

Permit with introductory note

Environment Protection Act (CAP. 549) Industrial Emissions (Framework) Regulations (S.L. 549.76) Industrial Emissions (Integrated Pollution Prevention and Control) Regulations (S.L. 549.77) Industrial Emissions (Large Combustion Plants) Regulations, S.L 549.78

Installation:

Operator:

Marsa Power Station

Enemalta plc (C65836), Triq il-Belt il-Ħażna, Marsa, MRS 1571

Permit number

IP 0003/21

Contents

Introductory note Permit	3 6
Conditions	7
1 General	7
2 Operating conditions	9
3 Site Management and Training	27
4 Records	29
5 Reporting	30
6 Notifications	30
7 Greenhouse Gas Emissions Permit	31
Schedule 1 - Notification of abnormal emissions	32
Schedule 2 - Annual Environmental Report	33
Schedule 3 – Quarterly Reporting	45
Schedule 4 – Notification of operation of MPS5 plant	55
Schedule 5 – Site plan	57
Schedule 6 – Terms of reference for noise monitoring	58
Schedule 7 – Interpretation	61
End of Permit	65



This page has been intentionally left blank

Introductory note

The following Permit is issued under Regulation 7 of the Industrial Emissions (Framework Regulations, (S.L. 549.76) ("the Industrial Emissions (Framework) Regulations to operate an installation carrying out activities covered by the description in Section 1.1 in Schedule 1 of the Industrial Emissions (IPPC) Regulations (S.L. 549.77) ("the Industrial Emissions (IPPC) Regulations"), to the extent authorised by the Permit, i.e.

"Combustion installations with a rated thermal input exceeding 50 MW".

Aspects of the operation of the installation which are not specifically regulated by conditions in the Permit may also be subject to the condition implied by Regulation 8 of the Industrial Emissions (IPPC) Regulations, which require The Permit Holder to use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

Conditions marked with a ' ∞ ' shall be construed as conditions which are to be enforced by the Authority responsible for such an issue.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, managed, operated and decommissioned.

In some sections, the Permit conditions require The Permit Holder to use Best Available Techniques (BAT), in each of the aspects of the management of the installation, to prevent and where that is not practicable to reduce emissions. These conditions do <u>not</u> explain what is BAT.

A non-technical description of the installation is given in the application, but the main activity of the installation is as follows:

• Generation of electrical energy through the combustion of gasoil.

Note that the Permit requires the submission of certain information to the Competent Authority. In addition, the Competent Authority has the power to seek further information at any time under regulation 11 of the Industrial Emissions (Framework) Regulations, provided that it acts reasonably

Superseded Licences/Authorisations/Consents relating to this installation		
Operator	Reference Number	Date of Issue
Enemalta plc	IP 0003/07/A	29/03/10
Enemalta plc	IP 0003/07/B	11/06/15
Enemalta plc	IP 0003/07/C	15/09/17

Public Registers

This IPPC Permit and application is available to the public through the Competent Authority in accordance with the requirements of the Industrial Emissions (IPPC) Regulations. The applicant has made a request for certain information of a commercial nature to be withheld from the public. ERA has been supplied with all this information and has accepted the request of the applicant, because it was deemed to be commercially confidential. Alternative text which provides relevant information but does not include the confidential information, has however been included in the application.

Variations to the Permit

This Permit may be varied at any time in the future. If the Permit Holder wants any of the Conditions of the Permit to be changed, a formal application must be submitted to the Competent Authority. The **Status Log** within the Introductory Note to any such Variation Notice

will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been granted.

Any change in operations shall only be implemented following the issue of a variation of the permit by the Authority.

Surrender of the Permit

0(-) - | - |

Before this Permit can be wholly or partially surrendered, an Application to surrender the Permit has to be made to the Competent Authority by the Permit Holder. For the application to be successful, the Permit Holder must be able to demonstrate to the Competent Authority that there is no pollution risk and that, for complete surrender, no further steps are required to return the site to a satisfactory state.

The Permit Holder shall retain all responsibility for management and activities within the site until the Authority officially approves the permit surrender in writing.

Transfer of the Permit or part of the Permit

Upon the joint application of a Permit Holder and a proposed transferee, the Permit Holder may request to transfer an environment permit. The Permit shall not be transferred from the Permit Holder without prior approval from the Authority. Upon the Authority's decision to transfer the permit to the transferee, all rights, obligations, liabilities shall subsist onto the transferee.

Date	Comment
Received 02 February 2007	Not 'duly made'
Request dated 13 March 2007 and 23 March 2007	Response dated 11 April 2007and 25 June 2007
Request dated 24 October 2007	Partial response dated 25 July 2008
24 October 2007	
Received on 21 January 2009	
Commenced on 22 January 2009	Concluded on 21 February 2009
26 March 2009	Reconsideration: 13 August 2009
29 March 2010	
Received on 21 April 2014	To amend site boundary
26 May 2014	
26 May 2014	
Received 10 November 2014	Demolition of Tanks 1, 2 and 6, Chimneys 1 (MPS1) and 3 ('A' Station) and the
	Received 02 February 2007 Request dated 13 March 2007 and 23 March 2007 Request dated 24 October 2007 24 October 2007 Received on 21 January 2009 Commenced on 22 January 2009 26 March 2009 29 March 2010 Received on 21 April 2014 26 May 2014 Received 10 November

		dismantling of 2 degassing tower structures.
Consolidated version	Received on 24 February 2015	
Public Consultation	Commenced on 28 February 2015	Concluded on 29 March 2015
Permit Determined	14 May 2015	
Permit Issued	11 June 2015	
Application for partial surrender	29 April 2016	
Consolidated version	10 July 2017	
Public Consultation	Commenced on 12 July 2017	Concluded on 26 July 2017
Permit Determined	25 August 2017	
Permit Issued	15 September 2017	Permit Expires: 25 August 2021
Application for renewal	25 February 2021	
Consolidated version	Received on 2 July 2021	
Public Consultation	Commenced on 17 July 2021	Concluded on 31 July 2021
Permit Determined	27 August 2021	

End of Introductory Note

Permit

Industrial Emissions (Framework) Regulations, S.L.549.76; Industrial Emissions (Integrated Pollution Prevention and Control) Regulations, S.L. 549.77; Industrial Emissions (Large Combustion Plants) Regulations, S.L. 549.78

Permit number

IP 0003/21

The Environment and Resources Authority (hereinafter the Authority; the Competent Authority or ERA) in exercise of its powers under Regulation 7 of the Industrial Emissions (Framework) Regulations, (S.L.549.76) ("the Industrial Emissions (Framework) Regulations"), hereby authorises:

Ing. Jason Vella obo Enemalta plc. (Hereinafter "The Permit Holder")

Of / Whose Registered Office (or principal place of business) is at

Triq il-Belt il-Hażna, Marsa, MRS 1309

(Company registration number: C65836)

to operate an installation at

Marsa Power Station, Church Wharf, Marsa MRS 1571

This permit is valid for (4) four years from the date below. An application for renewal of this permit is to be submitted at least **nine (9) months** prior to expiry of this permit.

Environment and Resources Authority	
APPROVAL	
Board No. 140 Held on 27 / 08 / 2021	
	Date Granted:
	19 / 10 / 2021
Chairman Secretary	

Authorised to sign on behalf of the Competent Authority

Conditions

1 General

The Permitted Installation shall, subject to the conditions of this Permit, be managed, controlled and operated as described in the IPPC Application, or as otherwise previously agreed in writing by the Authority. This Permit shall be interpreted in accordance with Schedule 7 or as otherwise defined in S.L. 549.76 and S.L. 549.77

1.1 Permitted Activities

1.1.1 The Permit Holder is authorised to carry out the activities and the associated activities specified in Table 1.1.1.

Table 1.1.1	Table 1.1.1		
Activity listed in Schedule 1 of the Industrial Emissions (IPPC) Regulations / Associated Activity	Description of specified activity	Limits of specified activity	
Section 1.1: Combustion installations with a rated thermal input exceeding 50 MW	Generation of electrical energy through the combustion of gasoil. The operation of one gas turbine MPS 5.	From receipt of fuel to delivery of utility.	
Associated activity of fuel handling and storage	Handling and storage of gas oil.	From receipt of the fuel to storage in tank and combustion in gas turbine MPS5	
Associated activity of storage, treatment and disposal/recycling of waste materials	Handling, storage, treatment and disposal/recovery of wastes from installation.	From generation of waste to disposal or recycling onsite or offsite.	
Associated activity of maintenance	Maintenance carried out in any workshop in the installation.	From maintenance activity to appropriate recovery/ disposal of any wastes created.	

1.2 Site

- 1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, as shown in red on the Site Plan in Schedule 5 to this Permit.
- 1.2.2 Site security systems shall be implemented at all times during the subsistence of this Permit, the objective of which shall be to prevent access which is not authorised either by the Permit Holder or under legal powers of entry. These shall be installed, operated and maintained, and shall be fully documented and recorded.

1.3 Information to the public

- 1.3.1 In the event that the continuous monitoring equipment (CEM) is installed on MPS5, the Permit Holder shall make emission data publicly available via the Internet not later than two months after the production of such data. Nonetheless such data shall be made available to the Authority upon request within 24 hours.
- 1.3.2 The Local Councils most affected by emissions from the Marsa Power Station including Floriana, Valletta, Hamrun, Marsa, Paola and Fgura may jointly and in agreement with both the Authority and the Permit Holder, establish independent ambient air monitoring systems to monitor for levels of particulate matter, nitrogen oxides, sulphur dioxide, carbon monoxide, as well as any other parameters that may be agreed with the Authority at the expense of the Permit Holder.
- 1.3.3 The Local Councils most affected by emissions from the Marsa Power Station including Floriana, Valletta, Hamrun, Marsa, Paola and Fgura may jointly and in agreement with the Authority, appoint an independent expert to assist in the interpretation of the emission data made publicly available pursuant to condition 1.3.1.

1.4 **Overarching Management Conditions**

- 1.4.1 Without prejudice to the other conditions of this Permit, the Permit Holder shall implement and maintain the approved Environmental Management System (EMS) ISO 14001:2015, and an organisational structure, and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.
- 1.4.2 The Permit Holder shall submit (including as part of the EMS) the following reports annually as part of the Annual Environmental Report of the site, according to the timeframe specified in Condition 5.2:
 - a) Environmental Policy containing the installation's environmental objectives and targets;
 - b) Environmental Management Programme report (for the reporting year);
 - c) Environmental Management Programme proposal (for the following year).
- 1.4.3 All plant, equipment and technical means used in operating the Permitted Installation shall be maintained in good operating condition and without causing polluting emissions, potentially polluting leaks and spillages. The Permit Holder shall keep maintenance records as per section 3.4.

1.5 Operational Changes

- 1.5.1 The Permit Holder shall seek the Authority's written agreement to any operational change as defined by S.L. 549.77 by sending to the Authority: written notice of the details of the proposed change, including an assessment of its possible effects (including changes in emissions and waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 1.5.2 Any such change shall not be implemented until agreed to in writing by the Authority. As from the agreed implementation date, the Permit Holder shall operate the Permitted Installation in accordance with that change, and relevant provisions in the Application shall be deemed to be amended.
- 1.5.3 In order to ensure compliance with SL 549.59, the Authority reserves the right to impose any additional conditions it deems necessary on the Permit Holder.

1.5.4 The Director of Environment and Resources and any officials to whom this role is delegated are hereby authorized to make decisions on variations to this permit that do not constitute a substantial change in the operations, permit or approved documents. No variations may be undertaken under this clause should these require any statutory consultation or further studies.

1.6 Off-site conditions

1.6.1 The Permit Holder shall ensure that no chemicals or waste escape to the environment especially when transporting such materials offsite or onsite.

