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Manufacturing facility		Awazu Plant (established 1921)	Osaka Plant (established 1952)
Over-view	Location	Komatsu, Ishikawa Prefecture	Hirakata, Osaka Prefecture
	Main products	Small and midsize bulldozers; small hydraulic excavators; mini, small, and midsize wheel loaders; large presses; tunnel machinery; armoured vehicles; others	Large bulldozers, midsize and large hydraulic excavators, mobile recycling machinery (crushers, soil recycler, tub grinder, etc.)
	Site/building area (1,000 m ²)	785 / 290	557 / 157
	Number of employees	3,547	1,944

Compliance Conditions to Major Regulations

Air	Item / Unit	Unit	Facility	Regulated value	Actual value (Max.)	Facility	Regulated value	Actual value (Max.)
	Nitrogen oxides (NOx)	ppm		Boiler	250	125	Boiler	150
Hot-air boiler				180	130	Metal furnace	180	50
Heating furnace				200	53	Diesel engine	500	154
Diesel engine				950	920	Gas engine	300	100
Sulphur oxides (SOx)	-	(K-value regulation)	17.5	1.01	Regulation of total emission (Nm ³ /h)	11.6	5.4	
Soot and dust	g / Nm ³		Boiler	0.3	0.061	Boiler	0.05	Less than 0.001
			Hot-air boiler	0.3	0.038	Metal furnace	0.1	0.007
			Heating furnace	0.25	0.036	Diesel engine	0.08	0.013
			Diesel engine	0.1	0.042	Gas engine	0.04	Less than 0.001

waste Water	Item	Regulated value according to the WPCL	Regulated value	Actual value			Regulated value	Actual value		
				Maximum	Minimum	Average		Maximum	Minimum	Average
	pH	5.8–8.6	5.8–8.6	8.5	6.1	7.3	5.8–8.6	7.4	6.5	7.1
	BOD	160	80	18	0.7	3.4	65	10.0	1.0	3.4
	COD	160	80	10	0.6	4.6	65	5.2	2.4	3.4
	Suspended substances	200	120	5.6	0.6	2.7	110	4.0	2.8	3.2
	Mineral oils	5	5	2.4	ND	1.4	3	0.7	ND	0.3
	Copper	3	3	ND	ND	ND	3	ND	ND	ND
	Zinc	5	5	0.03	ND	0.02	5	0.02	ND	0.02
	Nitrogen	120	120	11	1	3	120	8.6	1.6	3.8
	Phosphorus	16	16	1.3	ND	0.4	16	0.28	0.10	0.19
	Cadmium	0.1	0.1	ND	ND	ND	0.01	ND	ND	ND
	Lead	0.1	0.1	0.02	ND	0.01	0.05	ND	ND	ND
	Hexavalent chromium	0.5	0.5	ND	ND	ND	0.05	ND	ND	ND
	Trichloroethylene	0.3	0.3	0.002	ND	0.002	0.03	ND	ND	ND
	Tetrachloroethylene	0.1	0.1	0.001	ND	0.001	0.01	0.003	ND	0.002
	Dichloromethane	0.2	0.2	ND	ND	ND	0.02	ND	ND	ND
	1.1.1-trichloroethane	3	3	0.007	ND	0.002	1	0.004	0.0008	0.002

Major performances

Environmental impact	Item	Actual value	Item	Actual value
	Total CO ₂ emission	16,168 tC / year	Total CO ₂ emission	10,313 tC / year
	NOx total amount	106,775 kg / year	NOx total amount	7,590 kg / year
	SOx total amount	5,674 kg / year	SOx total amount	2,614 kg / year
	Total emission of waste	8,301 t / year	Total emission of waste	1,912 t / year

Energy consumption	Item	Actual consumption	Converted to crude oil (kl/year)	Item	Actual consumption	Converted to crude oil (kl/year)
	Electricity	80,610 MWh / year	19,346	Electricity	56,349 MWh / year	13,524
	Heavy oil A	6,541 kl / year	6,607	Heavy oil A	2,266 kl / year	2,289
	Kerosene	1,297 kl / year	1,245	Kerosene	1,582 kl / year	1,519
	Light oil	361 kl / year	357	Light oil	0 kl / year	0
	LPG, et al		2,867	Coal gas, et al		2,921
	Total		30,442	Total		20,252

