

Environmental Data by Plant

Following table shows the air and water quality data for each plant and a comparison to regulated standards. These figures are amounts of actual measurement.

● Fujisawa Plant

Air Quality

Item	Equipment	Regulated standard	Maximum	Average
NOx (ppm)	Boiler	125	110	92.3
	Oil heater	125	88	68
	Cogeneration system	50	30	30
	Incineration	150	78	74.5
	Heat treatment furnace (continuous gas feed)	200	170	150
	Aluminum melting furnace	200	36	31
	3rd painting (drying furnace)	230	19	17
	4th painting (drying furnace)	230	32	31
Dust and soot (mg/Nm ³)	Boiler	100	5	2
	Oil heater	300	6	5
	Cogeneration system	50	1	1
	Incineration	100	100	90
	Heat treatment furnace (continuous gas feed)	200	9	7
	Aluminum melting furnace	200	26	23
	3rd painting (drying furnace)	100	2	2
	4th painting (drying furnace)	100	2	1
SOx(Nm ³ /h)	(Regulated standard on total emissions)	21.82	1.4	1.23

Water Quality

Item	Regulated standard	Maximum	Minimum	Average
pH	5.8 ~ 8.6	8	7.7	7.8
COD(mg/l)	60	19	12	15.2
BOD(mg/l)	60	10	5	7.3
SS (mg/l)	90	5.5	≤5	5
Oil content(mg/l)	5	1.3	1	1.1
Copper content (mg/l)	3	≤0.05	≤0.05	≤0.05
Zinc content(mg/l)	3	≤0.1	≤0.1	≤0.1
Soluble iron content(mg/l)	10	≤0.5	≤0.5	≤0.5

	Description	Responses
Complaints	Vibration of the compressor	Restrict the operation of the compressor during the night
Accidents	None	

● Tochigi Plant

Air Quality

Item	Equipment	Regulated standard	Maximum	Average
NOx (ppm)	Boiler	230	92	84
	Air conditioner	230	92	84
	Unit heater	150	73	71
	Metal furnace	170	120	111
Dust and soot (mg/Nm ³)	Boiler	300	29	11
	Unit heater	250	26	17
	Metal furnace	250	≤5	≤5
SOx(Nm ³ /h)	(Regulated standard on total emissions)	14.5	0.70	0.25

Water Quality

Item	Regulated standard	Maximum	Minimum	Average
pH	5.8 ~ 8.6	7.4	7.0	7.2
COD(mg/l)	Max 25, average 20	15	6.4	9.8
BOD(mg/l)	Max 25, average 20	4.2	1.3	2.1
SS (mg/l)	Max 50, average 40	6.0	1.0	2.5
Oil content(mg/l)	5	≤1	≤1	≤1
Copper content (mg/l)	3	≤0.05	≤0.05	≤0.05
Zinc content(mg/l)	5	0.23	0.07	0.12
Soluble iron content(mg/l)	3	0.23	≤0.05	0.10

Complaints	None	
Accidents	None	

● Kawasaki Plant

Air Quality

Item	Equipment	Regulated standard	Maximum	Average
NOx (ppm)	Boiler	125	64	54
	Air conditioner	105	50	50
	Unit heater	150	45	42
	Metal oven	200	15	12
Dust and soot (mg/Nm ³)	Boiler	100	1	1
	Unit heater	150	2	2
	Metal oven	200	7	5
SOx(Nm ³ /h)	(Regulated standard on total emissions)	4.017	0.008	0.008

Water Quality

Item	Regulated standard	Maximum	Minimum	Average
pH	5.8 ~ 8.6	8.1	6.3	7
COD(mg/l)	60	8.3	2.1	5.3
BOD(mg/l)	60	8.1	1.8	5
SS (mg/l)	90	12	1	7.2
Oil content(mg/l)	5	1	1	1
Copper content(mg/l)	3	0.05	0.05	0.05
Zinc content(mg/l)	3	0.1	0.1	0.1
Soluble iron content(mg/l)	10	0.5	0.5	0.5

Complaints	None	
Accidents	None	

● Isuzu Engine Manufacturing Hokkaido Co., Ltd.

Air Quality

Item	Equipment	Regulated standard	Maximum	Average
NOx (Nm ³ /h)	Unit heater	Regulated standard on total emissions 6.3	1.24	1.23
	Boilers			
	Nitride heat treatment furnace			
	Aluminum-smelting furnace			
Dust and soot (kg/h)	Unit heater	Regulated standard on total emissions 3.5	0.1	0.1
	Boilers			
	Nitride heat treatment furnace			
	Aluminum-smelting furnace			
SOx(Nm ³ /h)	(Regulated standard on total emissions)	26	0.034	0.002

Water Quality

Item	Regulated standard	Maximum	Minimum	Average
pH	6 ~ 8	7.6	6.7	7.2
COD(mg/l)	50	21.2	4.2	13.6
BOD(mg/l)	50	12.7	≤0.5	3.3
SS (mg/l)	50	7.0	1.0	3.0
Oil content(mg/l)	4	1.0	≤0.5	0.5

Complaints	None	
Accidents	None	

Notes

1. Data for fiscal 2002 (April 2002 to March 2003).
2. Standards shown are the strictest among those stipulated by environmental laws, ordinances, or pollution prevention agreements.
3. COD: Chemical oxygen demand BOD: Biochemical oxygen demand SS: Density of suspended solids in water