2 Operating Conditions

2.1 General Conditions

- 2.1.1 The conditions and obligations of this Permit are without prejudice to any other regulation, code of practice, conditions or requirements requested by other Authorities or entities, including but not limited to, the Planning Authority, the Occupational Health and Safety Authority, Transport Malta, the Regulator for Energy and Water Services (REWS) and the Environmental Health Directorate.
- 2.1.2 This Permit is granted saving third party rights. The Permit Holder is not excused from obtaining any other permission required by law.
- 2.1.3 In these conditions and their interpretation, all terms shall have the same meaning as that assigned to them in CAP549 Environment Protection Act and its subsidiary legislation.
- 2.1.4 A copy of this Permit shall be available at all times at the site office, including any variation notices of amendments to it.
- 2.1.5 The Permitted Installation shall be managed, controlled, supervised and operated by staff that are aware of the importance of environmental protection and suitably trained on the requirements of this Permit. All staff shall be provided with adequate training and written operating instructions to enable them to effectively carry out their duties. Such training shall be recorded and maintained in line with Section 3.2.
- 2.1.6 The Permit Holder has the sole responsibility to ascertain compliance with legal obligations, permit conditions and to undertake activities on and off site in line with good environmental practices at all times.
- 2.1.7 The Permit Holder is to be fully liable and responsible for managing the site in all its various aspects and to supervise the full adherence with all the conditions of this permit.
- 2.1.8 All persons have a duty of care to protect the environment. The Permit Holder shall become familiar with his legal obligations and good environmental practice.
- 2.1.9 The company shall maintain a register of third party complaints. The register shall record the details of the complainant(s) if available, the date, source and nature of the complaint and the corrective action undertaken, where such action proves necessary.
- 2.1.10 The Authority may carry out regular pre-set or unannounced compliance or monitoring checks that vary in frequency according to the site's compliance with the permit conditions and safeguarding of natural assets. Any checks or audits carried out by the Authority shall be made at the Permit Holder's financial expense at rate and arrangement communicated by ERA's Compliance and Enforcement Directorate.
- 2.1.11 The Authority's representatives may inspect and photograph any part of the site and ask for any closed or locked areas to be opened and may demand to be provided with

any proof, documentation, plans, receipts or any other records. The Permit Holder shall also provide all the necessary assistance to enable the Authority to take samples if necessary.

- 2.1.12 The Authority may request additional monitoring and/or review of operational practices and any commission audits/reports as deemed necessary to address any circumstances that may affect the quality of the surrounding environment at the expense of the Permit Holder.
- 2.1.13 In case of any monitoring requirements specified in this permit, there shall be provided safe means of access to enable sampling/monitoring to be carried out by the Authority or by a third party if deemed necessary.
- 2.1.14 The Authority may suspend or revoke this environmental permit in line with the provisions of CAP549.
- 2.1.15 The Authority may add, amend, delete or substitute any of the conditions of this permit after notifying the Permit Holder of its intention and after describing the changes to the Permit Holder. This is without prejudice to any prevailing circumstances that would preclude the Authority from following such a procedure.
- 2.1.16 The validity of this permit is until four (4) years from the date of the permit granting. The Permit Holder is able to renew the permit upon application with the Authority expressing his/her intention at least nine months prior to the expiry of the permit. The permit will be considered renewed once the official renewed permit is granted by the Authority.
- 2.1.17 The permit is issued against a Bank Guarantee of € 16,640. This guarantee will have to be maintained throughout the validity of the permit. Following renewal and/or variations to this permit, the Authority may require amendments to the Bank Guarantee.
- 2.1.18 The Bank Guarantee shall remain in place for the duration of validity of this permit and shall only be released upon confirmation of full compliance with the permit conditions by the Authority.
- 2.1.19 The Authority may take part or all of the bank guarantee if the Permit Holder fails to take the necessary action, or fails to fulfil his legal obligations under the Act or its subsidiary legislation thereof, in cases of non-compliance with these permit conditions, or in cases where environmental integrity is threatened. This bank guarantee is without prejudice to any environmental liabilities incurred by the Permit Holder through failure to adhere with permit conditions or any other works/activity carried out on site. Should the Authority forfeit the Bank Guarantee either in part or in full, the Permit Holder shall ensure that this is replenished without undue delay, in any case not exceeding 2 months from the date of forfeiture.
- 2.1.20 In cases where the bank guarantee does not cover the expenses incurred by the Authority to take any remedial action on the Permit Holder's behalf, the Permit Holder is to financially reimburse the Authority of all the expenses incurred within.
- 2.1.21 The Permit Holder shall submit a fixed annual fee of € 607.75 and a variable addition reflecting ERA's cost for inspections. The latter variable component depends on the actual number of site inspections, which is determined by the performance of the Permit Holder. The total annual contribution has to be paid annually before the anniversary of the date of issue of this permit.
- 2.1.22 Without prejudice to condition 2.1.20, the Authority may take any action deemed necessary including but not limited to the suspension of any activity/operation until investigations are concluded.

- 2.1.22 The site shall be maintained in a tidy condition, free from litter and waste (whether arising from own activities or external sources).
- 2.1.23 The Permit Holder shall undertake all necessary measures and precautions to prevent spillage of raw materials, intermediates, products, waste and any other materials.
- 2.1.24 Any incident including accidental release of liquid, solid or gaseous materials from the site shall be reported not later than within 24 hours to ERA, without prejudice to the emergency plan of the installation and Health and Safety.

2.2 Emissions to air

- 2.2.1 Gas turbine constituting of OCGT 9 shall only be utilised as a backup plant.
- 2.2.2 The Permit Holder shall inform the Authority of any test start-up of the turbine intended to ensure its functioning 48 hours before the test is carried out. The Permit Holder shall follow procedure as agreed upon by the Authority for such a notification. A log of notifications shall be included as part of the AER.
- 2.2.3 The Permit Holder shall inform the Authority upon utilisation of the specified plants for energy production including the number of hours during which the plant was utilised. Such a notification shall be submitted in the format as specified in Schedule 4 and shall be submitted to the Authority within 24 hours of operations of specified plant.
- 2.2.4 A release from the authorised process into the atmosphere shall arise only from a release point specified in Table 2.2.4, which shall arise only from the source for that release specified in that Table.

Table 2.2.4 - Permitted Emission points to air			
Release Point	Source and Total Thermal Rating	UTM Co-ordinates ¹	
		x-coordinates	y- coordinates
MPS5	OCGT9 (Gas turbine 9) – 121 MW _{TH}	454,891	3,971,238

- 2.2.5 At the end of every year, the Permit Holder shall forward to the Authority a copy of all the certificates of analysis for every representative composite sample throughout the year together with Schedule S2.5. Gas turbine MPS5 shall fire only gasoil, in the Authorised Process in accordance with the Application. The gasoil used shall comply with the standards laid down by the Quality of Fuels Regulations (S.L. 545.18) i.e. the sulphur content of the gas oil fired by gas turbines MPS5 shall in no case exceed 1 kg for every tonne of gas oil. The Permit Holder shall ensure that a quality assurance/quality control programmes for fuel utilised on site is in line with BAT 9 on the BREF on Large Combustion Plants. The Permit Holder shall determine the mass of fuel fired in the Authorised Process for each reporting year and report this as per Section S2.3.2 of the AER.
- 2.2.6 The Authority shall be notified by the Permit Holder of substantial changes in the type of fuel used or in the mode of operation of the installation. The Authority shall then determine whether the monitoring requirements laid down in conditions 2.2.39 till 2.2.45 are still adequate or require adaptation.
- 2.2.7 The Permit Holder shall ensure that all operations on-site shall be carried out in a manner such that air emissions do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.

¹ Zone 33s, datum ED 50, ellipsoid – Hayford International.

2.2.8 The Permit Holder shall monitor continuously the speed and the direction of the wind at the site. The results of this monitoring shall be presented in the form of a wind rose part of the AER. In addition, any meteorological data collected by the Permit Holder shall be made available to the Authority upon request.

Emissions to Air from Specified Points – Emission limits and calculation methodology

2.2.9 The emissions to air from MPS5 specified in Table 2.2.9 and shall comply with the criteria in condition 2.2.10. These limits relate to dry gas and volume flows without dilution.

Table 2.2.9 - Emission limits to air and monitoring from MPS5				
		Unit (mg.Nm ⁻³)		
Release Point	Monthly mean	95% of all 48 hourly mean values	Yearly average	Daily average
NOx	200	220	_	_
со	100	_	_	_
SO ₂	_	_	58	62
Dust	_	_	2	2.5

- 2.2.10 For any parameter specified in Table 2.2.9, all results of monitoring shall be corrected to the reference conditions 273K, 101.3 kPa, and 15% v/v O₂, dry gas. The results of all tests and data used to correct the monitoring results to the reference condition specified in this condition shall be recorded.
- 2.2.11 The Permit Holder shall keep records of the operating hours of MPS5 and report to the Authority the operating time of MPS5 as part of the AER of the installation and in the format specified therein (Section S2.3.3). This report shall be accompanied by copies of the relevant operational records which should be approved by an independent auditor.
- 2.2.12 Until such time that the plant (MPS 5) is still utilised as an emergency plant and the hours of operation do not exceed 1500 hrs per year, emissions for NO_x, Dust and SO_x shall be calculated as specified in condition 2.2.13 and 2.2.14. Reporting obligations are however still applicable.
- 2.2.13 For the calculations of NOx and dust, the emission factor established from the EMEP/EEA Air Pollutant Emission Inventory Guidebook (latest Revision)² shall be utilised. The monthly and annual loads of dust (TSP), sulphur dioxide (SO₂) and nitrogen oxides (NO_X) shall be reported separately using the Schedules in S2.4.2.2 and S2.4.3.
- 2.2.14 For SO_x, the emission factor shall be calculated from the fuel's sulphur content (to be taken as 0.1% for gasoil) and the fuel burnt by the gas turbine during each month.

² https://www.eea.europa.eu/themes/air/air-pollution-sources-1/emep-eea-air-pollutant-emission-inventory-guidebook

- 2.2.15 Further to conditions 2.2.12 and 2.2.13, the Authority shall be immediately notified should the Permit Holder intend to deviate from such calculation methodology.
- 2.2.16 No new calculation methodology shall be applied by the Permit Holder unless approved in writing by the Authority.

Emissions to Air from Specified Points – Monitoring of Gas turbine Emissions (MPS5) in case of exceedance of 1500 hrs/year.

- 2.2.17 In relation to emissions from MPS 5, the Authority reserves the right to request the reintroduction and/or re-calibration of continuous monitoring equipment (CEMS) in the event that the plant is no longer utilised as a back-up plant.
- 2.2.18 In the event that CEMS are installed, emissions from gas turbine MPS5 must be monitored according to ISO 11042-2:1996 (Gas turbines -- Exhaust gas emission -- Part 2: Automated emission monitoring) or the equivalent EN standard.
- 2.2.19 Further to condition 2.2.17, in case this is not technically feasible, the Permit Holder shall use alternative monitoring techniques or other solutions which would ensure compliance with S.L. 549.78 and as agreed upon with the competent Authority.
- 2.2.20 Continuous measurements shall include the relevant process operation parameters of oxygen content, temperature, pressure and water vapour content, velocity and flue gas volume, provided that where the sampled exhaust gas is dried prior to emission analyses, The Permit Holder shall not be required to measure the water vapour content of the exhaust gas.
- 2.2.21 The Permit Holder shall measure the concentration of dust (TSP), sulphur dioxide (SO₂), nitrogen oxides (NO_x) and carbon monoxide (CO) in the exhaust gases of gas turbines MPS5. The annual load of dust (TSP), sulphur dioxide (SO₂) and nitrogen oxides (NO_x) shall be reported separately using the Schedules in s2.4.2.2 and S2.4.2.2. Load shall be calculated on the basis of the waste gas flow rate unless otherwise specified by the Authority.
- 2.2.22 The Permit Holder must keep record of the following data unless otherwise agreed in writing with the Authority:
 - a. The validated hourly concentration of nitrogen oxides (NO_x), sulphur dioxide (SO₂), dust (TSP) and carbon monoxide (CO) values for each combustion plant per day in the format specified in s3.2.1.
 - b. 24-hourly mean values for the concentrations of carbon monoxide (CO) in the format specified in s3.2.1.4.
 - c. 48-hourly mean values for the concentration of nitrogen oxides (NO_x), sulphur dioxide (SO₂) and dust (TSP) in the format specified in s3.2.2.
 - d. Calendar monthly mean values for the concentration of nitrogen oxides (NO_x), sulphur dioxide (SO₂), dust (TSP) and carbon monoxide in the format specified in s2.4.2.2.
 - e. The total annual load of nitrogen oxides (NO_X), sulphur dioxide (SO₂) and dust (TSP) which shall be calculated by adding the total mass of pollutant emitted per year, on the basis of the volumetric flow rates of waste gases. This shall be included in the AER for this installation in the format specified in s2.4.3
- 2.2.23 In order to validate the hourly readings, The Permit Holder shall subtract a factor determined according to the procedure established by the relevant part of EN 14181 and which shall in no case exceed 10% of the measured valid hourly average value for

CO, 20% of the measured valid hourly average value for SO₂, NO_x and 30% of the measured valid hourly average value for dust.

