cho, Shimoina-gun, Nagano 399-3102, JAPAN

*Production operations ceased in late June 2017.

Contact for consultation and complaints

Plant Control Section

Tel: +81-265-34-2051 Fax: +81-265-34-2052

E-mail: akihiko.sugeta@y-yokohama.com

Message from the General Manager

The Nagano Plant began operations in the town of Takamori in 1961.

In 2013, we began implementation of a plan to integrate the metal fittings processing and hose assembly operations of the Hoses and Couplings Division. The first stage in this project was the relocation of the functions of the Hiratsuka-Higashi plant (in Kanagawa Prefecture) to a new factory built in Toyooka Village; this relocation was completed in February 2014.

In 2015, work began on the construction of a new factory on an adjacent site; and this was completed in November 2016.

We then proceeded to move the functions of the Takamori Plant to the new factory, the relocation of major production facilities was completed in June 2017, and this marked a major new step forward for us with the development of integrated production, including everything from metal fittings processing through to hose assembly.



Eita Minegishi

Through machining and cutting processes that make use of equipment such as multi-axis CNC machines and NC lathes, etc., we produce oil pressure hose clasps and hose clasps for automobiles; we also complete the production of hoses produced at the Ibaraki Plant by caulking and assembling them. These products are then supplied to various hosepipe markets such as the construction machinery, machine tools and automobile manufacturing industries.

Besides being used for assembly in our own factory, the clasps that we manufacture are also supplied to affiliated plants in Japan and overseas and to other domestic customers nationwide. Furthermore, we don't just engage in the cutting of clasps, we also undertake the assembly of self-seal couplings.

The Nagano factory is located on the east bank of the Tenryu River, in the Ina Valley with its beautiful natural scenery, bordered by the Southern Alps (Akaishi Range) and the Central Alps (Kiso Range).

Precisely because of our location in such a marvelous natural environment, we are determined to keep the burden that we place on the environment as small as possible, and we are implementing various measures aimed at combatting global warming and at contributing to the development of a recycling-based, low-carbon society through energy conservation, resource-saving and recycling.

As regards energy-saving, in addition to promoting familiar energy-saving activities both at the plant and in the homes of all employees by acting as one, by introducing and renewing power saving-type equipment within the plant and seeking to control the wasteful use of energy, we are actively striving to help prevent global warming.

With regard to community and CSR activities, since fiscal 2013 we have been undertaking biodiversity conservation work involving surveys of the flora, aquatic fauna and birds along the Oshima and Tenryu Rivers. Such activities will help in conservation.

On September 7, 2015, thanks to assistance provided by Nagano Prefectural Government, we signed a "Forest Stewardship Agreement" with Toyooka Village and began to undertake satoyama (traditional community-managed forest) conservation work with respect to the area around the Toyooka Village Gymnasium and Sports Ground. In 2016, our efforts in these activities received recognition in the awarding of the Shimoina Forest Association Chairman's Prize in the Minami Shinshu Healthy Forests Awards.

Concerning the "Yokohama Forever Forest Project" that has continued since 2007, we concluded the plan for stage VI tree planting activities in 2013, and in 2016 we donated a total of 1,040 seedlings grown at the plant to local towns and villages. For the Tenryu River which flows through the region, each year we proactively participate as a party in charge of allocations during the river cleanup (the environment picnic).

We also make effective use of opportunities for communication and exchange with the residents of Takamori and Toyooka, for example by arranging plant tours for local elementary and high school students and members of local organizations, etc. In addition to listening to what people have to say, we are working to improve understanding of the Company's business activities and its environmental conservation efforts.

Furthermore, by visiting the suppliers who collaborate with us on the provision of materials and parts for our business, and by proactively encouraging our customers to visit us, we foster smooth, two-way communication, in line with our aim of being a factory that is able to respond effectively to every nuance of market needs within the supply chain.

Organizational Governance

Concerning decision-making, a system is in place so that monthly meetings are held for each different area. Safety and health issues are decided by the Safety and Health Committee, environment issues by the Environment Committee, energy issues by the Energy Savings Committee, and quality issues by the Quality Committee. Furthermore, Section Chief Meetings and Follow-up Meetings are held as required to make decisions on plant-wide issues. Employees are notified of the decisions made by this committee system through daily communications and by the General Manager's Morning Meeting held at the start of each month.

As regards compliance awareness-raising activities, at the end of each monthly Safety and Health Committee meeting, the Safety and Health Section Chief (who also serves as head of the Corporate Compliance Department) uses the Department's "Workplace Learning Session Materials" to implement education for the meeting participants. In each workplace, the members of the Safety and Health Committee implement the activities decided on at the workplace safety and health committee meetings on a plant-wide basis.

Human Rights

Supply chain relations

We were unable to visit each company from which we procure parts and materials in FY2022 due to the COVID-19 disaster. In FY2023, we will visit each company systematically to confirm production and quality status based on the "3 Gen" principle of "actual place," "actual part," and "actual situation" in order to achieve a better image through collaboration. We also aim to foster effective communication with suppliers through the holding of Purchasing Liaison Meetings, Supplier Quality Coordination Meetings, and CSR Study Meetings.

Regarding our customers, by attending certified plant management meetings and hosting plant inspections, we are able to assist customers with their business operations by maintaining a clear picture of the types of products and services that our customers, and the market as a whole, require.

Labor Practices

Nagano Plant Safety and Health Policy

Nagano Plant Safety and Health Policy

Basic Policy

Following the Management Policy "Create a workplace that values, improves and energizes people," Yokohama Rubber shall consider the safety and health to be the basis for everything, and focus on preventing occupational accidents and creating workplaces comfortable and healthy both physically and mentally.