Oyama Plant (established 1962)	Mooka Plant (established 1971)
Oyama, Tochigi Prefecture	Mooka, Tochigi Prefecture
Engines for construction/industrial machinery, diesel generators, hydraulic equipment, excimer lasers, etc.	Large wheel loaders, rough-terrain cranes, dump trucks, motor graders, road-related equipment, etc.
594/193 1,976	302/66 686

* The number of employees includes those working for Komatsu affiliates on the premises.

Facility	Regulated value	Actual value (Max.)	Facility	Regulated value	Actual value (Max.)
Boiler	250	133	Boiler	180	100
Incinerator	200	74	Diesel engine	950	356
Diesel engine	950	787			
Sand recycling furnace (K-value regulation)	250 7	37 0.41	(K-value regulation)	8	0.68
Boiler	0.3	0.005	Boiler	0.3	0.007
Incinerator	0.25	Less than 0.001	Diesel engine	0.1	0.03
Diesel engine	0.1	0.039			
Sand recycling furnace	0.5	0.004			

* Regulated values are in accordance with the Air Pollution Control Act and local regulations.

Regulated value	Actual value			Regulated value	Actual value		
	Maximum	Minimum	Average		Maximum	Minimum	Average
5.8-8.6	7.3	6.9	7.1	5.8-8.6	7.8	7.1	7.4
25	18	3.7	11.4	25	23	1	9
25	19.8	6.0	12.6	25	14	7.9	11.0
50	14	6.4	9.6	50	17	ND	7.1
5	1.3	ND	0.6	5	4.7	ND	1.8
3	ND	ND	ND	3	ND	ND	ND
5	0.3	ND	0.1	5	0.19	ND	0.11
20	6.7	2.6	4.5	120	7.1	5.5	6.3
2	0.4	0.2	0.2	16	5.9	0.6	3.2
0.1	ND	ND	ND	0.1	ND	ND	ND
0.1	ND	ND	ND	0.1	0.06	0.04	0.05
0.1	ND	ND	ND	0.1	ND	ND	ND
0.3	ND	ND	ND	0.3	ND	ND	ND
0.1	ND	ND	ND	0.1	ND	ND	ND
0.2	ND	ND	ND	0.2	ND	ND	ND
3	0.001	ND	0.001	3	ND	ND	ND

WPCL: Water Pollution Control Law
 • The unit is mg/l, except for pH.
 • Regulated values are in accordance with the Water Pollution Control Law and local laws of regional governments.
 • ND indicates a value below the lower limit of detection.
 • ND is considered to be the lower limit of detection when calculating the average.
 • Other items are confirmed to be below the regulated value.

Item	Actual value	Item	Actual value
Total CO ₂ emission	16,429 tC/year	Total CO ₂ emission	1,818 tC/year
NOx total amount	181,109 kg/year	NOx total amount	1,732 kg/year
SOx total amount	14,727 kg/year	SOx total amount	486 kg/year
Total emission of waste	7,250 t/year	Total emission of waste	810 t/year

Refer to 4.1, "Environmental Conservation Activities in Manufacturing," for details on the methods used to calculate amounts.
 * Total emission of waste is a composite of amount recycled and amount disposed.

Item	Actual consumption	Converted to crude oil (kl/year)	Item	Actual consumption	Converted to crude oil (kl/year)
Electricity	83,402 MWh/year	20,016	Electricity	14,434 MWh/year	3,464
Heavy oil A	1,218 kl/year	1,230	Heavy oil A	176 kl/year	178
Kerosene	7,626 kl/year	7,321	Kerosene	17 kl/year	16
Light oil	1,989 kl/year	1,969	Light oil	13 kl/year	13
LPG, et al		210	LPG, et al		260
Total		30,747	Total		3,931

*The conservation factor for crude oil is in accordance with "Regulation for Enforcement Regarding the Rationalization of Energy Use - Appendix 1."