- 2.2.24 95% of the validated hourly averages for nitrogen oxides (NO_x) shall not exceed 132 mg.Nm⁻³.
- 2.2.25 For 2.2.22 b-d, the Permit Holder must clearly indicate any exceedances of the concentrations of nitrogen oxides (NO_x) and carbon monoxide (CO) indicated in conditions 2.2.11 in the format specified in S3.2.2
- 2.2.26 The records specified by 2.2.22 a-c must be forwarded by email to the Authority in electronic format. Unless otherwise communicated in writing the reporting frequencies to the Authority shall be as established in Table 2.2.26. Furthermore the said records must be made available for inspection upon request.

Table 2.2.26 Frequency of Record Submission	
Condition Frequency	
2.2.22 a –b	quarterly
2.2.22 c	annually

- 2.2.27 The data for one day shall be invalidated if on that day three or more hourly average concentration of dust (TSP), sulphur dioxide (SO₂), nitrogen oxides (NO_x) and carbon monoxide (CO) values are invalid due to malfunction or maintenance of the continuous monitoring system.
- 2.2.28 If more than 10 days in a year are invalidated for such situations, the Permit Holder must take adequate measures to improve the continuous monitoring system.
- 2.2.29 All limit values specified in Table 2.2.9 shall not apply if MPS5 does not operate more than 500 hours annually. Reporting obligations are however still applicable.
- 2.2.30 Further to condition 2.2.20, the Permit Holder shall monitor continuously for the parameters listed in table 2.2.30 using the methods listed in the same table.

Table 2.2.30 Monitoring of Additional Parameters		
Parameter	Standard Number /Instrument(or	
	equivalent)	
Oxygen	ISO 12039:2019	
Water Content	EN 14181	
	EN 15267-3	
Velocity	ISO 10780:1994	
Flue gas volume	ISO 14164:1999	
Flue gas temperature (prior to discharge	Temperature Sensor	
into the atmosphere)		
Flue gas pressure	Pressure Sensor	
(prior to discharge into the atmosphere)	N/A	

Emissions to Air from Specified Points – Performance and Calibration of Automated Measuring Systems.

- 2.2.31 The commissioning and operation of all automated measuring systems at the Marsa Power station shall follow EN 14181:2015 Stationary Source Emissions Quality Assurance of automated measurement systems or equivalent.
- 2.2.32 Measuring systems shall be subject to control by means of parallel measurements with the reference methods listed in Table 2.2.32, at least every year. The calibrations shall be performed by a lab accredited (or in the process of accreditation, as confirmed by the National Accreditation Body (NAB-Malta) or equivalent) to at least EN ISO 17025:2017 or equivalent and preferably accredited for each and every calibration.

Table 2.2.32 Calibration of Automated Measuring Systems		
Standard Number	Title	
EN 14791:2017 or equivalent	Stationary source emissions - Determination of mass concentration of sulphur dioxide - Reference method.	
EN 14792:2017 or equivalent	Stationary source emissions - Determination of mass concentration of nitrogen oxides (NOx) - Reference method: Chemiluminescence.	
EN 13284-1:2017 or equivalent	Stationary source emissions - Determination of low range mass concentration of dust - Part 1: Manual gravimetric method.	
EN 13284-2:2017	Stationary source emissions. Determination of low range mass concentration of dust. Quality assurance of automated measuring systems	

2.2.33 For the parameters measured continuously, the data for one day shall be invalidated if on that day three or more hourly average concentration of dust (TSP), sulphur dioxide (SO₂), nitrogen oxides (NO_X) and Carbon Monoxide (CO) values are invalid due to malfunction or maintenance of the continuous monitoring system. If more than 10 days in a year are invalidated for such situations, the Permit Holder must take adequate measures to improve the continuous monitoring system.

Compliance with Total Emission Ceilings for Sulphur Dioxide (SO₂) and Oxides of Nitrogen (NO_x).

2.2.34 The Permit Holder shall ensure that the total annual loads of sulphur dioxide (SO₂), Carbon monoxide (CO), nitrogen oxides (NO_x as NO₂), dust (PM_{2.5}) and ammonia (NH₃) from both the Marsa Power Station and Delimara Power Station shall not exceed the ceilings specified in Table 2.2.34 or any other annual ceilings as may be amended by the Authority from time to time.

Table 2.2.34 – Cumulative Emission Ceiling for Delimara Power Station and Marsa Power Station.		
Pollutant	Total Annual Load in kilo tonnes	
Sulphur Dioxide (SO ₂)	1.23	
Nitrogen Oxides (NOx)	1.85	
Dust (PM 2.5)	0.2	
Ammonia (NH ₃)	0.33	

- 2.2.35 The Permit Holder is to forward to the authority:
 - a. By not later than end of September of each year, a detailed plan indicating how the installation will be operated in the following year in order to comply with the ceilings in Table 2.2.34. The measures communicated in this plan shall be to the satisfaction of the Authority.

- b. By not later June for each reporting year a report in the format specified in Schedule 3 on the actual loads of SO₂, NO_x, PM_{2.5} and NH₃ emitted from Marsa Power Station during the previous year shall be submitted.
- 2.2.36 The measures to be included in the plan as per Condition 2.2.35 shall also take into account that Enemalta plc. is responsible for energy dispatch from both this installation and another power plant which it also partly operates and which is located on a separate site also covered by the requirements of the Industrial Emissions (IPPC) Regulations.
- 2.2.37 The Competent Authority reserves the right to reduce these ceilings further particularly but not solely:
 - a. In the event of there being a new entrant on the power production market in Malta;
 - b. If it transpires that due to unforeseen circumstances the contributions of other sectors to the National Ceilings as per S.L.549.32 have been underestimated or if it transpires that sectors which also contribute to the total annual loads of these pollutants have been ignored;
 - c. If it is decided that such a decision is in the national interest
 - d. In the event of further reductions to Malta's National Ceilings.
- 2.2.38 The ceilings listed in Table 2.2.34 shall expire on the 31 December 2029.

Emissions to Air from Specified Points – Total Annual Emissions

- 2.2.39 The Permit Holder shall keep an inventory of the total annual emissions of SO₂, NO_x and dust (TSP) from MPS5. This inventory shall be submitted as part of the AER of the installation in the format specified in s2.4.3. Such records must also be made available for inspection upon request.
- 2.2.40 In addition to the total annual emissions of the pollutants listed in condition 2.2.39, the inventories shall also include the total fuel burn per plant, the fuel type and the average heat value of the fuel fired. Such records must also be made available for inspection upon request.

Determination of start-up and shut-down

- 2.2.41 The determination of periods of start-up and shut-down as defined in the following conditions shall be maintained in accordance with the provisions of the Commission Implementing Decision 2012/249/EU.
- 2.2.42 The Permit Holder shall immediately inform the authority should there be any changes in any aspects relating to each plant that affect start-up and shut-down periods, including the installed equipment, fuel type, plant role in the system and installed abatement technology.
- 2.2.43 The operator shall make sure that the frequency of start-up and shut down periods are minimised as far as practicable.
- 2.2.44 Start-up and shut-down of the respective units is defined in the Table 2.2.44

Table 2.2.44 – Determination of start-up and shut-down for the OCGT9 at the Marsa Power Station

End of Start-up period	20% MCR or 7MW
Start of Shut-down period	20% MCR or 7 MW

2.3 Fugitive emissions of substances to air

- 2.3.1 The Permit Holder shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation, in particular from:
 - a) process areas
 - b) storage areas, including waste storage
 - c) buildings
 - d) pipes, valves and other transfer systems
 - e) open surfaces

provided always that the techniques used by the Permit Holder shall be no less effective than those described in the application, where relevant and approved by the Authority prior to their implementation.

2.4 Discharges to Surface Water

2.4.1 Waste waters shall not be discharged into marine water unless from the sources specified in Table 2.4.1 and as indicated in Schedule 5.

Table 2.4.1 - Emissions to Marine Water			
Outlet	Details	UTM Co-o	rdinates ³
Number			
		x-coordinate	у-
			coordinate
1	surface drains through oily water	454,691	3,971,053
	separator (interceptor)		
18	light distillate fuel tank bund oily	455,007	3,971,160
	water separator (interceptor)		
20	road rainwater	454,960	3,971,227

- 2.4.2 The Authority may exempt the Permit Holder from carrying out sampling and monitoring of specified emission points. Such an exemption may be reconsidered following notifications from the Permit Holder pertaining to condition 2.4.3
- 2.4.3 Subject to condition 2.4.2 where the daily inspections show discharges from outlets other than those associated with the operation of MPS5. The Permit Holder shall immediately notify the Authority through the form in Schedule 1. The Authority reserves the right to request monitoring of the discharge for any of the parameters listed in Table 2.4.4.
- 2.4.4 No specified emission to water shall exceed the emission limit values set out in Table 2.4.4. There shall be no other emissions to water of environmental significance.

Table	Table 2.4.4 - Emissions limit values for discharges to Marine Water			
No.	Parameter	Emission limit value (annual average)	Measurement Methodology	
1	Total petroleum hydrocarbons	5 mg/L	ISO 9377-2:2000	
2	PAHs as follows: Benzo(a)pyrene (as a marker for all PAHs)	1.7 x 10 ⁻⁴ μg/L	EN ISO 17993:2003	

³ Zone 33s, datum ED 50, ellipsoid – Hayford International.

- 2.4.5 Monitoring and analyses of each substance shall be carried out according to the standards specified in Table 2.4.2 or equivalent. Should an alternative standard be used by the Permit Holder the Authority is to be duly notified before sampling and analysis is carried out. All Limits of Detection (LOD) and Limits of Quantification (LOQ) per standard method used must be listed in the AER. The results shall be submitted as part of the AER.
- 2.4.6 The results obtained may require the Permit Holder to submit an action programme to the Authority aimed at reducing the emission limits of certain parameters, as deemed necessary by the Authority.
- 2.4.7 The Permit Holder shall make sure all methods of analysis, including laboratory, and field methods analyses for the purposes of chemical monitoring is carried out by an accredited laboratory accredited (or in the process of accreditation, as confirmed by the National Accreditation Body (NAB-Malta) or equivalent) to at least EN ISO 17025:2017 and preferably for each and every test listed in Table 2.4.2. The Permit Holder shall include a copy of the laboratory's accreditation certification in the AER.
- 2.4.8 Minimum performance criteria for methods of analysis shall be in accordance with the guidance provided in Schedule XI of the Water Policy Framework Regulations (S.L.549.100).
- 2.4.9 The operations of the installation shall not hinder the achievement of good status for surface water as required under the Water Policy Framework Regulations, (S.L.549.100). The Permit Holder shall implement all the necessary mitigation measures should deterioration in the ecological and chemical status of the water bodies as monitored by the Competent Authorities is attributed to the operation of the installation.
- 2.4.10 The Permit Holder shall carry out a visual examination of the surface water discharge daily and shall maintain a log of such inspections. The Permit Holder shall ensure that no visible oil layer is present in surface water prior to discharge. Surface water that appears contaminated shall be treated prior to discharge to seawater.
- 2.4.11 Surface run-off (rainwater) that might be contaminated by any spillage of fuel from fuel storage and handling shall be collected and treated prior to discharge.
- 2.4.12 The Permit Holder shall collect a random sample of the effluents arising from nonprocess waters on an annual basis, and analyse for the relevant chemical parameters according to the standards listed in Table 2.4.2 or equivalent. The Permit Holder shall also include a summary of these analyses in the AER.
- 2.4.13 In the event that any analyses or observations made on the quality or appearance of waste water from surface runoff should indicate that a contamination has taken place, The Permit Holder shall:
 - a. Carry out an immediate investigation to identify and isolate the source of the contamination;
 - b. Put in place measures to prevent further contamination and to minimise the effects of any contamination on the environment; and
 - c. Notify the Authority as soon as is possible as per Section 6 of this Permit.

