Research and Development Center

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

Start of operations: April 1969

Area: 86,200 m² Employees: 109

Cosmo Oil Lubricants Co., Ltd.

Address: 4-9-25, Shibaura, Minato-ku, Tokyo

Start of operations: April 1988

Employees: 200

Business activities: Manufacturing, research and sales of lubricating oils and other products

Research and Development Center

Regulated Pollutants

	Pollutant	Regulation	Type of control	Standard -	Performance	
ţ					Maximum	Average
tau	COD (mg/L)	Water Pollution Control Law	Concentration control	160 120)	19.5	10.2
- €	SS (ng/L)	Prefectural ordinance	Concentration control	60 50)	7	5
Ę.	Oil content (ng/L)	Water Pollution Control Law	Concentration control	5	1	1
ate	Nitrogen (ng/L)	Water Pollution Control Law	Concentration control	12(0 60)	8	6
Š	Phosphorus (ng/L)	Water Pollution Control Law	Concentration control	16 8)	1.0	8.0
	Phenol (mg/L)	Prefectural ordinance	Concentration control	1	Below measure	ement threshold

Figures in parentheses = daily average

Research and Development Center; Cosmo Oil Lubricants Co., Ltd. Environmental Accounting

	Environmental cost (million yen)			
Item	Investment amount	Expenditure amount		
1 Business area costs	0	0		
Pollution prevention costs	0	0		
Global environmental conservation costs	0	0		
Resource circulation costs	0	0		
2 Upstream/downstream costs	0	100		
Product environmental impact reduction costs	0	0		
Product sulfur reduction costs	0	0		
Gasoline	0	0		
Naphtha	0	0		
Jet fuel oil	0	0		
Kerosene	0	0		
Diesel fuel	0	0		
Heavy fuel oil A	0	0		
Heavy fuel oil C	0	0		
LPG	0	0		
Costs of substituting toxic substances in gasoline	0	0		
Costs of aromatics reduction in petrochemical products	0	0		
Green procurement costs	0	100		
3 Management activity costs	0	0		
4 Research and development costs	0	1,462		
5 Social activity costs	0	0		
Total	0	1 ,562		

Notes on the expenditure amount for FY 2001 100m illon yen for green procurement in the upstream /downstream costs: Expenditure associated with the green procurement of raw materials for lubricating oils (Cosmo O ilLubricants)

Research and development costs of 1,462 m illon yen:

Expenditure for research and development for environmental protection (Research and Development Center)

Economic Benefit (104million yen)

Benefits from research and development (income from royalties, etc.): 104