

Japan Display environmental measurement data (FY2015)

Environmental measurement data of the plant have been partly published in page 16 of the Environmental Report 2016. If you want to see all the data, including other plants, please refer to the following.

Wastewater Management

Living environment items

Plant name	Discharge destination	BOD* ¹ (mg/L)					COD* ² (mg/L)					SS* ³ (mg/L)					Hydrogen ion concentration (pH)				
		Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value
Mobara①	River	10	8	0.6	2.2	3.8	25	20	2.3	3.3	4.7	20	15	<0.5	0.6	1.5	5.8~8.6	6.0~8.4	7.2	7.4	7.7
Mobara②	River	10	8	<0.5	1.6	3.4	25	20	3.0	4.7	6.3	20	15	<0.5	1.3	8.0	5.8~8.6	6.0~8.4	6.9	7.1	7.6
Tottori	Sewage system	600	450	10	204	337	-	-	-	-	-	600	300	15	44	102	5.0~9.0	6.0~8.7	6.8	7.1	7.3
Higashiura	River	15	12	0.6	1.1	1.8	10	8	2.7	3.4	4.6	15	12	1.0	1.7	3.0	5.8~8.6	6.0~8.3	7.2	7.4	7.5
Ishikawa	River	30	29	1.3	6.4	9.0	160	125	2.2	3.2	4.4	80	60	1.0	2.7	5.0	5.8~8.6	6.1~8.2	7.1	7.3	7.4
Nomi	River	30	29	1.0	1.5	2.0	160	125	2.5	2.5	2.5	90	70	1.0	1.5	2.0	5.8~8.6	6.1~8.2	7.2	7.3	7.3

Plant name	Discharge destination	Normal hexane extractable material (mg/L)					Phenols (mg/L)					Phosphorus (mg/L)					Nitrogen (mg/L)				
		Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value
Mobara①	River	2	1.6	<0.5	0.5	0.7	0.5	0.4	<0.01	0.05	<0.1	16	6.4	0.04	0.10	0.30	120	80	6.9	11.1	14.8
Mobara②	River	2	1.6	<0.5	0.6	0.7	0.5	0.4	<0.01	0.05	<0.1	16	6.4	<0.03	0.03	0.04	120	80	11.2	28.3	45.0
Tottori	Sewage system	5	2.5	1.0	1.0	1.0	5	2.5	1.0	1.0	-	-	-	-	-	-	-	-	-	-	
Higashiura	River	2	1.6	0.5	0.5	0.5	5	4	0.05	0.05	0.05	1	0.8	0.04	0.30	0.53	10	8	2.5	3.4	4.5
Ishikawa	River	5	4	1.0	1.0	1.0	5	4	0.05	0.05	0.05	16	14.9	0.24	2.14	4.40	120	95	3.9	5.1	6.6
Nomi	River	5	4	1.0	1.0	1.0	5	4	0.05	0.05	0.05	16	14.9	0.06	0.10	0.14	120	95	30.0	36.0	42.0

Hazardous substances

Plant name	Discharge destination	Nitrate nitrogen, nitrite nitrogen, and ammoniac nitrogen (mg/L)					Boron and its compounds (mg/L)					Fluorine and its compounds (mg/L)				
		Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value
Mobara①	River	100	80	<6.1	10.0	14.0	10	8	0.03	0.05	0.09	8	6.4	0.7	1.3	2.2
Mobara②	River	100	80	9.1	17.6	24.8	10	8	0.50	0.73	1.20	8	6.4	0.5	2.2	3.7
Tottori	Sewage system	380	190	0.9	1.0	1.2	-	-	-	-	-	8	5	0.2	0.8	1.3
Higashiura	River	100	80	1.7	3.2	4.4	10	8	1.00	1.00	1.00	8	6.5	2.1	2.7	3.9
Ishikawa	River	100	80	2.4	3.3	4.4	10	8	0.10	0.10	0.10	8	6	0.6	0.8	0.9
Nomi	River	100	80	25.0	31.5	38.0	10	8	0.10	0.20	0.30	8	6	1.5	1.8	2.1

