

●Environmental Data for Individual Plants and Group Companies in FY2022

**Ogaki Plant**

<No.1 Wastewater Measurement>

Item	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
pH	-	5.8~8.6	5.8~8.6	6.0~8.3	7.29	8.3	

<No.2 Wastewater Measurement>

Item	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
pH	-	5.8~8.6	5.8~8.6	6.0~8.3	7.21	8.3	
BOD (Biochemical oxygen demand)	mg / L	160	15	15	2.44	5.3	
COD (Chemical Oxygen Demand)	mg / L	160	Regulation of total emission	Regulation of total emission	3.1	5.8	
SS (Suspended Solids)	mg / L	200	30	30	2.6	10	
Copper	mg / L	3	2	1	0.1	0.24	
Lead and lead compounds	mg / L	0.1	0.1	0.03	0.01	0.01	
Cyanide compounds	mg / L	1	0.1	0.1	0.01	0.01	
n-H mineral oils	mg / L	5	5	5	1	1	
Nitrogen	mg / L	120	60	60	1.4	3.1	
Phosphorus	mg / L	16	8	8	0.061	0.15	
Boron and boron compounds	mg / L	10	10	10	0.14	0.2	
Ammonia and ammonium compounds, nitrite and nitrate compounds	mg / L	100	100	100	1.1	2.6	

<Air Measurement>

Item	Equipment	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
Soot	Boiler No.15	g/m <sup>3</sup> N	0.3	0.27	0.27	0.002	0.002	
	Boiler No.16	g/m <sup>3</sup> N	0.3	0.27	0.27	0.002	0.002	
	Boiler No.17	g/m <sup>3</sup> N	0.3	0.27	0.27	0.002	0.002	
	Boiler No.18	g/m <sup>3</sup> N	0.3	0.27	0.27	0.002	0.002	
	Boiler No.19	g/m <sup>3</sup> N	0.3	0.27	0.27	0.001	0.001	
	Boiler No.20	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	Boiler No.21	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	Boiler No.22	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	Boiler No.23	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	Boiler No.25	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	Boiler No.26	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	Gas Turbine No.1	g/m <sup>3</sup> N	0.05	0.05	0.05	0.001	0.001	
	Gas Turbine No.2	g/m <sup>3</sup> N	0.05	0.05	0.05	0.001	0.001	
NOx (Nitrogen oxides)	Boiler No.15	ppm	260	260	260	100	100	
	Boiler No.16	ppm	260	260	260	85	85	
	Boiler No.17	ppm	260	260	260	92	92	
	Boiler No.18	ppm	260	260	260	81	81	
	Boiler No.19	ppm	260	260	260	89	89	
	Boiler No.20	ppm	150	150	150	77	77	
	Boiler No.21	ppm	150	150	150	35	35	
	Boiler No.22	ppm	150	150	150	46	46	
	Boiler No.23	ppm	150	150	150	38	38	
	Boiler No.25	ppm	150	150	150	44	44	
	Boiler No.26	ppm	150	150	150	35	35	
	Gas Turbine No.1	ppm	70	70	70	13.3	24	
	Gas Turbine No.2	ppm	70	70	70	17.2	23	

<Noise Measurement>

Place	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
North (morning·evening)	dB	65	65	65	50.8	53	
East (morning·evening)	dB	65	65	65	46.9	52	
South (morning·evening)	dB	65	65	65	47.4	52	
West (morning·evening)	dB	65	65	65	55.0	58	
North (night)	dB	60	60	60	45.4	51	
East (night)	dB	60	60	60	44.1	51	
South (night)	dB	60	60	60	45.4	52	
West (night)	dB	60	60	60	54.6	57	