Health and Safety Policy

1. Giving top priority to the safety and health, participating by all members and developing globally, whole Yokohama Rubber group will improve the safety and health activities.
2. Yokohama Rubber will comply with all laws and regulations related to the safety and health, and take continuous improvement for the safety and health.
3. Yokohama Rubber will communicate with stake holders and cooperate with value chains to contribute to the local communities and the society.
4. Yokohama Rubber will strengthen the use of the Occupational Safety and Health Management System and repeat the PDCA cycle for continuous improvement.
5. Yokohama Rubber will carry out Risk Assessments for the "safety of the equipment" and "establishment of the Standard Operating Procedure" to promote reduction of the risk.
6. Being a part of the automotive industry, Yokohama Rubber will take preventive measures against traffic accidents.
7. Yokohama Rubber will create the safe and comfortable workplace, and take measures to promote physical and mental health positively.
8. Yokohama Rubber will make employees recognize the importance of the safety and the health, and provide education and training for them as required.
9. Yokohama Rubber shall publish this policy and make it known to all.

January 1, 2023
Nagano Plant, Yokohama Rubber Co., Ltd.
General Manager
Eita Minegishi

Disaster-prevention drills

Emergency drills were held on June 22 and 27 in the spring and November 9 and 16 in the fall. Self-defense firefighting drills were also held in conjunction with these drills.

Water fire extinguisher training was also conducted for employees. The training was designed to ensure that employees are trained in the use of fire extinguishers and are able to quickly extinguish fires.



Evacuation Drill



Formation of each team



Assumed power outage drill



Firefighting training with water



Fire extinguisher training with water

The Environment

Nagano Plant environmental policy

Following the norm of "valuing fairness to society and harmony with the environment" as stated in our management policy, we will become a top-level environmentally friendly business site that embodies "caring for the future" for the sake of the global environment.

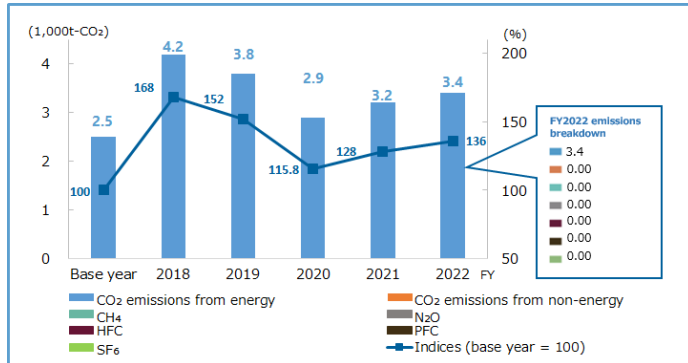
1. Under the leadership of senior management, the Nagano Plant, as an integrated clasp-processing and assembly operation, works on reducing environmental impacts at all stages on a global level, from production to waste recycling/handling, by implementing world-acclaimed environmental activities that are uniform through the Group.
2. In order to remain a plant that is trusted by society, we strive continuously to prevent environmental pollution and sensory pollution and to reduce environmental impact through chemical substance management in our effort to improve the environment. We achieve this by strengthening our environmental management systems and adopting a proactive stance in an aim for zero environmental risks.
3. To achieve carbon neutrality, we will promote decarbonization measures such as energy-saving activities and introduction of renewable energy. We will also promote resource conservation and recycling to realize a recycling-oriented society.
4. We observe the environment-related laws and regulations applicable to the plant, and other agreements which we have entered into, and we continue to implement measures aimed at furthering environmental protection.
5. We work to promote cooperation with the value chain and to contribute to both the local community and society as a whole. While doing so, we shall respect international regulations and deepen our communication with stakeholders.
6. We have set out environmental objectives and targets to realize the environmental policy of the plant, and we prepare and implement plans accordingly.
7. We maintain communications with the local community, and promote activities in harmony with the region that also make a positive contribution to the region.
8. We will strive to conserve biological diversity irreplaceable in the region and use natural resources in a sustainable manner in our business activities.
9. To improve their own understanding, awareness, and actions, we educate and enlighten all our employees and individuals so that they fully understand this environmental policy.
10. Our environmental policy shall be made available to the public upon request.

January 1, 2023
Nagano Plant, Yokohama Rubber Co., Ltd.
General Manager
Eita Minegishi

Environmental data (Nagano Plant)

Reductions in greenhouse gas emissions

Greenhouse gas emissions at Nagano Plant and their indices (base year = 100)



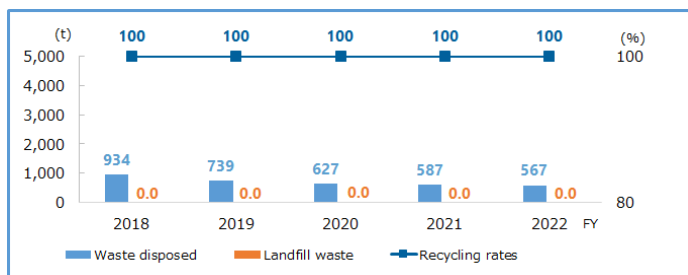
※Base year is defined as 1990 except for HFC, PFC and SF₆, where the base year is 1995 as per the Kyoto Protocol.

※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).

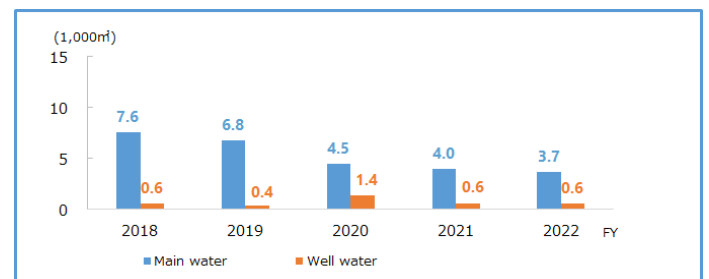
Note that GHG emissions associated with purchased power in FY2009 were calculated using the table of Emission Coefficients by Power Company (Ministry of the Environment).

