

Schedule 2

Annual Environmental Report - DPS

Important note

By this submission, you confirm that you give your explicit consent for the entire contents of this Annual Environment Report to be made available on the Authority's public website.

S2.1 Introduction

IPPC Permit Number	IP 0002/07/A
Reporting Year	2009
Name and location of Site	Delimara Power Station
Brief description of activities at the site	Combustion Installation > 50MW

S2.2 Environment Management System & Reporting

Please attach a supporting document with the following:

	Tick (✓)
1. Environmental Policy containing the installation's environmental objectives and targets; [This policy is to be implemented through the EMS, which is being developed]	✓
2. Environmental Management Programme report (for the reporting year) ¹ ;	N/A
3. Environmental Management Programme proposal (for the following year) ² ;	✓
4. European Pollutant Release and Transfer Register Report (as per Condition 4.1.3) ³ . [Already submitted last June 2010.]	✓

S2.3 Process Data

S2.3.1 Annual Summary

	Units	Previous reporting year ⁴	Current reporting year
Quantity of energy produced	MWh	N/A	1,195,589
Total Annual Energy Consumption (from electricity and other sources)	MWh	N/A	57,121
Energy consumption per unit product	MWh consumed/ MWh produced	N/A	0.0478
Annual water consumption ⁵	m ³	N/A	197,771
Water consumption per unit product	m ³ /MWh	N/A	0.165
Annual quantity of waste produced	tonnes	N/A	38.5
Waste produced per unit product	tonne waste/ MWh	N/A	0.0000322

S2.3.2 Fuel consumption

	Units	Sulphur Content ⁶	Consumption	
			Previous Year	Current Year
Heavy Fuel Oil	t	0.652%	N/A	220,458
Gas Oil	t	0.055%	N/A	75,148

¹ Currently Enemalta is developing the EMS and hence for 2009 & 2010 no programme was yet defined.

² The attached programme spans 2010-2016 and that the measures will be implemented through the EMS.

³ The format used for reporting shall be that published in the Government Gazette

(<http://www.doi.gov.mt/EN/gazetteonline/2007/07/gazts/GG%2013.7.pdf>)

⁴ "Previous reporting year" is not applicable for the first reporting year (2008)

⁵ Quantity of water generated internally by the desalination plant for installation use only

⁶ Specify units (e.g. as percentage, or mg/kg) – annual weighted average of fuel consignments from quality certificates.

S2.4 Monitoring Data

S2.4.1 Summary of emissions to air⁷

S2.4.1.1 Emissions of Dust (TSP), Nitrogen Oxides (NO_x) and Sulphur Dioxide (SO₂).

Parameter	Emission point reference	Standard methodology used	Annual average pollutant concentration ⁸	Mean Monthly Limit Value	Total annual number of exceedances of monthly mean value after validation		48 hourly Mean Limit Value	Percentage of exceedances of 48 hourly mean limit value after validation	
			mg.Nm ⁻³	mg.Nm ⁻³	Previous year ⁹	Present year	mg.Nm ⁻³	Previous year ⁹	Present year
Total Suspended Particulates	DPS1	EN 13284-2	28.00	50	N/A	0	55 (97%)	N/A	0
Oxides of Nitrogen	DPS1	ISO 7395	575.81	450	N/A	12	495 (95%)	N/A	63.33
Sulphur Dioxide	DPS1	ISO 10849	1053.14	1490	N/A	0	1639 (97%)	N/A	0
Total Suspended Particulates	DPS2	ISO 1142-2	no data	-	-	-	-	-	-
Oxides of Nitrogen	DPS2	ISO 1142-2	no data	450	N/A	no data	495 (95%)	N/A	no data
Sulphur Dioxide	DPS2	ISO 1142-2	no data	-	-	-	-	-	-
Total Suspended Particulates	DPS3	ISO 1142-2	no data	-	-	-	-	-	-
Oxides of Nitrogen	DPS3	ISO 1142-2	no data	450	N/A	no data	495 (95%)	N/A	no data
Sulphur Dioxide	DPS3	ISO 1142-2	no data	-	-	-	-	-	-
Total Suspended Particulates	DPS4	ISO 1142-2	2.66	-	-	-	-	-	-
Oxides of Nitrogen	DPS4	ISO 1142-2	346.27	450	N/A	0	495 (95%)	N/A	0
Sulphur Dioxide	DPS4	ISO 1142-2	16.12	-	-	-	-	-	-
Total Suspended Particulates	DPS5	ISO 1142-2	2.21	-	-	-	-	-	-
Oxides of Nitrogen	DPS5	ISO 1142-2	357.84	450	N/A	0	-	N/A	0
Sulphur Dioxide	DPS5	ISO 1142-2	72.84	-	-	-	-	-	-