*1 Biochemical Oxygen Demand

*2 Chemical Oxygen Demand

*3 Suspended Solids

Air Emissions Management

Plant name	Target facilities	Number of units	Particulate matter (g/Nm ³)* ⁴					Nitrogen oxides (vol ppm)* ⁵					Sulfur oxide(Nm ³ /h)* ⁶				
			Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value	Legal limits	JDI standards	Minimum value	Average	Maximum value
Mobara	Once-through boilers	20	-	-	-	-	-	150	120	9	14.2	20	-	-	-	-	-
Tottori	Once-through boilers	8	0.1	0.05	<0.001	<0.001	<0.001	150	75	18	24	30	-	-	-	-	-
	Absorption coolin	3	0.1	0.05	0.001	0.001	0.001	150	75	28	29	30	-	-	-	-	-
Higashiura	Flue and smoke tube boilers	5	0.1	0.08	<0.002	0.002	0.003	150	120	18	27.1	35	-	-	-	-	-
	Multitubular once-through boilers	6	0.1	0.08	<0.002	0.002	0.003	150	120	8	15.3	24	-	-	-	-	-
Ishikawa	Once-through boilers	3	0.3	0.15	0.01	0.01	0.01	180	105	47	52	58	2.05	0.28	0.01	0.01	0.01
	Flue and smoke tube boilers	2	0.3	0.15	0.01	0.01	0.01	180	164	74	85	97	6.4	3.21	0.01	0.09	0.17
	Gas turbines	4	0.05	0.025	0.01	0.01	0.01	70	56	40	47	51	9.53	5	0.04	0.19	0.44
Nomi	Once-through boilers	6	0.3	0.15	0.001	0.001	0.001	180	105	27	34	38	2.05	0.28	0.0016	0.0095	0.0180

*4 Particulate matter" refers to soot and other solid particulate matter resulting from combustion.

*5 Nitrogen oxides" is a generic term that refers to compounds that arise from a combination of nitrogen atoms (N) and oxygen atoms (O).

*6 Sulfur oxides: a compound of sulfur and oxygen as the main sulfur dioxide (sulfur dioxide),Collectively, including sulfur trioxide.

Noise and Vibration Management

Unit: dB

Plant name	Item	Time zone	Legal limits	JDI standards	Results
Mobara	Noise	Morning 06:00~08:00	65	60	42~54
		Daytime 08:00~19:00	70	65	45~60
		Evening 19:00~22:00	65	60	43~57
		Night 22:00~06:00	60	57	41~54
	Vibration	Daytime 07:00~22:00	65	60	36~42
		Night 22:00~07:00	60	55	34~39
Tottori* ⁷	Noise	Morning 06:00~08:00	70	70	42~51
		Daytime 08:00~19:00	65	65	45~47
		Evening 19:00~22:00	70	70	40~54
		Night 22:00~06:00	65	65	45~48
		Daytime 08:00~19:00	70	70	41~54
		Evening 19:00~22:00	65	65	45
		Night 22:00~06:00	65	65	40~52
		Night 22:00~06:00	50	50	41~45
	Vibration	Daytime 08:00~19:00	65	65	<25~37
		Night 19:00~08:00	60	60	<25~38
Higashiura	Noise	Morning 06:00~08:00	55	55	50~54
		Daytime 08:00~19:00	60	60	49~57
		Evening 19:00~22:00	55	55	49~54
		Night 22:00~06:00	50	50	49~50
	Vibration	Daytime 07:00~22:00	60	40	<20~25
		Night 22:00~07:00	55	40	<20~27
Ishikawa	Noise	Morning 06:00~08:00	60	60	46~51
		Daytime 08:00~19:00	65	65	41~53
		Evening 19:00~22:00	60	60	45~52
		Night 22:00~06:00	50	50	46~50
	Vibration	Daytime 07:00~22:00	65	30	-
		Night 22:00~07:00	60	30	-
Nomi	Noise	Morning 06:00~08:00	65	65	44
		Daytime 08:00~19:00	70	70	42
		Evening 19:00~22:00	65	65	43
		Night 22:00~06:00	60	60	44
	Vibration	Daytime 07:00~22:00	65	30	<30
		Night 22:00~07:00	60	30	<30

*7 Noise regulation zone is different at the location of the plant site boundary, there are two ways.