Effective use of resources / Waste reductions

Waste output



Water usage



Measures for discharges into water, air and soil

Data related to water contamination

Plant Name Drain Name	Item	Regulatory values	Voluntary standard values	FY2022 result		
				Average	Maximum	Minimum
Nagano Plant (Takamori)	pH	5.8~8.6	6.0~8.0	6.8	7.0	6.6
	BOD concentration (mg/l)	160	22 or less	2.1	2.3	1.9
	COD concentration (mg/l)	160	25 or less	4.9	5.8	4.0
	SS concentration (mg/l)	200	—	4.0	6.2	1.8
	Plant and animal oil concentration (mg/l)	5	—	0.5	0.5	0.5
	Mineral oil concentration (mg/l)	5	—	0.5	0.5	0.5
Nagano Plant (Toyooka)	pH	5.8~8.6	6.0~8.0	6.4	6.6	6.1
	BOD concentration (mg/l)	160	22 or less	4.2	5.7	2.6
	COD concentration (mg/l)	160	25 or less	6.3	7.9	4.7
	SS concentration (mg/l)	200	—	5.8	6.0	5.5
	Plant and animal oil concentration (mg/l)	5	—	0.5	0.5	0.5
	Mineral oil concentration (mg/l)	5	—	0.5	0.5	0.5

※Not subject to legal regulation (Voluntary standard measurement, twice or more per year)

※Regulatory values are in compliance with the ordinances of Nagano Prefecture

※Takamori : Water discharged to Oshima River, Toyooka : Water discharged to Terasawa River

Reporting on chemical substance management status (Pollutant Release and Transfer Register (PRTR) Law compliance)

The Nagano Plant verifies whether secondary materials and auxiliary materials contain chemical substances subject to Safety Data Sheet (SDS) requirements, and in the case of substances where the amounts handled exceed the thresholds specified by the PRTR Law, annual reports are submitted to the national (or prefectural) authorities and safety impact assessment is performed.

Regarding the handling of substances pursuant to the PRTR Law, please refer to

[the Safety Evaluation Table of Domestic Production Bases.](#)

Participation in the Tenryu River Environment Picnic (Cleanup)

The Tenryu River Environmental Picnic (garbage pickup), which we participate in every year, was postponed due to COVID-19.

Yokohama Forever Forest Tree planting Activity

With the completion of the planting of 6,905 trees, exceeding the cumulative total number in the plan, the activities were concluded in stage VI of 2013.

Although the provision of seedlings outside the company was continued after that, the continued provision became difficult after the move to Toyooka, and the activities were concluded with the donation of 1,040 seedlings to local municipalities and residents in December 2016.



Biodiversity conservation activities

As part of biodiversity conservation activities that were started from fiscal 2013, we have conducted monitoring surveys in the spring and fall of every year downstream in the Oshima River where rainwater is discharged from Takamori and near its junction with the Tenryu River, as well as downstream in the Terasawa River where rainwater is discharged from Takamori and along the agricultural-water runoff ditch located at Kono Hydrophilic Park.

Activities have been resumed since FY2021 by demarcating a regulating pond on the plant site.



Satoyama Conservation Activity

On June 10, 2022, after a three-year absence, eight people resumed satoyama conservation activities and worked on underbrush and undergrowth maintenance.



Underbrush and undergrowth maintenance work in satoyama conservation activities

MD Squad activities

The MD team's activities included promotion of paperless office, 2S on OA servers, waste rag collection, stocking collection, 2S patrols, heat measures through green curtains, reduction of confidential document disposal costs by introducing shredders, reduction of purchase costs & waste by introducing rental items, review of outsourced cleaning details, review of purchased items, and energy saving activities. Reviewing the contents of outsourced cleaning, reviewing purchased goods, energy saving activities, etc.

In particular, for energy conservation, we have introduced equipment that can quantify the amount of compressed air leakage and have been working to improve air leaks from facilities.

In addition, we have achieved zero rag purchases through rag collection activities.



green curtain



Waste rag collection



Fair Operating Practices

Thorough statutory compliance

In fiscal year 2022, there were no legal violations or external complaints.

Consumer Issues

Internship

Due to COVID-19, this program was not implemented in FY2022.

Community Involvement and Development

Donations to assist the local community

Due to COVID-19, the event was cancelled.

Donations were made to the Red Feather Community Chest.

Employee Communication

The labor-management sponsored event, which had been cancelled due to COVID-19, was implemented by inviting a kitchen car after considering infection control measures. 490 meals were served in December 2022.



Blood donations

June 15: 35 participants

November 15: 28 participants

Safety Evaluation Table of Domestic Production Bases

Safety evaluation of substances subject to PRTR

How to approach the “Degree of Safety Evaluation”

While the PRTR Law requires reports of discharge amounts of chemical substances into the environment, the impact of chemical substances on the environment largely depends not only on the discharge amount but also on the degree of hazardousness. Therefore, it is necessary to take action based on comprehensive evaluation to reduce the risk that chemical substances pose to the environment, considering both the discharge amount and the hazardousness.

Accordingly, since 2010, with reference to the “Guidelines for Evaluation of Degree of Impact on Safety by Chemical Substances” issued by Kanagawa Prefecture, we have calculated the “translation discharge amount” obtained by multiplying the “discharge amount” of the individual substances to be reported under the PRTR Law by the “toxic coefficient” depending on the hazardousness published by Kanagawa Prefecture, and we have calculated the total discharge amount by adding them together. Then, we ranked the degree of impact on “human health” and on the “ecological system.” We clarified the direction of risk reduction by indicating the position of each business site with reference to “Evaluation Table of Degree of Impact on Safety.”