**Aoyanagi Plant**

<No.5 Wastewater Measurement>

Item	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
pH	-	5.8~8.6	5.8~8.6	6.0~8.3	7.0	7.5	
BOD	mg / L	160	15	15	0.8	2.7	
COD	mg / L	160	Regulation of total emission	Regulation of total emission	0.2	0.6	
SS	mg / L	200	30	30	1.5	3.0	
Copper	mg / L	3	2	1	0.1	0.6	
Lead and lead compounds	mg / L	0.1	0.1	0.03	0.01	0.01	
Fluorine and fluorine compounds	mg / L	8	8	5	0.1	0.1	
Cyanide compounds	mg / L	1	0.1	0.1	0.01	0.01	
n-H mineral oils	mg / L	5	5	5	1.0	1.0	
Nitrogen	mg / L	120	60	60	2.0	3.8	
Phosphorus	mg / L	16	8	8	0.1	0.2	
Boron and boron compounds	mg / L	10	10	10	0.1	0.1	
Ammonia and ammonium compounds, nitrite and nitrate compounds	mg / L	100.0	100	100	1.7	3.7	
Selenium and selenium compounds	mg / L	0.1	0.1	-	0.01	0.01	

<No.6 Wastewater Measurement>

Item	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
pH	-	5.8~8.6	5.8~8.6	6.0~8.3	7.8	7.9	
BOD	mg / L	160	15	15	1.0	1.0	
COD	mg / L	160	Regulation of total emission	Regulation of total emission	0.4	1.0	
SS	mg / L	200	30	30	1.0	1.0	
Cyanide compounds	mg / L	1	0.1	0.1	0.01	0.01	
Phenol	mg / L	5	0.4	0.4	0.1	0.2	
n-H mineral oils	mg / L	5	5	5	1.0	1.0	
Nitrogen	mg / L	120	60	60	1.0	1.3	
Phosphorus	mg / L	16	8	8	0.05	0.07	

<Air Measurement>

Item	Equipment	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
Soot	Boiler No.2	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	Gas Turbine No.1	g/m <sup>3</sup> N	0.05	0.05	0.05	0.001	0.001	
	Gas Turbine No.2	g/m <sup>3</sup> N	0.05	0.05	0.05	0.001	0.001	
NOx	Boiler No.2	ppm	150	150	150	81	82	
	Gas Turbine No.1	ppm	70	70	70	20	29	
	Gas Turbine No.2	ppm	70	70	70	15	19	

<Noise Measurement>

Place	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
East (morning·evening)	dB	65	65	60	51.1	57	
South (morning·evening)	dB	65	65	60	48.5	51	
West (morning·evening)	dB	65	65	60	46.3	52	
North (morning·evening)	dB	65	65	60	46.8	52	
East (night)	dB	60	60	55	44.1	51	
South (night)	dB	60	60	55	48.0	50	
West (night)	dB	60	60	55	45.5	50	
North (night)	dB	60	60	55	45.3	50	

•Environmental Data for Individual Plants and Group Companies in FY2022

**Gama Plant**

<No.1 Wastewater Measurement>

Item	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
pH	-	5.8~8.6	5.8~8.6	6.0~8.3	-	-	Measurements were completed in September2021 for the construction of a new building.
BOD	mg / L	160	15	15	-	-	Same as above
COD	mg / L	160	Regulation of total emission	Regulation of total emission	-	-	Same as above
SS	mg / L	200	30	30	-	-	Same as above
Copper	mg / L	3	2	1	-	-	Same as above
Lead and lead compounds	mg / L	0.1	0.1	0.03	-	-	Same as above
Fluorine and fluorine compounds	mg / L	8	8	8	-	-	Same as above
Cyanide compounds	mg / L	1	0.1	0.1	-	-	Same as above
n-H mineral oils	mg / L	5	5	5	-	-	Same as above
Nitrogen	mg / L	120	60	60	-	-	Same as above
Phosphorus	mg / L	16	8	8	-	-	Same as above
Boron and boron compounds	mg / L	10	10	10	-	-	Same as above
Ammonia and ammonium compounds, nitrite and nitrate compounds	mg / L	100	100	100	-	-	Same as above
Selenium and selenium compounds	mg / L	0.1	0.1	-	-	-	Same as above

