

Permit Reference Number: KP3734SH

Operator: Navigator Terminals Windmill Limited

Installation: Barry Silicon Based Manufacturing Installation

Form Number: R1

Reporting of Waste Disposal and Recovery for the year 2017

Waste Description	Disposal		Recovery Tonnes (t)
	Route	Tonnes (t)	
1) Hazardous Waste: (WEEE)		0	0
1) Non-Hazardous Wastes: General	Landfill	7.92	
2) Non-Hazardous Waste: Site Cess Pit	Treatment	145.6	
1) Materials for Recovery by Dow Corning			
Tank wash water			4.320
Product samples			9.304
Tank water from base of Linears tanks			29.636
		153.52	43.26

Trends in Waste Disposal and Recovery			
Year	Parameter	Total Hazardous Wastes (t)	Total Non-Hazardous Wastes (t)
2006		185	15.6
2007		203	10.3
2008		202	14.4
2009		167	15.6
2010		170	15.0
2011		33.72	217.25
2012		0	219.88
2013		0	180.76
2014		0.5	170.32
2015		0.05	142.84
2016		0	161.79
2017		0	153.52
			Total Materials for Recovery by Dow Corning
			5
			6.5
			9.7
			12.8
			9.6
			43.42
			46.94
			28.82
			27.76
			19.562
			30.367
			43.26

Operator's comments:

Signed ...A Jackson.....
(Authorised to sign as representative of the Operator)



Date.....03/01/18

Permit Reference Number: KP3734SH

Operator: Navigator Terminals Windmill Limited

KP3734SH

Reporting of Energy Usage for the year 2017

Energy Source	Energy Usage		CO ₂ Produced (t)
	Quantity	Primary Energy (MWh)	
Electricity * (MWh)	852.060	852.060	143
Natural Gas (MWh)	102.417	102.417	17.2
Diesel / Distillate Fuel Oil (t)	0.164	1.772	0.299
TOTAL	954.641	956.249	161.564

Trends in Energy Usage		
Year	Parameter	
	Primary Energy Usage (MWh)	CO ₂ Produced (t)
2006	1655	279.69
2007	1557	262.232
2008	1521	256
2009	1532	261
2010	1466	249
2011	1392	237
2012	1476	249
2013	1389	234
2014	1280	216
2015	1310	220.6
2016	1059	179
2017	956.249	161.564

Operator's comments:

**Electric supplied from the adjacent CHP plant, losses are assumed to be negligible.

Signed

A Jackson

(Authorised to sign as representative of the Operator)



Date.....4/1/18

Operator: Navigator Terminals Windmill Limited

Form Number: MR1

Reporting of Mass Release for the year 2017

[illegible]

Trends in Mass Release (kg)			
Year	Parameter	Octamethylcyclotetrasiloxane (D4 Cyclics)	Decamethylcyclotetrasiloxane (D5 Cyclics)
2006	Methanol	1491	9.69
2007	153	1510	8.69
2008	43	1699	10.76
2009	100	1431	11.4
2010	55	1678	11
2011	98	1812	10
2012	70	2170	10
2013	125	2445	11
2014	121	2530	13.7
2015	85	3298	12.96
2016	100	2559	14.71
2017	34.4	2165.25	14.12

Operator's Comments:

The Methanol mass (air emission) release was calculated by averaging the results obtained from the fugitive emission surveys carried out by LDAR Envolve Ltd.

D4 and D5 Cyclic products mass emissions are calculated from ideal gas laws in conjunction with Raoult's law using vapour pressure, the final calculated figure is directly related to the tank throughputs. One of the D4 tanks (TK108) has not been in service for the whole of 2017 due to low stock levels. This results in fewer tank movements and less vapour displacement

SignedA Jackson (Authorised to sign as representative of the Operator)

Date.....4/1/18.....

KP3734SH