For example, the Hiratsuka Factory recorded a total translation discharge amount for human health of 2,714.818 tons and ranked III, while with a total translation discharge amount for the ecological system of 7.18 tons, it ranked 5. Accordingly, the degree of impact on safety of the Hiratsuka Factory is indicated as “III-5.”

Reasons for changes in FY 2022

Hiratsuka Factory, III-4 to III-5 The ecosystem improved.	The amount of No. 300 toluene handled and discharge decreased.
There were no changes in other plants.	

Explanation about degree of impact on safety

Toxicity ranking and toxicity factor

Rank	A	B	C	D
Toxicity factor	1000	100	10	1

Ranking of effects on human health

Rank	Total converted emissions (Effects on human health)
I	10,000t or more
II	3,000t to less than 10,000t
III	1,000t to less than 3,000t
IV	300t to less than 1,000t
V	100t to less than 300t
VI	30t to less than 100t
VII	10t to less than 30t
VIII	Less than 10t

Ranking of effects on the ecosystem

Rank	Total converted emissions (Effects on the ecosystem)
1	10,000t or more
2	1,000t to less than 10,000t
3	100t to less than 1,000t
4	10t to less than 100t
5	Less than 10t

Changes in safety evaluation of each plant

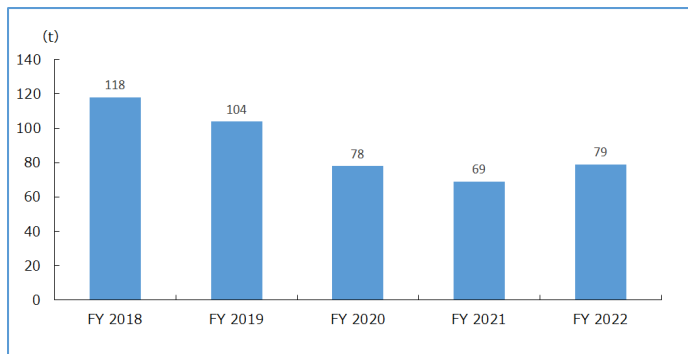
Plant Name	2018	2019	2020	2021	2022	Improvement or worsened points
Hiratsuka Factory	II-4	II-4	II-4	III-4	III-5	No change in human health impact and ecosystem is better compared previous year (FY 2021).
Adhesives and Sealants Plant	VII-4	VII-5	VII-5	–	–	Not applicable after 2021.
Nagano Plant	VIII-5	VIII-5	VIII-5	VIII-5	VIII-5	There was no change from the previous year (FY 2021).
Ibaraki Plant	VII-5	VI-5	VI-5	VI-5	VI-5	There was no change from the previous year (FY 2021).
Shinshiro Plant	IV-4	IV-4	V-4	VII-5	VII-5	There was no change from the previous year (FY 2021).
Shinshiro-Minami Plant	V-5	V-5	V-5	V-5	V-5	There was no change from the previous year (FY 2021).
Mie Plant	VI-5	VI-5	VI-5	VI-5	VI-5	There was no change from the previous year (FY 2021).
Mishima Plant	V-4	IV-4	V-4	VI-5	VI-5	There was no change from the previous year (FY 2021).
Onomichi Plant	VII-5	VIII-5	VII-5	VII-5	VII-5	There was no change from the previous year (FY 2021).

Category	Effects on safety (effects on the ecosystem)						
	Worse	1	2	3	4		5
Effects on safety (effects on human health)	I						Great effect on human health
	II						
	III				Hiratsuka Factory (FY 2021)	Hiratsuka Factory	Moderate effect on human health
	IV						
	V					Shinshiro-Minami Plant Shinshiro-Minami Plant (FY 2021)	Small effect on human health
	VI					Mishima Plant Mie Plant Ibaraki Plant Mihima Plant (FY2021) Mie Plant (FY 2021) Ibaraki Plant (FY 2021)	
	VII					Shinshiro Plant Onomichi Plant Shinshiro Plant (FY2021) Onimichi Plant (FY2021)	Small effect on human health
	VIII					Nagano Plant Nagano Plant (FY 2021)	
		Great effect on the ecosystem	Moderate effect on the ecosystem		Small effect on the ecosystem		

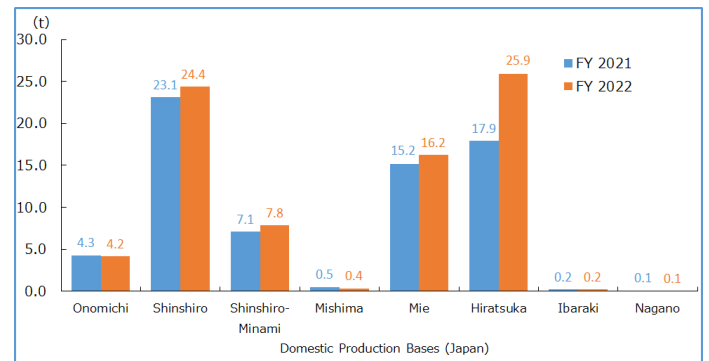
※As the Nagano Plants have no substances to be reported (less than 1 ton), their details are not attached.

※Each plant discloses information in accordance with the requirements of the law.

