

Kyocera Group Environmental Impact Data

Kyocera Chemical Corporation Kawaguchi Plant



Profile

| | |
|-----------------------|---|
| Location | 5-14-25, Ryouke, Kawaguchi-shi, Saitama |
| Products manufactured | Epoxy resin molding compounds for semiconductor encapsulation, Phenolic molding compounds, Plastic molding compounds, Flexible printed circuit board materials, Copper pastes |
| Number of employees | 283 |
| Land area | 52,357 m ² |
| Total floor space | 47,232 m ² |

Environmental Performance

| Items | Units | | FY 2010 | | FY 2011 | |
|----------------------------|----------------------|--------------------------|---------|----------------------|---------|----------------------|
| | Amount | Specific consumption | Amount | Specific consumption | Amount | Specific consumption |
| Energy | kℓ (crude oil based) | kℓ/M Yen | 1,610 | 0.65 | 1,745 | 0.61 |
| CO ₂ | t-CO ₂ | t-CO ₂ /M Yen | 3,044 | 1.2 | 2,845 | 1.0 |
| Water | m ³ | m ³ /M Yen | 50,948 | 2.9 | 48,400 | 17.0 |
| Industrial waste emissions | kg | kg/M Yen | 157,526 | 63.9 | 217,404 | 76.2 |
| Effluent | m ³ | m ³ /M Yen | 43,920 | 17.8 | 41,326 | 14.5 |

Air related

| Items | Facility | Legal standard | Internal criteria | Self-management standard | Performance for FY2011 | | |
|--------------------------------------|------------------------|----------------|-------------------|--------------------------|------------------------|-------|-----------------------|
| | | | | | Ave | Max | Measurement frequency |
| Soot and dust (g/Nm ³) | S Heat catalyst boiler | 0.3 | — | 0.012 | 0.005 | 0.005 | Twice/year |
| NO _x (ppm) | S Heat catalyst boiler | 180 | — | 92.3 | 71 | 74 | Twice/year |
| SO _x (Nm ³ /h) | S Heat catalyst boiler | 0.47 | — | 0.009 | 0.005 | 0.005 | Twice/year |

Air emission: total impact (units: tons)

| Items | Total emission | |
|-----------------|----------------|---------|
| | FY 2010 | FY 2011 |
| NO _x | 0.02 | 0.06 |
| SO _x | 0.011 | 0.000 |

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 | — | 6.5~8.2 | 7.5 | 7.7 | Once/year |
| Biochemical oxygen demand (BOD) | 25 | — | 7.6 | 1.5 | 4.4 | 6 times/year |
| Chemical oxygen demand (COD) | 160 | — | 9 | 2.9 | 5.8 | 6 times/year |
| Suspended solid (SS) | 60 | — | 4.5 | 1.6 | 4.0 | 6 times/year |
| N-hexane extracts weight | 5 | — | 0.6 | 0.0 | 0.0 | 6 times/year |
| Phenols content | 1 | — | 0.45 | 0.00 | 0.00 | 6 times/year |
| Zinc content | 2 | — | 0.9 | 0.13 | 0.44 | 12 times/year |
| Dissolved iron content | 10 | — | 4.5 | — | — | — |
| Nitrogen content | 120 | — | 6.2 | 3 | 4 | 4 times/year |
| Phosphorous content | 16 | — | 0.3 | 0.03 | 0.10 | 4 times/year |

Water pollution: total impact (units: tons)

| Items | Total emission | |
|---------------------------------|----------------|---------|
| | FY 2010 | FY 2011 |
| Chemical oxygen demand (COD) | 0.12 | 0.12 |
| Biochemical oxygen demand (BOD) | 0.08 | 0.06 |
| Nitrogen | 0.07 | 0.10 |
| Phosphorous | 0.004 | 0.001 |

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 |
| 24 | m-aminophenol | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 |
| 31 | antimony and its compounds | 2.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 2.0 | 0.0 |
| 135 | 2-methoxyethyl acetate; ethylene glycol monomethyl ether acetate | 7.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.3 |
| 258 | 1,3,5,7-tetraazatricyclo[3.3.1.1 ^{3,7}]decane; hexamethylenetetramine | 66.3 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 42.9 | 23.2 |
| 349 | phenol | 10.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9 | 5.8 |
| Target chemical substances total | | 88.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 51.2 | 36.3 |