

Kyocera Group Environmental Impact Data

Kyocera Corporation Nagano Okaya Plant



Profile

Location	3-11-1 Kohagi Osachi, Okaya-shi, Nagano
Products manufactured	Thermal print heads, single crystal sapphire, cutting tools, factory automation
Number of employees	333
Landarea	80,067 m ²
Total floor space	35,926.4 m ²

Environmental Performance

Items	Units		FY2010		FY2011	
	Amount	Specific consumption	Amount	Specific consumption	Amount	Specific consumption
Energy	kℓ (crudeoil based)	kℓ/M Yen	9,458	0.99	12,680	0.89
CO ₂	t-CO ₂	t-CO ₂ /M Yen	18,167	1.9	24,025	1.7
Water	m ³	m ³ /M Yen	69,803	7.3	99,295	7.0
Industrial waste emissions	kg	kg/M Yen	104,905	10.9	112,831	7.9
Effluent	m ³	m ³ /M Yen	24,265	2.5	27,009	1.9

Air related

Items	Facility	Legal standard	Internal criteria	Self-management standard	Performance for FY2011		
					Ave	Max	Measurement frequency
Soot and dust (g/Nm ³)	Boiler (central)	0.3	0.24	0.043	0.0055	0.0060	Twice/year
NOx (ppm)	Boiler (central)	180	144	106	54.0	59.0	Twice/year
SOx (Nm ³ /h)	Boiler (central)	5.8	4.7	3.8	0.100	0.100	Twice/year

Air emission: total impact (units: tons)

Items	Total emission	
	FY2010	FY2011
NOx	0.34	0.79
SOx	0.16	0.51

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	6.9 ~ 7.7	7.5	7.6	Twice/month
Biochemical oxygen demand (BOD)	30	10	8	1.3	2.4	Twice/month
Chemical oxygen demand (COD)	30	10	8	4.4	6.5	Twice/month
Suspended solid (SS)	50	5	4	1.4	3.6	Twice/month
N-hexane extracts weight	5	1	1	<1	<1	Twice/month
Phenols content	5	0.5	0.2	<0.1	<0.1	Once/year
Copper content	3	1	0.5	0.013	0.017	Twice/month
Zinc content	2	1	0.1	0.110	0.110	Once/year
Dissolved iron content	10	5	3	<0.05	<0.05	Once/year
Dissolved manganese content	10	5	0.5	<0.05	<0.05	Once/year
Coliform group number (colonies/ mℓ)	3,000	350	0	0	0	Once/year
Nitrogen content	40	30	15	10.9	14.0	Twice/month
Phosphorous content	5	3	1	0.071	0.120	Twice/month

Water pollution: total impact (units: tons)

Items	Total emission	
	FY2010	FY2011
Chemical oxygen demand (COD)	0.09	0.12
Biochemical oxygen demand (BOD)	0.05	0.04
Nitrogen	0.27	0.29
Phosphorous	0.0004	0.0019

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
132	cobalt and its compounds	14.5	0.0	0.0	0.0	0.3	0.0	0.5	13.8	0.0
453	molybdenum and its compounds	11.8	0.0	0.0	0.0	1.2	0.0	10.6	0.0	0.0
Target chemical substances total		26.3	0.0	0.0	0.0	1.4	0.0	11.1	13.8	0.0