Discharge and total transfer amounts of PRTR in domestic factories



Discharge and total transfer amounts of PRTR in domestic factories (by location)



Onomichi Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

Safety Evaluation: VII-5*1

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission	Transfer	Emission & Transfer (Combined)	Safety Evaluation			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	200.0205	0.0000	2.0168	2.0168	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	78.5400	0.0000	0.7920	0.7920	B	0.000	A	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	6.2764	0.0000	0.0633	0.0633	D	0.000	B	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.1 ^{3,7}]decane; hexamethylenetetramine	100-97-0	1.8830	0.0000	0.0190	0.0190	C	0.000	D	0.000
	392	n-hexane	110-54-3	1.3145	1.1305	0.0000	1.1305	C	11.305	Not Reported	0.000
	132	cobalt and its compounds	68-19-9	1.1338	0.0000	0.0114	0.0114	A	0.000	Not Reported	0.000
	74	p-octylphenol	1806-26-4	1.0606	0.0000	0.0107	0.0107	Not Reported	0.000	A	0.000
Not Subject to reporting	86	cresol	1319-77-3	0.9540	0.0000	0.0096	0.0096	B	0.000	C	0.000
	205	1,3-diphenylguanidine	102-06-7	0.8800	0.0000	0.0089	0.0089	A	0.000	C	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	0.6000	0.0000	0.0061	0.0061	D	0.000	B	0.000
	411	formaldehyde	50-00-0	0.1591	0.0000	0.0016	0.0016	A	0.000	C	0.000
	333	hydrazine	302-01-2	0.1178	0.0000	0.1178	0.1178	A	0.000	B	0.000
		Total			292.9397	1.1305	3.0572	4.1876	—	11.305	—

*1: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Shinshiro Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

Safety Evaluation: VII-5*2

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	834.0797	0.0000	16.3868	16.3868	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	253.3678	0.0000	4.1549	4.1549	B	0.000	A	0.000
	205	1,3-diphenylguanidine	102-06-7	137.5356	0.0000	0.0000	0.0000	A	0.000	C	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.1 ^{3,7}]decane; hexamethylenetetramine	100-97-0	35.5964	0.0000	0.2113	0.2113	D	0.000	B	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	33.7853	0.0000	0.3509	0.3509	C	0.000	D	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	22.2536	0.0000	0.2132	0.2132	D	0.000	B	0.000
	74	p-octylphenol	1806-26-4	21.4100	0.0000	0.3570	0.3570	Not Reported	0.000	A	0.000
	132	cobalt and its compounds	-	8.4050	0.0000	0.1401	0.1401	A	0.000	Not Reported	0.000
	349	phenol	108-95-2	7.1308	0.0000	0.0762	0.0762	A	0.000	C	0.000
	86	cresol	1319-77-3	4.4778	0.0000	0.0710	0.0710	B	0.000	C	0.000
	411	formaldehyde	50-00-0	3.2115	0.0000	0.3570	0.3570	A	0.000	C	0.000
	409	sodium poly(oxyethylene) dodecyl ether sulfate	9004-82-4	1.6076	0.0000	0.0000	0.0000	C	0.000	C	0.000
	392	n-hexane	110-54-3	1.4184	1.4184	0.0000	1.4184	C	14.184	Not Reported	0.000
Not Subject to reporting	438	methylnaphthalene	1321-94-4	0.2701	0.0014	0.0000	0.0014	A	1.351	C	0.014
	405	boron compounds	74-94-2	0.2297	0.0000	0.0734	0.0734	D	0.000	Not Reported	0.000
	80	xylene	1330-20-7	0.1368	0.1368	0.0000	0.1368	C	1.368	C	1.368
	333	hydrazine	302-01-2	0.1242	0.0000	0.0000	0.0000	A	0.000	B	0.000
	20	2-aminoethanol	141-43-5	0.0854	0.0000	0.0000	0.0000	C	0.000	C	0.000
	296	1,2,4-trimethylbenzene	95-63-6	0.0826	0.0826	0.0000	0.0826	C	0.826	C	0.826
	297	1,3,5-trimethylbenzene	108-67-8	0.0692	0.0692	0.0000	0.0692	C	0.692	C	0.692
	453	molybdenum and its compounds	1309-56-4	0.0281	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	53	ethylbenzene	100-41-4	0.2570	0.2570	0.0000	0.2570	C	2.570	C	2.570
	305	lead compounds	75-74-1	0.0222	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	368	4-tert-butylphenol	98-54-4	0.0146	0.0000	0.0000	0.0000	B	0.000	C	0.000
	1	zinc compounds (water-soluble)	557-13-1	0.0127	0.0000	0.0000	0.0000	D	0.000	Not Reported	0.000
	462	tri-n-butyl phosphate	126-73-8	0.0100	0.0000	0.0000	0.0000	A	0.000	C	0.000
	354	di-n-butyl phthalate	84-74-2	0.0226	0.0000	0.0000	0.0000	A	0.000	B	0.000
		Total			1,365.6449	1.9654	22.3917	24.3571	—	20.991	—

*1: Emissions volume = atmosphere + public bodies of water + soil

*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Shinshiro-Minami Plant

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

(Unit: tons/year)

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: V-5*2			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	255.7774	0.0000	5.3910	5.3910	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	62.1958	0.0000	0.9251	0.9251	B	0.000	A	0.000
	205	1,3-diphenylguanidine	102-06-7	44.8140	0.0000	0.5395	0.5395	A	0.000	C	0.000
	438	methylnaphthalene	1321-94-4	38.8999	0.1945	0.0000	0.1945	A	194.499	C	1.945
	155	N-(cyclohexylthio)phthalimide	17796-82-6	12.4970	0.0000	0.1411	0.1411	D	0.000	B	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	7.3015	0.0000	0.0820	0.0820	D	0.000	A	0.000
	74	p-octylphenol	1806-26-4	5.6750	0.0000	0.1168	0.1168	Not Reported	0.000	A	0.000
	132	cobalt and its compounds	68-19-9	2.9575	0.0000	0.0521	0.0521	A	0.000	B	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.1.3.7]decane; hexamethylenetetramine	100-97-0	1.7192	0.0000	0.0707	0.0707	D	0.000	B	0.000
	86	cresol	1319-77-3	1.4962	0.0000	0.0264	0.0264	D	0.000	B	0.000
Not Subject to reporting	411	formaldehyde	50-00-0	0.8512	0.0000	0.1168	0.1168	A	0.000	C	0.000
	349	phenol	108-95-2	0.2305	0.0000	0.0000	0.0000	A	0.000	C	0.000
	405	boron compounds	74-94-2	0.0809	0.0000	0.0273	0.0273	D	0.000	Not Reported	0.000
	392	n-hexane	110-54-3	0.0637	0.0637	0.0000	0.0637	C	0.637	Not Reported	0.000
	458	tris(2-ethylhexyl) phosphate	78-42-2	0.0547	0.0000	0.0000	0.0000	A	0.000	C	0.000
	296	1,2,4-trimethylbenzene	95-63-6	0.0358	0.0358	0.0000	0.0358	C	0.358	C	0.358
	297	1,3,5-trimethylbenzene	108-67-8	0.0300	0.0300	0.0000	0.0300	C	0.300	C	0.300
	80	xylene	1330-20-7	0.0267	0.0267	0.0000	0.0267	C	0.267	C	0.267
	305	lead compounds	75-74-1	0.0096	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	Total			434.7166	0.3508	7.4889	7.8396	—	196.062	—	2.871