Additional documentation to be submitted:

Tick (✓)

Accreditation certificate(s) of laboratory

⁷ No CEMS have been installed on the Open Cycle gas turbine plants stacks at DPS due to technical reasons.

⁸ Arithmetic average of monthly concentrations.

⁹ "Previous year" is not applicable for the first reporting year (2009).

S2.4.1.2 Emissions of Carbon monoxide (CO)

Emission point reference	Standard methodology used	Annual average pollutant concentration	Monthly Limit Value	Total annual number of exceedances of monthly mean value after validation	
		mg.Nm ⁻³	mg.Nm ⁻³	Previous year ¹⁰	Present year
DPS1	EN 10558	12.71	100	N/A	0
DPS2	ISO 1142	no data	50	N/A	no data
DPS3	ISO 1142	no data	50	N/A	no data
DPS4	ISO 1142	3.58	50	N/A	0
DPS5	ISO 1142-2	16.94	50	N/A	0

¹⁰ "Previous year" is not applicable for the first reporting year (2009).

S2.4.1.3 Emissions of Dioxins and Furans (PCDDs and PCDFs)

Dates on which sampling was carried out:

1 st semester:	
2 nd semester:	

Emission point reference	Standard methodology used ¹¹	Mean Annual Limit Value	PCDD & PCDF concentration 1 st semester	PCDD & PCDF concentration 2 nd semester	Annual average Pollutant Concentration	
		ng.Nm ⁻³	ng.Nm ⁻³	ng.Nm ⁻³	Present year ng.Nm ⁻³	Previous year ¹² ng.Nm ⁻³
DPS1	EN 1948	0.1	no data ¹³	no data	no data	N/A

Additional documentation to be submitted:

Tick (✓)

Accreditation certificate(s) of laboratory

¹¹ If equivalent methodology has been used, kindly indicate which standard methodology has been used.

¹² "Previous year" is not applicable for the first reporting year (2009).

¹³ Contract to carry out tests by third party is in progress but for year 2010 onwards.

S2.4.1.4 Emissions of Metals**S2.4.1.4.1 Emissions of Cadmium (Cd) and Thallium (Tl)**

Dates on which sampling was carried out:

1st semester:	
2nd semester:	

Emission point reference	Standard methodology used	Mean Annual Limit Value	Cd & Tl concentration 1 st semester	Cd & Tl concentration 2 nd semester	Annual average Pollutant Concentration	
		mg.Nm ⁻³	mg.Nm ⁻³	mg.Nm ⁻³	Present year mg.Nm ⁻³	Previous year ¹⁴ mg.Nm ⁻³
DPS1	EN 14385	0.05	no data ¹⁵	no data	no data	N/A

Additional documentation to be submitted:

Tick (✓)

Accreditation certificate(s) of laboratory

☐
¹⁴ "Previous year" is not applicable for the first reporting year (2009).¹⁵ Contract to carry out tests by third party is in progress but for year 2010 onwards.

