

CSR Report of Mie Plant

Business activities: Production of tires for trucks and buses, passenger cars
Total site area: 264,000m²
Number of employees: 1,076 (as of December 31, 2013)
Location: 1038 Takamuku, Misono-cho, Ise City, Mie 516-8530, JAPAN

Contact for consultation and complaints:

Environment Management Administration Bureau
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Message from the General Manager



Makoto Takagi

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. In doing business in this region, we have a strong desire to protect the abundance of nature that surrounds us. Since our plant’s acquisition of ISO14001 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. In particular, one representative activity has been our reduction of resource usage amounts. This has been achieved by our “Waste Removal Discovery Force,” a group mainly comprised of female employees, and a group we can be proud of. Furthermore, through the activities of the “Forever Forest Project” and “Company Forest”, we have been creating forests and ensuring water sources, such factors being valuable in the reduction of CO₂, disaster-

prevention and the protection of living creatures.

In FY2013, we carried out our 6th planting of seedlings and the total number of trees planted thus far has reached 25,195. Furthermore, we have also donated seedlings in response to requests. With respect to the biodiversity protection activities commenced in 2012, we have successfully edited the picture books of natural life and plants that were created by each team; and our activities continue in an atmosphere that is both positive and enjoyable. As one of our volunteer activities, local volunteer staff carried relief supplies to disaster-stricken areas immediately after the Great East Japan Earthquake struck. Since then, we have continued to both collect donations and support recovery activities in the stricken areas.

In March 2014, we visited the region and helped with the transportation of administrative documentation belonging to the Onagawa Town Office. This was relocated from the Regional Medical Center to its new storage location within the former No.1 Elementary School (134 boxes of documents were relocated over a four hour period). After the conclusion of this task, our volunteers participated in the Recovery Festival.

Furthermore, as a volunteer activity we conduct within our own region, we clean around our plant in conjunction with the municipal government and the local residents’ association. This is an activity undertaken by everybody. As a company that our region can trust, in the future we will continue to undertake a range of activities.



Organizational Governance

Thorough compliance policies

All employees are issued “compliance cards”, and they work thoroughly on corporate-compliance attitudes and policies.

Organizational self-corrective functions

We established a suggestions box in the plant’s welfare hall and feedback was received from a wide range of employees. Through such measures mechanisms have been introduced as part of our work to achieve organizational soundness.



Human Rights

Education on respect for human rights

At the time of new employment, we distribute Compliance Cards to employees to provide education on the importance of respect of human rights.

Furthermore, we also conduct compliance training for persons in a supervisory role. As a human rights theme, in 2013 we conducted training that dealt with the issue of harassment.

Creating active workplaces

We give a variety of different awards even for small achievements. We do this irrespective of whether recipients hold job titles or not. Rather than fearing failure, numerous inventions have been born by encouraging people to take up challenges.

Employment of people with disabilities

Concerning the employment of people with disabilities, we closely exchange information with related organizations and we employed three persons in FY2013 and one person in 2014. We continue to conduct work experience learning of people with disabilities to enhance employment of people with disabilities.



The Environment

The map illustrates the Katsuragi River basin, divided into three sections: Upper (上流部), Middle (中流部), and Lower (下流部). Key locations marked include Ise City (伊勢市), Maibara City (三河原市), and the river (木曽川). Other features shown are mountains (e.g., Mt. Maibara), parks (e.g., Maibara Park), and various roads (e.g., National Route 1, 2, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 93

Biodiversity map

Noise, vibration and odor

Noise: Noises are managed at the border of the premises of the plant (18 points) and autonomous measurement is conducted once a month.

Vibration: Vibrations are managed at the border of the premises of the plant (13 points) and autonomous measurement is conducted once a month.

Odor: Odors are managed by autonomous measurements conducted twice a year at the border of the plant's premises. Our response involves the installation of deodorizing vaporizers in building ducting.

Responses to comments and complaints received in FY2013

Vibration

Q. I act as an environment monitor. I felt vibrations until about half a year ago; however, things have improved over the last half year. I wish to express my gratitude.