*1: Emissions volume = atmosphere + public bodies of water + soil

*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Mishima Plant

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

(Unit: tons/year)

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: VI-5*2			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	370.9200	0.0000	0.0000	0.0000	D	0.000	B	0.000
	205	1,3-diphenylguanidine	102-06-7	90.0200	0.0000	0.0000	0.0000	A	0.000	C	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	83.2250	0.0000	0.0000	0.0000	B	0.000	A	0.000
	258	1,3,5,7-tetraazatricyclo[3.3.1.1.3.7]decane; hexamethylenetetramine	100-97-0	18.2160	0.0000	0.0000	0.0000	D	0.000	B	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	10.5200	0.0000	0.0042	0.0042	D	0.000	B	0.000
	74	p-octylphenol	1806-26-4	7.8030	0.0000	0.0000	0.0000	Not Reported	0.000	A	0.000
	349	phenol	108-95-2	3.2871	0.0000	0.0013	0.0013	A	0.000	C	0.000
	392	n-hexane	110-54-3	1.2189	0.0000	0.0005	0.0005	C	0.000	Not Reported	0.000
	411	formaldehyde	50-00-0	1.1705	0.0000	0.0005	0.0005	A	0.000	C	0.000
	409	sodium poly(oxyethylene) dodecyl ether sulfate	9004-82-4	1.0920	0.0000	0.0004	0.0004	C	0.000	C	0.000
Not Subject to reporting	300	toluene	108-88-3	0.4692	0.0129	0.0000	0.0129	C	0.129	D	0.013
	20	2-aminoethanol	141-43-5	0.2829	0.2829	0.0000	0.2829	B	28.288	C	2.829
	53	ethylbenzene	100-41-4	0.2022	0.0001	0.0000	0.0001	C	0.001	C	0.001
	296	1,2,4-trimethylbenzene	95-63-6	0.1924	0.0009	0.0000	0.0009	C	0.009	C	0.009
	80	xylene	1330-20-7	0.1883	0.0003	0.0000	0.0003	C	0.003	C	0.003
	297	1,3,5-trimethylbenzene	108-67-8	0.0682	0.0000	0.0000	0.0000	C	0.000	C	0.000
	333	hydrazine	302-01-2	0.0570	0.057000	0.0000	0.0570	A	57.000	B	5.700
	453	molybdenum and its compounds	1309-56-4	0.0432	0.000000	0.0000	0.0000	A	0.000	Not Reported	0.000
	400	benzene	71-43-2	0.0200	0.000000	0.0000	0.0000	A	0.000	C	0.000
	368	4-tert-butylphenol	98-54-4	0.010500	0.000000	0.0000	0.0000	A	0.000	C	0.000
	Total			589.0064	0.3541	0.0069	0.3610	—	85.430	—	8.555

*1: Emissions volume = atmosphere + public bodies of water + soil

*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Mie Plant

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

(Unit: tons/year)

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: VI-5*2			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	940.4700	0.0000	10.6765	10.6765	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	422.4250	0.0000	0.7280	0.7280	B	0.000	A	0.000
	189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	4979-32-2	87.8200	0.0000	0.3932	0.3932	D	0.000	B	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	67.2200	0.0000	0.2299	0.2299	D	0.000	B	0.000
	132	cobalt and its compounds	-	21.4370	0.0000	0.2664	0.2664	A	0.000	Not Reported	0.000
	205	1,3-diphenylguanidine	102-06-7	9.0800	0.0000	0.0128	0.0128	A	0.000	C	0.000
	74	p-octylphenol	1806-26-4	7.1625	0.0000	0.0582	0.0582	Not Reported	0.000	A	0.000
	392	n-hexane	110-54-3	3.7064	2.8709	0.0000	2.8709	C	28.709	Not Reported	0.000
	300	toluene	108-88-3	2.7559	0.7012	0.0000	0.7012	C	7.012	D	0.701
	296	1,2,4-trimethylbenzene	95-63-6	1.2022	0.0022	0.0000	0.0022	C	0.022	C	0.022
	405	boron compounds	-	1.0787	0.0000	0.0216	0.0216	D	0.000	Not Reported	0.000
	411	formaldehyde	50-00-0	1.0744	0.0000	0.0017	0.0017	A	0.000	C	0.000
	80	xylene	1330-20-7	1.0238	0.1287	0.0000	0.1287	C	1.287	C	1.287
Not Subject to reporting	86	cresol	1319-77-3	0.8220	0.0000	0.0176	0.0176	B	0.000	C	0.000
	20	2-aminoethanol	141-43-5	0.4681	0.0000	0.0000	0.0000	B	0.000	C	0.000
	400	benzene	71-43-2	0.1545	0.0004	0.0000	0.0004	A	0.422	C	0.004
	53	ethylbenzene	100-41-4	0.0889	0.0836	0.0000	0.0836	C	0.836	C	0.836
	297	1,3,5-trimethylbenzene	108-67-8	0.0567	0.0004	0.0000	0.0004	C	0.004	C	0.004
	349	phenol	108-95-2	0.0149	0.0000	0.0000	0.0000	A	0.000	C	0.000
	412	manganese and its compounds	-	0.0109	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	333	hydrazine	302-01-2	0.0108	0.0108	0.0000	0.0108	A	10.800	B	1.080
	453	molybdenum and its compounds	-	0.0091	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	264	2,3,5,6-tetrachloro-p-benzoquinone	118-75-2	0.0069	0.0000	0.0000	0.0000	A	0.000	C	0.000
	336	hydroquinone	123-31-9	0.0063	0.0000	0.0063	0.0063	A	0.000	B	0.000
	308	nickel	7440-02-0	0.0058	0.0000	0.0000	0.0000	A	0.000	Not Reported	0.000
	207	2,6-di-tert-butyl-4-cresol	128-37-0	0.0055	0.0000	0.0044	0.0044	B	0.000	B	0.000
87	chromium and chromium(III) compounds	-	0.0040	0.0000	0.0000	0.0000	B	0.000	Not Reported	0.000	
		Total		1,568.1202	3.7982	12.4167	16.2149	—	49.091	—	3.933