S2.4.1.4.2 Emissions of Arsenic (As), Chromium (Cr), Cobalt (Co), Copper (Cu), Manganese (Mn), Nickel (Ni), Lead (Pb), Antimony (Sb) and Vanadium (V)

Dates on which sampling was carried out:

1 st semester:	
2 nd semester:	

Emission point reference	Standard methodology used	Mean Annual Limit Value	Metals concentration 1 st semester	Metals concentration 2 nd semester	Annual average Pollutant Concentration	
		mg.Nm ⁻³	mg.Nm ⁻³	mg.Nm ⁻³	Present year mg.Nm ⁻³	Previous year ¹⁶ mg.Nm ⁻³
DPS1	EN 14385	0.5	no data ¹⁷	no data	no data	N/A

Additional documentation to be submitted:

Tick (✓)

Accreditation certificate(s) of laboratory

¹⁶ "Previous year" is not applicable for the first reporting year (2009).

¹⁷ Contract to carry out tests by third party is in progress but for year 2010 onwards.

S2.4.1.5 Emissions of PAHs

Date on which sampling was carried out

Emission point reference	Standard methodology used ¹⁸	Naphthalene	Anthracene	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(a)pyrene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Indeno(1,2,3-cd)pyrene
		mg.kg ⁻¹ dust	mg.kg ⁻¹ dust	mg.kg ⁻¹ dust	mg.kg ⁻¹ dust	mg.kg ⁻¹ dust	mg.kg ⁻¹ dust	mg.kg ⁻¹ dust	mg.kg ⁻¹ dust	mg.kg ⁻¹ dust	mg.kg ⁻¹ dust
DPS1	N/A	no data ¹⁹	no data	no data	no data	no data	no data	no data	no data	no data	no data

Emission point reference	PAH (sum 10) mg.kg ⁻¹ dust	
	Present year	Previous year ²⁰
DPS1	no data	N/A

Additional documentation to be submitted:

Accreditation certificate(s) of laboratory Tick (✓)

¹⁸ If equivalent methodology has been used, kindly indicate which standard methodology has been used.

¹⁹ Contract to carry out tests by third party is in progress but for year 2010 onwards.

²⁰ "Previous year" is not applicable for the first reporting year (2009).

S2.4.2 Monthly Statistical Analysis of Continuous Monitoring

S2.4.2.1 Monthly Concentration Data for Particulates, SO₂ and NO_x²¹

ONE PAGE PER MONTH TO BE SUBMITTED FOR EACH PLANT

Reporting year	
Month	
Plant	

	Particulates	SO ₂	NO _x	CO
Monthly average concentration for the period (mg . Nm ⁻³)				
No of exceedances of 24 hr limit in period				
Highest individual 24 hr average in period (mg. Nm ⁻³)				
Mean daily average, in period (mg. Nm ⁻³)				
No of exceedances of 1 hr average in period				
Highest individual 1 hr average in period (mg. Nm ⁻³)				
Mean 1 hr average in period (mg. Nm ⁻³)				
Percentage of boiler operating time that continuous monitors available during reporting period.				

²¹ Please refer to separate PDF files generated by CEMS's.

S2.4.2.2 Monthly Loads of Particulates, SO₂ and NO_x²²*ONE PAGE PER PLANT TO BE SUBMITTED*

Operator: Enemalta Corporation Ltd.	Plant no. DPS ____
Location: Delimara.	Heat Value of Fuel fired: ____ GJ.Mg ⁻¹
Reporting year: _____	

Month	Fuel Burn During this period Mg. month ⁻¹	Monthly SO ₂ Load Mg	Monthly NO _x Load Mg	Monthly Dust Load Mg
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
TOTAL				

Pollutant Load (Mg) = Pollutant concentration (µg.Nm⁻³) × 1×10⁻⁹ × WGF (m³.month⁻¹)
(WGF = waste gas flow rate).

