

Environmental Data Classified by Plant

Fujimatsu Plant

Environmental Performance

Prevention of Global Warming	CO ₂ Emissions volume	89,000 tons-CO ₂
	Energy consumption	1,360 × 10 ³ GJ
Reduction in waste substances	Volume of landfill	1,023 tons
	At production plants	1,150,000 m ³
Water Consumption	Total water consumption	1,240,000 m ³

Accidents · Claims

None

Environmental Data

Air Quality (Air Pollution Control Law, Prefectural regulations)

Units [NO_x : ppm, Dust : g/Nm³, SO_x : K-values]

Item	Equipment	Regulated Value	Result*
NO _x	Boiler	237	72
		150	11
		142	0
	GTG	35	27
	Drying Oven	237	196
Soot & Dust	Boiler	184	45
		0.3	0.001
		0.2	0
	GTG	0.1	0.001
	Drying Oven	0.05	0.001
SO _x	Boiler	0.35	0.001
		0.2	0.001
		3.5	0
	GTG	1.75	0.12
	Drying Oven	1.75	0

* Result values indicate movement result maximums for regulated values for each type of equipment

Water Quality (Water Pollution Control Law, Prefectural regulations)

Units [pH, Excluding the number of coliform bacilli mg/ℓ]

Item	Regulated Value	Result		
		Maximum	Minimum	Average
PH	5.8~8.6	7.4	6.2	6.6
COD	—	24.3	5.8	14.9
BOD	20	8.5	0.9	3.0
SS	20	5.4	ND	1.4
Oil content	5	1.3	ND	0.3
Number of coliform bacilli	3000 bacteria/cc	ND	ND	ND
Total nitrogen	60	9.9	3.3	6.6
Total phosphorus	8	0.52	0.04	0.16
Zinc	5	0.31	ND	0.09
Iron	10	0.79	0.14	0.45
Manganese	10	1.37	0.39	0.77
Fluorine	8	2.2	0.7	1.6
Boron	10	0.03	ND	0.02
Ammonia Nitrate nitrogen Nitrous acid characteristic nitrogen	100	3.7	0.9	1.7

* ND indicates below the inspection limit.

* For the below items not listed, all are below the inspection limit:

Phenol, Copper, All chrome, Cadmium, Cyanide, Organic phosphorus, Lead, Hexavalent chrome, Arsenic, Total mercury, Alkyl mercury, PCB, Selenium, Trichloroethylene, Tetrachloroethylene, Carbon tetrachloride, Dichloro-methane, 1,2-dichloroethane, 1,1,1-torikuroethane, 1,1,2-torikuroethane, 1,1-dichloroethylene, Cis-1,2-dichloroethylene, Benzene, 1,3-jikuropropen, Chiuramu, Sima gin, Thiobencarb

PRTR Substances (PRTR Law)

units [tons / year]

Substance name	Handling quantity	Discharge quantity		
		Air	Waters	Waste
Zinc compound (Dissolved)	16.8	—	—	2.0
Bisphenol A epoxy resin (liquid)	36.3	—	—	10.1
Ethyl benzene	182.1	120.9	—	—
Ethylene glycol	818.0	—	—	—
Xylene	752.8	372.4	—	—
Ethylene glycol mono ethyl ether acetate	1.8	1.8	—	—
Organic tin compound	7.1	—	—	0.3
1,3,5-trimethylbenzene	96.0	42.4	—	—
Toluene	409.2	262.4	—	—
Nickel compounds	3.5	—	—	2.2
Phthalic acid di-2-ethylhexyl	1.2	—	—	—
Hydrogen fluoride & those water soluble salts	4.4	—	2.1	2.3
Benzene	68.0	0.1	—	—
Manganese compounds	8.5	—	0.3	2.9

* Round up to the second decimal place, and "—" is indicated for less than 0.1.

* Regulated values not established by PRTR law.

Kariya Plant

Environmental Performance

Prevention of Global Warming	CO ₂ Emissions volume	6,000 tons-CO ₂
	Energy consumption	84 × 10 ³ GJ
Reduction in waste substances	Volume of landfill	102 tons
	At production plants	100,000 m ³
Water Consumption	Total water consumption	110,000 m ³

Accidents · Claims

When making safety barriers, sprayed paint hit nearby vehicles, arising in claims. The vehicle were restored to standard condition, and this claim was transmitted throughout the company to prevent further incidents.

Environmental Data

Air Quality (Air Pollution Control Law, Prefectural regulations)

Units [NO_x : ppm, Dust : g/Nm³, SO_x : K-values]

Item	Equipment	Regulated Value	Result *
NO _x	Drying Oven	184	75
Soot & Dust	Boiler	0.3	0.001
	Drying Oven	0.2	0.001
SO _x	Boiler	1.75	0
	Drying Oven	1.75	0

* Result values indicate movement result maximums for regulated values for each type of equipment.

