

# Kyocera Group Site Information

## Kyocera Corporation Kagoshima Hayato Plant



### Profile

Location	999-3 Uchi, Hayato-cho, Kirishima, Kagoshima
Products manufactured	Thermal heads, LCDs
Number of employees	575
Land area	26,407 m <sup>2</sup>
Total floor space	25,814 m <sup>2</sup>

### Environmental Performance

Items	Units		FY 2006		FY 2007	
	Amount	Specific consumption	Amount	Specific consumption	Amount	Specific consumption
Electricity	kWh	kWh/M Yen	42,331,440	2,238	42,434,503	2,391
Fuel (LPG, diesel fuel)	kℓ (crude-oil based)	kℓ/M Yen	1,656	0.09	1,787	0.10
CO <sub>2</sub>	t-CO <sub>2</sub>	t-CO <sub>2</sub> /M Yen	16,940	0.90	17,261	0.97
Water	m <sup>3</sup>	m <sup>3</sup> /M Yen	535,225	28.3	535,595	30.2
Industrial waste emissions	kg	kg/M Yen	827,768	46.1	824,188	46.4
Effluent	m <sup>3</sup>	m <sup>3</sup> /M Yen	520,211	27.5	481,353	27.1

#### Comments

We installed low-energy mode manufacturing facility to reduce electricity and water, and we installed turbo refrigerator to reduce fuel consumption. However, the amount increased for most items due to the increase in production volume.

### Air related

Items	Facility	Legal standard	Internal criteria	Self-management standard	Performance for FY 2007		
					Ave	Max	Measurement frequency
N/A							

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

Items	Total emission	
	FY 2006	FY 2007
N/A		

#### Comments

N/A

### Water quality

(units: mg/ℓ)

Items	Legal standard	Internal criteria	Self-management standard	Performance for FY 2007		
				Ave	Max	Measurement frequency
Hydrogen ion concentration (pH)	5.8~8.6	6.2~8.2	6.2~8.2	7.12	7.3	12 times/year
Biochemical oxygen demand (BOD)	20	10	10	4.92	8.9	12 times/year
Chemical oxygen demand (COD)	—	10	10	4.82	6.5	12 times/year
Suspended solid (SS)	30	5	5	2.02	3.6	12 times/year
N-hexane extracts weight	30	1	1	0.50	0.5	12 times/year
Phenols content	5	0.5	0.01	<0.01	<0.01	Once/year
Copper content	3	1	0.08	0.03	0.06	6 times/year
Zinc content	2	1	0.2	0	0	6 times/year
Dissolved iron content	10	5	1	0.15	0.58	6 times/year
Dissolved manganese content	10	5	1	0.04	0.14	6 times/year
Coliform group number (colonies/ mℓ)	700	350	200	0.5	6.0	12 times/year
Nitrogen content	60	60	20	2.58	2.8	12 times/year
Phosphorous content	8	8	7.2	2.23	6.8	12 times/year

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

Items	Total emission	
	FY 2006	FY 2007
Chemical oxygen demand (COD)	2.60	2.32
Biochemical oxygen demand (BOD)	2.13	2.36
Nitrogen	2.39	1.24
Phosphorous	1.20	1.07

#### Comments

Less than self-management standards, no incidents exceeded standards.

### Bad odors

No incidents exceeded standards.

### Noise and vibration

No incidents exceeded standards.

### PRTR substances

(units: tons)

Number	Substance	Handled amounts	Releases to			Transfers to		Other amounts		
			Air	Water	Soil	Waste	Sewage	Recycled	Consumption	Removed by process
16	2-amino ethanol	6.6	0	0	0	2.7	0	0	0.9	3.0
	Target chemical substances total	6.6	0	0	0	2.7	0	0	0.9	3.0

#### Comments

Due to the drop in production volume, target chemical substance 2-amino ethanol dropped compared to last year for all items.