²² Please refer to separate PDF files generated by CEMS's

S2.4.3 Annual Data

S2.4.3.1 Annual Load of Particulates, SO₂ and NO_x²³

Delimara Power Station								
Units	Rated Thermal Input	Type	Fuel	Fuel Burn	Heat Value ²⁴	Annual Emissions [*] SO ₂	Annual Emissions [*] NO _x	Annual Emissions [*] dust
	MW _{TH}			Mg.yr ⁻¹	GJ.Mg ⁻¹	Mg.yr ⁻¹	Mg.yr ⁻¹	Mg.yr ⁻¹
“New” plants – ≥300 MW_{TH}								
Delimara 1	332	Steam Boiler	HFO	220,474.35	40.916	3,417.756	1,837.490	91.784
“Existing” plants- 50- 300 MW_{TH}								
Delimara 2	121	Gas Turbine	Gasoil	1,401.15	42.666	1.45	8.80	0.000
Delimara 3	121	Gas Turbine	Gasoil	4,139.78	42.666	4.28	26.01	0.000
Delimara 4	121	Gas Turbine	Gasoil	26,678.44	42.666	16.456	340.989	2.945
Delimara 5	121	Gas Turbine	Gasoil	42,970.94	42.666	39.520	289.466	2.784
Total “Existing” 50-300 MW_{TH}								
Total						3,479.46	2,502.77	97.51

²³ Annual load values as submitted for the Commission report.

²⁴ Weighted average from fuel consignments during 2009 (as per GHG Report)

* Sum of the total emissions during normal operations + total emissions during start-up/shut down periods.

S2.4.3.2 Annual Load of Ni and V**ONE PAGE PER PLANT TO BE SUBMITTED**

Operator: Enemalta Corporation Ltd.	Plant no. DPS 1ⁱ
Location: Delimara.	Heat Value of Fuel: 40.916 GJ/t
Reporting year: 2009	

Year	Fuel Burn (Mg . year ⁻¹)	Average Ni content ⁱⁱ (mg Ni.Mg ⁻¹)	Average V content ⁱⁱⁱ (mg V.Mg ⁻¹)	Annual Ni Load (Mg)	Annual V Load (Mg)
Previous	N/A	N/A	N/A	N/A	N/A
Current	220,474	30,662	20,055	6.760	4.422

Metal Load (Mg) = metal content (mg metal .Mg⁻¹) × 1×10⁻⁹ × FB (Mg.month⁻¹)

FB = Fuel Burn.

Metal = nickel or vanadium.

Additional documentation to be submitted:

Accreditation certificate(s) of laboratory ☐ Tick (✓)

ⁱ The values are the annual weighted averages based on fuel consignment quality certificates.

ⁱⁱ Analysed according to ASTM D5708-05: Standard Test Methods for Determination of Nickel, Vanadium, and Iron in Crude Oils and Residual Fuels by Inductively Coupled Plasma (ICP) Atomic Emission Spectrometry.

ⁱⁱⁱ Analysed according to ASTM D5708-05: Standard Test Methods for Determination of Nickel, Vanadium, and Iron in Crude Oils and Residual Fuels by Inductively Coupled Plasma (ICP) Atomic Emission Spectrometry.

Operator: Enemalta Corporation Ltd.	Plant no. DPS 2 - 5ⁱ
Location: Delimara.	Heat Value of Fuel: 42.666 GJ/t
Reporting year: 2009	

Year	Fuel Burn (Mg . year ⁻¹)	Average Ni content ⁱⁱ (mg Ni.Mg ⁻¹)	Average V content ⁱⁱⁱ (mg V.Mg ⁻¹)	Annual Ni Load (Mg)	Annual V Load (Mg)
Previous	N/A	N/A	N/A	N/A	N/A
Current	75,190	50 ^{iv}	73 ^v	0.00376	0.005489

Metal Load (Mg) = metal content (mg metal .Mg⁻¹) × 1×10⁻⁹ × FB (Mg.month⁻¹)

FB = Fuel Burn.

Metal = nickel or vanadium.

Additional documentation to be submitted:

Tick (✓)

Accreditation certificate(s) of laboratory

ⁱ Since the concentration values of Ni & V are the annual weighted averages based on fuel consignment quality certificates, only the totals for HFO & gasoil plants are given here, with each individual plant on a pro-rata basis.

