Environmental Data for Overseas Plants

Lion daily Necessities Chemicals (Qingdao) Co., Ltd.

Location: Qingdao (China)

Lines of Business: Toothpastes and toothbrushes

Category	Year				(ton)
	2008	2009	2010	2011	2012
CO ₂ emissions	1,533	1,668	1,566	1,576	1,532
Total waste generated	344	130	262	232	226
Landfill waste	187	50	162	2	6
SOx emissions	0	0	0	0	0
NOx emissions	0	0	0	0	0
COD emissions	2	2	2	2	2

CJ Lion Corporation

Location: Incheon (Korea)

Lines of Business: Laundry detergents, dishwashing detergents, toothpastes, toothbrushes, and hair and skin care products, etc.

Category	Year				(ton)
	2008	2009	2010	2011	2012
CO ₂ emissions	15,791	16,354	16,667	15,296	14,478
Total waste generated	1,366	501	708	538	631
Landfill waste	512	459	451	441	479
SOx emissions	1	1	1	1	0
NOx emissions	0	0	0	0	0
COD emissions	0	0	0	0	0

Lion Chemical Industry (Taiwan) Co., Ltd.

Location: Wugu, Kannon (Taiwan)

Lines of Business: Laundry detergents, dishwashing detergents, toothpastes, toothbrushes, and skin care products, surfactants, etc.

C. I	Year				(ton)
Category	2008	2009	2010	2011	2012
CO ₂ emissions	3,942	4,124	4,135	3,559	2,909
Total waste generated	88	111	108	80	74
Landfill waste	48	65	70	54	46
SOx emissions	5	2	3	3	4
NOx emissions	4	3	2	4	3
COD emissions	11	6	0	1	1

Lion Corporation (Thailand) Ltd.

Location: Sriracha (Thailand)

Lines of Business: Laundry detergents, dishwashing detergents, toothpastes, toothbrushes, and hair and skin care products, etc.

Category	Year				(ton)
	2008	2009	2010	2011	2012
CO ₂ emissions	22,661	26,793	28,750	29,572	31,859
Total waste generated	2,316	2,299	2,551	2,893	3,105
Landfill waste	1,332	1,240	1,315	1,412	1,368
SOx emissions	2	0	1	0	0
NOx emissions	6	11	5	22	3
COD emissions	4	1	8	3	3

Lion Eco Chemicals Sdn. Bhd.

Location: Johor (Malaysia) Lines of Business: surfactants

Category	Year				(ton)
	2008	2009	2010	2011	2012
CO ₂ emissions		2,273	4,359	7,578	10,143
Total waste generated		381	407	252	178
Landfill waste		89	231	223	110
SOx emissions		8	15	38	68
NOx emissions		0	0	0	0
COD emissions		0	0	1	1

^{*}CJ Lion (Korea) calculates its CO_2 emissions by using Korea's calorific value conversion factor for each fuel and electricity as well as the conversion factor for CO_2 emission amount.

^{*}The calculation method for CO₂ emission amount outside of CJ Lion, the The Japan Electrical Manufacturers' Association's(JEMA) "The Estimated Report for the Power Sector and CO₂ Basic Unit for Emission(Ver. 3) (2006)" was used. The calculation method for CO₂ emission amount for fuel other than electricity, the calorific value conversion factor for CO₂ emission amount within Japan included in the Ministry of the Environment's "Calculation Method and Report for Greenhouse Gas Emission(Ver.3.3) (2012) " was used.