<No.2 Wastewater Measurement>

Item	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
pH	-	5.8~8.6	5.8~8.6	6.0~8.3	-	-	Measurements were completed in September2021 for the construction of a new building.
BOD	mg / L	160	15	15	-	-	Same as above
COD	mg / L	160	Regulation of total emission	Regulation of total emission	-	-	Same as above
SS	mg / L	200	30	30	-	-	Same as above
n-H mineral oils	mg / L	5	5	5	-	-	Same as above
Nitrogen	mg / L	120	60	60	-	-	Same as above
Phosphorus	mg / L	16	8	8	-	-	Same as above

<Air Measurement>

Item	Equipment	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
Soot	Gas engine	g/m <sup>3</sup> N	0.05	0.05	0.05	<0.002	<0.002	
NOx	Gas engine	ppm	600	600	600	170	180	

<Noise Measurement>

Place	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
East (morning·evening)	dB	65	65	60	43	49	
South (morning·evening)	dB	65	65	60	40	45	
West (morning·evening)	dB	65	65	60	-	-	Measurements were completed in September2021 for the construction of a new building.
East (night)	dB	60	60	55	41	45	
South (night)	dB	60	60	55	37	41	
West (night)	dB	60	60	55	-	-	Measurements were completed in September2021 for the construction of a new building.

**Ogaki Central Plant**

<Wastewater Measurement>

Item	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
pH	-	5.8~8.6	5.8~8.6	6.0~8.3	6.9	7.1	
BOD	mg / L	160	15	15	5.3	9.4	
COD	mg / L	160	Regulation of total emission	Regulation of total emission	2.8	6.9	
SS	mg / L	200	30	30	3.1	20	
Copper	mg / L	3	2	1	0.1	0.9	
Lead and lead compounds	mg / L	0.1	0.1	0.03	0.01	0.01	
Cyanide compounds	mg / L	1	0.1	0.1	0.01	0.01	
n-H mineral oils	mg / L	5	5	5	1.0	1.0	
Nitrogen	mg / L	120	60	60	3.0	4.1	
Phosphorus	mg / L	16	8	8	0.05	0.05	
Boron and boron compounds	mg / L	10	10	10	0.10	0.12	
Ammonia and ammonium compounds, nitrite and nitrate compounds	mg / L	100	100	100	2.0	3.1	

<Air Measurement>

Item	Equipment	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
Soot	B-1-1 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-2 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-3 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-4 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-5 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-6 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-7 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-8 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-9 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
	B-1-10 Boiler	g/m <sup>3</sup> N	0.1	0.09	0.09	0.001	0.001	
Nox	Gas engine Unit 1	g/m <sup>3</sup> N	0.05	0.05	0.05	0.002	0.002	
	Gas engine Unit 2	g/m <sup>3</sup> N	0.05	0.05	0.05	0.002	0.002	
	B-1-1 Boiler	ppm	150	150	150	32	32	
	B-1-2 Boiler	ppm	150	150	150	28	28	
	B-1-3 Boiler	ppm	150	150	150	36	36	
	B-1-4 Boiler	ppm	150	150	150	32	32	
	B-1-5 Boiler	ppm	150	150	150	33	33	
	B-1-6 Boiler	ppm	150	150	150	32	32	
	B-1-7 Boiler	ppm	150	150	150	34	34	
	B-1-8 Boiler	ppm	150	150	150	31	31	
B-1-9 Boiler	ppm	150	150	150	33	33		
B-1-10 Boiler	ppm	150	150	150	30	30		
Gas engine Unit 1	ppm	600	600	600	155	180		
Gas engine Unit 2	ppm	600	600	600	135	150		

<Noise Measurement>

Place	Unit	National standard	City standard	Voluntary standard	Average	Maximum	Note
North (morning·evening)	dB	50	50	50	44	46	
East No.1 (morning·evening)	dB	50	50	50	46	47	
East No.2 (morning·evening)	dB	60	60	60	43	44	
South (morning·evening)	dB	60	60	60	42	43	
West (morning·evening)	dB	50	50	50	42	43	
North (night)	dB	45	45	45	42	44	
East No.1 (night)	dB	45	45	45	44	45	
East No.2 (night)	dB	50	50	50	41	42	
South (night)	dB	50	50	50	37	39	
West (night)	dB	45	45	45	42	43	