2.5 Discharges to sewers

2.5.1 The Permit Holder shall also abide by the provisions of the Sewer Discharge Control Regulations (S.L. 545.08).∞

- 2.5.2 Where any of the parameters stipulated by the Water Services Corporation are exceeded, The Permit Holder shall ensure that any follow up actions requested by the Water Services Corporation are implemented. ∞
- 2.5.3 With the exception of sanitary waters, The Permit Holder shall not discharge any waste waters into the sewers.
- 2.5.4 No direct or indirect discharges of trade effluent into the sewer (whether from off-site or on-site discharge points) are allowed, unless specifically authorised by the Water Services Corporation. $^{\infty}$

2.6 Discharges to groundwater

- 2.6.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance as per requirements of Protection of Groundwater against Pollution and Deterioration Regulations (S.L. 549.53).
- 2.6.2 The operations of the installation shall not hinder the achievement of good chemical and quantitative status of groundwater as prescribed under the Water Policy Framework Regulations (S.L.549.100).

2.7 Fugitive emissions of substances to water and sewer

- 2.7.1 Subject to condition 2.7.2, The Permit Holder shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than groundwater) and sewer from the Permitted Installation, in particular from:
 - All structures under or over ground
 - Surfacing
 - Storage areas
 - Bunded areas.
- 2.7.2 The Permit Holder shall undertake all necessary measures and precautions to prevent spillage of raw materials, intermediates, products, waste and any other materials.
- 2.7.3 Connection points for fuel unloading must be appropriately contained. Any accidental release of substances shall be duly treated prior to discharge or disposed/recovered appropriately. Records shall be kept of such discharges, including the volume discharged.
- 2.7.4 Rainwater shall be segregated from all areas (including areas for fuel storage and raw materials) that are potentially contaminated.
- 2.7.5 Rainwater shall not be discharged into the sewer.
- 2.7.6 The rate of flow into treatment chambers (e.g. interceptors) shall not exceed design capacity.
- 2.7.7 All bulk liquid storage tanks shall be provided with an adequately designed bund system with an impermeable base and walls. The capacity of the bund shall be a minimum of 110% of the largest tank within the bund. Filling and off-take points shall be located within the bund or within a previously approved containment system designed for this purpose (e.g. mobile bund).
- 2.7.8 Drainage from bunded areas shall be diverted for collection and safe disposal. All bunds shall be tested for integrity at least once every three years.

- 2.7.9 The integrity testing of any bunds for tanks/containers as required by condition 2.7.7 shall;
 - a) For tank bund up to 25m³, be tested at least once every three years according to CIRIA 163, Construction Industry Research and Information Association Report 163 – Construction of Bunds for Oil Storage Tanks. The test must be carried out by an approved auditor and the inspection report and any ensuing certification must be included in the AER in the format specified in Schedule 2. Testing of bunds for wastes is not required if hazardous liquid wastes are stored on drip trays or prefabricated bunds.
 - b) For tank bunds greater than 25m³, visual inspections shall be carried out at least weekly by a warranted engineer, who shall as a minimum examine the following elements:
 - Identification of any cracks or faults in the bund walls or floors;
 - Whether the bund is holding rainwater during/after episodes of rain;
 - Whether drain holes are present in the bund which could lead to emissions (if this is the case, these would need to be sealed with waterproof cement or a material of at least equivalent impermeability);
 - The presence of any damp patches which could indicate cracks.

Any faults identified during the inspection must be followed by immediate action to remedy the situation. Such inspections must be recorded, together with any faults and remedial actions taken. Such bunds shall also be certified annually by a warranted civil engineer.

- 2.7.10 The unloading of gasoil shall be supervised at all times and shall be undertaken in accordance with the standard operating procedure or as amended.
- 2.7.11 The pipes, pumps, valves and flanges forming part of the system which transfers fuel from the delivery ship to the gasoil tank shall be certified to be leak-proof by an approved auditor at least once every three years. The inspection report and any ensuing certification must be included in the AER in the format therein.
- 2.7.12 All oil transfers shall be undertaken in accordance with the oil spillage response plan.
- 2.7.13 All personnel involved in the transfer of gasoil from ships to storage or from storage to the generating stations shall be trained in the oil spillage response plan. Records of such training shall be maintained and made available for inspection by Authority personnel.
- 2.7.14 The loading and unloading of other materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 2.7.15 All pump sumps or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment interceptors, shall be fitted with high liquid level alarms within 12 months from the grant of this permit, and followed by immediate notification to the Authority.
- 2.7.16 All flanges and valves on over-ground pipes used to transport materials other than uncontaminated water, where no permanent provision for containment of leaks is provided, shall be subject to weekly visual inspection or otherwise monitored for leaks to the satisfaction of the Authority. All such inspections shall be recorded in a log which shall be available for inspection by the Authority.

- 2.7.17 All the flanges, valves and over-ground pipes listed in 2.7.16 shall be certified by an accredited auditor to be completely leak-proof at least once every three years. Any ensuing inspection report shall be included in the AER in the format specified in 2.10.
- 2.7.18 The Permit Holder shall have in storage an adequate supply of containment booms and suitable absorbent material to absorb any spillage.
- 2.7.19 Valves on bunds shall be maintained in closed position except during bund drainage. Drainage of water collecting in bunds shall be carried out under constant supervision. No discharges shall be undertaken from bunds where there is a visible film of oil on the bund water.
- 2.7.20 All the oil interceptors shall be monitored on a monthly basis and maintained to ensure efficient operation. A log of monitoring and interceptor waste removal shall be maintained on site for inspection.
- 2.7.21 All the operational oil interceptors shall be inspected by an accredited auditor at least once every three years unless otherwise directed by the Authority. The accredited auditor shall amongst other things inspect the interceptor for efficiency of operation. Any ensuing certification shall be included in the AER.

2.8 Emissions to Land

- 2.8.1 No emission from the Permitted Installation (including any reservoirs) shall be made to land.
- 2.8.2 In the event of contamination of land, the Permit Holder shall notify the Authority within 24 hours. In such cases, a decontamination plan shall be forwarded to the Authority for approval and shall be executed within a time frame agreed with the Authority.

2.9 Waste

Waste storage and handling

- 2.9.1 The Permit Holder shall use BAT in the design, maintenance and operation of all facilities for the storage and handling of waste on site such that there are no releases to water or land during normal operation and that emissions to air and risk of accidental release to water or land are minimised.
- 2.9.2 All operations concerning the management of waste are subject to the Waste Management Regulations (S.L.549.63) and the Waste Management (Activity Registration) Regulations (S.L. 549.45).
- 2.9.3 The Permit Holder shall be committed to reduce waste generation where possible.
- 2.9.4 All wastes shall be stored within a designated and controlled storage area(s) prior to ultimate disposal. Wastes to be recycled shall be stored in a designated container or area and shall not be mixed with other wastes.
- 2.9.5 The Permit Holder is to prevent litter or other wastes escaping from the site boundaries, particularly during loading/unloading. Any such escape of waste shall be collected immediately upon detection.
- 2.9.6 Liquid and hazardous wastes shall be stored in a labelled, closed container(s) within a designated and controlled storage area(s) prior to ultimate disposal. Wastes of different natures and having different European Waste Catalogue codes as established by Commission Decision 2000/532/EC and any subsequent amendments should not be mixed in the same container.

- 2.9.7 Packaging and containers containing residual quantities of chemicals shall be regarded as hazardous waste and shall be disposed of in an appropriate manner.
- 2.9.8 On-site disposal of wastes by any means including burning, disposal to drain or surface water, burying or deposition on land is prohibited.
- 2.9.9 No storage of waste, equipment or materials is permitted on property outside the site premises.
- 2.9.10 No storage of waste destined for disposal is permitted for a period exceeding 12 months. No storage of waste destined for recovery is permitted for a period exceeding 3 years.
- 2.9.11 Off-site disposal or recovery of wastes may only take place at a facility licensed for that purpose

Transport

- 2.9.12 Transboundary movement of waste shall be carried out in accordance with the following regulations, as amended from time to time:
 - a) Regulation (EC) N° 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste as implemented through SL 549.65;
 - b) Commission Regulation (EC) N° 1418/2007 of 29 November 2007 concerning the export for recovery of certain waste listed in Annex III or IIIA to Regulation (EC) N° 1013/2006 of the European Parliament and of the Council to certain countries to which the OECD Decision on the control of transboundary movements of waste does not apply, and
 - c) Any other applicable legislation.
- 2.9.13 The Permit Holder shall make use of the services of a registered waste carrier for the transport of waste from the site in accordance with activity 38 of schedule 1 of S.L. 549.45, the Waste Management (Activity Registration) Regulations. Where the company removes wastes using its own transport the vehicle(s) must also be registered as a waste carrier in accordance with S.L. 549.45 or any statutory provisions or regulations amending or replacing them.
- 2.9.14 Movement of hazardous waste to authorised facilities shall be covered by a valid consignment permit obtainable from the Competent Authority. Each movement shall also be covered by a consignment note obtainable from the Authority.
- 2.9.15 Should the Permit Holder require the services of a waste broker, it shall be ensured that any such broker is a duly registered waste broker in accordance with S.L. 549.45.

Records

- 2.9.16 The Permit Holder shall ensure to keep records for every consignment of waste removed from the Site indicating the EWC Code, description, quantities, date of removal, contractor name (including for transport), consignment note number (where applicable) and manner and place of final disposal/recovery.
- 2.9.17 Disposal certificates shall be kept on record and made available for inspection for a period of at least 3 years from date of their issue.
- 2.9.18 In the case of waste that is sent for treatment or recovery to another facility locally or abroad, the audit trail shall cover all waste from the point of generation or collection to the end recovery or disposal facility.

- 2.9.19 A summary record of the waste quantities removed from the site shall be made for each quarter of the reporting year (January-March, April-June, July-September and October-December) and shall be submitted to the Authority in the format specified in schedule 3.1 of this Permit within 4 weeks following the end of the quarter.
- 2.9.20 As part of the Annual Environmental Report for the installation, The Permit Holder shall produce a report on the off-site transfers of waste from the Permitted Installation over the previous calendar year, by end of June of each year, providing the information listed in the format specified in schedule S2.9.

2.10 Odour

- 2.10.1 The Permit Holder shall use applicable BAT so as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:
 - a) limiting the use of odorous materials;
 - b) restricting odorous activities;
 - c) controlling the storage conditions of odorous materials;
 - d) controlling processing parameters to minimise the generation of odour;
 - e) optimising the performance of abatement systems;
 - f) timely monitoring, inspection and maintenance;
 - g) employing, where appropriate, an approved odour management plan;

Provided always that the techniques used by the Permit Holder shall be no less effective than those described in the Odour Monitoring Programme, where relevant, and approved by the Authority prior to their implementation.

- 2.10.2 There shall be no significant offensive odour, as perceived by an Authorised Officer of the Competent Authority, outside the boundary of the permitted installation
- 2.10.3 In case of complaints from sensitive receptors regarding odours generated from either operations and/ or decommissioning processes the Permit Holder shall take all measures necessary so as to address such complaints.

2.11 Noise and Vibration

- 2.11.1. The Permit Holder shall use BAT so as to prevent or where that is not practicable to reduce emissions of noise and vibration from the Permitted Installation, in particular by:
 - a. equipment maintenance, e.g. circulating pumps, extraction fans, compressors, silencers.
 - b. use and maintenance of appropriate attenuation, eg. silencers, barriers, enclosures;
 - c. appropriate timing and location of noisy activities and vehicle movements;
 - d. periodic checking of noise emissions, either qualitatively or quantitatively; and

- e. maintenance of building fabric
- 2.11.2 Emergency generators/alarms/sirens/release valves shall only be tested between the hours of 07.00 and 19.00 Monday to Friday and not on any Public Holiday.
- 2.11.3 The level of noise emitted from the installation at all operational times shall not exceed the background noise level by 5dB, excluding during the use of emergency sirens and alarms and start-ups.
- 2.11.4 Noise monitoring is to be carried out annually (or as otherwise agreed with the Authority), to ensure that the limits in condition 2.11.3 are not exceeded. Noise monitoring shall also be carried out upon commissioning of any new equipment which in the opinion of the Authority has the potential to significantly increase noise emissions from the installation. The Permit Holder shall submit to the Authority a method statement for carrying out a Noise Monitoring Survey in line with the Terms of Reference provided in Schedule 6. Once the method statement is approved by the Authority, the noise monitoring survey shall be initiated.
- 2.11.5 Noise monitoring is to be carried out during day time on the condition that the operations are carried out only during the day, thus being representative of the operational situation.
- 2.11.6 Based on the results of the noise monitoring, the Permit Holder may be requested to submit a proposal for an action plan aimed at reducing noise from those sources which have resulted in significantly high noise levels.
- 2.11.7 The proposal for an action plan is to be submitted and approved by the Authority, which reserves the right to request any additional measures as deemed necessary.
- 2.11.8 As part of the AER, records of noise monitoring of the previous year shall be submitted to the Competent Authority by not later than end of June after the end of each reporting year, in the format specified in Schedule 2. A detailed report shall also accompany such results.

