

# Kyocera Group Environmental Impact Data

## Kyocera Corporation Kagoshima Hayato Plant



### Profile

Location	999-3Uchi, Hayato-cho, Kirishima-shi, Kagoshima
Products manufactured	Thermal heads, LCDs, Inkjet head
Number of employees	565
Landarea	26,406m <sup>2</sup>
Total floor space	25,813m <sup>2</sup>

### Environmental Performance

Items	Units		FY2010		FY2011	
	Amount	Specific consumption	Amount	Specific consumption	Amount	Specific consumption
Energy	kℓ (crudeoil based)	kℓ/M Yen	9,685	0.80	11,302	0.93
CO <sub>2</sub>	t-CO <sub>2</sub>	t-CO <sub>2</sub> /M Yen	14,986	1.23	17,070	0.86
Water	m <sup>3</sup>	m <sup>3</sup> /M Yen	415,514	34.2	624,168	31.3
Industrial waste emissions	kg	kg/M Yen	408,552	33.6	678,950	34.0
Effluent	m <sup>3</sup>	m <sup>3</sup> /M Yen	331,122	27.2	461,014	23.1

### Air related

Items	Facility	Legal standard	Internal criteria	Self-management standard	Performance for FY2011		
					Ave	Max	Measurement frequency
N/A							

### Air emission: total impact (units: tons)

Items	Total emission	
	FY2010	FY2011
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	6.2 ~ 8.2	7.09	6.80	Once/week
Biochemical oxygen demand (BOD)	120	10	10	3.6	8.0	Once/week
Chemical oxygen demand (COD)	120	10	10	3.9	7.6	Once/week
Suspended solid (SS)	200	5	5	2.5	4.2	Once/week
N-hexane extracts weight	30	1	1	<0.5	<0.5	Once/month
Phenols content	5	0.5	0.01	<0.01	<0.01	Once/year
Copper content	3	1	0.08	<0.01	0.02	Once/every 2 month
Zinc content	2	1	0.2	<0.01	0.04	Once/every 2 month
Dissolved iron content	10	5	1	0.23	0.37	Once/every 2 month
Dissolved manganese content	10	5	1	0.06	0.13	Once/every 2 month
Coliform group number (colonies/ mℓ)	3,000	350	200	N/D	N/D	Once/month
Nitrogen content	60	60	20	<0.01	<0.01	Once/year
Phosphorous content	8	8	7.2	2.0	3.8	Once/week

### Water pollution: total impact (units: tons)

Items	Total emission	
	FY2010	FY2011
Chemical oxygen demand (COD)	1.30	1.78
Biochemical oxygen demand (BOD)	1.19	1.67
Nitrogen	1.64	1.68
Phosphorous	0.77	0.92

### 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	4.0	0.004	0.0	0.0	1.5	0.0	0.0	0.00	2.5
Target chemical substances total		4.0	0.004	0.0	0.0	1.5	0.0	0.0	0.00	2.5