ⁱⁱ Analysed according to ASTM D5708-05: Standard Test Methods for Determination of Nickel, Vanadium, and Iron in Crude Oils and Residual Fuels by Inductively Coupled Plasma (ICP) Atomic Emission Spectrometry.

ⁱⁱⁱ Analysed according to ASTM D5708-05: Standard Test Methods for Determination of Nickel, Vanadium, and Iron in Crude Oils and Residual Fuels by Inductively Coupled Plasma (ICP) Atomic Emission Spectrometry.

^{iv} Incomplete data. Value based on half the LOR level of available data only.

^v Value based on half the LOR level of available data as applicable.

S2.5: Certificates of Analysis for physical and chemical parameters of fuels

Documentation to be submitted:

Certificates of analysis for physical and chemical parameters of fuels for reporting year (indicate number of certificates submitted)
Accreditation certificate(s) of laboratory

Tick (✓)

see
attachmentsⁱ

S2.6: Wind Roseⁱⁱ

Documentation to be submitted:

Wind rose for the reporting year showing wind speed and direction at the site

Tick (✓)

not
available

ⁱ Please refer to separate folder containing fuel quality certificates.

ⁱⁱ An anemometer is in the process of being installed. Hence data for 2009 is not available.

S2.7 Emissions to Marine Water

Name of outlet: **MAIN OUTFALL**

Parameter	Limit	Standard methodology used ⁱ	Total annual number of exceedances ⁱⁱ		Concentration (Annual Average)			Total Annual Mass Emissions		
			Previous year	Present year	Units	Previous year	Present year	Units	Previous Year	Present Year
pH ⁱⁱⁱ	6-10	n/a	no data	no data	n/a	no data	no data	n/a	no data	no data

ⁱ If an equivalent methodology is used, kindly indicate this instead of the quoted standard.

ⁱⁱ If the total number of exceedances exceeds 0, the value of each of these exceedances (for the reporting year) must be submitted in a separate report, together with action taken to regularise the situation.

ⁱⁱⁱ Enemalta is currently in the process of investigating & installing appropriate pH and temperature sensors in the main outfall.

Parameter	Limit	Standard methodology used ⁱ	Total annual number of exceedances ⁱⁱ		Concentration (Annual Average)			Total Annual Mass Emissions		
			Previous year	Present year	Units	Previous year	Present year	Units	Previous Year	Present Year
Temperature ⁱ	15°C above marine	n/a	no data	no data	n/a	no data	no data	n/a	no data	no data
BOD5	25 mg.dm ⁻³	Method 521B, AWWA/ APHA	0	0	mg/l	4-17	0.00	kg	1026258	0.00
COD	30 mg.dm ⁻³	ISO 6060	3	1 ⁱⁱ	mg/l	443.33	50	kg	0.00	12315100
Total Nitrogen	10 mg.dm ⁻³	In house based on BS3882	0	0	mg/l	0.00	0.00	kg	0.00	0.00
Total Phosphorous	1 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00	kg	0.00	0.00
AOX ⁱⁱⁱ	0.15 mg.dm ⁻³	see footnote	0	0	mg/l	0.00	see footnote	kg	0.00	0.00
Chlorine dioxide and oxidants (given as chlorine) ^{iv}	0.3 mg.dm ⁻³	---	0	0	mg/l	0	0	kg	0	0
Arsenic	0.1 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.001	kg	0.00	246.30
Cadmium	0.05 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00	kg	325.12	0.00
Chromium (total)	0.5 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.001	kg	0.00	246.30
Copper	0.5 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00275	kg	1366.98	677.33
Lead	0.1 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00215	kg	1026.26	529.55
Mercury	0.03 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00	kg	0.00	0.00
Nickel	0.5 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00045	kg	0.00	110.84

ⁱ See footnote iii for pH.

ⁱⁱ This occurrence was reported in the October 2009 analytical report where the COD seawater inlet value was 210mg/l whilst the main outfall value was 280mg/l.