2.12 Transport

- 2.12.1 Independent of any Environment Management System, The Permit Holder shall be responsible for making use of the services of an ADR (The European Agreement concerning the International Carriage of Dangerous Goods by Road) certified carrier for transport of hazardous chemicals and hazardous wastes on land. ∞
- 2.12.2 The Permit Holder shall make use of the services of a registered waste carrier for the transport of waste from the site in accordance with S.L. 549.45.

2.13 Energy Efficiency

- 2.13.1 In the event that MPS5 is operated ≥ 1 500 hr/yr a net electrical efficiency of 25 35.7 % shall be met.
- 2.13.2 As part of the AER, the Permit Holder shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, providing the information listed in Schedule 2 in the format specified therein.
- 2.13.3 The Permit Holder shall maintain and operate the Permitted Installation so as to secure energy efficiency, in particular by:
 - a) ensuring that the appropriate operating and maintenance systems are in place;
 - b) ensuring that all installation is adequately insulated to minimise energy loss or gain;

- c) ensuring that the type of lighting used is energy-efficient;
- d) ensuring that all appropriate containment methods (e.g. seals) are employed and maintained to minimise energy loss;
- e) maintaining and implementing an energy management system which shall include the monitoring of main energy flows for each generating unit, and an energy efficiency plan which targets areas for improving energy efficiency and identifies energy-saving techniques that are applicable to the activities and their associated environmental benefit, and prioritises them. The energy efficiency plan shall be updated at least once every 2 years.

2.14 Closure and Decommissioning

- 2.14.1 The Permit Holder shall maintain and operate the Permitted Installation so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:
 - a) Attention to the design of new plant or equipment;
 - b) The maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out; and
 - c) The maintenance of a decommissioning plan to demonstrate that the installation can be decommissioned avoiding any pollution and public health risk and returning the site of operation to a satisfactory state.
- 2.14.2 The Permit Holder shall maintain an Outline Decommissioning Plan for the installation. This Outline Decommissioning Plan shall at least include the following information:
 - a) A draft waste management strategy which shall include:
 - i. The identification and characterisation of sources, types of wastes (including equipment, tanks, fuels and by-products);
 - ii. Criteria for segregation of wastes;
 - iii. Proposed treatment, conditioning, transport, storage and disposal/recovery methods;
 - iv. Potential reuse/recycling of such wastes.
 - b) A qualitative assessment of the potential for contamination of land and groundwater pollution which might arise from the historical and current processes carried out at the installation.
 - c) The identification of potential sources of emissions to the atmosphere, land and water (both seawater and groundwater) pollution which might arise from the decontamination process and corresponding mitigation measures to minimise the likelihood of such emissions.
- 2.14.3 The Permit Holder shall carry out a full review of the outline Decommissioning Plan at least every 4 years.
- 2.14.4 The Authority may request the Permit Holder to carry out additional land and groundwater monitoring.

- 2.14.5 The land and groundwater monitoring strategy referred to in 2.14.4 shall fulfil these requirements:
 - a) The list of the pollutants to be monitored.
 - b) The location of the points for the sampling, the sampling methods, the handling of the samples, the pre-treatment/extraction of the analytes (where applicable) and the methods used in order to analyse the samples are clearly detailed.
 - c) Samples will be analysed to the relevant EN or EN ISO standards or equivalent.
 - d) Samples shall be managed by a lab accredited (or in the process of accreditation, as confirmed by the National Accreditation Body (NAB-Malta) or equivalent) to at least EN ISO 17025:2017 and preferably accredited for each and every analysis.
- 2.14.6 The Permit Holder shall notify the Authority immediately upon a decision being taken to decommission all or part of the site, or planned cessation for a period greater than 6 months, of all or part of the permitted activities. The Authority may impose further requirements in the case of planned cessation for a period greater than 6 months.
- 2.14.7 The Permit Holder shall notify the Authority prior to ceasing operations permanently in part or full, whereby an application for cessation of operations shall be made to the Authority and shall include a decommissioning plan.
- 2.14.8 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the installation in the permitted activity, the Permit Holder shall to the satisfaction of the Authority, decommission, render safe or remove for disposal/recovery, any land, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution and that may pose a public health risk.
- 2.14.9 One year before the planned decommissioning of all or part of the site, the Permit Holder shall submit for approval to the Authority a full Decommissioning Plan which shall at least include:
 - a) Updated land and groundwater monitoring testing showing the state of land and groundwater upon cessation of activities.
 - b) A comparison between the monitoring submitted as part of the baseline report and the monitoring carried out as per condition 2.14.9 (a), to assess whether significant pollution of land and groundwater by relevant hazardous substances has been caused by the installation.
 - c) The levels to which the site and any affected land and groundwater will have to be decontaminated to ensure that the site is returned to the state in the first monitoring carried out as part of the baseline report.
 - d) Where the contamination of land and groundwater at the site poses a significant risk to human health or the environment as a result of the activities carried out by the Permit Holder, the Permit Holder shall submit a report indicating the actions to be taken for removal, control, containment or reduction of relevant hazardous substances so that the site, taking into account its current or approved future use, ceases to pose such a risk.
 - e) The methods which will be used in order to decontaminate the land. Such methods may also include isolation.

- f) A detailed waste management strategy which shall include:
 - i. The identification and characterisation of sources, types and quantities of waste (including equipment, fuels, by-products such as ash, etc.);
 - ii. Criteria for segregation of wastes;
 - iii. Proposed treatment, conditioning, transport, storage and disposal/recovery methods;
 - iv. Potential reuse/recycling of such wastes.
- g) The identification of potential sources of emissions to the atmosphere, land and water (both seawater and groundwater) pollution which might arise from the decontamination process and corresponding mitigation measures to minimise the likelihood of such emissions.
- 2.14.10 The approved Decommissioning Plan shall be implemented within 12 months of final cessation or decommissioning of the Permitted activities or part thereof or according to a timeframe as may be agreed with the Authority

3 Site Management and Training

3.1 Technically Competent Person

- 3.1.1 The Permit Holder or one member of the staff shall be nominated as the Technically Competent Person (TCP) of the site. The TCP is responsible for the implementation of all the obligations stipulated in this permit including during inspections, must supervise the rest of the staff on site. In cases where the TCP is not the Permit Holder, the TCP shall be the Permit Holder's technical focal point for the implementation of the conditions of this permit.
- 3.1.2 Another member of staff shall be nominated as the delegate Technically Competent Person (delegate TCP). The TCP or delegate is to physically represent the Permit Holder during the times when the Permit Holder will not be available.
- 3.1.3 Attendance of the TCP(s) and delegate TCP at the Site shall be recorded in the Site diary on arrival and departure.
- 3.1.4 For the whole operational hours permitted for the Site under this Permit, the TCP(s) or the delegate TCP shall be physically in attendance at the Site. Prior to start of operations, the Permit Holder is to provide details as to how he intends to provide this coverage in order to take into account unavoidable absences due to vacation or leave of absence.
- 3.1.5 In the event of any short or long periods of leave of absence taken by the TCP or the delegate for a period exceeding 10 days, the Permit Holder is obliged to find a replacement for that member of staff without delay.

Changes in Technically competent Persons

3.1.6 Where there are any changes/additions in technically competent management (person/s), including delegates, the name of any incoming person together with evidence that such person has the required technical competence and 24-hour contact details shall be submitted to the Authority in writing within 5 working days of the change in management.

3.1.7 In the event of the death, dismissal, resignation, leave, or of extended leave of absence of the Technically Competent Management of the Site, the Permit Holder shall immediately inform the Authority, and prove to the Authority that the Permit Holder is actively seeking a replacement.

3.2 Training

- 3.2.1 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.
- 3.2.2 All staff shall be fully conversant with those aspects of the Permit conditions which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to effectively carry out their duties.
- 3.2.3 The Permit Holder shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

3.3 Incident and Complaints

- 3.3.1 The Permit Holder shall maintain and implement written procedures for:
 - a) taking prompt remedial action, investigating and reporting to the Competent Authority actual or potential non-compliance with operating procedures or emission limits and if such events occur;
 - b) investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short-term and long-term remedial measures and near-misses) and prompt implementation of appropriate actions; and
 - c) ensuring that detailed records are made of all such actions and investigations
- 3.3.2 Without prejudice to section 6, the Authority may request that within one month of the incident occurring or as otherwise agreed by the Authority, the Permit Holder shall submit a proposal to the Authority:
 - a) Identify and put in place measures to avoid recurrence of the incident; and
 - b) Identify and put in place any other appropriate remedial actions
- 3.3.3 The Permit Holder shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment and public health. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.
- 3.3.4 As part of the Annual Environmental Report, the Permit Holder shall provide a summary record of incidents and complaints in the format specified in Schedule 2. These records shall also be made available upon request during any inspection on site.

3.4 Maintenance

3.4.1 All plant and equipment used in operating the Permitted Installation shall be maintained in good operating condition and in such a manner to:

- a) Prevent corrosion as applicable
- b) Ensuring access to potentially leaky equipment
- c) Regularly controlling protective equipment.
- 3.4.2 The Permit Holder shall maintain a record of plant and equipment covered by condition 3.4.1, and for such plant and equipment:
 - a) a written or electronic maintenance programme; and
 - b) records of its maintenance.

3.5 Accident prevention and control

- 3.5.1 In the case of an accident, the Permit Holder shall follow the Emergency Response Plan approved by the Authority and shall notify the Authority within 24 hours. ∞
- 3.5.2 The Emergency Response Plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Authority notified of the results of the review within 2 months of its completion.
- 3.5.3 In case of a major accident causing an imminent risk to health and safety, the Civil Protection Department are to be immediately notified following detection.∞
- 3.5.4 The Permit Holder shall maintain and implement all health and safety measures in compliance with Act XXVII of 2000; Occupational Health and Safety Authority Chapter 424 and all relevant subsidiary legislation. ∞
- 3.5.5 The Permit Holder shall have sufficient employees trained to deal with any emergency that may arise, e.g. fire-fighting and first aid.∞
- 3.5.6 The Permit Holder is to keep the Authority updated on any major changes in operations that may impact on the health and safety of the employees, which shall be carried out in compliance with Act XXVII of 2000 (Occupational Health and Safety Authority Act, 2000 (Chapter 424)) and all relevant subsidiary legislation.∞
- 3.5.7 The Permit Holder is to make available Health and Safety documentation freely available, in compliance with Act XXVII of 2000 (Occupational Health and Safety Authority Act, 2000 (Chapter 424)) and all relevant subsidiary legislation.∞

4 Records

- 4.1 The Permit Holder shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:
 - a) Be made available for inspection by the Authority at any reasonable time;
 - b) Be supplied to the Authority on demand and without charge and in the format requested;
 - c) Be legible;
 - d) Be made as soon as reasonably practicable;
 - e) Indicate any amendments which have been made and shall include the original record wherever possible; and

f) Be retained at the Permitted Installation, or other location agreed by the Authority in writing, for a minimum period of 5 years from the date when the records were made, unless otherwise agreed in writing with the Authority.