A. It's been reported that it wasn't possible to identify the vibration source. However, concerning the vibrations on the JR side, it is assumed they might have been caused by the installation of air-compressors on the south side of the plant. There are two types of facilities at that plant that cause vibration both easily and not easily. It should be noted, however, that as part of energy-saving activities, there was a reduction in air escaping from inside the plant. Thus, the issue was resolved through the decision that it wasn't necessary to use the applicable equipment (the air-compressors).

Road manners

Q. With respect to the driving of trucks and trailers, I haven't seen anything that bad.

The roads are rather narrow, and these vehicles are being driven with good manners. However, the driving standard declines for people working at the plant. This is especially the case around the time they go home. I want good manners observed. I look forward to your cooperation regarding issues of road safety.

A. We are not satisfied with the current state of traffic manners. We are considering consultations with local government on this topic. Such consultations would include possible installations of traffic lights, etc. Furthermore, we are continuing with our efforts to promote safe driving by standing at the front gate when employees arrive at work. Ise Police Station is also cooperating with us by holding seminars on road manners for our employees.

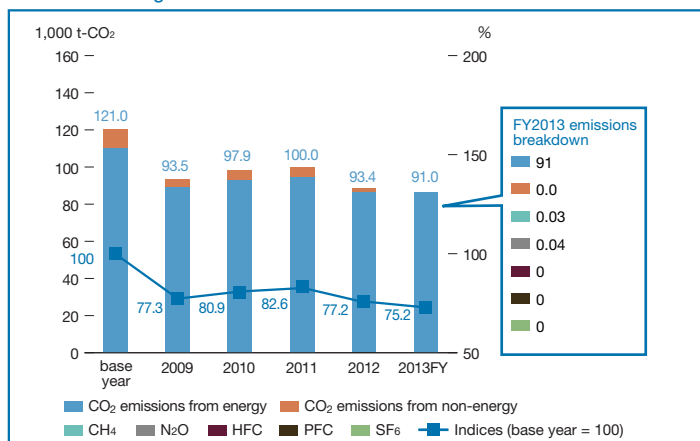
Comments:

I was given the opportunity to take a guided tour of the plant. I have also been a water quality monitor for the last 33 years. In that I was shown the treatment tanks, I felt I could continue to monitor with peace-of-mind. Thank you very much.

Environmental data

Reductions in greenhouse gas emissions

Greenhouse gas emissions



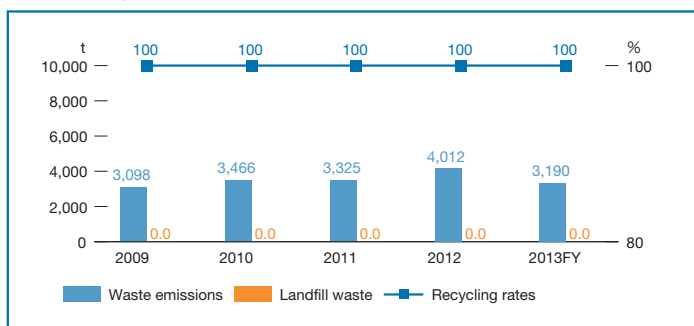
* The base year is defined as 1990 except for HFC, PFC and SF₆, where the base year is 1995 as per the Kyoto Protocol.

* 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).

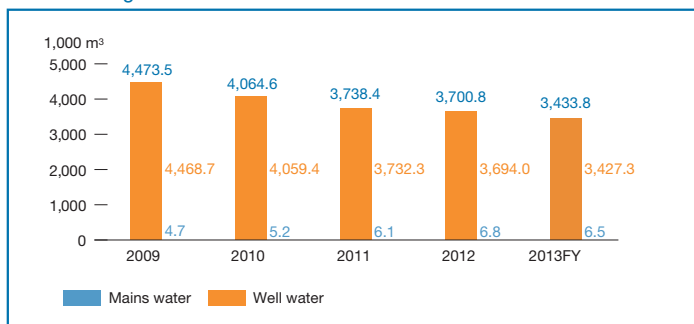
* As the closing of accounts period was April to December in FY2011, the calendar year of January to December was calculated by the duplication of data for the period January to March.