Water Quality (Water Pollution Control Law, Prefectural regulations)

Units [pH, Excluding the number of coliform bacilli mg/ℓ]

Item	Regulated Value	Result		
		Maximum	Minimum	Average
PH	5.8~8.6	7.8	6.6	7.0
COD	—	21.7	4.5	9.6
BOD	20	6.9	0.6	2.8
SS	20	7.9	ND	1.2
Oil content	5	0.8	ND	0.02
Number of coliform bacilli	3000 bacteria/cc	ND	ND	ND
Total nitrogen	60	16.0	5.4	10.2
Total phosphorus	8	2.64	0.02	0.53
Zinc	5	0.06	ND	0.03
Iron	10	0.06	0.03	0.05
Manganese	10	0.88	0.06	0.28
Fluorine	8	2.1	0.3	1.1
Boron	10	0.03	ND	0.01
Ammonia Nitrate nitrogen Nitrous acid characteristic nitrogen	100	13.0	5.3	8.9

* ND indicates below the inspection limit.

* For the below items not listed, all are below the inspection limit:

Phenol, Copper, All chrome, Cadmium, Cyanide, Organic phosphorus, Lead, Hexavalent chrome, Arsenic, Total mercury, Alkyl mercury, PCB, Selenium, Trichloroethylene, Tetrachloroethylene, Carbon tetrachloride, Dichloro-methane, 1,2-dichloroethane, 1,1,1-torikuroethane, 1,1,2-torikuroethane, 1,1-dichloroethylene, Cis-1,2-dichloroethylene, Benzene, 1,3-jikuropropen, Chiuramu, Sima gin, Thiobencarb

PRTR Substances (PRTR Law)

units [tons / year]

Substance name	Handling quantity	Discharge volume		
		Air	Waters	Waste
Ethyl benzene	14.7	12.9	—	—
Xylene	28.8	23.7	—	—
1,3,5-trimethylbenzene	3.8	2.1	—	—
Toluene	20.5	19.3	—	—

* Round up to the second decimal place, and "—" is indicated for less than 0.1.



Inabe Plant

Environmental Performance

Prevention of Global Warming	CO ₂ Emissions volume	60,000 tons-CO ₂
	Energy consumption	891 × 10 ³ GJ
Reduction in waste substances	Volume of landfill	408 tons
	At production plants	600,000 m ³
Water Consumption	Total water consumption	710,000 m ³

Accidents · Claims

None

Environmental Data

Air Quality (Air Pollution Control Law, Prefectural regulations)

Units [NO_x: ppm, Dust: g/Nm³, SO_x: K-values]

Item	Equipment	Regulated Value	Result*
NO _x	Boiler	130	77
	GTG	100	72
	Diesel engine	950	435
	Drying Oven	230	41
Soot & Dust	Boiler	0.1	0.001
	GTG	0.05	0.001
	Diesel engine	0.1	0.008
	Drying Oven	0.2	0.003
SO _x	Boiler	17.5	0
	GTG	17.5	0
	Diesel engine	17.5	0.15
	Drying Oven	17.5	0

* Result values indicate movement result maximums for regulated values for each type of equipment.

Water Quality (Water Pollution Control Law, Prefectural regulations)

Units [pH, Excluding the number of coliform bacilli mg/ℓ]

Item	Regulated Value	Result		
		Maximum	Minimum	Average
PH	5.8~8.6	7.4	6.7	7.1
COD	—	6.4	4.9	5.6
BOD	20	3.2	0.4	1.3
SS	70	1.8	ND	0.6
Oil content	1	ND	ND	ND
Number of coliform bacilli	3000 bacteria/cc	ND	ND	ND
Total nitrogen	60	1.8	1.0	1.3
Total phosphorus	8	0.24	0.03	0.13
Zinc	5	0.49	ND	0.30
Iron	10	0.56	0.16	0.35
Manganese	10	0.68	ND	0.25
Fluorine	8	3.7	1.8	2.8
Boron	10	0.03	ND	0.02
Ammonia Nitrate nitrogen Nitrous acid characteristic nitrogen	100	0.9	0.2	0.4

* ND indicates below the inspection limit.