ⁱⁱⁱ The analytical reports do not include the AOX test. However several individual component tests are included and the results were always below the LOD. Test methods were mainly US EPA 8260b.

^{iv} Chlorine dioxide measurements are taken **BEFORE** seawater entry into condensers and it's difficult to measure at outfall due to the nature of the pollutant, given its instability. ClO2 concentration at the main outlet will be well below any equipment resolution level and annual concentration and quantity discharge values are therefore considered as nil.

Parameter	Limit	Standard methodology used ⁱ	Total annual number of exceedances ⁱⁱ		Concentration (Annual Average)			Total Annual Mass Emissions		
			Previous year	Present year	Units	Previous year	Present year	Units	Previous Year	Present Year
Tin	1 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00	kg	0.00	0.00
Vanadium	4 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00	kg	574.70	0.00
Zinc (insert limit value)		Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.0325	kg	3284.03	8004.82
Petroleum hydrocarbons	0.03 mg.dm ⁻³	US EPA 8020 & 602	0	0	mg/l	0.00	0.00	kg	11083.59 ⁱⁱⁱ	0.00
Tributyltin compounds	0.0005 mg.dm ⁻³	Alcontrol In house method ^{iv}	0	0	µg/l	0.00	0.00	kg	0.00	0.00
Total Suspended Solids	35 mg.dm ⁻³	Method 2540D, AWWA/ APHA	0	0	mg/l	4.33	0.00	kg	1067309	0.00
Benzene	-	US EPA 8020 & 602	0	0	mg/l	0.00	0.00	kg	0.00	0.00
PAHs	-	US EPA 8100	0	0	mg/l	0.00	0.00	kg	0.00	0.00

ⁱ If an equivalent methodology is used, kindly indicate this instead of the quoted standard.

ⁱⁱ If the total number of exceedances exceeds 0, the value of each of these exceedances (for the reporting year) must be submitted in a separate report, together with action taken to regularise the situation.

ⁱⁱⁱ EPH (C10 – C40) only

^{iv} Determination of organotin compounds in aqueous samples by derivitisation / GC-MC

Name of outlet: **OILY WATER INTERCEPTOR 2ⁱ**

Parameter	Limit	Standard methodology used ⁱⁱ	Total annual number of exceedances ⁱⁱⁱ		Concentration (Annual Average)			Total Annual Mass Emissions		
			Previous year	Present year	Units	Previous year	Present year	Units	Previous Year	Present Year
pH	6-10	n/a	no data	no data	n/a	no data	no data	n/a	no data	no data

ⁱ No sample was taken from tank farm oil interceptor 1 since there was no sufficient source water.

ⁱⁱ If an equivalent methodology is used, kindly indicate this instead of the quoted standard.

ⁱⁱⁱ If the total number of exceedances exceeds 0, the value of each of these exceedances (for the reporting year) must be submitted in a separate report, together with action taken to regularise the situation.

Temperature	15°C above marine	n/a	no data	no data	n/a	no data	no data	n/a	no data	no data
BOD5	25 mg.dm ⁻³	Method 521B, AWWA/ APHA	0	0	mg/l	3.67	0.50	kg	57.82	7.88
COD	30 mg.dm ⁻³	ISO 6060	2	2	mg/l	223.33	189.70	kg	3522	2991
Total Nitrogen	10 mg.dm ⁻³	In house based on BS3882	0	0	mg/l	2.50	1.50	kg	39.42	23.63
Total Phosphorous	1 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.18	0.05	kg	2.89	0.83
AOX ⁱ	0.15 mg.dm ⁻³	see footnote	0	0	mg/l	no data	0.00	kg	0.00	0.00
Chlorine dioxide and oxidants (given as chlorine) ⁱⁱ	0.3 mg.dm ⁻³	---	0	0	mg/l	0	0	kg	0	0
Arsenic	0.1 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.02	0.03	kg	0.36	0.54
Cadmium	0.05 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.0004	kg	0.01	0.0065
Chromium (total)	0.5 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.01	0.01	kg	0.09	0.19
Copper	0.5 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.02	0.01	kg	0.25	0.097
Lead	0.1 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00	kg	0.01	0.02
Mercury	0.03 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00	kg	0.00	0.00
Nickel	0.5 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.01	0.02	kg	0.19	0.28

ⁱ The analytical reports do not include the AOX test. However several individual component tests are included and the results were always below the LOD. Test methods were mainly US EPA 8260b.