Effective use of resources/ Waste reduction

Waste output



Water usage



Measures for discharges into water, air and soil

Data related to water contamination

Drain	Item	Regulatory values	Voluntary Standard Values	FY2013 results		
				Average	Maximum	Minimum
Mie Plant Drain 1	PH	6.0~8.0	6.5~7.8	7.2	7.3	7.0
	BOD concentration (mg/l)	20	10	1.5	3.4	0.8
	COD concentration (mg/l)	20	10	1.3	1.8	0.7
	SS concentration (mg/l)	40	20	Less than 1	3.0	Less than 1
	Oil concentration (mg/l)	2	1.6	Less than 0.5	Less than 0.5	Less than 0.5
Mie Plant Drain 2	PH	6.0~8.0	6.5~7.8	7.3	7.5	7.2
	BOD concentration (mg/l)	20	10	1.2	2.5	0.5
	COD concentration (mg/l)	20	10	1.3	2.7	0.9
	SS concentration (mg/l)	40	20	Less than 1	1.0	Less than 1
	Oil concentration (mg/l)	2	1.6	Less than 0.5	Less than 0.5	Less than 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)	56	---

Facility	Substance	Regulatory values	Voluntary Standard Values	FY2013 results		
				Average	Maximum	Minimum
Mie Plant Cogeneration 1	SOx emissions (m ³ N/h)	3.4	1.0	0.04	0.07	0.01
	NOx (ppm)	100	90	54.5	80	22
	Soot and dust (g/m ³ N)	0.05	0.01	Less than 0.01	Less than 0.01	Less than 0.01
Mie Plant Cogeneration 2	SOx emissions (m ³ N/h)	3.4	1.0	0.06	0	0.01
	NOx (ppm)	100	90	27	80	12
	Soot and dust (g/m ³ N)	0.05	0.01	Less than 0.01	Less than 0.01	Less than 0.01
Mie Plant Boiler 3	SOx emissions (m ³ N/h)	1.0	1.0	Less than 0.01	Less than 0.01	Less than 0.01
	NOx (ppm)	130	120	79	85	72
	Soot and dust (g/m ³ N)	0.1	0.05	Less than 0.01	Less than 0.01	Less than 0.01
Mie Plant Boiler 4	SOx emissions (m ³ N/h)	1.5	1.0	Less than 0.01	Less than 0.01	Less than 0.01
	NOx (ppm)	130	120	70	72	68
	Soot and dust (g/m ³ N)	0.1	0.05	Less than 0.01	Less than 0.01	Less than 0.01
Mie Plant Drying Furnace 1	SOx emissions (m ³ N/h)	3.0	Due to suspension of operation of equipment, no measurement was made.			
	NOx (ppm)	250				
	Soot and dust (g/m ³ N)	0.1				
Mie Plant Drying Furnace 2	SOx emissions (m ³ N/h)	3.0				
	NOx (ppm)	250				
	Soot and dust (g/m ³ N)	0.1				
Mie Plant Incinerator	SOx emissions (m ³ N/h)	6.2				
	NOx (ppm)	250				
	Soot and dust (g/m ³ N)	0.3				

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

Report of the Status of Management of Chemical Substances (Response to PRTR Law)

(Unit: tons/year)

Designated No.	Specified chemical substance	Amount to treat *1	Emission *2	Transfer *3	Safety Evaluation: V-4*4			
					Toxicity Rank (effect on people)	Annual Converted Emissions (effect on people)	Toxicity Rank (effect on ecosystem)	Annual Converted Emissions (effect on ecosystem)
53	ethylbenzene	1.099	0.282	0.000	C	2.818	C	2.818
80	xylene	6.403	2.170	0.000	C	21.698	C	21.698
86	cresol	1.068	0.000	0.027	B	0.000	C	0.000
132	cobalt and its compounds	10.704	0.000	0.042	A	0.000	----	0.000
155	N-(cyclohexylthio)phthalimide	83.540	0.000	0.569	D	0.000	B	0.000
189	N,N-dicyclohexyl-2-benzothiazolesulfenamide	90.060	0.000	0.625	D	0.000	B	0.000
205	1,3-diphenylguanidine	8.640	0.000	0.004	A	0.000	C	0.000
230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	957.520	0.000	16.342	D	0.000	B	0.000
300	toluene	7.795	2.522	0.000	C	25.222	D	2.522
372	N-(tert-butyl)-2-benzothiazolesulfenamide	456.225	0.000	1.492	B	0.000	A	0.000
392	n-hexane	4.424	4.424	0.000	C	44.242	----	0.000
20	2-aminoethanol	0.227	0.227	0.000	B	22.745	C	2.275
169	3-(3,4-dichlorophenyl)-1,1-dimethylurea; diuron; DCMU	0.002	0.000	0.000	B	0.000	A	0.000
207	2,6-di-tert-butyl-4-cresol	0.005	0.000	0.000	A	0.000	B	0.000
296	1,2,4-trimethylbenzene	0.352	0.000	0.000	C	0.000	C	0.000
297	1,3,5-trimethylbenzene	0.070	0.000	0.000	C	0.000	C	0.000
333	hydrazine	0.271	0.000	0.000	A	0.000	B	0.000
400	benzene	0.556	0.001	0.000	A	0.750	C	0.007
Total		1,628.961	9.626	19.100	----	117.5	----	29.3