*1: Emissions volume = atmosphere + public bodies of water + soil

*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Hiratsuka Factory

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

Safety Evaluation: III-5*2

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission*1	Transfer	Emission & Transfer (Combined)	Safety Evaluation: III-5*2			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	793-24-8	289.13770	0.00000	7.39766	7.39766	D	0.000	B	0.000
	372	N-(tert-butyl)-2-benzothiazolesulfenamide	95-31-8	97.53998	0.00000	1.25638	1.25638	B	0.000	A	0.000
	155	N-(cyclohexylthio)phthalimide	17796-82-6	20.00470	0.00000	0.74543	0.74543	D	0.000	B	0.000
	31	antimony and its compounds	-	16.30033	0.00000	1.25861	1.25861	A	0.000	Not Reported	0.000
	74	p-octylphenol	1806-26-4	11.43150	0.00000	0.02250	0.02250	Not Reported	0.000	A	0.000
	58	ethylene glycol monomethyl ether	109-86-4	9.56817	2.65102	6.74348	9.39449	A	2,651.015	Not Reported	0.000
	460	tritoyl phosphate	1330-78-5	8.85600	0.00000	0.67248	0.67248	B	0.000	B	0.000
	205	1,3-diphenylguanidine	102-06-7	8.13670	0.00000	0.61617	0.61617	A	0.000	C	0.000
	352	diallyl phthalate	131-17-9	6.55268	0.00000	0.49752	0.49752	A	0.000	B	0.000
	300	toluene	108-88-3	3.86921	0.46200	0.11687	0.57886	B	46.200	C	4.620
	258	1,2,3,7-tetraazatricyclo[3.3.1.1.3.7]decane; hexamethylenetetramine	100-97-0	3.26600	0.00000	0.24800	0.24800	Not Reported	0.000	Not Reported	0.000
	80	xylene	1330-20-7	2.41717	0.13388	0.01916	0.15303	C	1.339	C	1.339
	452	2-mercaptobenzothiazole	149-30-4	2.39151	0.00000	0.18160	0.18160	B	0.000	B	0.000
	268	tetramethylthiuram disulfide; thiram	137-26-8	2.29500	0.00000	0.17427	0.17427	A	0.000	A	0.000
	349	phenol	108-95-2	2.13771	0.00000	0.11888	0.11888	A	0.000	C	0.000
	411	formaldehyde	50-00-0	1.75722	0.00000	0.01705	0.01705	A	0.000	C	0.000
	384	1-bromopropane	106-94-5	1.66815	0.00000	0.35204	0.35204	B	0.000	Not Reported	0.000
	132	cobalt and its compounds	-	1.41135	0.00000	0.10717	0.10717	A	0.000	Not Reported	0.000
	392	n-hexane	110-54-3	1.36945	1.29735	0.02501	1.32236	C	12.974	Not Reported	0.000
	405	boron compounds	-	1.08427	0.00000	0.19364	0.19364	D	0.000	Not Reported	0.000
Not Subject to reporting	259	tetraethylthiuram disulfide; disulfiram	97-77-8	0.95264	0.00000	0.07234	0.07234	A	0.000	B	0.000
	160	3,3'-dichloro-4,4'-diaminodiphenylmethane	101-14-4	0.90520	0.00000	0.06877	0.06877	A	0.000	B	0.000
	42	2-imidazolidinethione	96-45-7	0.75680	0.00000	0.05747	0.05747	B	0.000	Not Reported	0.000
	169	3-(3,4-dichlorophenyl)-1,1-dimethylurea; diuron; DCMU	330-54-1	0.75435	0.00000	0.09286	0.09286	B	0.000	A	0.000
	359	n-butyl-2,3-epoxypropyl ether	2426-08-6	0.57625	0.00000	0.04380	0.04380	B	0.000	Not Reported	0.000
	203	diphenylamine	122-39-4	0.55430	0.00000	0.04209	0.04209	B	0.000	B	0.000
	1	zinc compounds (water-soluble)	-	0.39269	0.00000	0.02982	0.02982	D	0.000	Not Reported	0.000
	330	bis(1-methyl-1-phenylethyl) peroxide	80-43-3	0.32400	0.00000	0.02460	0.02460	D	0.000	B	0.000
	127	chloroform	67-66-3	0.32235	0.01535	0.00000	0.01535	B	1.535	C	0.154
	447	methylenebis(4,1-cyclohexylene) diisocyanate	5124-30-1	0.28311	0.00000	0.00857	0.00857	A	0.000	C	0.000
	53	ethylbenzene	100-41-4	0.18458	0.08993	0.00542	0.09535	C	0.899	C	0.899
	86	cresol	1319-77-3	0.17520	0.00000	0.01330	0.01330	A	0.000	C	0.000
	57	ethylene glycol monoethyl ether	110-80-5	0.06079	0.00000	0.00083	0.00083	B	0.000	Not Reported	0.000
	446	4,4'-methylenedianiline	101-77-9	0.04778	0.00000	0.00142	0.00142	A	0.000	B	0.000
	181	dichlorobenzene	95-50-1106-46-7	0.01890	0.00090	0.00000	0.00090	B	0.090	B	0.090
	13	acetonitrile	75-05-8	0.01790	0.00000	0.00000	0.00000	C	0.000	Not Reported	0.000
	354	di-n-butyl phthalate	84-74-2	0.01470	0.00070	0.00000	0.00070	A	0.700	B	0.070
	30	n-alkylbenzenesulfonic acid and its salts (alkyl C=10-14)	-	0.01467	0.00000	0.00177	0.00177	B	0.000	B	0.000
	318	carbon disulfide	75-15-0	0.01365	0.00065	0.00000	0.00065	B	0.065	C	0.007
	240	styrene	100-42-5	0.01300	0.00000	0.00360	0.00360	B	0.000	C	0.000
	88	chromium(VI) compounds	-	0.01212	0.00000	0.00160	0.00160	A	0.000	B	0.000
	281	trichloroethylene	28861.00000	0.01176	0.00000	0.00292	0.00292	B	0.000	C	0.000
	374	hydrogen fluoride and its water-soluble salts	-	0.01050	0.00050	0.00000	0.00050	D	0.001	Not Reported	0.000
	290	trichlorobenzene	-	0.00900	0.00000	0.00900	0.00900	Not Reported	0.000	C	0.000
	133	2-ethoxyethyl acetate; ethylene glycol monoethyl ether acetate	111-15-9	0.00424	0.00000	0.00144	0.00144	B	0.000	Not Reported	0.000
	36	isoprene	78-79-5	0.00300	0.00000	0.00000	0.00000	C	0.000	Not Reported	0.000
	336	hydroquinone	123-31-9	0.00285	0.00000	0.00285	0.00285	A	0.000	B	0.000
	408	poly(oxyethylene) octylphenyl ether	9036-19-5	0.00258	0.00000	0.00000	0.00000	Not Reported	0.000	Not Reported	0.000
	186	dichloromethane; methylene dichloride	75-09-2	0.00250	0.00000	0.00250	0.00250	B	0.000	C	0.000
	296	1,2,4-trimethylbenzene	95-63-6	0.00103	0.00015	0.00001	0.00016	C	0.002	C	0.002
76	ε-caprolactam	105-60-2	0.00100	0.00000	0.00100	0.00100	B	0.000	Not Reported	0.000	
	Total			497.63823	4.65243	21.25189	25.90431	—	2,714.818	—	7.180