ⁱⁱ Refer to comment for previous outlet

Parameter	Limit	Standard methodology used ⁱ	Total annual number of exceedances ⁱⁱ		Concentration (Annual Average)			Total Annual Mass Emissions		
			Previous year	Present year	Units	Previous year	Present year	Units	Previous Year	Present Year
Tin	1 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.00	0.00	kg	0.02	0.05
Vanadium	4 mg.dm ⁻³	Method 3125B, AWWA/ APHA	0	0	mg/l	0.01	0.01	kg	0.14	0.11
Zinc (insert limit value)		Method 3125B, AWWA/ APHA	0	0	mg/l	0.10	0.06	kg	1.52	1.00
Petroleum hydrocarbons ⁱⁱⁱ	0.03 mg.dm ⁻³	US EPA 8020 & 602	0	0	mg/l	0.01/ 1.44	0.01/ 0.48	kg	0.08/ 22.64	7.81
Tributyltin compounds	0.0005 mg.dm ⁻³	Alcontrol In house method ^{iv}	0	0	µg/l	0.00	0.00	kg	0.04	0.00
Total Suspended Solids	35 mg.dm ⁻³	Method 2540D, AWWA/ APHA	1	0	mg/l	29.33	12.98	kg	462.53	204.64
Benzene	-	US EPA 8020 & 602	0	0	mg/l	0.01	0.00	kg	0.08	0.00
PAHs	-	US EPA 8100	0	0	mg/l	0.00	0.00	kg	0.79	0.00

Name of laboratory where tests in this section have been carried out	Alcontrol Laboratories
Is this laboratory accredited (certified) for the above tests?	Yes ^v <input type="checkbox"/> No <input type="checkbox"/>

Additional documentation to be submitted:

Accreditation certificate(s) of laboratory Tick (✓)
☒

ⁱ If an equivalent methodology is used, kindly indicate this instead of the quoted standard.

ⁱⁱ If the total number of exceedances exceeds 0, the value of each of these exceedances (for the reporting year) must be submitted in a separate report, together with action taken to regularise the situation.

ⁱⁱⁱ GRO (C10 – C10) & EPH (C10 – C40)

^{iv} Determination of organotin compounds in aqueous samples by derivitisation / GC-MC

^v As per indication in test reports

S2.8 Noise monitoringⁱⁱⁱ

Monitoring point ⁱⁱⁱ	Date sampled	Time sampled	Operating conditions	Noise measurement	Units	Other comments (if any)

Additional documentation to be submitted:

Map showing monitoring points	Tick (✓)
Detailed noise report ^{iv}	<input type="checkbox"/>

ⁱ Noise monitoring shall be carried out according to BS 4142:1997.

ⁱⁱ Noise survey review during 2009 was not carried out since IPPC permit was still being discussed by late September. However a review has been carried out during March/ April 2010 and will be reported for that year.

ⁱⁱⁱ Monitoring points should be labelled using a unique code, and should be suitably sited. A corresponding labelled map showing the location of each monitoring points shall be submitted.

^{iv} The detailed noise report should include information about the various monitoring points chosen, an analysis of the results and suggestions for improvement (if applicable).