5 Reporting

- 5.1 All reports and written and/or oral notifications required by this Permit and notifications required by Regulation 7 of the Industrial Emissions (IPPC) Regulations shall be made and sent to the Authority using the contact details notified in writing to The Permit Holder by the Authority.
- 5.2 The Permit Holder shall submit to the Authority an AER of the previous year by not later than end of June of each year, providing the information listed in Schedule 2 of this Permit and in the format specified therein.
- 5.3 The Permit Holder shall submit to the Authority the information listed in Schedule 3 Quarterly Reporting and in the format specified therein within four weeks after the end of each quarter.
- 5.4 The European Pollutant Release and Transfer Register (E-PRTR) report for the installation shall be submitted as part of the Annual Environment Report, by end of March of each year, or as required by Legislation. All quantities shall. be reported, even when these do not exceed the thresholds mentioned in EC Regulation 166/2006. The format used for reporting shall be that established by Legislation, notably S.L. 549.47 and Government Notice 138 of 2017 or as subsequently amended.
- 5.5 Any monitoring results submitted to the Authority on a monthly, quarterly, annual and on an ad hoc basis as requested by this permit shall include a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data.
- 5.6 The Permit Holder shall, within 6 months of receipt of written notice from the Authority, submit to the Authority a report assessing whether all appropriate preventive measures continue to be taken against pollution, in particular through the application of the best available techniques, at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by The Permit Holder, that may provide environmental improvement.

6 Notifications

This section is without prejudice to any other notification requirement in this permit and in the event of the restarting of MPS 5 due to emergencies associated with security of supply.

- 6.1 The Permit Holder shall notify the Authority without delay of:-
- 6.2 The Permit Holder shall submit written confirmation to the Authority of any notification under condition 6.1, by sending:
 - a) the detection of an emission of any substance which exceeds any limit or criterion in this Permit specified in relation to the substance;
 - b) The detection of any fugitive emission which has caused, is causing or may cause exceedances of the emission limit values stipulated in the permit;

- c) The detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause exceedances of the emission limit values stipulated in the permit
- d) Any accident which has caused, is causing or has the potential to cause significant pollution.
- e) The restarting of plant MPS5.
- 6.3 The Permit Holder shall submit written confirmation to the Authority of any notification under condition 6.1, by sending:
 - a) The information listed in Schedule 1 to this Permit within 24 hours of such notification; and
 - b) The information regarding non-compliance incidents listed in Schedule 2
- 6.4 The Permit Holder shall submit written confirmation to the Authority of any notification under condition 6.1, by sending:
 - a) permanent cessation of the operation of part or all of the Permitted Installation;
 - b) cessation of operation of part or all of the Permitted Installation for a period likely to exceed 1 year; and
 - c) Resumption of the operation of part or all of the Permitted Installation after a cessation notified under 6.4 b).
- 6.5 The Permit Holder shall notify the Authority, as soon as practicable, of any information concerning the state of the site which affects or updates that provided to the Authority as part of the Site Report submitted with the application for this Permit.
- 6.6 The Permit Holder shall notify the following matters to the Authority in writing within 10 working days of their occurrence:
 - a) Any change in the Permit Holder's trading name, registered name or registered office address;
 - Any change to particulars of the Permit Holder's ultimate holding company (including details of an ultimate holding company where a Permit Holder has become a subsidiary); and
 - c) Any steps taken with a view to the Permit Holder going into administration, entering into a company voluntary arrangement or being wound up

7. Greenhouse gas emissions permit

7.1 The conditions in this permit are without prejudice to any condition in the Greenhouse gas Emissions Permit pursuant to S.L. 423.50 (European Union Greenhouse Gas Emissions Trading System for Stationary Installations Regulations.)

Schedule 1

Notification of abnormal emissions

This page outlines the information that the Permit Holder must provide to satisfy conditions 6.1 and 6.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from nonconfidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the Industrial emissions (IPPC) Regulations.

Part A

Permit Number	
Name of Operator	
Location of Installation	
Location of the emission	
Time and date of the emission	

Substance(s) emitted	Media (e.g. air, groundwater)	Best estimate of the quantity or the rate of emission (include units)	Time between which the emission took place

Measures taken, or intended to be taken, to stop the emission	
---	--

Part B

Name ⁴	
Post	
Signature	
Date	

⁴ authorised to sign on behalf of Operator

Schedule 2 **Annual Environmental Report**

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	
Reporting Year	
Name and location of Site	
Brief description of activities at the site	

S2.2 **Environment Management System & Reporting**

Please attach a supporting document with the following:

- 1. Environmental Policy containing the installation's environmental objectives and targets;
- 2. Environmental Management Programme report (for the reporting year);
- 3. Environmental Management Programme proposal (for the following year); 4. European Pollutant Release and Transfer Register Report (as per Condition 5.4)⁵.



S2.3 **Process Data**

S2.3.1 Annual Summary

	Units	Previous reporting year	Current reporting year
Quantity of energy produced	MWh		
Total Annual Energy Consumption	MWh		
(from electricity and other sources)			
Energy consumption per unit product	MWh		
	consumed/		
	MWh		
	produced		
Annual water consumption	m ³		
Water consumption per unit product	m³/MWh		
Annual quantity of waste produced	tonnes		
Waste produced per unit product	tonne waste/ MWh		

S2.3.2 Fuel consumption

	Units	Sulphur Consumption		nption
		Content ⁶	Previous Year	Current Year
Gas Oil	m ³			

⁵ The format used for reporting shall be that published in the Government Gazette

^{(&}lt;u>http://www.doi.gov.mt/EN/gazetteonline/2007/07/gazts/GG%2013.7.pdf</u>) ⁶ Specify units (e.g. as percentage, or mg/kg)

S2.3.3 Operating Time Data for Gas Turbine

Operator: Enemalta plc.	From:	01/01/
Location: Marsa.	To:	31/12/

Total operating hours of the plant MPS 5 during reporting year

Additional documentation to be submitted:

Operational records

Tick (✓)

Approval of operational records by independent auditor

S2.3.4 Log of monthly start-up

Monthly logs records

Tick (✓)

IPPC Permit for Marsa Power Station

S2.4 Monitoring Data

S2.4.1 Summary of emissions to air

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

Parameter	Emission point reference	Standard methodol ogy used	Annual average pollutant concentration	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	Present	mg.Nm⁻³	Previous	Present
					year	year		year	year
Total Suspended Particulates	MPS5			-	-	-	-	-	-
Oxides of Nitrogen	MPS5			200			220 (95%)		
Sulphur Dioxide	MPS5			-	-	-	-	-	-

Additional documentation to be submitted:

Accreditation certificate(s) of laboratory

Tick (✓)

S2.4.1.2 Emissions of Carbon monoxide (CO)

	Emission point reference	Standard methodology used	Annual average pollutant concentration	Monthly Limit Value		annual number of exceedances of monthly mean value after validation	
			mg.Nm⁻³	mg.Nm ⁻³	Previous year	Present year	
Γ	MPS5			100			

S2.4.2 Monthly Statistical Analysis of Continuous Monitoring

S2.4.2.1 Monthly Concentration Data for Particulates, SO₂ and NO_X One page per Month to be submitted

Reporting year	
Month	
Plant	MPS 5

	Particulat es	NOx	SO ₂	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.				
S2.4.2.2 Monthly Loads of Particulates, SO₂ and NO_X

ONE PAGE PER PLANT TO BE SUBMITTED

Operator: Enemalta plc	Plant no. MPS 5	
Location: Marsa.	Heat Value of Fuel fired:GJ.Mg	-1
Reporting year:		

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

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

S2.4.3 Annual Data

Marsa Power Station

Units	Rated Thermal Input	Туре	Fuel	Fuel Burn	Heat Value	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
Marsa 5	121	Gas Turbine	Gasoil					

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

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

S2.6: Wind Rose

Documentation to be submitted:

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

Tick (✓)

Tick (✓)

S2.7 Emissions to Marine Water

ONE REPORT PER OUTLET TO BE SUBMITTED

Parameter	Emission Limit Value	LOD	LOQ	Standard methodology used ⁱ	Total annual number of exceedances ⁱⁱ		Concentration (Annual Average)			Total Annual Mass Emissions		
					Previous	Present	Units	Previous	Present	Units	Previous	Present
					year	year		year	year		Year	Year
Petroleum												
hydrocarbons												
Polyaromatic												
hydrocarbons												
Benzo(a)pyrene (as a marker for all PAHs)												

Name of laboratory where tests in this section have been carried out	
Is this laboratory accredited (certified) for the above tests?	Yes 🗆 No 🗆

Additional documentation to be submitted:

Accreditation certificate(s) of laboratory

Т	ick	(✓)	

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.

S2.8 Noise monitoringⁱ

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

Additional documentation to be submitted:

Map showing monitoring points Detailed noise report iii

Tick (✓)

ⁱ Noise monitoring shall be carried out according to Schedule 6

[&]quot; 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.

results and suggestions for improvement (if applicable).

S2.9 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 "	Name of person responsible for ultimate disposal/recovery	Disposal/ Recovery	Details of Recovery (if applicable)

ⁱ European Waste Catalogue Code ⁱⁱ For hazardous waste only. If waste is not hazardous, please write "n/a".

S2.10 Testing of bunds, pipes, pumps, valves, flanges and over-ground pipes

Number of hundeen site for tenks/sentsiners (25 m ³ nervising testing in	
Number of bunds on site for tanks/containers \leq 25 m ³ requiring testing in	
accordance with condition 2.7.9.	
Number of oil interceptors on site	
Number of tanks on site	
Date of last test for bunds for tanks/containers ≤25 m ³	
Testing for bunds for tanks/containers <25 m ³ due on (date)	
Number of existing fuel tanks on site	
Date of last ultrasonic testing of shell thickness for above tanks	
Ultrasonic testing of shell thickness for above tanks due on (date)	
Date of last test for pipes, pumps, valves and flanges for fuel delivery	
from delivery ship to tank farm	
Testing of pipes, pumps, valves and flanges for fuel delivery from	
delivery ship to tank farm due on (date)	
Date of last test for other flanges, valves and over-ground pipes on site	
Testing of other flanges, valves and over-ground pipes on site due on	
(date)	
Date of last test for oil interceptors	
Testing for oil interceptors due on (date)	

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

	Tick (✓)
Inspection report and certification by approved auditor for bunds for	
tanks/containers ≤25 m³ 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	
Ultrasonic test report of tank shell thickness	

Bunds for tanks/containers >25 m³:

Number of bunds on site for tanks >25 m ³	
Number of visual inspections carried out during reporting year on each bund	
Total number of faults identified during reporting year	
Total number of faults rectified during reporting year	

Additional documentation to be submitted for bunds for tanks/containers >25 m³:

Tick (✓)	

Bund certification by 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)

ctions taken)

S2.11 Incidents and Complaints

S2.11.1 Non-Compliance Incidents during Reporting Year

Date of incident	Brief description of Incident	Cause	Corrective action

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

S2.11.2 Complaints made by the public

Date of complaint	Description of complaint	Actions taken

Total number of complaints for previous year: ⁱ Total number of complaints for current reporting year:

S2.12 Transport

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

Name of registered waste carrier used during reporting year	Waste type(s) transported

S2.13 Land monitoring

Land monitoring carried out in (year): Land monitoring due in (year)

*If land monitoring was due in current reporting year:*Sampling date/s

Additional documentation to be submitted:

Land monitoring programme Land monitoring results Accreditation certificates of laboratory

Tick (✔)	

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

Schedule 3 Quarterly Reporting

Important note

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

S3.1 Waste

Period covered by this report:

Waste	Quantity	Units
Waste removed from site		

S3.2 Air Emissions S3.2.1 – Daily Statistical analysis of continuous monitoring

S3.2.1.1 Data for Particulates

ONE PAGE PER DAY TO BE SUBMITTED FOR MPS 5

Operator: Enemalta plc. Location: Marsa.	Emission Limit Value: 2.5 mg.Nm ⁻³
Date:/ _/	Plant no. MPS5

Time	Hourly average	Validated Hourly	Validity of Data*
	(mg . Nm ⁻³)	average (mg . Nm ⁻³)	
0000 hrs			
0100 hrs			
0200 hrs			
0300 hrs			
0400 hrs			
0500 hrs			
0600 hrs			
0700 hrs			
0800 hrs			
0900 hrs			
1000 hrs			
1100 hrs			
1200 hrs			
1300 hrs			
1400 hrs			
1500 hrs			
1600 hrs			
1700 hrs			
1800 hrs			
1900 hrs			
2000 hrs			
2100 hrs			
2200 hrs			
2300 hrs			

Validated mean daily	mg . Nm ⁻³
concentration of	
particulates	

Note:

- (a) The validated hourly average is calculated by subtracting a factor determined according to the procedure established by the relevant part of EN14181 and which shall in no case exceed 30% from the hourly average.
- (b) Validated mean daily concentration average is calculated from the validated hourly averages
- *In this column mark valid data entries with a \checkmark and invalid data entries with a \times .

