

Kyocera Group Environmental Impact Data

Kyocera Corporation Kagoshima Sendai Plant



Profile

Location	1810 Taki-cho, Satsumasendai-shi, Kagoshima
Products manufactured	Ceramic components, electronic devices, semiconductor components, cutting tools, color filter for liquid crystal
Number of employees	2,536
Land area	205,794 m ²
Total floor space	181,249 m ²

Environmental Performance

Items	Units		FY2010		FY2011	
	Amount	Specific consumption	Amount	Specific consumption	Amount	Specific consumption
Energy	kℓ (crudeoil based)	kℓ/M Yen	53,680	0.72	60,429	0.58
CO ₂	t-CO ₂	t-CO ₂ /M Yen	86,929	1.16	96,413	0.92
Water	m ³	m ³ /M Yen	1,346,390	18.0	1,550,082	14.8
Industrial waste emissions	kg	kg/M Yen	1,192,950	16.0	1,488,000	14.2
Effluent	m ³	m ³ /M Yen	1,833,997	24.6	2,020,721	19.3

Air related

Items	Facility	Legal standard	Internal criteria	Self-management standard	Performance for FY2011		
					Ave	Max	Measurement frequency
Soot and dust (g/Nm ³)	Firing oven	0.25	0.20	0.19	<0.005	<0.005	Twice/year
	Shuttle oven (No. 1)	0.25	0.20	0.19	<0.007	<0.007	Twice/year
	Waste incinerator	0.15	0.12	0.11	0.021	0.028	Twice/year
NO _x (ppm)	Boiler (R-2)	150	120	114	94.0	94.0	Twice/year
	Shuttle oven (No. 1)	180	144	137	31.0	38.0	Twice/year
	Waste incinerator	—	200	190	57.5	65.0	Twice/year
SO _x (Nm ³ /h)	N/A	—	—	—	—	—	—

Air emission: total impact (units: tons)

Items	Total emission	
	FY2010	FY2011
NO _x	2.03	3.96
SO _x	N/A	N/A

Water quality

(units: mg/ℓ)

Items	Legal standard	Internal criteria	Self-management standard	Performance for FY2011		
				Ave	Max	Measurement frequency
Hydrogen ion concentration (pH)	5.8~8.6	6.2~8.2	6.5~7.8	7.0	7.2	Once/month
Biochemical oxygen demand (BOD)	160	10	9.5	2.2	5.9	Once/month
Chemical oxygen demand (COD)	—	10	9.5	3.3	5.9	Once/month
Suspended solid (SS)	200	5	4.8	1.8	3.4	Once/month
N-hexane extracts weight	5	1	0.95	<0.5	<0.5	Once/month
Phenols content	5	0.5	0.48	<0.01	<0.01	Once/year
Copper content	3	1	0.95	0.04	0.05	Once/month
Zinc content	2	1	0.45	0.02	0.05	Once/month
Dissolved iron content	10	5	4.8	0.03	0.05	Once/month
Dissolved manganese content	10	5	4.8	0.08	0.15	Once/month
Coliform group number (colonies/ mℓ)	3,000	350	93	11.5	31.0	Once/month
Nitrogen content	120	60	57	8.3	23.0	Once/month
Phosphorous content	16	8	7	0.2	0.3	Once/month

Water pollution: total impact (units: tons)

Items	Total emission	
	FY2010	FY2011
Chemical oxygen demand (COD)	5.46	6.67
Biochemical oxygen demand (BOD)	4.80	4.93
Nitrogen	15.76	16.72
Phosphorous	1.38	0.32

Bad odors

No incidents exceeded standards.

Noise and vibration

No incidents exceeded standards.

PRTR substances

(units: tons)

Number	Substance	Handled amounts	Releases			Transfers to		Other amounts		
			Air	Water	Soil	Waste	Sewage	Recycled	Consumption	Removed by process
20	2-aminoethanol	3.9	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0
82	silver and its water-soluble compounds	1.2	0.0	0.0	0.0	0.0	0.0	0.2	1.1	0.0
87	chromium and chromium(III) compounds	36.5	0.0	0.0	0.0	0.6	0.0	13.9	22.0	0.0
132	cobalt and its compounds	35.0	0.0	0.1	0.0	0.6	0.0	0.9	33.1	0.3
144	inorganic cyanide compounds (except complex salts and cyanates)	7.3	0.0	0.0	0.0	0.0	0.0	0.0	7.3	0.0
243	dioxins	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
272	copper salts(water-soluble, except complex salts)	1.4	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
300	toluene	184.1	99.7	0.0	0.0	5.9	0.0	0.0	78.5	0.0
305	lead compounds	3.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	3.2
308	nickel	96.4	0.0	0.1	0.0	8.1	0.0	1.5	86.7	0.0
309	nickel compounds	6.7	0.0	0.3	0.0	0.0	0.0	5.8	0.5	0.0
354	di-n-butyl phthalate	26.2	0.0	0.0	0.0	0.6	0.0	7.8	17.6	0.1
355	bis(2-ethylhexyl)phthalate	27.8	0.0	0.0	0.0	1.6	0.0	7.0	19.2	0.1
405	boron compounds	2.3	0.0	0.6	0.0	0.0	0.0	1.4	0.3	0.0
407	poly(oxyethylene)alkyl ether(alkyl C=12-15)	1.0	0.0	0.0	0.0	0.1	0.0	0.0	0.9	0.0
412	manganese and its compounds	8.0	0.0	0.0	0.0	0.7	0.0	0.4	6.9	0.0
453	molybdenum and its compounds	16.2	0.0	0.0	0.0	0.2	0.0	4.8	11.2	0.0
Target chemical substances total		457.3	99.7	1.2	0.0	18.6	0.0	45.1	289.0	3.7