MAP

Cosmo Research & Development Center

as of 31 March, 2004

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

Start-up: April 1969

Total area: 86,200m²

Employees: 104



► About Cosmo Research and Development Center

Cosmo Research and Development Center is uniquely located between Satte city, Saitama Prefecture and Goka town, Ibaraki Prefecture. 104 employees are engaged in R&D and commercialization of fuel oils, oil refining catalysts, new energy sources, environmental technology, etc. As the site is located between two prefectures, we are endeavoring to maintain good relationships with the hazardous material safety associations and police friendship clubs in the both prefectures. In relation with hazardous materials and high-pressure gases, we have been operating without a single accident since its establishment in 1969.

As a Sainokuni Eco-up declaration business site, which is promoted by Saitama Prefecture, we are also actively implementing global environmental activities including reduction of emissions of CO2 and industrial wastes. Satte city is famous for its Sakura-Zutsumi (an embankment with cherry trees). Its cherry blossoms, field mustards and blue sky form a beautiful contrast of colors and many tourists visit there to enjoy the scenery. Our employees are contributing to the local clean-up activities by cleaning up the areas around the embankment twice a

year before the cherry blossom festival and in late autumn. In near future, there will be a park around Miyukiko lake, which is located next to Sakura-Zutsumi. We will pay even more attention to waste water, noise and gas emissions and are committed to symbiosis with the local community.



Mitsugu Yumoto
Director
Research &
Development Center

► Regulated pollutants

	Pollutant	Standard	Actual Performance in FY 2003		
			Maximum	Average	
alit	COD (mg/L)	160 (120)	16.4	9.5	
pollutants	Suspended Solids (mg/L)	60 (50)	9	6	
Water po	Oil Content (mg/L)	5	1	1	
	Nitrogen (mg/L)	120 (60)	7	6	
	Phosphorus (mg/L)	16 (8)	0.9	0.8	
	Phenols (mg/L)	1	Below measurement threshold		
Values in () are daily average					

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Miyuki-sho (Elementary School) October 1 October 1 October 1 October 2 October 2 October 3 October 3 October 4 O

Environmental accounting

Environmental costs (million yen)						
			FY 2003			
	Item	Invest.	Spending			
Business area	Pollution prevention	0	0			
	Global environmental conservation	0	0			
	Resource recycling	0	0			
Up/Down-stream	Green Purchasing	0	0			
	Reduction of environmental impact of products	0	0			
Management activity		0	0			
Research and Development		54	1,060			
Social activity		0	0			
Total		54	1,060			

Purchasing recycled paper: 1 million yen

Economic benefits (million yen)				
Item	FY 2003			
Benefits of research and development (royalty, etc.)	49			
Total	49			

> Number of staff holding environmental qualifications					
Air pollution control manager	4				
Water pollution control manager	5				
Dioxin pollution control manager	1				
Hazardous materials officer (Class A & B)	80				
High-pressure gas production safety manager (Class A & B)	36				
Qualified person for heat management	1				
Specially controlled industrial waste manager	1				
Engineering manager for disposal facilities of industrial waste	1				
Environmental Certified Measurer	1				
Boiler operator (1st & 2nd grade)	8				