S3.2.1.2 Data for Sulphur Dioxide

ONE PAGE PER DAY TO BE SUBMITTED FOR MPS5

Operator: Enemalta plc. Location: Marsa.

1

Date:

Emission Limit Value: 62 mg.Nm⁻³

mg. Nm⁻³

Plant no. MPS5

Time	Hourly average	Validated Hourly average	Validity of Data*
	(mg . Nm ⁻³)	(mg . Nm ⁻³)	
0000 hrs			
0100 hrs			
0200 hrs			
0300 hrs			
0400 hrs			
0500 hrs			
0600 hrs			
0700 hrs			
0800 hrs			
0900 hrs			
1000 hrs			
1100 hrs			
1200 hrs			
1300 hrs			
1400 hrs			
1500 hrs			
1600 hrs			
1700 hrs			
1800 hrs			
1900 hrs			
2000 hrs			
2100 hrs			
2200 hrs			
2300 hrs			

Validated mean daily concentration of sulphur dioxide

Note:

- (a) The validated hourly average is calculated by subtracting a factor determined according to the procedure established by the relevant part of EN14181 and which shall in no case exceed 20% from the hourly average.
- (b) Validated mean daily concentration average is calculated from the validated hourly averages
- *In this column mark valid data entries with a \checkmark and invalid data entries with a \times .

S3.2.1.3 Data for Nitrogen Oxides

ONE PAGE PER DAY TO BE SUBMITTED FOR MPS5

Operator: Enemalta plc. Location: Marsa. Emission Limit Value: 200 mg . Nm-3

mg . Nm⁻³

Location: Marsa. Date: / /

Plant no. MPS5

Time	Hourly average (mg . Nm ⁻³)	Validated Hourly average (mg . Nm ⁻³)	Validity of Data*
0000 hrs		(ing. tim)	
0100 hrs			
0200 hrs			
0300 hrs			
0400 hrs			
0500 hrs			
0600 hrs			
0700 hrs			
0800 hrs			
0900 hrs			
1000 hrs			
1100 hrs			
1200 hrs			
1300 hrs			
1400 hrs			
1500 hrs			
1600 hrs			
1700 hrs			
1800 hrs			
1900 hrs			
2000 hrs			
2100 hrs			
2200 hrs			
2300 hrs			

Validated mean daily concentration of nitrogen oxides

Note:

- (a) The validated hourly average is calculated by subtracting a factor determined according to the procedure established by the relevant part of EN14181 and which shall in no case exceed 20% from the hourly average.
- (b) In the table above underline the **validated** hourly averages which exceed the emission limit value of 400 mg . Nm⁻³.
- (c) Validated mean daily concentration average is calculated from the validated hourly averages

*In this column mark valid data entries with a \checkmark and invalid data entries with a \times .

S3.2.1.4 Data for Carbon Monoxide

ONE PAGE PER DAY TO BE SUBMITTED FOR MPS5

Operator: Enemalta plc. Location: Marsa.	Emission Limit Value: 100 mg . Nm ⁻³
Date://	Plant no. MPS5

Time	Hourly average	Validated Hourly	Validity of Data*
	(mg . Nm⁻³)	average (mg . Nm⁻³)	
0000 hrs			
0100 hrs			
0200 hrs			
0300 hrs			
0400 hrs			
0500 hrs			
0600 hrs			
0700 hrs			
0800 hrs			
0900 hrs			
1000 hrs			
1100 hrs			
1200 hrs			
1300 hrs			
1400 hrs			
1500 hrs			
1600 hrs			
1700 hrs			
1800 hrs			
1900 hrs			
2000 hrs			
2100 hrs			
2200 hrs			
2300 hrs			

Validated mean daily concentration of carbon monoxide mg . Nm⁻³

Note:

- (a) The validated hourly average is calculated by subtracting a factor determined according to the procedure established by the relevant part of EN14181 and which shall in no case exceed 10% from the hourly average.
- (b) In the table above underline the **validated** hourly averages which exceed the emission limit value of 100 mg . Nm⁻³
- (c) Validated mean daily concentration average is calculated from the validated hourly averages.

*In this column mark valid data entries with a \checkmark and invalid data entries with a \times .

S3.2.2 Diurnal Statistical Analysis of Continuous Monitoring

S3.2.2.1 Diurnal Data for Particulates

ONE PAGE PER MONTH TO BE SUBMITTED FOR MPS5

Operator: Enemalta plc. Location: Marsa.	Emission Limit Value: n/a
Date://	Plant no. MPS5
Period	48 Hourly average (validated)

Period		48 Hourly average (Validated) (mg . Nm ⁻³)
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on:///	athrs	
Starts on://	athrs	
Ends on:///	athrs	
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on://	at hrs	
Starts on://	athrs	
Ends on://	at hrs	
Starts on://	athrs	
Ends on://	at hrs	
Starts on://	athrs	
Ends on://	at hrs	
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on://	athrs	
Starts on://	athrs	
Ends on://	athrs	

1

S3.2.2.2 Diurnal Data for Sulphur Dioxide One page per month to be submitted for MPS5

Operator: Enemalta plc.

Location: Marsa. Date: 1

Emission Limit Value: n/a

Plant no. MPS5

		Perio	d		48 Hourly average (validated) (mg . Nm ⁻³)
Starts on:	_/	/	at	hrs	
Ends on:	_/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/	_/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/	_/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/	_/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/	/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/	_/	at	hrs	
Starts on:	_/	/	at	hrs	
Ends on:	_/		at	hrs	

S3.2.2.3 Diurnal Data for Nitrogen Oxides

ONE PAGE PER MONTH TO BE SUBMITTED FOR MPS 5

Operator: Enemalta plc.	Emission Limit Value: 200 mg.Nm ⁻³
Location: Marsa.	95% of all mean validated 48 hourly values
	must not exceed 220 mg.Nm ⁻³
Date://	Plant no. MPS5

Period	48 Hourly average (validated) (mg . Nm ⁻³)
Starts on:/ athrs	
Ends on:/ at hrs	
Starts on:/ athrs	
Ends on: / at hrs	
Starts on:/ athrs	
Ends on:/ at hrs	
Starts on:/ athrs	
Ends on:/ at hrs	
Starts on:/ athrs	
Ends on:/ at hrs	
Starts on:/ athrs	
Ends on:/ at hrs	
Starts on:/ athrs	
Ends on:/at hrs	
Starts on:/athrs	
Ends on:/ at hrs	
Starts on:/athrs	
Ends on:/at hrs	
Starts on:/ athrs	
Ends on:/ at hrs	
Starts on:// athrs	
Ends on:// at hrs	
Starts on:// athrs	
Ends on:/ at hrs	
Starts on:/athrs	
Ends on:/ at hrs	
Starts on:/athrs	
Ends on:/ at hrs	
Starts on:// athrs	
Ends on:/ at hrs	
Starts on:// athrs	
Ends on: / / at hrs	

Note

In the table above underline 48 hourly averages which exceed 220 mg. Nm⁻³.

S3.2.2.4 Daily Data for Carbon Monoxide Two pages per month to be submitted for MPS5

Operator: Enemalta plc.	Emission Limit Value: 100 mg.Nm ⁻³
Location: Marsa.	Daily average not to exceed 100 mg.Nm ⁻³
Date://	Plant no. MPS5

Period			24 Hourly average (validated) (mg . Nm ⁻³)
Starts on://	at	hrs	
Ends on://	at	hrs	
Starts on://	at	hrs	
Ends on://	at	hrs	
Starts on://	at	_hrs	
Ends on:///	at	hrs	
Starts on://	at	_hrs	
Ends on:///	at	hrs	
Starts on://	at	_hrs	
Ends on://	at	hrs	
Starts on://	at	_hrs	
Ends on: / /	at	hrs	
Starts on://	at	_hrs	
Ends on:///	at	hrs	
Starts on://	at	_hrs	
Ends on:///	at	hrs	
Starts on://	at	_hrs	
Ends on://	at	hrs	
Starts on://	at	_hrs	
Ends on://	at	hrs	
Starts on://	at	_hrs	
Ends on:///	at	hrs	
Starts on://	at	_hrs	
Ends on://	at	hrs	
Starts on://	at	_hrs	
Ends on://	at	hrs	
Starts on://	at	_hrs	
Ends on://	at	hrs	
Starts on://	at	_hrs	
Ends on://	at	hrs	
Starts on://	at	_hrs	
Ends on: / /	at	hrs	

Period	24 Hourly average (validated) (mg . Nm ⁻³)
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on:/ at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:/ athrs	
Ends on: / at hrs	
Starts on:/ athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on:/ at hrs	
Starts on:// athrs	
Ends on:/ at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / at hrs	
Starts on:// athrs	
Ends on: / / _athrs	

Note

In the table above underline 48 hourly averages which exceed 100 mg.Nm⁻³.

S3.2.3 Quarterly reporting of SO₂ and NO_x loads

ONE PAGE PER QUARTER TO BE SUBMITTED FOR MPS5

S3.2.3.1 SO₂ load

Period	Projected load ⁱ	Actual load	Revised projected load	
	tonnes	tonnes	tonnes	
January – March				
April – June				
July – September				
October - December				
Total annual load				

S3.2.3.2 NO_x load

Period	Projected load ⁱ	Actual load	Revised projected load	
	tonnes	tonnes	tonnes	
January – March				
April – June				
July – September				
October - December				
Total annual load				

ⁱ As submitted to the Authority in September of previous year

Schedule 4 Notification of operation of MPS5 plant

This notification shall be submitted to the Competent Authority within 24hours of utilisation of the following plants:

Release Point	Source
OCGT9	MPS5 (Gas Turbine 9)

Date	Release Point	Source	Operating hours in test/emergency condition	Cumulative number of Operating hours in test/emergency condition to date

Schedule 5 Site layout



Schedule 6

Terms of Reference for Noise Monitoring

1. Introduction

The noise monitoring shall be carried out by the Operator. A consultant that is either an accredited Acoustic expert or qualified professional Engineer and is approved by ERA according to the following criteria shall be commissioned who will propose a monitoring procedure for measuring noise levels within and around the installation as described in section 2 below.

The person(s) undertaking the "on field monitoring" shall be in possession of a certification for the collection of data.

The noise monitoring and impact study report shall be compiled and reviewed by a person who is in possession of a:

- (a) Bachelors degree in Acoustics, or
- (b) Bachelors degree in any of the following: Physics, Architecture, Civil Engineering or Engineering, Environmental Health, Environmental Science/Management, Occupational Health and Safety, and an MQF Level 7 specialisation in Acoustics, or
- (c) Bachelors degree in any of the following: Physics, Architecture, Civil Engineering or Engineering, Environmental Health, Environmental Science/Management, Occupational Health and Safety and in addition the consultant must be at least an associate member of the Institute of Acoustics or be employed by an organization who are members of the Association of Noise Consultants or equivalent grade of Membership of a professional body for those working in acoustics and noise in any one of the EU member states or any other reputable professional body to the satisfaction of ERA, or
- (d) Certification for the collection of data, such as "Certificate of Competence in Environmental Noise Measurement" issued by the Institute of Acoustics (IoA) or any other equivalent qualification issued by a comparable Professional Association dealing with acoustics in any one of the EU and EEA Member States or any qualifications issued by an educational institution to the satisfaction of ERA **and** five (5) years experience in noise measurements and assessments.

Copies of such qualifications and certification shall be submitted to ERA prior to the monitoring proposal.

The consultant, in collaboration with ERA, may, where applicable need to consult and seek advice from the Local Council during the selection of the sensitive receptors.

2. Content of monitoring study

The monitoring study should address the following issues:

1. A description of the installation – this shall include a description of all processes carried out on site and related equipment and infrastructures.

2. A description of the surrounding areas – this shall include identification of the types of activities, whether residential or commercial, roads and other amenities. These shall be location-specific taking into account their location with respect to the site.

3. Identification of the main sources of noise and vibration – this shall include all processes on site, including aspects such as transport noise on site, plant equipment, mechanical operations, etc (amongst others) and their times of operation.

4. Identification of the closest noise sensitive receptors – this shall be carried out after assessing the noise levels in the plant's perimeter and in the other locations identified in point 2 above under normal operating conditions of the plant. The various monitoring points shall be identified with a unique code and an analyses of the ambient noise to which each monitoring point is subjected to.