* 1 : Whereby annual handled volumes of the chemical substances subject to the Pollutant Release and Transfer Register (PRTR) exceed designated volumes, such shall be subject to reporting

* 2 : Emissions Volume = atmosphere + public bodies of water + soil

* 3 : Transfer Volume = waste - public sewerage system

* 4 : Converted emissions volume is calculated by multiplication of the emissions volume by the toxicity ranking. For information concerning the standards used in evaluating the degree of impact on safety, please refer to the "Safety Evaluation Table of Domestic Production Bases (<http://www.ryc.co.jp/csr/data/pdf/16kokunaikyoten.pdf>)

Fair Operating Practices

Certification of new business partners

So that dealings do not commence with parties that have problems with respect to human rights violations or breaches of law, etc., when business is to be commenced with a new business partner certain points are defined. Based on such points, the approval processes for the hiring 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

There is an organization at the Mie Plant comprised of cooperating companies called the "Isuzukai". It holds gatherings for officers from these companies, etc. We collect the requests and opinions that are given at such gatherings in order to make improvements. Furthermore, study meetings are also held annually. At the 2013 CSR study meeting the issues of "human rights (harassment)" and "information control and security" were raised as themes. We worked at the meeting to increase compliance levels by mutually ensuring that breaches of such issues did not occur.

Consumer Issues

Safety and quality of products and services

At the Mie Plant, 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 as our operational basis. We confirm the effectiveness of this system through internal systems audits and external audits that are conducted every half term.

Product information such as product defects and process defects, etc., is shared at the "Quality Taskforce", while at "Q-day" quality enlightenment

events defective products are put on show. We are also moving forward with sharing information such as improved test accuracy activities that are based on the informational analysis of defects. This is being done to make all employees conscious of the "eyes of the customer."

This financial year we placed a product on the market that offers a reduced environmental burden. This new product was possible due to improved wear functionality. In the future we want to shift our efforts even further towards products that contribute to the protection of the environment.



Relationship with local societies

Regional exchanges:

May 3, Fureai Festival

Regional volunteers:

Onagawa-cho Restoration Support Volunteer Activities (12 employees participated from March 14 to March 16).

Opening of facilities:

we loaned the grounds for the regional soccer grounds (YAMATO).

Participation in regional events:

February 11: Participated in the Takamuku Great Shrine Grand Festival

June 16: set up a stand at the Takayanagi Night Stalls

July 13: Participated in National Fireworks Festival dedicated to Ise Shrine

July : Participated in Three Town Bon-Odori Festival of Miyagawa, Tokiwa and Miyamachi

Participation in environmental activities:

January 26: Higashitoyohama Coast Cleanup

April 20: Hinokijiri River and Hotosu River Cleanups

July 7: Setagawa River Tanabata Festival Cleanup sponsored by Ise City

October 16 and 21: 6th Planting Festival

November: Participation in Promotion Council, Toshijima Floating Objects Cleanup Activities

Biodiversity protection activities:

Every month: conducting biodiversity monitoring survey

Plant tour and workshop

In FY2013, Mie Plant received a total of 36 visitor groups and regional organizations including elementary students and high school students from neighbours for plant visit and welcomed 800 persons in the plant.

Please contact the following if you would like to participate in 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: Kida, Operation Section, General Affairs

Tel: +81-596-28-3151