* For the below items not listed, all are below the inspection limit:

Phenol, Copper, All chrome, Cadmium, Cyanide, Organic phosphorus, Lead, Hexavalent chrome, Arsenic, Total mercury, Alkyl mercury, PCB, Selenium, Trichloroethylene, Tetrachloroethylene, Carbon tetrachloride, Dichloro-methane, 1,2-dichloroethane, 1,1,1-torikuroethane, 1,1,2-torikuroethane, 1,1-dichloroethylene, Cis-1,2-dichloroethylene, Benzene, 1,3-jikuropropen, Chioramu, Sima gin, Thiobencarb

PRTR Substances (PRTR Law)

units [tons / year]

Substance name	Handling quantity	Discharge volume		Transfer volume Waste
		Air	Waters	
Zinc compound (Dissolved)	18.9	—	0.2	2.2
Bisphenol A epoxy resin (liquid)	48.8	—	—	11.2
Ethyl benzene	88.9	61.1	—	—
Ethylene glycol	884.0	—	—	—
Xylene	561.4	239.0	—	—
Organic tin compound	6.0	—	—	0.3
1,3,5-trimethylbenzene	77.5	30.9	—	—
Toluene	324.4	120.6	—	—
Nickel compound	2.1	—	—	1.4
Phthalic acid di-2-ethylhexyl	2.7	—	—	—
Benzene	16.9	0.1	—	—
Poly(oxyethylene)=Alkyl ether	4.9	—	0.7	—
Manganese compound	6.8	—	—	2.5

* Round up to the second decimal place, and "—" is indicated for less than 0.1.

Yoshiwara Plant

Environmental Performance

Prevention of Global Warming	CO ₂ Emissions volume	33,000 tons-CO ₂
	Energy consumption	654 × 10 ³ GJ
Reduction in waste substances	Volume of landfill	0 tons
	At production plants	550,000 m ³
Water Consumption	Total water consumption	630,000 m ³

Accidents · Claims

None

Environmental Data

Air Quality (Air Pollution Control Law, Law Concerning Special Measures against Dioxins, Prefectural regulations)

Units [NO_x: ppm, Dust: g/Nm³, SO_x: K-values, Dioxins: ng-TEQ/Nm³]

Item	Equipment	Regulated Value	Result*
NO _x	Boiler	150	68
	GTG	35	27
	Drying Oven	237	33
		218	36
		184	62
Incinerator	—	109	
Soot & Dust	Boiler	0.1	ND
	GTG	0.05	ND
	Drying Oven	0.35	ND
		0.2	ND
Incinerator	0.7	0.043	
SO _x	Boiler	9.0	0
	GTG	9.0	0
	Drying Oven	9.0	0
	Incinerator	9.0	0.972
Dioxins	Incinerator	10	0.00012

* Result values indicate movement result maximums for regulated values for each type of equipment.

Water Quality (Water Pollution Control Law, Prefectural regulations)

Units [pH, Excluding the number of coliform bacilli mg/ℓ]

Item	Regulated Value	Result		
		Maximum	Minimum	Average
PH	5.8~8.6	7.6	6.6	7.1
COD	—	20.0	6.9	13.9
BOD	20	4.5	1.5	2.5
SS	20	1.0	ND	0.8
Oil content	5	1.0	ND	0.5
Number of coliform bacilli	3000 bacteria/cc	—	—	ND
Total nitrogen	60	9.0	5.1	6.4
Total phosphorus	8	0.12	0.03	0.07
Zinc	5	0.18	0.03	0.12
Iron	5	—	—	ND
Manganese	5	—	—	ND
Fluorine	8	—	—	0.8
Boron	10	—	—	0.04
Ammonia Nitrate nitrogen Nitrous acid characteristic nitrogen	100	—	—	6.3

* ND indicates below the inspection limit.

* For the below items not listed, all are below the inspection limit:

Phenol, Copper, All chrome, Cadmium, Cyanide, Organic phosphorus, Lead, Hexavalent chrome, Arsenic, Total mercury, Alkyl mercury, PCB, Selenium, Trichloroethylene, Tetrachloroethylene, Carbon tetrachloride, Dichloromethane, 1,2-dichloroethane, 1,1,1-torikuroethane, 1,1,2-torikuroethane, 1,1-dichloroethylene, Cis-1,2-dichloroethylene, Benzene, 1,3-jikuropropen, Chioramu, Sima gin, Thiobencarb

PRTR Substances (PRTR Law)

units [tons / year] Only Dioxin [ng-TEQ/year]

Substance name	Handling quantity	Discharge volume		Transfer volume Waste
		Air	Waters	
Zinc compound (Dissolved)	12.2	—	—	1.5
Bisphenol A epoxy resin (liquid)	36.7	—	—	3.0
Ethyl benzene	49.6	35.8	—	—
Ethylene glycol	743.8	—	—	—
Xylene	257.4	139.0	—	—
Organic tin compound	2.6	—	—	0.1
Dioxins	—	0.0026	—	0.0092
1,3,5-trimethylbenzene	7.6	6.5	—	—
Toluene	186.9	80.6	—	—
Nickel compound	2.3	—	—	1.4
Phthalic acid di-2-ethylhexyl	12.3	—	—	0.4
Benzene	4.2	—	—	—
Poly(oxyethylene)=Alkyl ether	1.7	—	0.3	—
Manganese compound	2.1	—	—	0.8

* Round up to the second decimal place, and "—" is indicated for less than 0.1 (Excluding Dioxins).