5. Environmental Noise Study – this shall include details of the standards used for measurements, equipment used including calibration details and certificates, resultant measurement data, assessment methods and complaints significance scale. The study is to be carried out according to the latest revisions of ISO1996 and the rating of industrial noise affecting residential areas shall be according to the latest revisions of BS4142. The study should include perimeter noise levels, baseline noise study of sensitive receptor sites, noise impact on site sensitive receipts including day and night background levels.

The data compiled for both day and night is a typical representation of the current situation at all receptor points and the measurement time interval is sufficient enough to obtain representative value of a typical background when the specific noise source will be operating. For facilities that operate continuously for 24 hours, it may be appropriate to measure at a time when all other noises have subsided. If it is possible 'specific noise' is estimated by measuring the noise level with and without the facility running.

6. The monitoring shall be performed exclusively using a calibrated type 1 sound level meter conforming to BS 6698/IEC 61672 Class 1. The use of type 2 sound level meters or less is not considered acceptable and will not be considered. The sound level meter, calibrator and microphone must hold a valid current calibration certificate from an accredited laboratory (ex. UKAS)

7. Prior to the initial data collection and at the end of the monitoring day, all acoustic instrumentation system such as the sound level meters are calibrated, and checked immediately before and after each series of monitoring readings. Results must be within ± 1.0 dB, otherwise discarded and read again.

8. As a basis for the collection of background data, monitoring shall be carried out during a period when there are no operations at the facility. If this is not possible, operations are to be temporarily suppressed during readings. If this is still not possible, a measurement at an alternative location where the residual sound is comparable to the assessment location(s) with justifications shall be provided.

In case that operating conditions of the site are significantly different during the day, evening or night periods, the measurement procedure will be repeated for those periods of day/evening or night. Therefore, information from the operator is requested prior to the commencement of the measurements. If the information requested is not provided in time, the Consultants will assume that the site operates uniformly during the day, evening and night periods and measure during the daytime only. However, baseline noise levels would still need to be measured at the nearest noise sensitive locations at night in order to determine the impact.

9. The background noise measurements shall be accompanied by a critical listening of all the other noise sources present in the background. Due to certain acoustic features such as tonality, impulsivity and intermittency the inclusion of specific noise level plus any adjustment for the different noise characteristic features, the rating level, LAr,Tr should be reported in accordance with BS 4142:2014, and any revision thereof, depending on the subjective assessment made while taking the readings.

10. Monitoring shall consider seasonal variations including but not limited to the occurrence of the fireworks and any other similar typical seasonal predominant noise sources. The recommended time periods over a twenty-four hour period are categorized in terms of daytime, from 0700-2300 hrs (LAeq,[16hrs]) and night-time period from 2300 – 0700 hrs (LAeq[8hrs]).

11. For the propagation of noise from the power plant, the use of ISO 9613, ISO 8297: 1994, ISO 3744:2010and ISO 3746:2010; and any revision thereof (as per the interim methods of the

Environmental Noise Directive 2002/49/EC) is strongly recommended.

12. In the case of multioperator installations where the evaluation and monitoring needs to distinguish between the impact caused by different or interconnected operators within the same installation, the application of the following standards is deemed necessary: standard ISO8297: 1994 and any revision thereof, and ISO37XX series or specifically ISO 9614-2:1996.

13. Impact assessment of noise events on noise sensitive receptor site – this shall include an assessment according to the guidelines BS 4142:2014, ISO1996 and ISO9613 or any other standard and any other standard methodology stipulated by the Authority. A summary of the data obtained after the study has been carried out in relation to the noise sensitive receptors identified above shall be submitted.

14. Conclusions and Mitigation measures – this shall include a summary report of findings from the noise monitoring study including the impact assessment of noise events on noise receptors sites and any remedial action and/or mitigation measures to be implemented by the operator in order to reduce impacts resulting from the site of operation.

Schedule 7 Interpretation

In this Permit, the following expressions shall have the following meanings assigned to them, except where the context otherwise requires. All other terms shall have the same meaning as that assigned to them in the Industrial Emissions (Integrated Pollution Prevention and Control) Regulations (S.L. 549.77), or any statutory provisions or regulations amending or replacing them:

In this Permit, the following expressions shall have the following meanings:-

- 1 *"AER"* means the Annual Environmental Report.
- 2 *"Application"* means the application for this Permit, together with any response to a notice served under Regulation 5 to the Industrial Emissions (IPPC) Regulations and any operational change agreed under the conditions of this Permit.
- 3 *"Authorised Officer"* means any officer of the Authority authorised in writing pursuant to the Environment Protection Act 2016 to exercise any of the powers specified therein.
- 4 *"Background concentration"* means such concentration of that substance as is present in:

Where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation onto the site water supplied to the site where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; the precipitation onto the site.

- 5 "BAT" means best available techniques, which means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: "available techniques" means "those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced in Malta, as long as they are reasonably accessible to the operator"; "best" means "in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole" and "techniques" "includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned."
- 6 *"Bi-annual"* means twice per year with at least five months between tests.
- 7 *"Bottom ash"* means solid residues from a combustion process.
- 8 *"BREF"* means the latest version of the BAT reference document published by the European Commission.

- 9 *"Combustion plant" or "plant"* means any technical apparatus in which fuels are oxidised in order to use the heat thus generated. Where two or more separate plants are installed in such a way that their waste gases are *de facto* discharged through a common stack, the combination formed by such plants shall be regarded as a single unit;
- 10 *"Composite sample"* shall refer to a sample which is taken continuously over a given period, or a sample consisting of several samples taken either continuously or discontinuously over a given period;
- 11 *"CEM"* means continuous emission monitor
- 12 *"CEN"* means Commité Européen de Normalisation
- 13 *"Certification"* means a procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements. Certification can apply to instruments, equipment and/or personnel.
- 14 *"Continuous measurement"* means measurement using an automated measuring system permanently installed on site.
- 15 *"COMAH Competent Authority"* means the Authorities and prescribed in the COMAH Regulations.
- 16 "*Decommissioning*" means ceasing the use of the Permitted Installation, or part thereof, including decontaminating and dismantling the equipment to such an extent that it can no longer be used.
- 17 *"Direct discharge"* shall refer to the introduction into marine waters and internal coastal water of any effluent;
- 18 "Effluent" shall refer to any discharge of water or waste water that can no longer be used as it is for the application it was originally intended;
- 19 *"Engineer"* for engineering works specified in these conditions, means a person who works in the relevant branch of engineering and possesses a warrant to carry out the profession of an engineer in Malta.
- 20 "Emission limit value"
 - a) for discharges to air: means the permissible quantity of a substance contained in the waste gases from the combustion plant which may be discharged into the air during a given period; it shall be calculated in terms of mass per volume of the waste gases expressed in mg/Nm³, assuming an oxygen content by volume in the waste gas of 3 % in the case of liquid fuels used in boilers and 15 % in the case of gas turbines;
 - b) for discharges to marine waters: shall refer to the limit value given in Schedule I to these permit conditions;
- 21 *"Flue*" means a compartment or division of a stack for conveying waste gases from the combustion plant to the outer air.
- 22 *"Flue-gas"* means a mixture of combustion products and air leaving a combustion chamber and being directed up a stack to be emitted.

- 23 *"Fugitive emission"* means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit under conditions 2.2, 2.4, 2.5, 2.6 or 2.8 of this Permit.
- 24 "Fuel" means any solid, liquid or gaseous combustible material used to fire the combustion plant with the exception of waste;
- 25 "Gas oil" means any petroleum-derived liquid fuel falling within CN code 2710 00 67 or 2710 00 68, or any petroleum-derived liquid fuel which, by reason of its distillation limits, falls within the category of middle distillates intended for use as fuel and of which at least 85 % by volume (including losses) distils at 350°C by the ASTM D86 method;
- 26 *"Gas turbine"* means any rotating machine which converts thermal energy into mechanical work, consisting mainly of a compressor, a thermal device in which fuel is oxidised in order to heat the working fluid, and a turbine;
- 27 *"Groundwater"* means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
- 28 *"GJ . Mg⁻¹"* means gigajoule per megagramme;
- 29 *"Industrial Emissions (IPPC) Regulations"* means the Industrial Emissions (Integrated Pollution Prevention and Control) Regulations (S.L.549.77) and words and expressions defined in the Industrial Emissions (IPPC) Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit. It shall include any future amendments or superseding legislation.
- 30 *"Installation"* means the stationary technical unit (composed of one or more plants) where combustion of fuels (the main activity) is taking place, and any other directly associated activities on the same site which have a technical connection with the main activity and which could have an effect on emissions and pollution;
- 31 "ISO" means International Standards Organisation
- 32 *"mg.Nm*-3" means milligramme per normal metre cubed;
- 33 *"Mg.month-1"* means megagramme per month;
- 34 *"Monitoring"* includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.
- 35 *"Nominal capacity"* has the same meaning as in the Industrial Emissions (Framework) Regulations (549.76).
- 36 "OTNOC" means operation other than normal operating conditions, excluding start-up and shut-down and periods of abnormal operation.
- 37 *"Permitted Installation"* means the activities and the limits to those activities described in Table 1.1.1 of this Permit.
- 38 *"Periodic measurement"* means measurement at specified time intervals using manual or automated methods.

39 "Periodic sampling" means discrete / individual / separate / discontinuous / grab / spot sampling - individual samples taken in batches or that are time or effluent-volume dependent.

Three formats can be identified:

- periodic time-dependent sampling discrete samples of equal volume are taken at equal time intervals;
- periodic flow-proportional sampling discrete samples of variable volumes are taken at equal time intervals;
- periodic samples taken at fixed flow intervals discrete samples of equal volume are taken after the passage of a constant volume
- 40 "Qualified random sample" shall refer to a composite sample of at least five random samples taken over a maximum period of two hours at intervals of no less than two minutes and blended;
- 41 *"Random sample"* shall refer to a single sample from a waste water flow;
- 42 "Shut -down period" means the period of time taken to shut down;
- 43 *"Sewer"* means *"Public sewerage system"* means the sewerage system owned by the Water Services Corporation.
- 44 *"Sensitive receptor*" means an area which needs special protection, such as residential areas; areas where human activities are carried out
- 45 *"Staff"* includes employees, directors or other officers of the Permit Holder, and any other person under the Permit Holder's direct or indirect control, including contractors.
- 46 *"Surface water"* means inland waters, except groundwater; transitional waters and coastal waters.
- 47 *"Technically Competent Person"* means a person possessing the qualifications, experience and technical competence to abide by the conditions of the Permit.
- 48 *"Technically Competent Management"* means the Technically Competent Person or Persons in control of the day-to-day activities authorised by the Permit and carried on at the Site.
- 50 *"The Authority"* or *"the Competent Authority"* or *"ERA"* means the Environment and Resources Authority or such other body or person as the Minister responsible for the environment may by order in the Gazette prescribe.
- 51 *"The Permit Holder"* means a natural or legal person who is in occupation of the Site and has responsibility for carrying out day to day activities at the Site and to whom the Permit has been issued and / or transferred.
- 52 *"The Regulations"* means the Industrial Emissions (Integrated Pollution Prevention and Control) Regulations (S.L. 549.77) and any regulations amending or replacing them.
- 54 *"The Site"* means the land, structures, combustion plants and equipment situated at the Marsa Power Station

"Total nitrogen" shall refer to the sum of total Kjeldahl nitrogen (organic N + NH₃), nitrate V (NO_3 ⁻) – nitrogen and nitrate III (NO_2 ⁻) – nitrogen;

"TSP" means Total Suspended Particulates;

- 56 *"Valid half-hourly average"* means a half-hourly average is considered valid when there is no maintenance or malfunction of the automated measuring system.
- 57 "Waste" has the same meaning as in regulation 4 the Waste Regulations (549.63).

"Waste gases" means gaseous discharges containing solid, liquid or gaseous emissions; their volumetric flow rates shall be expressed in cubic metres per hour at standard temperature (273 K) and pressure (101,3 kPa) after correction for the water vapour content, hereinafter referred to as (Nm³/h);

62 "Year" or "reporting year" means calendar year ending 31 December.

"% w/w" means percentage weight by weight

Where a minimum limit is set for pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means:-

- i. In relation to gases from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or.
- ii. In relation to gases from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such.

END OF PERMIT