

Others

Cosmo Matsuyama Oil Co., Ltd.

Address: 3-580 Okaga, Matsuyama-shi, Ehime-ken

Start of operations: February, 1944

Area: 532,879 m²

Employees: 121 (as of March, 2001)

Regulated materials

	Material	Regulation	Regulation contents	Regulation value	Actual results	
					Maximum	Average
Air related	NOx (m ³ _N /hour)				20.6	13.1
	SOx (m ³ _N /hour)	Pollution Prevention Agreement	Total volume regulation	208	78.7	48.5
	Dust (boiler) (g/m ³ _N)	Pollution Prevention Agreement	Concentration regulation	0.17	0.06	0.03

	Material	Regulation	Regulation contents	Regulation value	Actual results	
					Maximum	Average
Water related	COD (kg/day)	Law covering special measures to preserve the Seto Inland Sea	Total volume regulation	363.3	32.1	7
	" (mg/L)	Prefectural regulation	Concentration regulation	15 (10)	3.6	3.2
	SS (mg/L)	Prefectural regulation	Concentration regulation	20	4	3
	Oil content (mg/L)	Prefectural regulation	Concentration regulation	2	Below lower measurement limit	
	Nitrogen (mg/L)	Water Pollution Control Law	Concentration regulation	120 (60)	2.2	1
	Phosphorus (mg/L)	Water Pollution Control Law	Concentration regulation	16 (8)	0.33	0.18
	Phenol (mg/L)	Prefectural regulation	Concentration regulation	0.3	Below lower measurement limit	

Figures in parentheses = daily average

Cosmo Research Institute*

Address: 1134-2 Gongendo, Saitama-shi, Saitama-ken

Area: 86,200 m²

Employees: 108 (as of March, 2001)

Regulated materials

	Material	Regulation	Regulation contents	Regulation value	Actual results	
					Maximum	Average
Water related	COD (mg/L)	Water Pollution Control Law	Concentration regulation	160 (120)	19.9	9.1
	SS (mg/L)	Prefectural regulation	Concentration regulation	60 (50)	6	5
	Oil content (mg/L)	Water Pollution Control Law	Concentration regulation	5	2	1
	Nitrogen (mg/L)	Water Pollution Control Law	Concentration regulation	120 (60)	6	5.5
	Phosphorus (mg/L)	Water Pollution Control Law	Concentration regulation	16 (8)	0.9	0.8
	Phenol (mg/L)	Prefectural regulation	Concentration regulation	1	Below lower measurement limit	

Figures in parentheses = daily average

Cosmo Oil Lubricants Co., Ltd.; Cosmo Matsuyama Oil Co., Ltd.; Cosmo Research Institute

Environmental accounting

Item	Environmental protection cost
	Cost
0 Product environmental impact reduction costs	319
Heavy fuel oil sulfur reduction	
Diesel fuel sulfur reduction	
Removal of lead from gasoline	
Benzene reduction in gasoline	319 ¹
1 Business area costs	
Pollution prevention costs	
Global environmental protection costs	
Resource recycling costs	
2 Upstream/downstream costs	82 ²
3 Administration activity costs	
4 Research and development costs	1,331 ³
5 Social activity costs	
Total	1,732

Notes on other environmental protection costs:

1: Costs related to raw benzene treatment by Matsuyama Cosmo Oil

2: Costs related to the introduction of environmentally-friendly

lubricating oil raw materials at Cosmo Lubricants

3: Research and development costs at Cosmo Research Institute

Economic Effect (million yen)

Effects of research and development (income from royalties) 50

*From July, 2001
Research &
Development Center