S2.10 Off-site transfers of waste

Date of transfer	EWC Code ⁱ	Description of waste	Quantity of waste (in kg)	Treatment applied before transfer	Mode of transport	Names of agent & transporter of waste	Ultimate destination (address) of waste	Consignment note number ⁱⁱ	Name of person responsible for ultimate disposal/recovery	Disposal/Recovery	Details of Recovery (if applicable)
Over 1 year 2009	130208*	waste lubricating oils	15,000	nil	Road tanker / 17 IBCs	Waste Oils Co. Ltd.	42, Spencer Hill, Marsa MRS 1955	Not available	Mr Oliver Debono/ Mr David Falzon	Disposal	N/A
Over 1 year 2009	130701*	waste of liquid fuels	4,000	nil	Road tanker / 20 drums	Waste Oils Co. Ltd.	42, Spencer Hill, Marsa MRS 1955	Not available	Mr Oliver Debono/ Mr David Falzon	Disposal	N/A
Over 1 year 2009	150110*	Packaging containing residues of or contaminated by dangerous substances	180	nil	skip	DDE Attard Co. Ltd (Disma Attard)	WasteServ	Not available	WasteServ	Disposal	N/A
Over 1 year 2009	150202*	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	160	nil	skip	DDE Attard Co. Ltd (Disma Attard)	WasteServ	Not available	WasteServ	Disposal	N/A
Over 1 year 2009	various (non-hazardous)	various metallic material waste	19,160	nil	skip	DDE Attard Co. Ltd (Disma Attard)	Luqa Scrap Yard	weighting service certificates	Disma scrap yard, Luqa	recycled	segregated, remelting, etc.

ⁱ European Waste Catalogue Code (Reference: Schedule 1 of LN 337 of 2001)

ⁱⁱ For hazardous waste only. If waste is not hazardous, please write "n/a".

S2.11 Testing of bunds, pipes, pumps, valves, flanges and over-ground pipes

Number of oil interceptors on site	2
Date of last test for pipes, pumps, valves and flanges for fuel delivery from delivery ship to tank farm	2/11/09 (HFO) 27/11/09 (GDO)
Testing of pipes, pumps, valves and flanges for fuel delivery from delivery ship to tank farm due on (date)	By November 2010
Date of last test for other flanges, valves and over-ground pipes on site	programmed for 2010
Testing of other flanges, valves and over-ground pipes on site due on (date)	programmed for 2010
Date of last test for oil interceptors	monitoring carried out at regular intervals
Testing for oil interceptors due on (date)	cleaning & inspection carried out twice annually

Additional documentation to be submitted if test was carried out during previous reporting year:

Inspection report and certification by approved auditor for bunds on site
 Inspection report and certification by approved auditor for pipes, pumps, valves and flanges for fuel delivery from delivery ship to tank farm
 Inspection report and certification by approved auditor for other flanges, valves and over-ground pipes on site
 Inspection report and certification by approved auditor for oil interceptors

Tick (✓)

✓
programmed for 2010
programmed for 2010

Number of bunds on site	5
Number of visual inspections carried out during reporting year on each bund	6
Total number of faults identified during reporting year	GDO: 1 x repair of bund drain valve HFO: 1 x repair of expansion joint seals
Total number of faults rectified during reporting year	2

Additional documentation to be submitted:

Bund certification by independent warranted civil engineer

Summary report by warranted engineer on the visual inspections undertaken during the reporting year (including reports on faults and remedial actions taken)

Tick (✓)

to be reported in 2010
please refer to attached reports

S2.12 Incidents and Complaints

S2.12.1 Non-Compliance Incidents during Reporting Year

Date of incident	Brief description of Incident	Cause	Corrective action
---	Nil	---	---

Total number of non-compliance incidents for previous year:⁶²

N/A

Total number of non-compliance incidents for current reporting year:

Nil

S2.12.2 Complaints made by the public

Date of complaint	Description of complaint	Actions taken
---	Nil	---

Total number of complaints for previous year:ⁱ

N/A

Total number of complaints for current reporting year:

Nil

S2.13 Transport

Name of ADR certified carrier used during reporting year	Material(s) transported
---	Nil

Name of registered waste carrier used during reporting year	Waste type(s) transported
Waste Oils Co. Ltd.	waste lube & fuel oils
DDE Attard Co. Ltd (Disma Attard)	waste packaging, absorbents & scrap metals

⁶² "Previous year" data is not required in the first reporting year (2008).