*1: Emissions volume = atmosphere + public bodies of water + soil

*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Ibaraki Plant

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission* ¹	Transfer	Emission & Transfer (Combined)	Safety Evaluation: VI-5* ²			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Subject to reporting	438	methylnaphthalene	1321-94-4	8.6933	0.0004	0.0000	0.0004	Not Reported	0.000	Not Reported	0.000
Not Subject to reporting	300	toluene	108-88-3	0.4212	0.1840	0.0000	0.1840	B	18.400	C	1.840
	354	di-n-butyl phthalate	84-74-2	0.0217	0.0217	0.0000	0.0217	A	21.660	B	2.166
	453	molybdenum and its compounds	-	0.0051	0.0051	0.0000	0.0051	C	0.051	C	0.051
	80	xylene	1330-20-7	0.0040	0.0000	0.0000	0.0000	C	0.000	B	0.000
	53	ethylbenzene	100-41-4	0.0025	0.0025	0.0000	0.0025	C	0.025	C	0.025
	392	n-hexane	110-54-3	0.0017	0.0000	0.0000	0.0000	C	0.000	Not Reported	0.000
	296	1,2,4-trimethylbenzene	95-63-6	0.0013	0.0000	0.0000	0.0000	C	0.000	C	0.000
	400	benzene	71-43-2	0.0003	0.0003	0.0000	0.0003	A	0.300	C	0.003
	Total			9.1510	0.2140	0.0000	0.2140	—	40.436	—	4.085

*1: Emissions volume = atmosphere + public bodies of water + soil

*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking

Nagano Plants

(Unit: tons/year)

PRTR Designated Class 1 Chemical Substances: A total volume (emissions volume + transfer volume) of one ton or more is subject to reporting.
A total volume of less than one ton is not.

	Designated No.	Specified chemical substance	Cas No	Amount to treat	Emission* ¹	Transfer	Emission & Transfer (Combined)	Safety Evaluation: VIII-5* ²			
								Toxicity rank (effect on people)	Annual converted emissions (effect on people)	Toxicity rank (effect on ecosystem)	Annual converted emissions (effect on ecosystem)
Not Subject to reporting	392	n-hexane	110-54-3	0.0559	0.0181	0.0378	0.0559	C	0.181	Not Reported	0.000
	374	hydrogen fluoride and its water-soluble salts	-	0.0422	0.0422	0.0000	0.0422	D	0.042	Not Reported	0.000
	405	boron compounds	-	0.0266	0.0266	0.0000	0.0266	B	2.661	Not Reported	0.000
	Total			0.1247	0.0869	0.0378	0.1247	—	2.884	—	0.000

*1: Emissions volume = atmosphere + public bodies of water + soil

*2: Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking