Variation Notice Regulatory Framework 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:	**Delimara Power Station**
Permit Holders:	**Enemalta plc (C65836)** **Triq Belt il-Hazna** **Marsa MRS 1571** **MRS 1571** **ElectroGas Malta Ltd. (C60775)** **Q3, Level 16 Quad Central, Central Business District** **CBD 1040** **D3 Power Generation Ltd. (C66510)** **Enemalta Building** **Triq Belt il-Hazna** **Marsa MRS 1571** **United Equipment Co. (UNEC) Ltd.** **Bonnici House** **Sardine Street** **Burmarrad, SPB 6073**
Approved Documents:	Permit number IP 0002/21 – framework document IP 0002/21/V3 Sub-permit numbers IP 0002/21/i – ElectroGas Malta Ltd. IP 0002/21/ii – D3 Power Generation Ltd. IP 0002/21/iii – Enemalta plc. IP 0002/21/V3/iv – United Equipment Co. (UNEC) Ltd.

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Environment & Resources Authority
Hexagon House, Spencer Hill, Marsa MRS 1441 T. (+356) 2292 3500 E. info@era.org.mt W. era.org.mt

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), to the extent authorised by the Permit, i.e.

> **"Combustion of fuels in installations with a total rated thermal input of 50 MW or more".**

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/s 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 not 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 natural gas, and gasoil**

Note that the Permit requires the submission of certain information to the Competent Authority as per subsequent specific conditions. 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.

Other IPPC Permits relating to this installation		
Permit holder	**Permit Number**	**Date of Issue**
Not applicable		

Superseded Licences/Authorisations/Consents relating to this installation		
Holder	**Reference Number**	**Date of Issue**
Enemalta Corporation	IP 0002/07/A	29 March 2010
Enemalta Corporation	IP 0002/07/B	6 December 2011
Enemalta Corporation	IP 0002/07/C	23 July 2012
Enemalta Corporation	IP 0002/07/D	17 September 2013
Enemalta plc	IP 0002/07/E	01 April 2014
Enemalta plc *ElectroGas Malta Ltd.* *D3 Power Generation Ltd*	IP 0002/07/F	11 January 2017
ElectroGas Malta Ltd	IP 0002/07/Fi	11 January 2017
D3 Power Generation Ltd	IP 0002/07/Fii	12 January 2017
Enemalta plc	IP 0002/07/Fiii	11 January 2017
Enemalta plc *ElectroGas Malta Ltd.* *D3 Power Generation Ltd*	IP 0002/07/G	22 September 2017

ElectroGas Malta Ltd	IP 0002/07/Gi	22 September 2017
D3 Power Generation Ltd	IP 0002/07/Gii	22 September 2017
Enemalta plc	IP 0002/07/Giii	22 September 2017

Multiple Operator installations

As indicated in Regulation 6(3) of S.L. 549.76, a permit may regulate several parts of an installation operated by different Permit Holders. The importance of integrating the operations of each technical unit stems from the definition of "installation" in the provisions of S.L. 549.76, where this is defined as "a stationary technical unit within which one of more activities listed in the regulations concerning integrated prevention and control or in the regulations concerning organic solvents are carried out, and any other directly associated activities on the same site which have a technical connection with these activities and which could have an effect on emissions and pollution".

In accordance to guidance provided by the Commission, an activity is considered to be a directly associated activity with a Schedule 1 activity if it shares common features, for example: it is part of the same industrial complex; it operates in the same or a related sector; or operates with some collective aspects such as site security.

This installation is therefore being regarded as a multi-Operator installation.

Functions of the permit

This Permit consists of four main parts which have been structured so as to include:

- **The Regulatory Framework Permit** addressing the obligation of all Permit Holders and coordinating these obligations due to the nature of the facility as a multi-operator installation (IP 0002/21).
- **Subsidiary Permit 1** addressing the operation carried out by ElectroGas Malta Ltd (IP 0002/21/i);
- **Subsidiary Permit 2** addressing the operations carried out by D3 Power Generation Ltd. (IP 0002/21/ii).
- **Subsidiary Permit 3** addressing the operations carried out by Enemalta plc.(IP 0002/21/iii)
- **Subsidiary Permit 4** addressing the operations carried out by United Equipment Co Ltd. (IP 0002/21/iv)

Variations to the Permit

This Permit may be varied at any time in the future. If any of the Permit Holders wants any of the Conditions of either the regulatory framework or to the Permit Holder specific Subsidiary Permit to be changed, a formal application must be submitted to the Competent Authority. When such an application is submitted to the Authority for its consideration, the decision shall be carried out in consultation with the other Permit Holders within this multi operator installation

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 issued.

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

Surrender of the Permit

Before this Permit can be wholly or partially surrendered, an Application for the surrender of the Permit has to be made to the Competent Authority by any of the Permit Holders. For the

application to be successful, the Permit Holder(s) requesting this surrender must be able to demonstrate to the Competent Authority that there is no pollution and/or public health risk and that no further steps are required to return the site to a satisfactory state.

The Permit Holder(s) 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(s) may request to transfer an environmental 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.

Public Registers

This IPPC Permit and application are 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.

Status Log

Detail	Date	Comment
Application IP 0002/07	Received 05 February 2007	Not 'duly made'
Response to request for information	Request dated 16 June 2007	Response dated July 2007
Report on boiler conversion for emission reduction	PDS submitted 24 April 2008	Request for further information dated 14 July 2008. Further information submitted 24 September 2008
Noise survey	Report submitted 25 July 2008	
Application 'duly made'	27 April 2009	
Response to request for information	Request dated 27 April 2009	Response received 18 May 2009 Consolidated version received 18 May 2009
Public consultation	Commenced on 21 May 2009	Concluded on 20 June 2009
Re-classification of the phase 1 boilers (from 380 to 332 MW_{TH})	Official letter dated 28 September 2009 plus supporting documents.	
Permit A determined	01 October 2009	
Permit A issued	29 March 2010	
Application for variation of permit to include diesel engines	Application received on 11 February 2010	

Detail	Date	Comment
Response to request for information	Request dated 19 April 2010	Response received 31 May 2010, 17 June 2010 and 26 July 2010
Response to request for information	Request dated 17 September 2010	Response received 12 May and 2 June 2011
Response to request for information regarding NOx emissions	Request dated 24 June 2011	Response received 4 July 2011
Response to request for information regarding socio-economic assessment	Requests dated 24 June, 4 July and 18 July 2011	Response received on 4 August 2011
Response to request for information	Request dated 5 July 2011	Response received on 22 July, 27 July 2011.
Correspondence regarding flue gas volume calculations	Information submitted by Enemalta on 30 June, 8 and 29 July 2011 and 29 August 2011	Request accepted on 4 August 2011
Request for variations to existing permit	Received on 29 July 2011	
Request for consolidated application	Request made on 26 July 2011	Consolidated application received on 17 August (draft) and 23 August 2011 (final)
Air dispersion model	Report submitted on 24 August 2011	
Updated cooling water dispersion modelling study	Received on 7 September 2011	
Public consultation	Started on 24 August 2011	Concluded on 7 October 2011
Renewal and variation B determined	5 December 2011	
Permit B issued	6 December 2011	Permit expires on 6 December 2015 A consolidated permit is being issued
Public consultation on proposed extension to condition 2.2.1.7.9 from September 2012 to June 2013	Started on 17 May 2012	Concluded on 18 June 2012
Variation C determined	12 July 2012	
Permit C issued	23 July 2012	Permit expires on 6 December 2015 A consolidated permit is being issued
Public consultation on proposed extension for HFO use from June 2013 to March 2014	Started on 28 June 2013	Concluded on 28 July 2013
Variation D determined	5 September 2013	
Permit D Issued	17 September 2013	Permit expires on 6 December 2015 A consolidated permit is being issued

Detail	Date	Comment
Public consultation on the determination of the choice of fuel for DPS6	Started on 11 February 2014	Concluded on 12 March 2014
Variation E determined	27 March 2014	
Permit E issued	1 April 2104	Permit expires on 6 December 2015. A consolidated permit is being issued.
Permit extended	1 December 2015	From 06 December 2015 to 06 June 2016
	30 May 2016	From 06 June 2016 to 6 December 2016
	02 December 2016	From 06 December 2016 to 06 June 2017
Request for variations to existing permit by Electrogas Malta Ltd.	13 November 2014	
Request for variations to existing permit by D3 Power Generation Ltd.	20 February 2015	
Request for renewal and variations to existing permit by Enemalta plc.	4 June 2015	
Responses to request for information	Electrogas Malta Ltd	From 13 November 2014 to 17 October 2016
	D3 Power Generation Ltd	From 20 February 2015 to 17 October 2016
	Enemalta plc	From 4 June 2015 to 17 October 2016
Application Duly made	Electrogas Malta Ltd D3 Power Generation Ltd Enemalta plc	18 October 2016 18 October 2016 18 October 2016
Public Consultation	Between 19 October 2016 and 27 November 2016	Public consultation extended by 10 days from the original end date of 17 November 2016.
Permit F Determined	19 December 2016	
Permit F Issued	11 January 2017	Permit Expires: 19 December 2020
Request for partial surrender to existing permit by Enemalta plc.	12 April 2017	
Responses to request for information	11 May 2017	
Application Duly made	5 July 2017	
Public Consultation	Between 10 July 2017	Concluded 24 July 2017
Permit G Determined	25 August 2017	

Detail	Date	Comment
Permit G Issued	22 September 2017	Permit expires: 25 August 2021
Permit G extension	9 July 2021	Validity expires: 25 February 2022
Application IP 0002/21	*12 February 2021* *26 February 2021* *25 February 2021 and 9 December 2021*	*EGM; variation and renewal* D3PG; renewal *ENE; renewal and variation*
Regulatory consultation	*between 23rd April 2021 – 7th May 2021 and between 1st June 2021 – 8th June 2021 and 25th October 2021 – 8th November 2021*	
Public Consultation	*Commenced on 17 December 2021*	*Concluded on 02 January 2022*
Application Determined	*18 February 2022*	*Granted 10 May 2022*
IP 0002/21/V1	*Validated 11th August 2023*	
IP 0002/21/V2	*Validated 5th January 2024*	
IP 0002/21/V3	*Validated 8th May 2024*	

End of Introductory Note

Notice of Variation

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

Variation Notice
IP 0002/21/V3

Permit number
IP 0002/21

Approved Documents:

IP 0002/21/DOC1
IP 0002/21/DOC2
IP 0002/21/DOC3

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, 2013 (S.L. 549.76) ("the Industrial Emissions (Framework) Regulations"), hereby authorises:

Enemalta plc. (C65836) (Hereinafter "the Permit Holder" and/or "the Permit Coordinator" unless specifically mentioned) Of / Whose Registered Office (or principal place of business) is at **Triq Belt il-Hazna, Marsa, MRS1571, Malta**

ElectroGas Malta Ltd. (C60775) (hereinafter "the Permit Holder" unless specifically mentioned) Of / Whose Registered Office (or principal place of business) is at **Q3, Level 16 Quad Central, Central Business District CBD 1040'**

D3 Power Generation Ltd (C66510) (hereinafter "the Permit Holder" unless specifically mentioned) Of / Whose Registered Office (or principal place of business) is at **Enemalta Building, Triq Belt il-Hazna, Marsa MRS 1571, Malta**

United Equipment Co. (UNEC) Ltd.(C 10827) (hereinafter "the Permit Holder" unless specifically mentioned) Of / Whose Registered Office (or principal place of business) is at **Bonnici House Sardine Street Burmarrad, SPB 6073**

to operate specified plant described in the Framework Permit and Subsidiary Permits 1, 2, 3 and 4 of this Permit at the installation at:

Delimara Power Station, Delimara, Marsaxlokk, MXK 1220

to the extent authorised by and subject to the conditions of this Regulatory Framework Permit and in the Permit Holder specific Subsidiary Permits included in this Permit.

This variation is valid until the expiry of the permit IP 0002/21 which is four (years) from the 'Permit Granted' Date below. An application for renewal is to be submitted at least **nine (9) months** prior to expiry of the permit.

Environment and Resources Authority **APPROVAL** Board No.216 Held on 31 May 2024 Chairman_[redacted]_ Secretary_[redacted]	Date Granted: 10 / 05 / 2022 Variation Granted: 17.06.2024

Authorised to sign on behalf of the Competent Authority

Conditions

Section 1 – General

The enclosed notice of variation shall be read in conjunction to the permit with reference to IP 0002/21 and shall take effect as of the date indicated above.

The Authority is hereby varying the Covering Page, the Permit Signature page, the introductory note, , Section 1 (General), Section 2 (Operating conditions), Schedule 1A (Installation Site Boundary), Schedule 1B (Operational boundaries for individual Permit Holders) and Schedule 9 (Interpretation) as specified hereunder.

1. Table 1.1.1 in Section 1.1. 'Permitted Activities' shall be replaced as follows:

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**	**Extent of responsibility**
Section 1.1: Combustion installations with a rated thermal input exceeding 50 MW	Generation of electrical energy through the combustion gasoil. Installation consists of two open cycle gas turbines (DPS2 and DPS3), two combined cycle gas turbines (DPS4 and DPS5)	From receipt of fuel to delivery of utility.	Enemalta plc.
	Generation of electrical energy through the combustion of Natural Gas Installation consists of three Combined cycle gas turbines (DPS 7)	From receipt of fuel to delivery of utility.	Electrogas Malta Ltd.(EGM)
	Generation of electrical energy through the combustion of Natural Gas and gasoil	From receipt of fuel to delivery of utility.	D3 Power Generation Ltd. (D3PG)

	Installation consists of four medium-speed combined cycle dual fuel (natural gas and gasoil) diesel engines (DPS6 – diesel engines 5 to 8). Installation consists of four medium-speed combined cycle single fuel (natural gas) diesel engines (DPS6 – diesel engines 1 to 4).		
	Operation of 48 [4 MW_{th}] emergency generators (New MCPs) firing gas oil	From receipt of fuel to delivery of utility.	United Equipment Co. (UNEC) Ltd.
Associated activity of fuel handling and storage	Handling and storage of Natural Gas	1. From receipt of fuel to storage within the Floating Storage Unit to delivery to the Regasification Plant. 2. From storage within the Floating Storage Unit to offshore liquefied natural gas bunkering to third parties.	ElectroGas Malta Ltd.
	Handling and storage of heavy fuel oil	From receipt of the fuel and storage in tank farm and from tanks to tanker barge/third parties	Enemalta plc.
	Handling and storage of gasoil	From receipt of the fuel and storage in tank farm from	D3 Power Generation Ltd.

		Enemalta plc. at tie-in point TP4.D3 to combustion in the diesel engines 5 to 8 and the 3.85MW_{th} auxiliary boiler of D3PG	
		From receipt of fuel and storage in tank farm to combustion in DPS 2 to 5, 4.15MW_{th} auxiliary boiler of Enemalta and delivery of utility to D3PG at tie in point TP4.D3 Transfer from tanks to tanker barge/third parties	Enemalta plc
	Handling and storage of gasoil	From receipt of the fuel and storage in tank farm from Enemalta plc. at tie-in point TP3.Temp & TP4.Temp to combustion in the diesel engines	UNEC Ltd.
Associated activity of regasification and gas pressure reduction	Operation of a regasification plant and a gas reducing station	From receipt of liquefied natural gas from the floating storage unit to delivery to D3PG (DPS6) and DPS 7	ElectroGas Malta Ltd.
Associated activity of utilities	Sea water pre-treatment plant.	From intake of sea water from Marsaxlokk Bay to dosing and delivery of utility.	Enemalta plc
	Sea water discharge into Hofra Iz-Zghira	From receipt of waste water from own operations, D3PG and Electrogas operated plant to the discharge of the water.	Enemalta plc
	Provision of evaporated and demineralised water	From the generation of utility to distribution	Enemalta plc.

		through metered tie-in point to D3PG, EGM and own use.	
	Provision of fire-fighting water	External system: From intake of seawater from Marsaxlokk Bay to delivery and distribution through metered tie-in point to D3PG, EGM and own use. Internal system: From water reservoirs to delivery and distribution through metered tie-in point to D3PG, EGM and own use	Enemalta plc.
	Provision of potable water	From receipt of potable water from mains system to distribution through metered tie-in point to D3PG, EGM, UNEC and own use.	Enemalta plc.
	Foul water management	From receipt of own foul water and from D3PG's cesspits to on-site storage and connection to main sewerage network.	Enemalta plc.
	Oily-water management	From receipt of own oily-water and treated oily water from D3PG to further polishing and discharge.	Enemalta plc.
	Rainwater management	From receipt of rainwater from own operational area, EGM ,D3PG and UNEC Ltd. to final discharge points to sea.	Enemalta plc

	Auxiliary steam	From generation of auxiliary steam by D3PG to delivery to Enemalta for HFO tanks space heating and for fresh water production	D3 Power Generation ltd.
		From generation of auxiliary steam by Enemalta for HFO tanks space heating and for fresh water production	Enemalta plc

2. A condition numbered 1.3.4 shall added in sub-section 1.3 (Information to the public);

Conditions 1.3.1 shall not be applicable to UNEC Ltd.

3. A condition 1.4.10 in section 1.4 (Overarching Management Conditions) shall be added;

Upon submission and approval of improvement programme item 9, the mutual audit procedure in approved document IP 0002/21/DOC1 referred to in condition 1.4.7 shall be replaced as amended and renamed approved document IP 0002/21/V3/DOC1.

4. The following items in Table 1.5.1 in Section 1.5. 'Improvement Programme' shall be included;

Table 1.5.1: Improvement programme		
Reference	**Requirement**	**Date**
9	The following EMS documentation shall be updated and submitted to the Authority i. SOP-175 Coordinated Safety Management System Role and Responsibilities ii. SOP-176 Interconnected Service Management Procedure iii. SOP-177 Coordinated Health, Safety, and Environment Works Management Procedure iv. SOP-178 Management of Changes with impact on other units v. SOP-180 Coordinated Incident and Accident Investigation Procedure vi. SOP-234 Environmental Complaints Procedure (Coordinated) vii. SOP-256 Procedure for Analysing, Reporting and Following-up on odour complaints (Coordinated) viii. SOP-232 Mutual Audit Planning, Conducting and Reporting (Coordinated) ix. SOP-082 Performance Monitoring Procedure	One month from the date of the granting of the permit

5. Condition 1.8.2 in section 1.8 (Role of Co-ordinator) shall be replaced by the following;

The Permit Coordinator shall be responsible for the maintenance, monitoring, record keeping and reporting on issues related to any common infrastructure with the other Permit Holders up to the tie-in points detailed in Schedules 2A, 2B and 2C and Approved Document IP0002/21/V3/iv/DOC3 and obligations detailed in the relevant sections below, as may be required by the Authority from time to time and as required in terms of this Framework Permit. These shall be submitted to the other Permit Holders on a monthly basis.

Section 2 – Operating conditions

6. Condition 2.1.18 in section 2.1 (General Conditions) shall be replaced by the following;

This Permit is issued against a Bank Guarantee of €1,000,000 by Enemalta plc. 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.

7. A condition numbered 2.3.12 shall be added in sub-section 2.5 (Discharges to Sewer);

Section 2.3 shall not be applicable to UNEC Ltd.

8. A condition numbered 2.12.41 shall beadded in sub-section 2.5 (Emissions to Marine Water):

Section 2.5 shall not be applicable to UNEC Ltd.

9. A condition numbered 2.12.15 shall be added in sub-section 2.12 (Noise and Vibration):

Conditions 2.12.12- 2.12.14 shall not be applicable to UNEC Ltd.

10. A condition numbered 2.21.22 shall be added in sub-section 2.21 (Land and groundwater investigations, Closure and Decommissioning):

Section 2.21 shall not be applicable to UNEC Ltd., except for conditions pertaining to land and groundwater studies.

Section 3 - Records

No changes

Section 4 - Coordination of reporting

No changes

Section 5 - Greenhouse Gas Emissions Permit

No changes

Section 6 - Audit & Inspection Fees

No changes

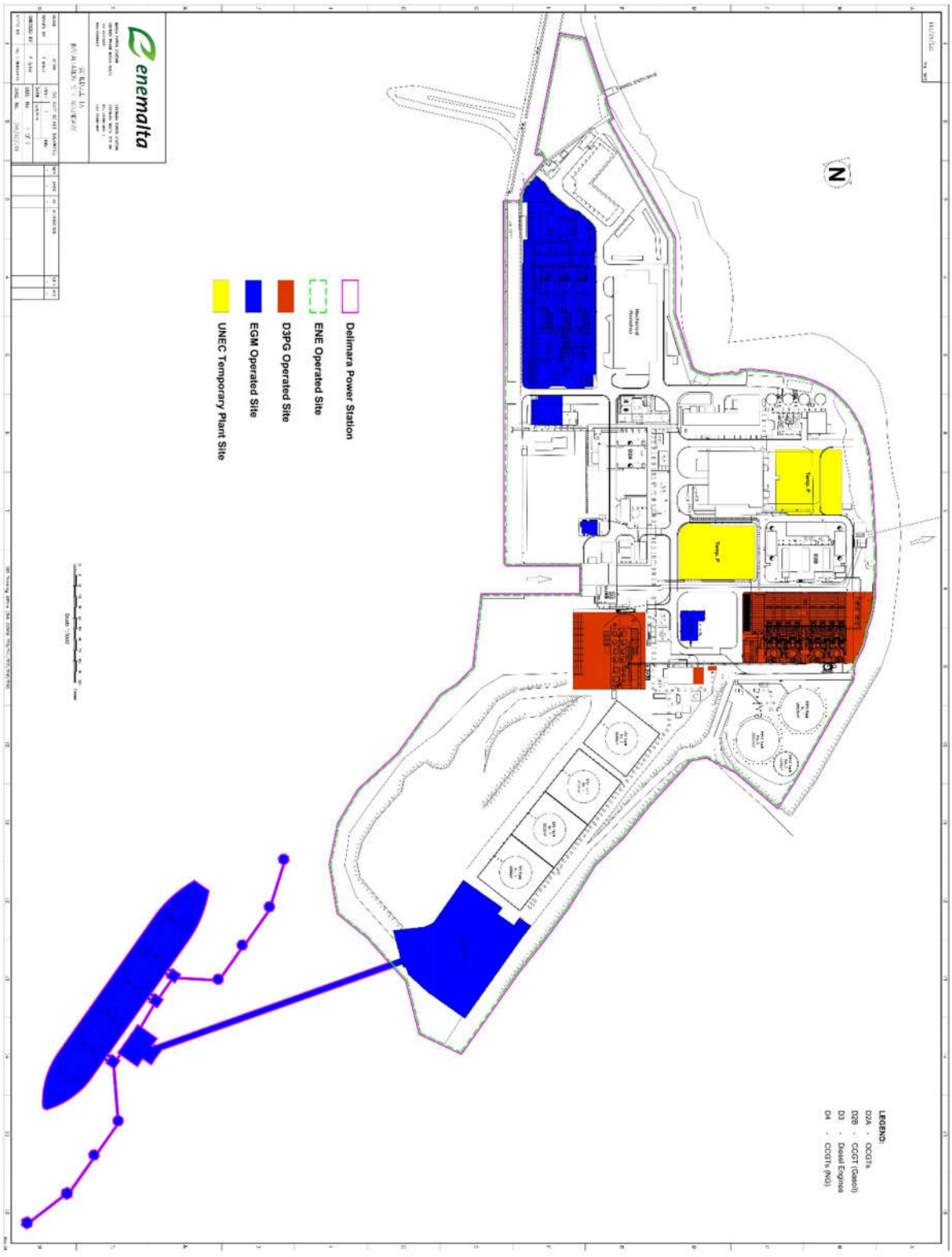
Section 7- Notifications

No changes

Schedule 1A – Installation Site Boundary

1. Shall be amended as indicated in the Schedule.

Schedule 1A
Installation Site Boundary

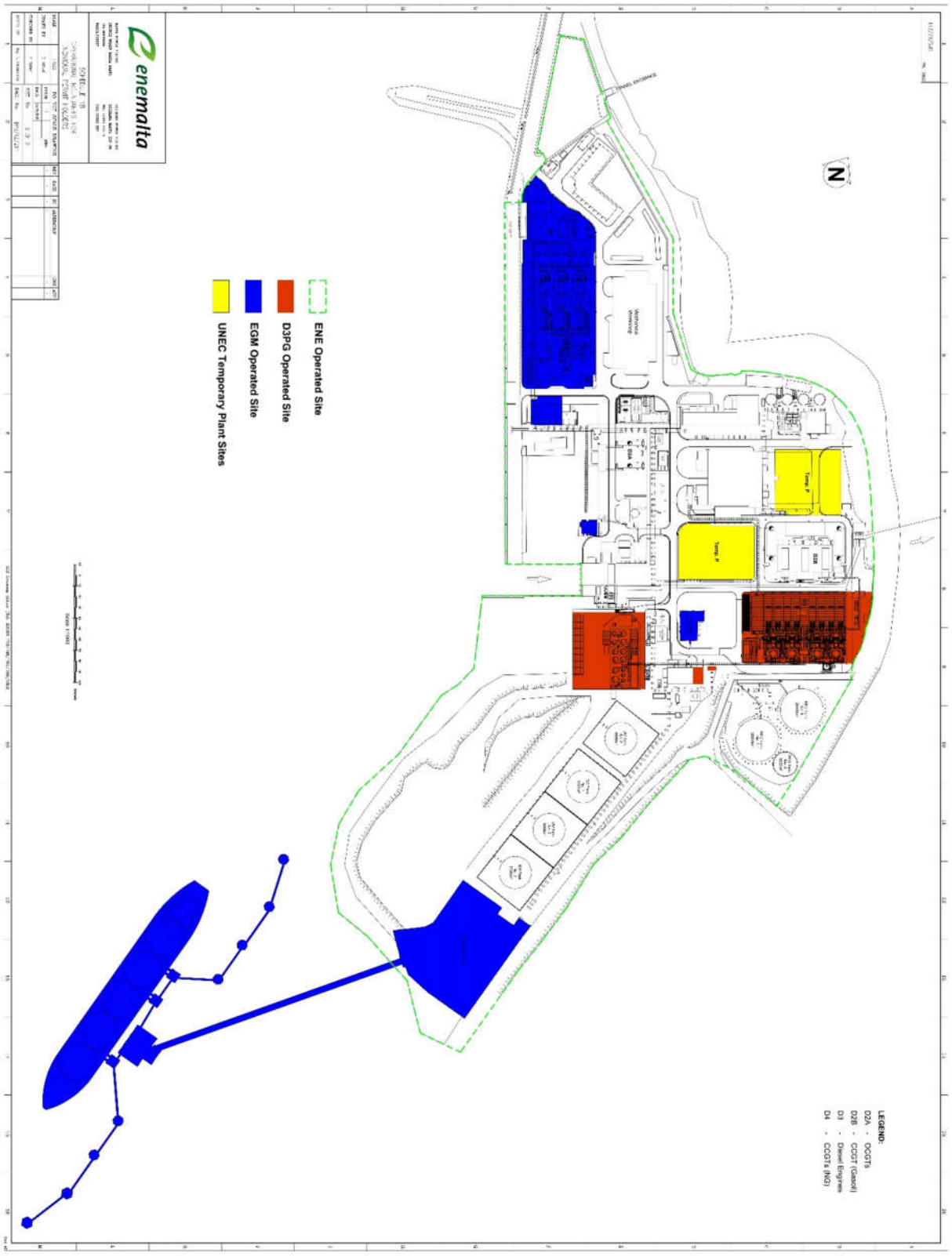


Schedule 1B – Operational boundaries for individual Permit Holders

1. **Shall be amended as indicated in the Schedule.**

Schedule 1B

Operational boundaries for individual Permit Holders



Schedule 2A – Tie-in points between Enemalta plc. and Electrogas Malta Ltd.

No changes

Schedule 2A – Tie-in points between Enemalta plc. and D3 Power Generation Ltd.

No changes

Schedule 2C – Tie-in points between D3 Power Generation Ltd. And Electrogas Malta Ltd – TP 5 only.

No changes

Schedule 3 – Notification of abnormal emissions

No changes

Schedule 4 – Annual Environmental Report

No changes

Schedule 5 – Emission points to sea from the Installation

No changes

Schedule 6 - Procedure for reporting complaints and exceedances

No changes

Schedule 7 - List of Priority Substances and Certain Other Pollutants in the field of Water Quality

No changes

Schedule 8 - Terms of Reference for Noise Monitoring

No changes

Schedule 9 – Interpretation

1. The introduction shall in Schedule 9 –Interpretation shall be amended as follows:

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. Where applicable the terminology as assigned in limitation of emissions of certain pollutants into the air from medium combustion plants (S.L.549.122) shall apply.

2. Point 39 definition shall be amended as follows:

‘’Permit” means this Framework Permit (IP0002/21/) together with the Subsidiary Permits (IP0002/21/i, IP0002/21/ii, IP0002/21/iii, IP 00002/21/iv) and any variation notices to said permits, and the terms “Framework Permit” and “Subsidiary Permit” shall be defined accordingly.

3. Point 57 definition shall be amended as follows:

The Permit Holder” means:

- In relation to the Framework Permit each of Enemalta plc., ElectroGas Malta Ltd., D3 Power Generation Ltd. and United Equipment Co Ltd. acting jointly unless otherwise specified;
- In relation to any Subsidiary Permits as follows:

  For IP 0002/21/i – ElectroGas Malta Ltd.
  For IP 0002/21/ii – D3 Power Generation Ltd.
  For IP 0002/21/iii – Enemalta plc.
  For IP 0002/21/iv – United Equipment Co. Ltd.

END OF PERMIT

Variation Notice Subsidiary Permit 3 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:	**Delimara Power Station**
Permit Holder:	**Enemalta plc (C65836),** **Triq il-Belt il-Ħazna,** **Marsa, MRS 1571,** **MRS 1571**
Approved Documents:	IP 0002/21 – framework document Sub-permit numbers: IP 0002/21/i – ElectroGas Malta Ltd./ EGM Ltd IP 0002/21/ii – D3 Power Generation Ltd./D3PG Ltd. IP 0002/21/iii – Enemalta plc. IP 0002/21/V3/iv - United Equipment Co. Ltd./ UNEC Ltd.

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Introductory note

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"Combustion of fuels in installations with a total rated thermal input of 50 MW or more".

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 Operator 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 not 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 as per subsequent specific conditions. 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.

Other IPPC Permits relating to this installation		
Permit holder	**Permit Number**	**Date of Issue**
Not applicable		

Superseded Licences/Authorisations/Consents relating to this installation		
Holder	**Reference Number**	**Date of Issue**
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Enemalta plc	IP 0002/07/Giii	22 September 2017

Multiple Operator installations

As indicated in Regulation 6(3) of S.L. 549.76[1], a permit may regulate several parts of an installation operated by different operators. The importance of integrating the operations of each technical unit stems from the definition of "installation" in the provisions of S.L. 549.76, where this is defined as "a stationary technical unit within which one of more activities listed in the regulations concerning integrated prevention and control or in the regulations concerning organic solvents are carried out, and any other directly associated activities on the same site which have a technical connection with these activities and which could have an effect on emissions and pollution".

In accordance to guidance provided by the Commission, an activity is considered to be a directly associated activity with a Schedule 1 activity if it shares common features, for example: it is part of the same industrial complex; it operates in the same or a related sector; or operates with some collective aspects such as site security.

This installation is therefore being regarded as a multi operator installation.

Functions of the permit

This **subsidiary permit 3** (IP 0002/21/iii) which addresses the operations carried out by Enemalta plc. shall be regarded as part of the Permit IP 0002/21 which consists of four main parts structured so as to include:

- **The Regulatory Framework Permit** addressing the obligation of all Permit Holders and coordinating these obligations due to the nature of the facility as a multi-operator installation (IP 0002/21).
- **Subsidiary Permit 1** addressing the operation carried out by ElectroGas Malta Ltd (IP 0002/21/i);
- **Subsidiary Permit 2** addressing the operations carried out by D3 Power Generation Ltd. (IP 0002/21/ii).
- **Subsidiary Permit 3** addressing the operations carried out by Enemalta plc. (IP 0002/21/iii)
- **Subsidiary Permit 4 addressing the operations carried out by United Equipment Co Ltd. (IP 0002/21/iv)**

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 either the regulatory framework or this specific permit to be changed, a formal application must be submitted to the Competent Authority. When such an application is submitted to the Authority for its consideration, the decision shall be carried out in consultation with the other Permit Holders within this multi operator installation

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 issued.

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

Surrender of the Permit

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 and/or public health risk and that no further steps are required to return the site to a satisfactory state.

[1] SL. 549.76 – Industrial Emissions (Framework) Regulations,

The Permit Holder shall notify the other Permit Holders within the installation of any such intent so as to enable these entities to assess the impact of this proposal on their operations and on any obligations arising from either the Framework Permit of the Permit Holder specific Subsidiary Permit.

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 environmental 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.

The Permit Holder shall notify the other Permit Holders within the installation of any such intent so as to enable these entities to assess the impact of this proposal on their operations and on any obligations arising from either the Framework Permit of the Permit Holder specific Subsidiary Permit.

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.

Status Log

Detail	Date	Comment
Application IP 0002/07	Received 05 February 2007	Not 'duly made'
Response to request for information	Request dated 16 June 2007	Response dated July 2007
Report on boiler conversion for emission reduction	PDS submitted 24 April 2008	Request for further information dated 14 July 2008. Further information submitted 24 September 2008
Noise survey	Report submitted 25 July 2008	
Application 'duly made'	27 April 2009	
Response to request for information	Request dated 27 April 2009	Response received 18 May 2009 Consolidated version received 18 May 2009
Public consultation	Commenced on 21 May 2009	Concluded on 20 June 2009
Re-classification of the phase 1 boilers (from 380 to 332 MW_{TH})	Official letter dated 28 September 2009 plus supporting documents.	
Permit A determined	01 October 2009	
Permit A issued	29 March 2010	
Application for variation of permit to include diesel engines	Application received on 11 February 2010	

Detail	Date	Comment
Response to request for information	Request dated 19 April 2010	Response received 31 May 2010, 17 June 2010 and 26 July 2010
Response to request for information	Request dated 17 September 2010	Response received 12 May and 2 June 2011
Response to request for information regarding NOx emissions	Request dated 24 June 2011	Response received 4 July 2011
Response to request for information regarding socio-economic assessment	Requests dated 24 June, 4 July and 18 July 2011	Response received on 4 August 2011
Response to request for information	Request dated 5 July 2011	Response received on 22 July, 27 July 2011.
Correspondence regarding flue gas volume calculations	Information submitted by Enemalta on 30 June, 8 and 29 July 2011 and 29 August 2011	Request accepted on 4 August 2011
Request for variations to existing permit	Received on 29 July 2011	
Request for consolidated application	Request made on 26 July 2011	Consolidated application received on 17 August (draft) and 23 August 2011 (final)
Air dispersion model	Report submitted on 24 August 2011	
Updated cooling water dispersion modelling study	Received on 7 September 2011	
Public consultation	Started on 24 August 2011	Concluded on 7 October 2011
Renewal and variation B determined	5 December 2011	
Permit B issued	6 December 2011	Permit expires on 6 December 2015 A consolidated permit is being issued
Public consultation on proposed extension to condition 2.2.1.7.9 from September 2012 to June 2013	Started on 17 May 2012	Concluded on 18 June 2012
Variation C determined	12 July 2012	
Permit C issued	23 July 2012	Permit expires on 6 December 2015 A consolidated permit is being issued
Public consultation on proposed extension for HFO use from June 2013 to March 2014	Started on 28 June 2013	Concluded on 28 July 2013
Variation D determined	5 September 2013	
Permit D Issued	17 September 2013	Permit expires on 6 December 2015 A consolidated permit is being issued

Detail	Date	Comment
Public consultation on the determination of the choice of fuel for DPS6	Started on 11 February 2014	Concluded on 12 March 2014
Variation E determined	27 March 2014	
Permit E issued	1 April 2104	Permit expires on 6 December 2015. A consolidated permit is being issued.
Permit extended	1 December 2015	From 06 December 2015 to 06 June 2016
	30 May 2016	From 06 June 2016 to 6 December 2016
	02 December 2016	From 06 December 2016 to 06 June 2017
Request for variations to existing permit by Electrogas Malta Ltd.	13 November 2014	
Request for variations to existing permit by D3 Power Generation Ltd.	20 February 2015	
Request for renewal and variations to existing permit by Enemalta plc.	4 June 2015	
Responses to request for information	Electrogas Malta Ltd	From 13 November 2014 to 17 October 2016
	D3 Power Generation Ltd	From 20 February 2015 to 17 October 2016
	Enemalta plc	From 4 June 2015 to 17 October 2016
Application Duly made	Electrogas Malta Ltd D3 Power Generation Ltd Enemalta plc	18 October 2016 18 October 2016 18 October 2016
Public Consultation	Between 19 October 2016 and 27 November 2016	Public consultation extended by 10 days from the original end date of 17 November 2016.
Permit F Determined	19 December 2016	
Permit F Issued	11 January 2017	Permit Expires: 19 December 2020
Request for partial surrender to existing permit by Enemalta plc.	12 April 2017	
Responses to request for information	11 May 2017	
Application Duly made	5 July 2017	
Public Consultation	Between 10 July 2017	Concluded 24 July 2017
Permit G Determined	25 August 2017	

Detail	Date	Comment
Permit G Issued	22 September 2017	Permit expires: 25 August 2021
Permit G extension	9 July 2021	Validity expires: 25 February 2022
Application IP 0002/21	*12 February 2021* *26 February 2021* *25 February 2021 and 9 December 2021*	*EGM; variation and renewal* D3PG; renewal *ENE; renewal and variation*
Regulatory consultation	*between 23rd April 2021 – 7th May 2021 and between 1st June 2021 – 8th June 2021 and 25th October 2021 – 8th November 2021*	
Public Consultation	*Commenced on 17 December 2021*	*Concluded on 02 January 2022*
Application Determined	*18 February 2022*	*Granted 10 May 2022*
IP 0002/21/V1	*Validated 11th August 2023*	
IP 0002/21/V2	*Validated 5th January 2024*	
IP 0002/21/V3	*Validated 8th May 2024*	

End of Introductory Note

Notice of Variation

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

Variation Notice
IP 0002/21/V3/iii

Permit number
IP 0002/21/iii

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, 2013 (S.L.549.76) ("the Industrial Emissions (Framework) Regulations"), hereby authorises:

Enemalta plc. (C65836) (hereinafter "the Permit Holder" unless specifically mentioned)

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

Triq il-Belt il-Ħażna,
Marsa,
MRS 1571.

to operate specified plant described in the framework permit and this subsidiary permit 3 of this permit at the installation at:

Delimara Power Station, Delimara, Marsaxlokk, MXK 1320

to the extent authorised by and subject to the conditions of this subsidiary permit and applicable conditions in the regulatory framework permit.

This variation is valid until the expiry of the permit IP 0002/21 which is four (years) from the 'Permit Granted' Date below. An application for renewal is to be submitted at least nine (9) months prior to expiry of the permit

Environment and Resources Authority	Date Granted:
APPROVAL	10 / 05 / 2022
Board No. 216 Held on **31 May 2024**	Variation Granted: 17.06.2024
Chairman [redacted] Secretary [redacted]	

Authorised to sign on behalf of the Competent Authority

Section 1 – General

1. **The first paragraph in Section 1 named 'General' shall be replaced by the following:**

   This permit shall be read in conjunction with the regulatory framework Permit and the subsidiary permits issued to D3 Power Generation Ltd., ElectroGas Malta Ltd. and United Equipment Co. Ltd. which together comprise permit IP 0002/21.

   The enclosed notice of variation shall be read in conjunction to the permit with reference to IP 0002/21 and shall take effect as of the date indicated above.

   The Authority is hereby varying the Covering Page, the permit signature page, Section 1 (General), Section 2 (Operating Conditions), Schedule 1A as specified hereunder.

2. **Table 1.1.1 in Section 1.1. 'Permitted Activities' shall be replaced as follows:**

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 Installation consists of two open cycle gas turbines (DPS2 and DPS3), two combined cycle gas turbines (DPS4 and DPS5)	From receipt of fuel to delivery of utility.
Associated activity of steam generation	Generation of steam by means of a 4.15 MW_{TH} auxiliary boiler	
Associated activity of fuel handling and storage	Handling and storage of heavy fuel oil	From receipt of the fuel to storage in tank farm and from tank farm to tanker/barge to third parties.
	Handling and storage of gasoil	From receipt of fuel and storage in tank farm to delivery to D3PG for combustion in the diesel engines 5 to 8 and 3.85MW_{th} Auxiliary Boiler of D3PG and;
		From receipt of fuel and storage in tank farm to delivery to the Temporary

		Emergency Plant operated by UNEC Ltd.
		From receipt of fuel and storage in tank farm to combustion in DPS 2 to 5 and 4.15 MW_{th} auxiliary boiler of Enemalta
		From receipt of the fuel to storage in tank farm and from tank farm to tanker/barge to third parties.
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.
Other loading/Unloading to/from vessels on quay	Handling of equipment, materials and supplies	From DPS quay to vessels and vice-versa

3. **Condition 1.4.2 shall be added to section 1.4 ' Overarching Management Condition':**

   The Permit Holder, shall ensure that dispatch is carried out in a manner that favours the usage of natural gas and renewables over the utilisation of gasoil where economically and technically feasible.

4. **The following item in Table 1.5.1 in Section 1.5 (Improvement Programme) shall be amended:**

Table 1.4.1: Improvement programme		
Reference	**Requirement**	**Date**
2∞	Submission of an addendum to Enemalta safety report	Two weeks prior to commissioning

5. **A condition 1.6.3 shall be added to section 1.6 (Fuel supply to other Permit Holder within the installation):**

   The Permit Holder shall only supply gasoil for combustion in specified plant to UNEC Ltd. through the external tie in point connection as identified in **Approved Document IP 0002/21/V3/iv/DOC3** and as detailed in Table 1.6.3

Table 1.6.3– infrastructure related to receipt of fuel

Tie in point	Type of Fuel	Description
TP3. Temp	Gasoil	Gasoil connection from Enemalta gasoil tank farm to UNEC Ltd. gensets
TP4. Temp		

Section 2 – Operating Conditions

6. **Condition 2.2.9 in section 2.2 (Emissions to Air) shall be replaced by the following condition:**

   A copy of the certificates of analysis referred to in condition 2.2.5 and 2.2.6 shall also be submitted to D3 Power Generation Ltd. and UNEC Ltd.

7. **Condition 2.5.3 in sub-section 2.5 (Storage) shall be replaced by the following;**

   All oil transfers shall be undertaken in accordance with the oil spillage response plan. The Oil spillage Response Plan shall be updated so as to address oil transfers from the Permit Holder to D3 Power Generation Ltd. and to UNEC Ltd.

8. **Condition 2.5.10 (Storage) shall be replaced by the following;**

   All gasoil transfers shall be undertaken in accordance with the oil spillage response plan and any updates/addenda to it.

9. **Condition 2.7.13 in section 2.7 (Accident prevention and control) shall be replaced by the following;**

   In case any further modification in the piping and instrumentation of the facilities is deemed necessary by D3PG Ltd. or EGM Ltd. or UNEC Ltd.., which could have significant consequences for major-accident hazards in relation to the information provided in the P&IDs (Pipe& Instrumentation Diagrams) submitted along with the ENE Safety Report), it should be notified in detail to the COMAH Authority in advance of that modification (according to reg. 9 of the COMAH Regulations S.L.424.19).

Section 3 – Reporting

No changes

Section 4 – Interpretation

No changes

Schedule 1A– Operational Boundary for Enemalta

1. Shall be amended as indicated in the Schedule.

Schedule 1A

Operational Boundary for Enemalta

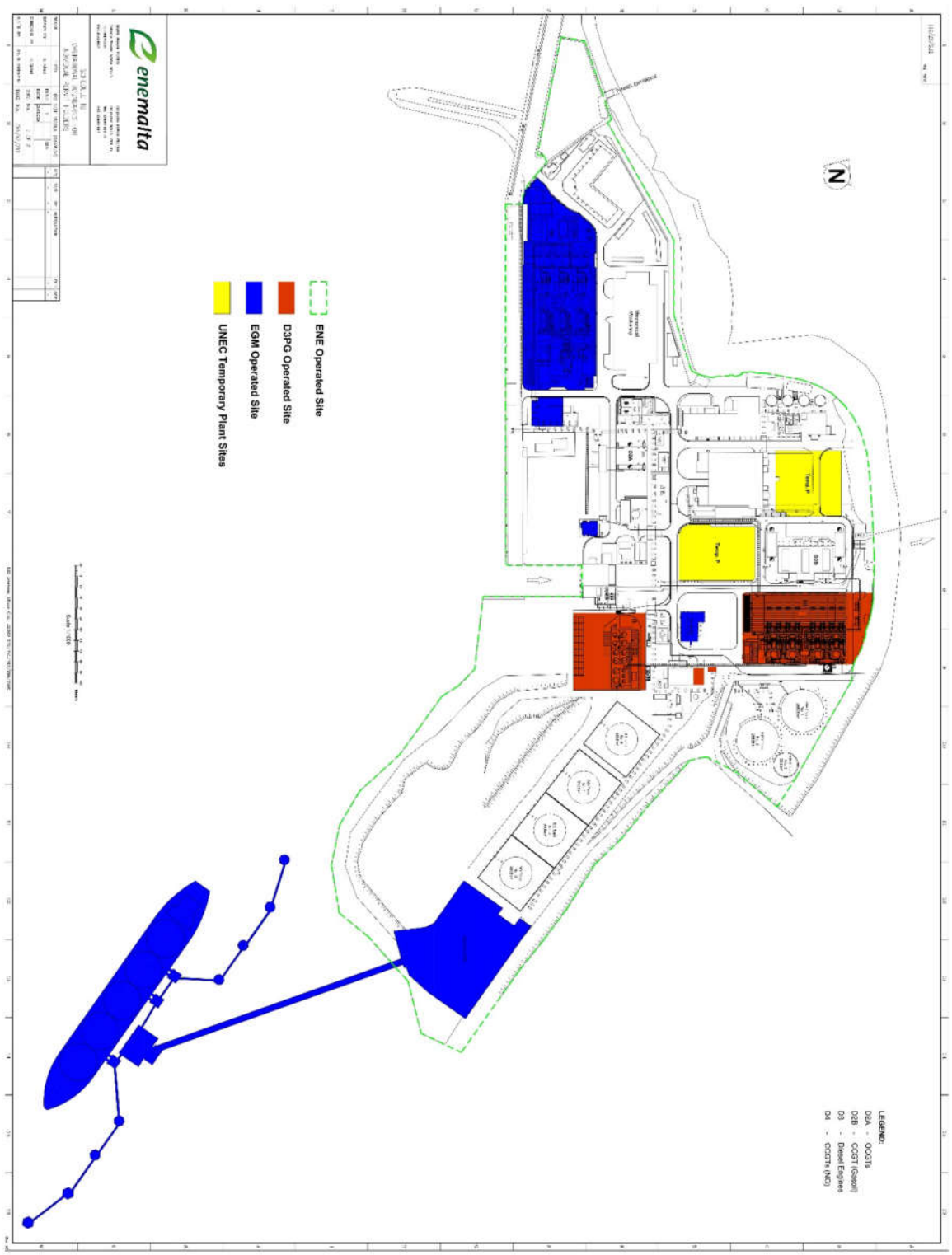

Fig. 1: Site of installation showing the extent of area authorised for operations for the carrying out of the operations specified in Condition 1.1.1. The extent of the site boundary is indicative and shall not be used for interpretation purposes.

Schedule 2 – Annual Environment Report

No changes

Schedule 3 – Quarterly Reporting

No changes

Schedule 4 – Monthly Reporting

No changes

Schedule 5 – Template for Exemption from Emission Limit Values

No changes

Schedule 6 – Notification of operation of DPS 2 to 5 plant

No changes

END OF NOTICE

Notice of Variation **Subsidiary Permit 4**

Environment Protection Act (CAP. 549)
Limitation of Emissions of Certain Pollutants into the air from Medium Combustion Plant Regulations (S.L. 549.122)

Permit number
IP 0002/21/V3/iv

Approved Documents:
IP 0002/21/V3/iv/DOC1
IP 0002/21/V3/iv/DOC2
IP 0002/21/V3/iv/DOC3

The Environment and Resources Authority (hereinafter the Authority; the Competent Authority or ERA) in exercise of its powers under the Environment Protection Act (CAP. 549) and applicable subsidiary legislation referred to in this permit, hereby authorises:

United Equipment Co. (UNEC) Ltd. (hereinafter "the Permit Holder"),
Company number: **C 10827**

Of / Whose Registered Office is at:

United Equipment Co. (UNEC) Ltd.
Bonnici House,Sardine Street
Burmarrad, SPB 6073

to operate a temporary emergency plant at:

Delimara Power Station
Triq il-Power Station
Marsaxlokk, MXK 1220

This variation is valid until the expiry of the permit IP 0002/21 which is four (years) from the 'Permit Granted' Date below. An application for renewal is to be submitted at least **nine (9) months** prior to expiry of the permit.

Environment and Resources Authority	Date Granted:
APPROVAL Board No. 216 Held on **31 May 2024** Chairman [redacted] Secretary [redacted]	10 / 05 / 2022 Variation Granted: 17.06.2024

Authorised to sign on behalf of the Competent Authority

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Conditions

1. General

This permit shall be read in conjunction with the regulatory framework Permit and the subsidiary permits issued to D3 Power Generation Ltd., ElectroGas Malta Ltd. and Enemalta plc. which together comprise permit IP 0002/21.

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

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.

1.1. Permitted Operations

1.1.1. The Permit Holder is authorised to carry out the operations specified in Table 1.1.1.

Table 1.1.1

Operation	Description of specified Operation	Limits of specified operation
Operation of a temporary emergency plant	Operation of fourty eight (48) [4 MW_{th}] emergency generators (New MCPs) (as indicated in the Schedule 3) operating on gas oil	Rated thermal input of combustion plant is less than or equal to 5 MW_{th} Electricity produced at the installation can only be exported to the National Grid to provide balancing services and for routine testing as established in condition 1.3.1 Each of combustion plants shall not operate for more than 500 hours per year unless duly authorised as specified in condition 2.1.10
Loading and Storage of fuel	Delivery and use of fuel for the operation of a combustion plant	From receipt of gas oil to combustion of fuel in the generators
Combustion plant maintenance and repair	Service, repair and maintenance of combustion plants	From the receipt of replacement parts to the disposal of waste related to the combustion plants.

Associated operation of waste management	Handling and storage of wastes generated from installation prior to dispatch offsite for disposal/recovery.	From generation of waste to storage and dispatch for disposal or recovery (including recycling) offsite

1.2. Site

1.2.1. Only those combustion plants listed in Table 1.1.1 can be operated at the site and the activities authorised under Condition 1.1.1 shall not extend beyond the Site boundary, as per Site Map in Schedule 1 to this Permit with, the authorised layout plans as defined in **Approved Document IP 0002/21/V3/iv /DOC1**.

1.3. Overarching Management Condition

1.3.1. The Temporary Emergency Plant shall only be utilised as a backup/emergency plant and shall only be put into operation in the following occasions:

i. In the event of peak demand shortfall to supply the maximum additional 60 MWe

ii. In the event of emergency situations where one of the country's principal electricity supplies fails during peak demand:

a. In the event of sudden disconnection from the European electricity grid following faults or damages to the existing electrical interconnection.

b. In instances of severe weather conditions affecting the port of Delimara, and in particular affecting the floating Liquid Natural Gas (LNG) storage vessel for extended periods.

iii. On a monthly basis for one hour for testing purposes to ensure their functioning.

1.3.2. The Permit Holder shall:

a. In reference to condition 1.3.1, the temporary emergency plant shall be put into operation last and shut down first.

b. Take appropriate measures to ensure that energy is used efficiently in the operation of the Temporary Emergency Plant;

1.3.3. The Permit Holder shall notify the Authority, without undue delay, of any planned change to the permitted combustion plants. In the event of off-site maintenance of GS1-GS48 the Permit Holder is notify the Authority.

1.3.4. The Permit Holder shall apply for a variation in permit and shall seek the Authority's written agreement prior to any operational changes, by sending to the Authority:

a. Written notice of the details of the proposed change, including an assessment of its possible effects (including changes in emissions) on risks to the environment from the Permitted installation

b. Any relevant supporting information (e.g. chemical/fuel consumption, technical details, changes in the type/use of substances/mixtures, etc.);

c. Any relevant supporting assessments and drawings, and;

d. The proposed implementation date.

1.3.5. Any such change, shall only be implemented following the issue of a variation of the permit by the Authority.

1.3.6. The Permit Holder shall notify the Authority in writing at least 14 working days prior in the event that the exemption criteria specified in condition 2.2.10 is likely to be exceeded.

1.3.7. The Permit Holder shall use BAT so as to prevent or where that is not practicable to reduce emissions to air and noise impacts. Any other unpredicted impacts and nuisances which may arise from this operation and that may have a significant adverse effect on public health are to be immediately addressed by the Permit Holder and the necessary mitigation measures should be taken.∞

1.3.8. In furtherance to section 1.3 of the framework permit, the Permit Holder shall develop and maintain an Environmental Management System (EMS) in line with the minimum requirements in Schedule 5 and shall place due consideration for the development of the following:

i. Procedures on fuel transfer
ii. General operation of the combustion plants on site for effective process control
iii. Spill prevention
iv. Method statement for the determination of gas oil supply
v. Recording keeping and data collection requirements

The Permit Holder shall ensure that the EMS is coordinated with those established by the other Permit Holders within the installation.

1.4. Commissioning

1.4.1. Six (6) days before the projected commencement of the commissioning of the temporary emergency plant, the Permit Holder shall inform the Authority and the other operators in writing.

1.5. Pre-operational Condition

1.5.1. Two weeks prior to the commissioning of the Temporary Emergency Plant, the Permit Holder shall submit addenda to the following safety documentation and any other necessary documentation as directed by the COMAH Competent Authority:∞

i. Coordinated Safety Report
ii. Internal Emergency Plan
iii. Coordinated Emergency Plan

1.5.2. The commissioning phase shall be deemed concluded following a communication in writing by the COMAH Competent Authority that the above documentation has been duly submitted.∞

1.5.3. In formulating its opinion and further to condition 1.5.2 the Authority shall seek the opinion of other Competent Authorities of direct relevance to this proposal.

1.6. Improvement Programme

1.6.1. The Permit Holder shall complete the improvements specified in Table 1.6.1 by the date specified in that table, and shall send written notification of the date of completion of each requirement to the Authority`s Compliance and Enforcement Unit within 10 working days (of the completion of such requirement).

Table 1.6.1: Improvement programme

Reference	Requirement	Deadline
1	a) Submission of a method statement showing how the monitoring requirements for the combustion plants permitted in Table 2.2.4 will be sampled and tested.	a) Within 1 month of the granting of the permit
	b) First measurement for the air monitoring as approved by 1(a) above.	b) Within 4 months of the granting of the permit
2	a) Submission of a method statement for a one time noise survey representing the worst case scenario in line with condition 2.7.1 of this permit.	a) Within 6 months of the date on which the generators are first operated on site
	b) Submission of the noise survey following approval of 2a	b) As agreed upon with the Authority
	c) Submission and implementation of noise management plan (if necessary, after completion of 2a)	c) Submission and implementation as agreed with the Authority
3	a) Submission of documentation and procedures which will for part of the Environment Management System (EMS) b) Attainment of ISO 14001 Environmental Management System	a) With 1 month from the date of granting of the permit b) Within 4 months of the date on which the generators are first operated on site
4	Establishment of start-up and shut-down periods	Two weeks prior to the commissioning

5	Updates to the general risk assessment including the submission of a spill risk assessment	Two weeks prior to the commissioning
6	Submission of an outline decommissioning plan to be updated in line with condition 2.21.2 of the framework permit	Within 12 months of the granting of the permit
7	Addendum to Oil Spillage Response Plan	Within 1 month from the granting of the permit

2. Operating Conditions

2.1. General Conditions

2.1.1. This permit is granted against a bank guarantee of €611,000 which shall be renewed annually. Without prejudice to condition 2.1.2 of this permit and condition 2.1.17 of the framework permit. The 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.

2.1.2. Following the completion of the commissioning operations and fulfilment of the pre-operational conditions stipulated in section 1.5, the sum of €500,000 shall be released from the financial guarantee upon the Permit Holder's request and after the verification by the Authority that all submissions have been submitted to its satisfaction.

2.2. Emissions to Air

2.2.1. Industrial combustion plants shall comply with the provisions of S.L. 549.122 (Limitation of emissions of certain pollutants into the air from Medium Combustion Plants Regulations) and any other applicable subsidiary legislation.

2.2.2. Only gas oil, shall be utilised as a source of fuel for the generators indicated in Table 2.2.4. The co-incineration of any material or additional fuel including engine or other waste oil is strictly prohibited. Any change in fuel type shall require a variation of this permit as per Condition 1.3.4 prior to commencement of its utilisation.

2.2.3. Emissions to air shall only arise from the emission points specified in Table 2.2.4.

2.2.4. The limits for emissions to air for the parameters and emission points set out in Table 2.2.4 shall not be exceeded. The limits are defined at a temperature of 273.15 K, a pressure of 101.3 kPa, after correction for the water vapour content of the waste gases and at a standardised O_2 content of 15%.

Table 2.2.4 : Emission points to air					
Emission point references	**Source**	**Monitoring Frequency**	**Pollutant**	**Emission Limit Value (mg/Nm^3)**	**Abatement**
GS1 – GS48	Generators as specified in Schedule 3	Annually	NO_X	190	N/A
			CO	--	

2.2.5. The first measurement shall be taken within four months of the granting of the permit.

2.2.6. Monitoring shall be carried out according to the frequency stated in Table 2.2.4. During each measurement, the plant shall be operating under stable conditions at a representative even load. In this context, start-up and shutdown periods shall be excluded. The Authority reserves the right to require an increase in the frequency of such measurements.

2.2.7. Sampling and analysis of polluting substances and measurements of process parameters shall be based on methods enabling reliable, representative and comparable results. Methods complying with harmonised EN standards shall be presumed to satisfy this requirement. All analysis shall be conducted by a laboratory accredited to at least EN ISO 17025:2017. In the case of in-situ monitoring, analysis shall be conducted via appropriately calibrated instrumentation. A copy of the laboratory's accreditation certificate and a valid calibration certificate for all instrumentation are to be provided to the Authority as part of the AER.

2.2.8. The monitoring results shall be submitted as part of the Annual Environmental Report (AER) of the year in which the monitoring was carried out. The data shall at the least be kept for a period of six years.

2.2.9. The Permit Holder shall maintain a record of the operating hours for each combustion plant. The Permit Holder shall inform the Authority upon utilisation of the specified plants within 24 hours and shall submit the requested information within 7 working days from notification the information requested in Schedule 4. The requested information shall be supplied in electronic format.

2.2.10. The Permit Holder is exempted from compliance with the emission limit values for GS1-GS48 until such time that the rolling average of the operating hours over three years does not exceed 500 hours annually or as communicated by the Authority. The exemption shall only exempt the Permit Holder from compliance with the emission limit values set out in Table 2.2.4. Monitoring is still to be carried out with the frequency indicated in the same table. The Authority reserves the right to terminate the exemption and in such case, shall communicate the expiry of the exemption in writing.

2.2.11. The Operating hours throughout the operation of the plant and shall exclude start-up and shut-down periods.

2.2.12. With prejudice to condition 2.2.10, the Authority may request the Permit Holder is to propose measures that will be taken to ensure compliance with the emission limit values in the event that the operating hours specified in condition 2.2.10 are exceeded.

2.2.13. Following the first year of operation, the Authority reserves the right to amend the parameters detailed in condition 2.2.4 and 2.2.10 following the review of the AER and other air quality data for the installation as a whole.

2.2.14. In the event malfunction leading to abnormal emissions, the Permit Holder must:

i. Investigate immediately and undertake corrective action;

ii. Adjust the process or activity to minimise those emissions;

iii. Record the cause of malfunction and actions taken; and

iv. In the event of non-compliance causing immediate danger to the environment, suspend the operation and inform the Competent Authority within 24 hours.

2.3. Determination of start-up and shut-down periods

2.3.1. The determination of periods of start-up and shut-down shall be established following completion of improvement programme 4 as defined in the Table 2.3.1

Table 2.3.1 – Determination of start-up and shut-down for G1-G48	
Mode	Description
End of start-up period	Load in MW and as percent of rated power output (%) and/or discrete processes)
Start of shut-down period	Load in MW and as percent of rated power output (%) and/or discrete processes

2.3.2. 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.

2.3.3. The operator shall make sure that the frequency of start-up and shut down periods are minimised as far as practicable.

2.4. Fuel

2.4.1. When gasoil is used, the sulphur content shall comply with the standards laid down by the Quality of fuels Regulations (S.L. 545.18) as may be amended from time to time), i.e. the sulphur content of the gasoil fired by the Temporary Emergency Plant shall in no case exceed 1 kg for every tonne of gasoil.∞

2.4.2. The Permit Holder shall submit records of the mass of fuel fired on a monthly basis and for each reporting year as part of the AER.

2.4.3. The Permit Holder shall ensure that a quality assurance/quality control programmes for fuel utilised on site is in line with BAT 9 in the Commission Implementing Decision (EU)

2021/2326 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council for large combustion plants.

2.5. Fuel: Emergency Considerations

2.5.1. In the case of an interruption in the supply of low sulphur fuel due to a serious shortage, the Director of Environment Protection may allow a suspension for a maximum of six (6) months from the obligation to comply with the emission limit values (if established) for sulphur dioxide in line with S.L. 549.122.

2.5.2. Conditions 2.2.13 till 2.2.19 of the framework permit shall not be applicable to UNEC Ltd.

2.6. Fuel supply points

2.6.1. The Permit Holder shall only utilise gas oil through the external tie in point connection with Enemalta plc. as identified in **Approved Document IP0002/21/V3/iv/DOC3** and as detailed in Table 2.6.1 below.

Table 2.6.1 – Infrastructure related to receipt of fuel		
Tie in point	Type of Fuel	Description
TP3. Temp	Gas oil	Gas oil connection points
TP4. Temp		

2.6.2. The Permit Holder shall only receive gasoil for combustion in the specified plant permitted in table 1.1.1 of this permit and without prejudice to any subsequent conditions in this permit or in the framework permit.

2.6.3. The unloading of gasoil and the transfer of gasoil from the Enemalta main tanks shall be supervised at all times and shall be undertaken in accordance with any an approved standard operating procedure once developed in line with improvement programme item 7.

2.6.4. The pipes, pumps, valves and flanges forming part of the system which transfers fuel from the gasoil tanks in the tank farm gasoil from the Enemalta main tanks to the Temporary Emergency Plant 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 specified in Schedule 2.

2.6.5. The Permit Holder shall have in storage an adequate supply of containment booms and suitable absorbent material to absorb any spillage.

2.6.6. On completion of improvement programme item 7, all gasoil transfers shall be undertaken in accordance with an approved oil spillage response plan. Such a plan shall be implemented and adopted in cases where spillages occur during fuel transfers

2.7. Noise

2.7.1. Noise monitoring shall be carried as indicated in improvement programme item 2 of this permit to verify the modelled noise data (**Approved Document IP0002/21/V3/iv/DOC2**).

Locations shall be chosen and the measurements/assessment made according to BS 4142:2014 + A1:2019. Prior to carrying out such monitoring, the Permit Holder shall submit a monitoring proposal in line with Schedule 5 of the framework permit. A detailed report shall accompany the results by the timeframe specified in improvement programme item 2.

2.8. Accident Prevention and control∞

2.8.1. An Emergency Response Plan shall be developed, followed and maintained containing details of the location and quantity of fuels stored, any special hazards, a drawing showing location of drains and the emergency phone numbers of the Permit Holder and relevant authorities. It shall also include actions to be taken in the case of incidents which could affect the environment, such as fires and chemical/fuel spills.

2.8.2. In the case of an accident (e.g. chemical spills, etc.), the Permit Holder shall follow the Emergency Response Plan referred to in Condition 2.8.1 and shall notify the Authority within 24 hours.

2.8.3. In the case of an accident the Permit Holder will be responsible for notifying the other operators and the Permit Coordinator of such an incident and each operator shall follow the procedures stipulated in the Internal Emergency Plan submitted by each Permit Holder.

2.8.4. In the case of an emergency situation within an individual operator plant or in an emergency escalated to a site level), the procedures and coordinated actions stipulated within the Coordinated Emergency Plan (CERP) shall apply. The operator shall ensure communication and coordination with the other operators and stakeholders together with the local area emergency response organisations and Authorities.

2.8.5. The level of application of the CERP shall be at least the communication of the emergency situation, with a possible escalation of the full activation of the CERP as required.

2.8.6. The CERP shall be reviewed at least every three 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.

2.8.7. The Permit Holder shall, in collaboration with the other Permit Holders at the installation 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, in particular but no limited to implementation a risk assessment which covers the operation of the whole installation.

2.8.8. 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 and the other Permit Holders at the installation.

2.8.9. The Permit Holder is to ensure that all Health and Safety documentation is freely available and provided upon request to either the Competent Authority or to the Occupational Health and Safety Authority.

Safety Considerations∞

2.8.10. Without prejudice to regulation 9 of the COMAH Regulations, the Permit Holder shall ensure that any information requested by the Permit Coordinator for the scope of the periodic review and where necessary update the Safety report, MAPP and Internal Emergency Plan (IEP), at least every five years.

2.9. Closure and Decommissioning

2.9.1. 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.

2.9.2. In the event of cessation of operations of the combustion plant(s) on the site, the Permit Holder shall remain responsible for all wastes and hazardous materials on site, which shall be removed from the site in accordance to good environmental practice and in such a manner that minimises environmental risks.

2.9.3. The Decommissioning Plan shall be implemented once approved by the Authority and within 12 months of final cessation of operations or as agreed with the Authority in writing.

2.9.4. The obligations arising from this permit shall subsist until the Authority confirms in writing that the decommissioning plan has been implemented to its satisfaction.

2.9.5. When deemed necessary, the Authority may require the Permit Holder to take such additional measures as it considers necessary with respect to after care obligations in relation, but not limited to the remedial action, rehabilitation, and monitoring of the waste management or waste production site.

2.9.6. In the event of cessation of operations of any plant and equipment specified in this Permit and/or which is integral to the carrying out of the permitted operations, the Permit Holder shall notify the Authority about the type of equipment, its intended fate and details of the transferee.

Unless the plant/equipment shall be transferred off-site in its current state, the Permit Holder shall submit a plan to the Compliance and Enforcement Unit which shall include the following details:

1. The appointed contractor or other competent person who shall carry out any works (e.g. cleaning, dismantling etc.).
2. A complete inventory of all the materials that shall be dismantled/removed, including waste streams classified according to their respective EWC code as per S.L. 549.63. and details on the manner in which waste will be managed. Waste resulting from depollution shall also be included.
3. The proposed cleaning, dismantling and transport procedures
4. Precautions and mitigation measures during such works to prevent spillages and other potential emissions to the environment.
5. Timeframes associated with the implementation of this plan.

For any plant/equipment and/or parts thereof which shall not be considered as waste in accordance with S.L. 549.63, The Waste Regulations, a certificate of good working order from an independent warranted engineer shall be submitted to the Compliance and Enforcement Unit following any works that may be necessary at the Permitted installation.

3. Documentation and Reporting

3.1. Reporting

3.1.1. All reports and written and/or verbal notifications required by this Permit shall be made and sent to the Authority using the contact details notified in writing to the Permit Holder by the Authority.

3.1.2. The Permit Holder shall submit to the Authority an Annual Environmental Report (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.

3.1.3. Any monitoring results submitted to the Authority 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.

Schedule 1

Site Plan

Figure S1: Site of installation, showing the extent of the area in red for the carrying out of the activities specified in condition 1.1.1. The extent of the site boundary is indicative and should not be used for interpretation purpose

Schedule 2

Annual Environmental Report

S2.1 Introduction

Environmental Permit Number	IP 0002/21/iv
Name and address of Plant	United Equipment Co. Ltd Delimara Power Station
Amount of Permitted Combustion Plants on sites	48
Reporting Year	01 January (Year) – 31 December (Year)
Brief description of activities at the site	

S2.2 Environment Management System & Reporting

Please attach a supporting document with the following:

	Tick (✓)
1. Environmental Policy containing the installation's environmental objectives and targets	
2. Environmental Management Programme report (for the reporting year)	
3. Environmental Management Programme proposal (for the following year)	
4. Energy Efficiency Plan	

S2.3 Process Data

S2.3.1 Annual Summary

Performance parameters		
Parameter	**Frequency of reporting**	**Units**
Electricity exported	Annually	MWh
Generator operation during commissioning	Report to be submitted annually	Total hours for the site (hours) Total hours per generator (hours) Total number of runs per generator (quantity and dates) Number of minutes per run (minutes)
Generator operation for testing and maintenance	Report to be submitted annually	Total hours for the site (hours) Total hours per generator (hours) Total number of runs per generator (quantity and dates)

		Number of minutes per run (minutes)
Generator operation during emergency scenario	Annually	Total hours for the site (hours) Total hours per generator (hours) Total number of runs per generator (quantity and dates) Number of minutes per run (minutes)
Generator operational hours	Annually	Cumulative number of Operating hours in test/emergency condition from completion of commissioning to date

S2.3.2 Fuel Usage and Fuel Quality

Please attach a supporting document with the following:

Gas Oil	Total Annual Gas oil Used	Tonnes
	Sulphur Content [1]	

Documentation to be submitted:

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

S2.4 Medium Combustion Plants

S2.4.1 Operational Data

Emission point references	Source [Serial Number]	GPS coordinates of each stack[2]	Annual Operating Hours for reporting year (hours)	Operational Hours Three year rolling average	Volumetric Waste gas flow rate (Nm^3/hour)
GS1	DD800404				
GS2	DD800405				
GS3	DD800317				
GS4	DD800341				

[1] Specify units (e.g. as percentage, or mg/kg)
[2] The Geo Reference coordinates of stack: for each stack, the geo-referenced latitude and longitude (coordinates for the approximate center of the installation) expressed with reference to the ETRS89 (2D) EPSG:4258 coordinate reference system, to a precision of 5 decimal degrees, in decimal degree format

GS5	DD800308				
GS6	DD800276				
GS7	DD800331				
GS8	DD800304				
GS9	DD800333				
GS10	DD800332				
GS11	DD800348				
GS12	DD800299				
GS13	DD800335				
GS14	DD800312				
GS15	DD800301				
GS16	DD800343				
GS17	DD800322				
GS18	DD800277				
GS19	DD800346				
GS20	1HZ04103				
GS21	1HZ03965				
GS22	DD800114				
GS23	1HZ03980				
GS24	1HZ03975				
GS25	1HZ03974				
GS26	DD800150				
GS27	DD800153				
GS28	DD800119				
GS29	DD800116				
GS30	DD800128				
GS31	DD800130				
GS32	DD800126				
GS33	DD800117				
GS34	DD800106				
GS35	1HZ04142				
GS36	1HZ04144				
GS37	DD800311				
GS38	DD800120				
GS39	DD800108				
GS40	DD800328				
GS41	DD800109				
GS42	DD800103				
GS43	DD800101				
GS44	DD800113				
GS45	1HZ04141				
GS46	DD800115				
GS47	1HZ04145				
GS48	1HZ04143				

S2.4.1 Air Emission Monitoring

Emission point reference	Parameter	Limit Value (mg/Nm^3)	Standard methodology used	Type of monitoring (in-situ / at an accredited lab)	Uncertainty[3]	Concentration (Annual Average)		
						Unit	Previous reporting period	Present reporting period
GS1	NO_X	190						
	CO	-						
GS2	NO_X	190						
	CO	-						
GS3	NO_X	190						
	CO	-						
GS4	NO_X	190						
	CO	-						
GS5	NO_X	190						
	CO	-						
GS6	NO_X	190						
	CO	-						

[3] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Emission point reference	Parameter	Limit Value (mg/Nm^3)	Standard methodology used	Type of monitoring (in-situ / at an accredited lab)	Uncertainty[3]	Concentration (Annual Average)		
						Unit	Previous reporting period	Present reporting period
GS7	NO_X	190						
	CO	-						
GS8	NO_X	190						
	CO	-						
GS9	NO_X	190						
	CO	-						
GS10	NO_X	190						
	CO	-						
GS11	NO_X	190						
	CO	-						
GS12	NO_X	190						
	CO	-						
GS12	NO_X	190						
	CO	-						
GS13	NO_X	190						

Emission point reference	Parameter	Limit Value (mg/Nm^3)	Standard methodology used	Type of monitoring (in-situ / at an accredited lab)	Uncertainty[3]	Concentration (Annual Average)		
						Unit	Previous reporting period	Present reporting period
	CO	-						
GS14	NO_X	190						
	CO	-						
GS15	NO_X	190						
	CO	-						
GS16	NO_X	190						
	CO	-						
GS17	NO_X	190						
	CO	-						
GS18	NO_X	190						
	CO	-						
GS19	NO_X	190						
	CO	-						
GS20	NO_X	190						
	CO	-						

Emission point reference	Parameter	Limit Value (mg/Nm^3)	Standard methodology used	Type of monitoring (in-situ / at an accredited lab)	Uncertainty[3]	Concentration (Annual Average)		
						Unit	Previous reporting period	Present reporting period
GS21	NO_X	190						
	CO	-						
GS22	NO_X	190						
	CO	-						
GS23	NO_X	190						
	CO	-						
GS24	NO_X	190						
	CO	-						
GS25	NO_X	190						
	CO	-						
GS26	NO_X	190						
	CO	-						
GS27	NO_X	190						
	CO	-						
GS28	NO_X	190						

Emission point reference	Parameter	Limit Value (mg/Nm^3)	Standard methodology used	Type of monitoring (in-situ / at an accredited lab)	Uncertainty[3]	Concentration (Annual Average)		
						Unit	Previous reporting period	Present reporting period
	CO	-						
GS29	NO_X	190						
	CO	-						
GS30	NO_X	190						
	CO	-						
GS31	NO_X	190						
	CO	-						
GS32	NO_X	190						
	CO	-						
GS33	NO_X	190						
	CO	-						
GS34	NO_X	190						
	CO	-						
GS35	NO_X	190						
	CO	-						

Emission point reference	Parameter	Limit Value (mg/Nm^3)	Standard methodology used	Type of monitoring (in-situ / at an accredited lab)	Uncertainty[3]	Concentration (Annual Average)		
						Unit	Previous reporting period	Present reporting period
GS36	NO_X	190						
	CO	-						
GS37	NO_X	190						
	CO	-						
GS38	NO_X	190						
	CO	-						
GS39	NO_X	190						
	CO	-						
GS40	NO_X	190						
	CO	-						
GS41	NO_X	190						
	CO	-						
GS42	NO_X	190						
	CO	-						
GS43	NO_X	190						

Emission point reference	Parameter	Limit Value (mg/Nm^3)	Standard methodology used	Type of monitoring (in-situ / at an accredited lab)	Uncertainty[3]	Concentration (Annual Average)		
						Unit	Previous reporting period	Present reporting period
	CO	-						
GS44	NO_X	190						
	CO	-						
GS45	NO_X	190						
	CO	-						
GS46	NO_X	190						
	CO	-						
GS47	NO_X	190						
	CO	-						
GS48	NO_X	190						
	CO	-						

Name of laboratory(ies) where tests in this section have been carried out (as applicable)	
Accreditation certificate of laboratory that carried out the emission monitoring AND/OR a valid instrument calibration certificate	

S2.4.3 Summary Annual Data

Units	Type	Fuel	Fuel Burn	Heat Value	Annual Emissions[4] NO_X	Annual Emissions CO
			$Mg.yr^{-1}$	$GJ.Mg^{-1}$	$Mg.yr^{-1}$	$Mg.yr^{-1}$
Temporary Emergency Plant	Generators G1-G48	Gasoil				

S2.4.4 Corrective Action (to be compiled at the request of the Authority)

Emission Point Reference	Proposed Action (may include reference to additional documentation)
[Indicate Genset number]	
[Indicate Genset number]	
…continue as required	

S2.5 Noise monitoring

Monitoring point [5]	Date sampled	Time Sampled	Operating conditions	Noise measurement	Units	Other comments (if any)

[4] $Total\ Annual\ Load\ (kg) = Volumetric\ flow\ rate\ \left(\frac{Nm^3}{hr}\right) \times Concentration\ \left(\frac{kg}{Nm^3}\right) \times Number\ of\ hours\ in\ a\ year\ (hr)$

[5] 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.

Additional documentation to be submitted:

	Tick (✓)
Approved noise monitoring method statement	
Map showing monitoring points	
Noise monitoring report according to 4142:2014 + A1:2019.[6]	

S2.6 Off-site transfers of waste

Date of transfer	EWC Code[7]	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 [8]	Name of person responsible for ultimate disposal/recovery	Disposal/ Recovery	Details of Recovery (if applicable)

S2.7 Data on Ozone Depleting Substances and Fluorinated Greenhouse Gases

S.1.7.1 Registration of Equipment

Equipment Code	Type of Equipment	Use	Charge (kg) /CO_2 (eq)	Type of Substance
EQ 1				

[6] The detailed noise report should include information about the various monitoring points chosen, an analysis of the results and suggestions for improvement (if applicable).
[7] European Waste Catalogue Code (Reference: Decision 2000/532/EC)
[8] For hazardous waste only. If waste is not hazardous, indicate as “N/A”.

EQ 2				
Continue as required				

S.1.7.2 Maintenance Schedule[9]

Data Submitted for each Scheduled Inspection[10]	**Equipment Code**				
	EQ 1	**EQ 2**	**EQ 3**	**EQ 4**	*Continue as required*
Date of inspection					
All amounts of leakages detected (in Kg/CO_2 equiv[11])					
Actions taken to eliminate such leakages					
Quantity and nature of the substances involved					
Serial number of the personnel involved					
Quantities added [12] and/or recovered (in Kg/ CO_2 equiv).					

[9] This table is required to be filled in for the 1st reporting year. In subsequent years, the table should only include information on any equipment commissioned or decommissioned during the reporting years, where relevant

a. For equipment that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO_2 equivalent or more, but of less than 50 tonnes of CO_2 equivalent: at least every 12 months; or where a leakage detection system is installed, at least every 24 months;

b. For equipment that contains fluorinated greenhouse gases in quantities of 50 tonnes of CO_2 equivalent or more, but of less than 500 tonnes of CO_2 equivalent: at least every 6 months or, where a leakage detection system is installed, at least every 12 months;

c. For equipment that contains fluorinated greenhouse gases in quantities of 500 tonnes of CO_2 equivalent or more: at least every 3 months or, where a leakage detection system is installed, at least every 6 months.

[10] Table to be repeated for every scheduled inspection as per 'footnote i' above

[11] Carbon Dioxide equivalent - For calculation kindly use Annex I and IV of Regulation (EU) No 517/2014

[12] The quantities of added fluorinated greenhouse gases are from recycled or reclaimed stocks, please include the name and address of the recycling or reclamation facility and, where applicable, the certificate number.

S2.7 Testing of bunds, pipes, pumps, valves, flanges, over-ground pipes and tanks

Number of bunds on site for tanks/containers ≤25 m^3 requiring testing in accordance with condition 2.6.3 of the regulatory framework permit	
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 m^3 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 m^3:

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 m^3:

	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)	

S2.8 Incidents and Complaints

S2.8.1 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:	
Total number of non-compliance incidents for current reporting year:	

S2.8.2 Complaints made by the public

Date of complaint	Description of complaint	Actions taken

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

S2.9 Submission of Certifications and Documentation

Documentation	Submission Dates	Tick
Monitoring results in the format provided in Schedule 1, Part 4 above	2024	☐
Accreditation certificate of laboratory that carried out the boiler emission monitoring AND/OR a valid instrument calibration certificate	2024	☐
Monthly gas oil usage records	On a monthly basis	☐

S2.10 Declaration

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.

I declare that, to the best of my knowledge, all the above information is correct and substantiated.

_____	_____	_____
Name *(in block letters)*	**ID Card Number**	**On behalf of / in my own name** *(in block letters)*

Schedule 3

List of Combustion Plants

Emission point references	Source[Serial Number]	GPS y- coordinates	GPS x-coordinates
GS1	DD800276	3965612	459943
GS2	DD800331	3965609	459938
GS3	DD800304	3965593	459957
GS4	DD800333	3965589	459952
GS5	DD800332	3965631	459949
GS6	DD800348	3965627	459952
GS7	DD800299	3965645	459969
GS8	DD800335	3965641	459972
GS9	DD800312	3965622	459955
GS10	DD800301	3965618	459959
GS11	DD800343	3965636	459975
GS12	DD800322	3965632	459978
GS13	DD800277	3965614	459962
GS14	DD800346	3965609	459965
GS15	1HZ04103	3965628	459982
GS16	1HZ03965	3965623	459985
GS17	DD800114	3965605	459968
GS18	1HZ03980	3965600	459971
GS19	1HZ03975	3965619	459988
GS20	1HZ03974	3965614	459991
GS21	DD800150	3965596	459974
GS22	DD800153	3965591	459977
GS23	DD800119	3965610	459995
GS24	DD800116	3965605	459998
GS25	DD800128	3965501	459909
GS26	DD800130	3965504	459913
GS27	DD800126	3965481	459923
GS28	DD800117	3965485	459927
GS29	DD800106	3965507	459917
GS30	1HZ04142	3965511	459922
GS31	1HZ04144	3965488	459932
GS32	DD800311	3965491	459936
GS33	DD800120	3965514	459926
GS34	DD800108	3965517	459931
GS35	DD800328	3965494	459940
GS36	DD800109	3965497	459945
GS37	DD800103	3965520	459935
GS38	DD800101	3965523	459939
GS39	DD800113	3965500	459949
GS40	1HZ04141	3965504	459954
GS41	DD800115	3965526	459944
GS42	1HZ04145	3965530	459948
GS43	1HZ04143	3965507	459958
GS44	DD800276	3965510	459962
GS45	DD800331	3965533	459953
GS46	DD800304	3965536	459957
GS47	DD800333	3965513	459967
GS48	DD800332	3965516	459971

Schedule 4

Notification of operation Temporary Emergency Plant

This notify shall be submitted to the Competent Authority within 24 hours and submit the requested information within 7 working days from notification. The requested information shall be supplied in electronic format.

Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Parameter	**Units**
Electricity exported	MWh
Generator operation during commissioning	Total hours for the site (hours) Total hours per generator (hours) Total number of runs per generator (quantity and dates) Number of minutes per run (minutes) Number of generators operating
Generator operation for testing and maintenance	Total hours for the site (hours) Total hours per generator (hours) Total number of runs per generator (quantity and dates) Number of minutes per run (minutes) Number of generators operating
Generator operation during emergency scenario	Total hours for the site (hours) Total hours per generator (hours) Total number of runs per generator (quantity and dates) Number of minutes per run (minutes) Number of generators operating
Generator operational hours	Cumulative number of Operating hours in test/emergency condition to date per genset

Schedule 5

Minimum requirements for an Environment Management System (EMS)

An EMS may include, as a minimum, the following elements:

1. Management and Reporting Structure

This shall in particular include the name of the person who will be responsible for managing environmental aspects of the installation. Relevant qualifications and experience shall be listed, together with contact details (including a mobile number for emergency purposes).

2. Environmental Objectives and Targets

The Permit Holder shall maintain a Schedule of Environmental Objectives and Targets. This shall include a review of all operations and processes, a commitment by the Permit Holder to continuous improvement, and identification of priority areas where improvement to the operations is necessary and practicable, such as:

The schedule shall, as a minimum, provide for a review of all operations and processes, including an evaluation of practicable options, for energy and resource efficiency, the use of cleaner technology, cleaner production, production related carbon footprint, and the prevention, reduction and minimisation of waste and shall include waste reduction targets

Targets shall be set for priority areas identified (e.g. minimising waste generation by __% annually). The schedule shall be reviewed annually and amendments thereto notified to the Authority for agreement as part of the Annual Environmental Report (AER)

3. Environmental Management Programme (EMP)

This shall include a time schedule for achieving the Environmental Objectives and Targets prepared under point 2 above. The schedule shall include timeframes for the achievement of set targets and shall address a five-year period as a minimum. The EMP shall include:

a. designation of responsibility for targets;

b. the means by which they may be achieved;

c. the time within which they may be achieved.

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Authority.

4. Documentation

A system of documentation shall be established to ensure that records are kept of the priority areas chosen according to point 2. In addition, the Permit Holder shall issue a copy of the environmental permit to all relevant personnel whose duties relate to any condition of the permit.

5. Corrective Action

The Permit Holder shall establish procedures to ensure that corrective action is taken shall the specified requirements of the environmental permit not be fulfilled. The responsibility and authority for initiating further investigation and corrective action in the event of a nonconformity with the environmental permit shall be defined.

6. Awareness and Training

The Permit Holder shall establish and maintain procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have an effect on the environment. Appropriate records of training shall be maintained.

7. Maintenance Programme

The Permit Holder shall establish and maintain a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme.

The Permit Holder shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel.

8. Efficient Process Control

The Permit Holder shall maintain a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these

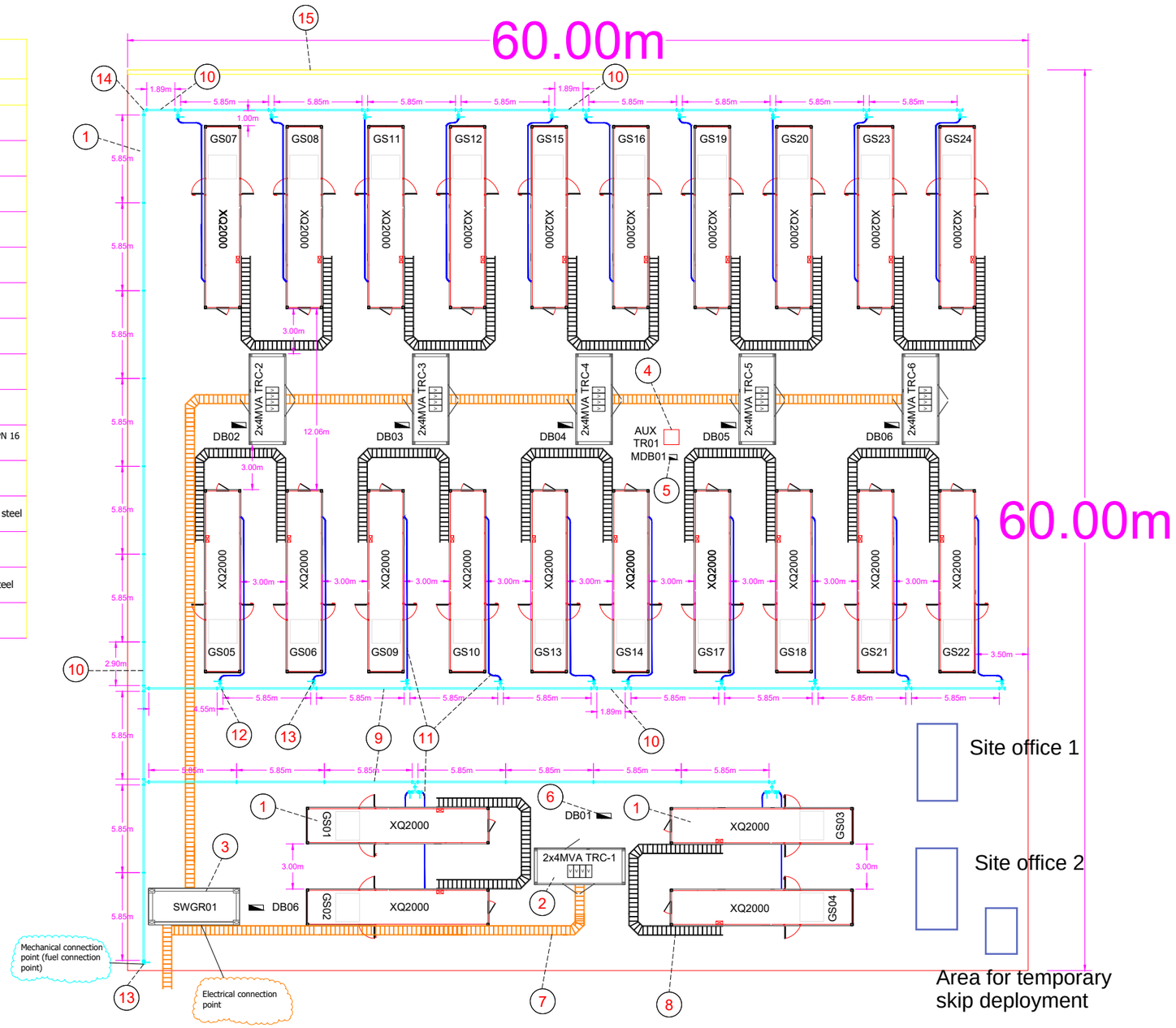
parameters. Abnormal process operating conditions shall be documented, and analysed to identify any necessary corrective action.

END OF PERMIT

SITE 1

LEGEND

Nm	DESCRIPTION
1	GS01-GS24 - Diesel Generator Set XQ2000
2	TRC1-TRC7 - Transformer Container Set 2x4MVA, 0.4/33kV, 50Hz + MV RMU
3	SWGR01 - MV Switchgear, 33kV, 2500A
4	AUXTR01 - Auxiliary Transformer 0.4/0.4 kV
5	MDB01 - LV AUX Main Distribution Board
6	DB01-DB06 - LV AUX Distribution Boards
7	MV Cable Ladders
8	LV Cable Ladders
9	Fuel Pipe 3" x 5,85m with DN80 PN 16 flanges - Carbon steel
10	Fuel Pipe 3" x VARIABLE lengths with DN80 PN 16 flanges - Flexible (Rubber) or Carbon steel
11	Flexible armed xx" fuel hoses 15m
12	3" to 3" T Piece with PN 16 flanges - Carbon steel
13	3" Ball Valve with PN 16 flanges
14	3" 90° elbow with PN 16 flanges - Carbon steel
15	Barrier (landslide protection)



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NOTE:

SITE 1 - 30MW@33kV,50Hz
DIESEL GENERATOR SETS:
- 24 x XQ2000; 0.4kV; 50Hz; 1.4MW; 0.8PF

TRANSFORMER CONTAINERS with MV RMU:
- 6 x (2 x 4 MVA);

connected and tap changer adjusted for 33kV@50Hz operating voltage.
SWITCHGEAR CONTAINERS:
- 1 x (2500A, 36kV used 33kV@50Hz)

SITE 2 - 30MW@33kV,50Hz
DIESEL GENERATOR SETS:
- 24 x XQ2000; 0.4kV; 50Hz; 1.4MW; 0.8PF

TRANSFORMER CONTAINERS with MV RMU:
- 6 x (2 x 4 MVA);

connected and tap changer adjusted for 33kV@50Hz operating voltage.
SWITCHGEAR CONTAINERS:
- 1 x (2500A, 36kV used 33kV@50Hz)

REVISION HISTORY

REV.	DESCRIPTION	DATE
A	Preliminary	09-02-2024
B	Respose on ENEMALTA letter dated 25-03-2024	27-03-2024
C	Mobilization	17-04-2024
D		
E		

DRAWN BY: Raju Jacob	DATE: 09-02-2024	PLOT SCALE: 1:1
CHECKED BY: Francisco Mateos	DATE: 09-02-2024	DWG. SCALE: NTS
APPROVED BY: Dragan Milic	DATE: 09-02-2024	PAPER SIZE: A3

PROJECT LOCATION: Delimara Power Station, Malta
DRAWING TITLE: 60 MW/33 kV @50Hz - SITE 1/2
DRAWING TYPE: SLO
CLIENT'S NAME: ENEMALTA PLC

DRAWING NUMBER:	SHEET	REVISION
OP00867-SLO	1 OF 2	C

SITE 2

LEGEND

Nm	DESCRIPTION
1	GS25-GS48 - Diesel Generator Set XQ2000
2	TRC7-TRC12 - Transformer Container Set 2x4MVA, 0.4/33kV, 50Hz + MV RMU
3	SWGR02 - MV Switchgear, 33kV, 2500A
4	AUXTR02 - Auxiliary Transformer 0.4/0.4 kV
5	MDB02 - LV AUX Main Distribution Board
6	DB07-DB12 - LV AUX Distribution Boards
7	MV Cable Ladders
8	LV Cable Ladders
9	Fuel Pipe 3" x 5,85m with DN80 PN 16 flanges - Carbon steel
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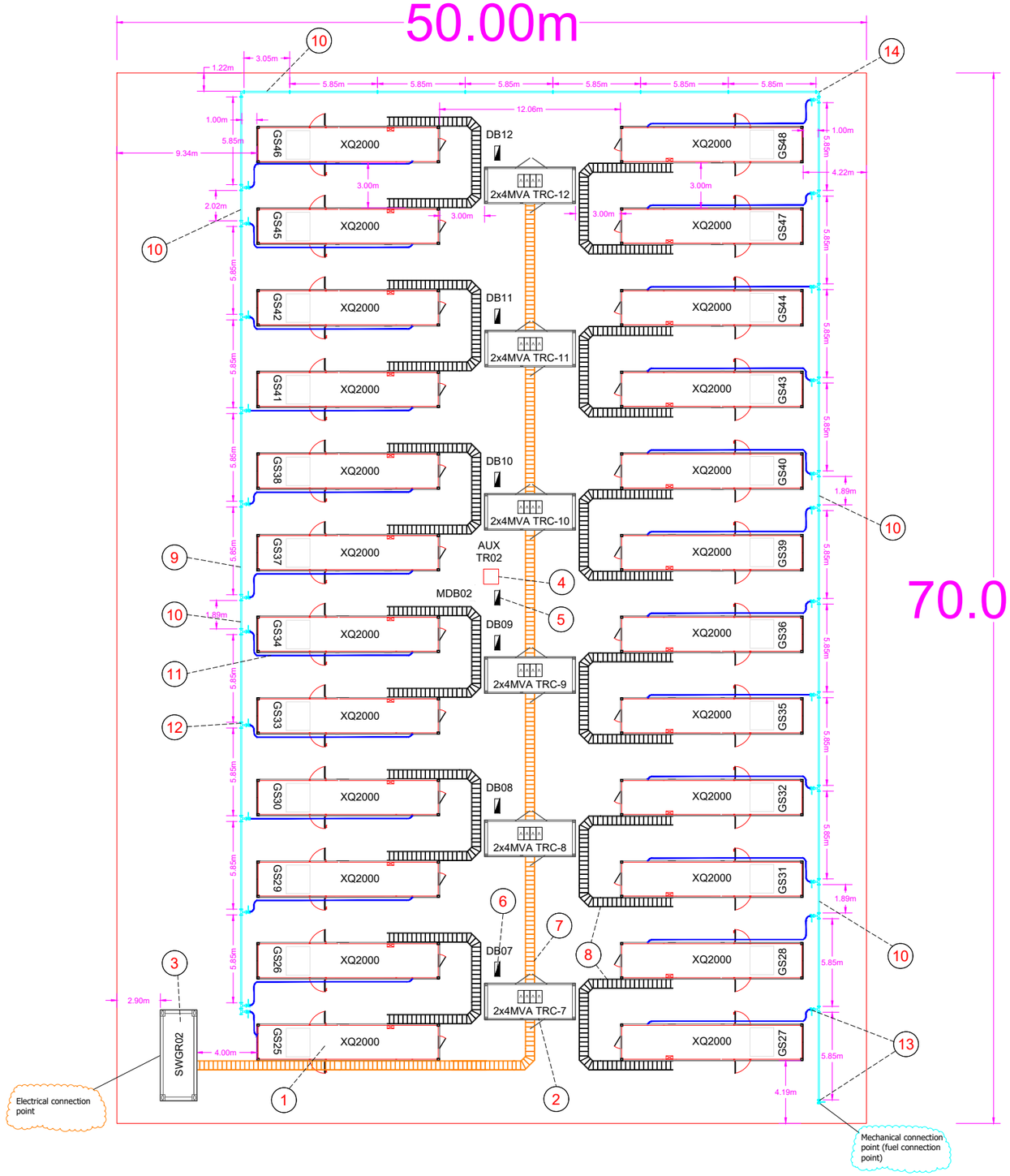

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DRAWN BY: Raju Jacob	DATE: 09-02-2024	PLOT SCALE: 1:1
CHECKED BY: Francisco Mateos	DATE: 09-02-2024	DWG. SCALE: NTS
APPROVED BY: Dragan Milic	DATE: 09-02-2024	PAPER SIZE: A3

PROJECT LOCATION: Delimara Power Station, Malta
DRAWING TITLE: 60 MW/33 kV @50Hz - SITE 2/2
DRAWING TYPE: SLO
CLIENT'S NAME: ENEMALTA PLC

DRAWING NUMBER:	SHEET	REVISION
OP00867-SLO	2 OF 2	C

March 4, 2024

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To whom it may concern

4th of March 2024

1 Introduction

Acoustical Consultancy has been asked to review literature provided to check compliance with tender document GN/DPS/T/4036/PC3/2023 (10154) with the title of 'Lease and operation of a 60MW power plant', dated the 24th of January 2024. Specifically, in satisfying clause 3.1.3.2 Noise Emissions Regulations, both for level requirements and Item 4 of the Literature List (Note 2) of said tender document.

Clause 3.1.3.2 of the tender document states: *The offered gensets shall have a noise emission limit of 81dB(A) at 7.0m from genset enclosure.* Furthermore, the Literature List for said clause asks for a noise map of the installation. The following sections address both criteria.

2 Sound pressure level statement.

The noise data available from the manufacturer is provided in *Test Report No. EPD2012-004* dated the 3rd August 2012. The information is based on a series of measurements to fulfill the following criteria:

- ISO 8528-10:1998 1m derive sound power data from 15 measurements.
- SAE J1074:FEB2000 providing sound pressure measurements at 7 meters.
- Directive 2000/14/EC, Part B, Item 45. The applicable basic noise emission standard is EN ISO 3744:1995 with a measurement radius of 16 meters to derive sound power data from sound pressure measurements.

Note that both 60Hz and 50 Hz generators are combined in a single report (in the case of the 60Hz versions the RPM would be of 1800).

The following information is extracted for the models in use on the proposed site:

- Table 14
  - Sound Pressure Level data at 7 m
  - Operating condition: 100% Standby
  - Power Output: 1800 kVA (400 VAC)
  - Speed / Freq.: 1500 rpm / 50 Hz
  - L_{PA} 80 dBA
- Table 15
  - Sound Pressure Level data at 7 m
  - Operating condition: 100% Prime
  - Power Output: 1600 kVA (400 VAC)
  - Speed / Freq.: 1500 rpm / 50 Hz
  - L_{PA} 80 dBA
- Table 16
  - Sound Pressure Level data at 7 m
  - Operating condition: 100% Continuous
  - Power Output: 1400 kVA (400 VAC)
  - Speed / Freq.: 1500 rpm / 50 Hz
  - L_{PA} 80 dBA

All three use cases (or power configurations) declare a level of 80dBA at 7 meters.

3 Noise map of operating site.

A series of simulations have been conducted of the proposed units installed at the proposed location as seen in Figure 3-1.

Figure 3-1 Equipment layout on site.

The contained gensets are off the proposed ground level by 0.5 meters of the minimum ground level at present. The units have been simulated as full sources i.e. all panels are emission points and not point sources due to their physical size in relation to the environment. Ground absorption is set for the area using both CORINNE 2000 and other areas from satellite imagery.

The source sound power used is as in Table 3-1. With the 2MW versions running at 1400 kVA and the 1.6MW version running at 1200 kVA. Spare units are not considered running and not on standby.

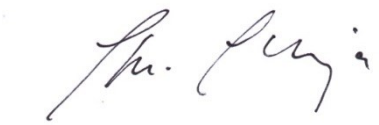
Table 3-1 Sound power data from Table 40 of Test Report No. EPD2012-004.

Supplementary Information - Sound Power Level											ISO 8528-10 (15 pts. per Figure 3)
Power kVA	**Load %**	**Rating**	**Overall dB(A)**	**OBCF 63 Hz dB**	**OBCF 125 Hz dB**	**OBCF 250 Hz dB**	**OBCF 500 Hz dB**	**OBCF 1k Hz dB**	**OBCF 2k Hz dB**	**OBCF 4k Hz dB**	**OBCF 8k Hz dB**
1800	100	Stdby	110	119	119	116	108	104	100	95	95
1600	100	Prime	109	119	119	115	107	103	100	95	97
1400	100	Cont.	109	118	118	115	107	103	100	95	99
1200	75	Prime	109	118	119	115	107	103	100	95	100
800	50	Prime	109	118	119	115	107	104	100	95	91
400	25	Prime	110	118	118	115	108	105	100	96	88
0	0		108	118	117	113	107	102	99	94	88

The transformers are passive and hence placed for their physicality and not as noise sources. The propagation model is based on ISO 1996-2:2017 Acoustics - *Description, measurement, and assessment of environmental noise Part 2: Determination of sound pressure levels*, thereby all the levels are the worst-case scenario with the ISO assumption of the wind or most favourable propagation conditions exist between each source and receiver. There are over 215 thousand receivers in these models as they are based on a 5 x 5-meter grid with height off the ground of 2 meters. The results shown are based on a sixteen-hour day; between 07:00 and 23:00.

Results presented are for these scenarios:

- The proposed units fully operating to provide the 60MW generation over a 24-hour period,
- The proposed units operating to provide the 60MW generation over two 2-hour periods (07:00 to 10:00 and 17:00 to 20:00),
- The proposed units operating to provide the 20MW generation over a 24-hour period with units at old Phase 1 location.



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Christian Calleja Dip.Ind.Elec. AMIOA

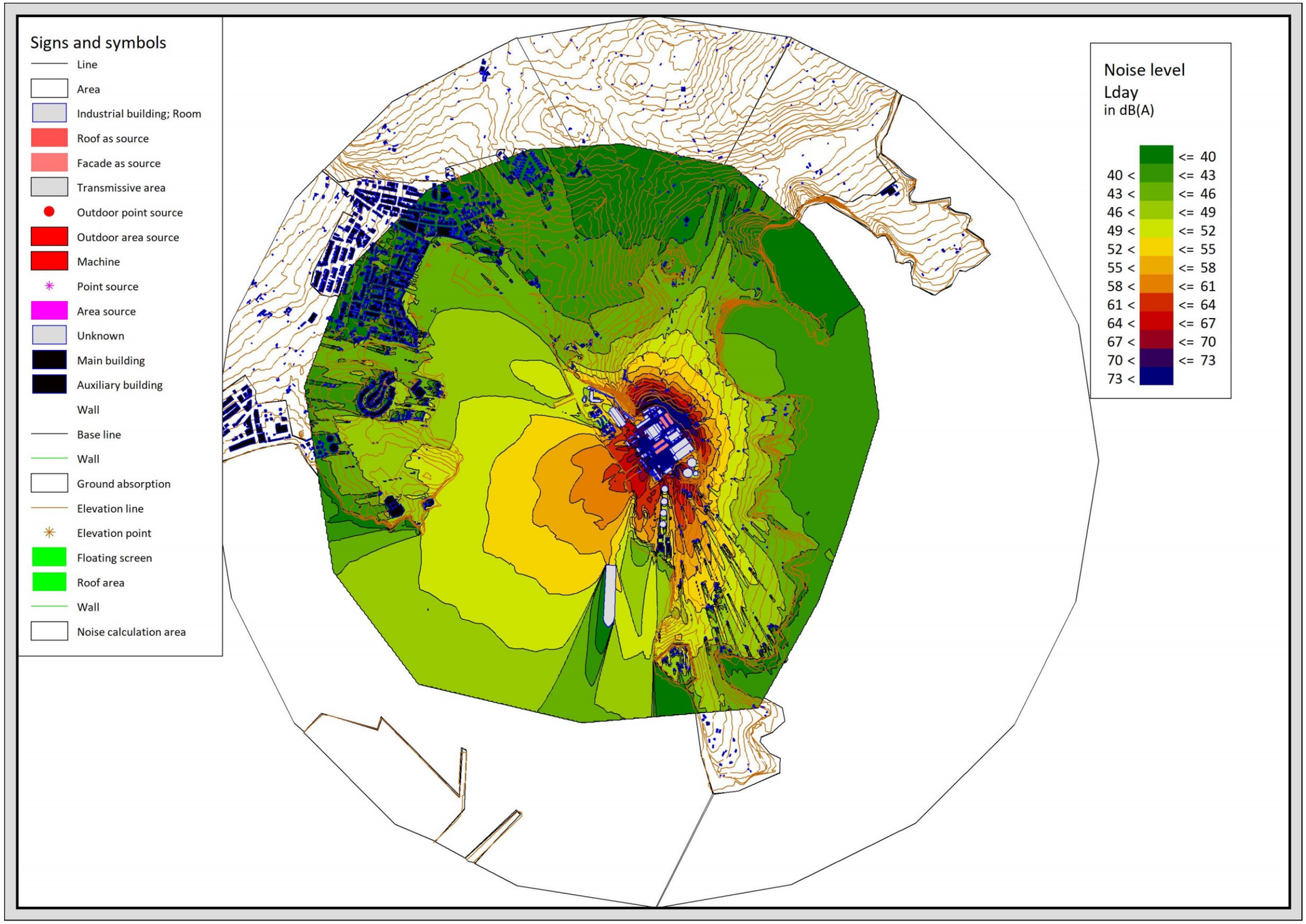


Figure 3-2 Full 60 MW operation continuously over a 24-hour period, L_{day} (07:00-23:00)

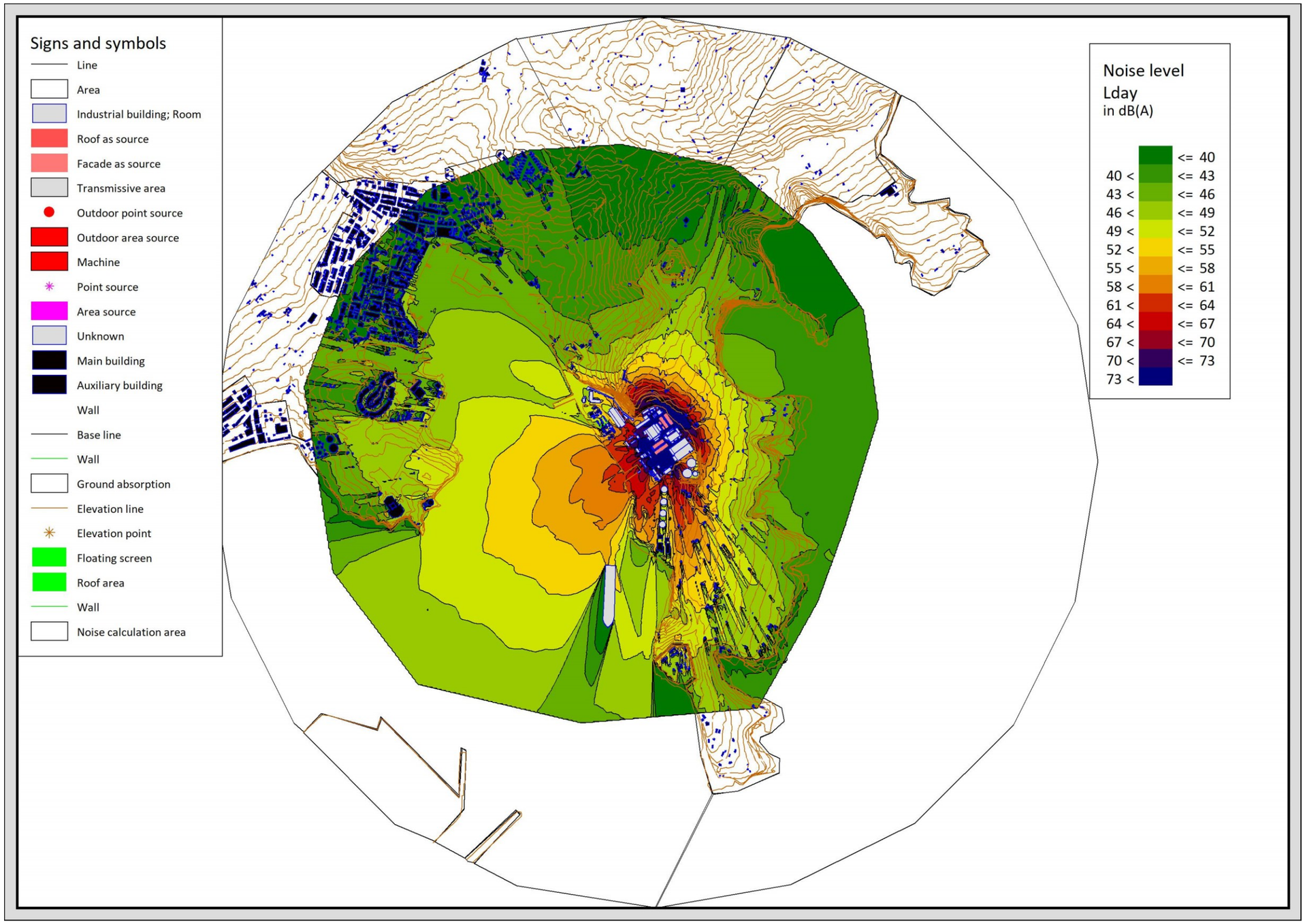


Figure 3-3 Full 60 MW operation continuously over a 6-hour period; 07:00 to 10:00; 17:00 to 20:00, Lday (07:00-23:00)

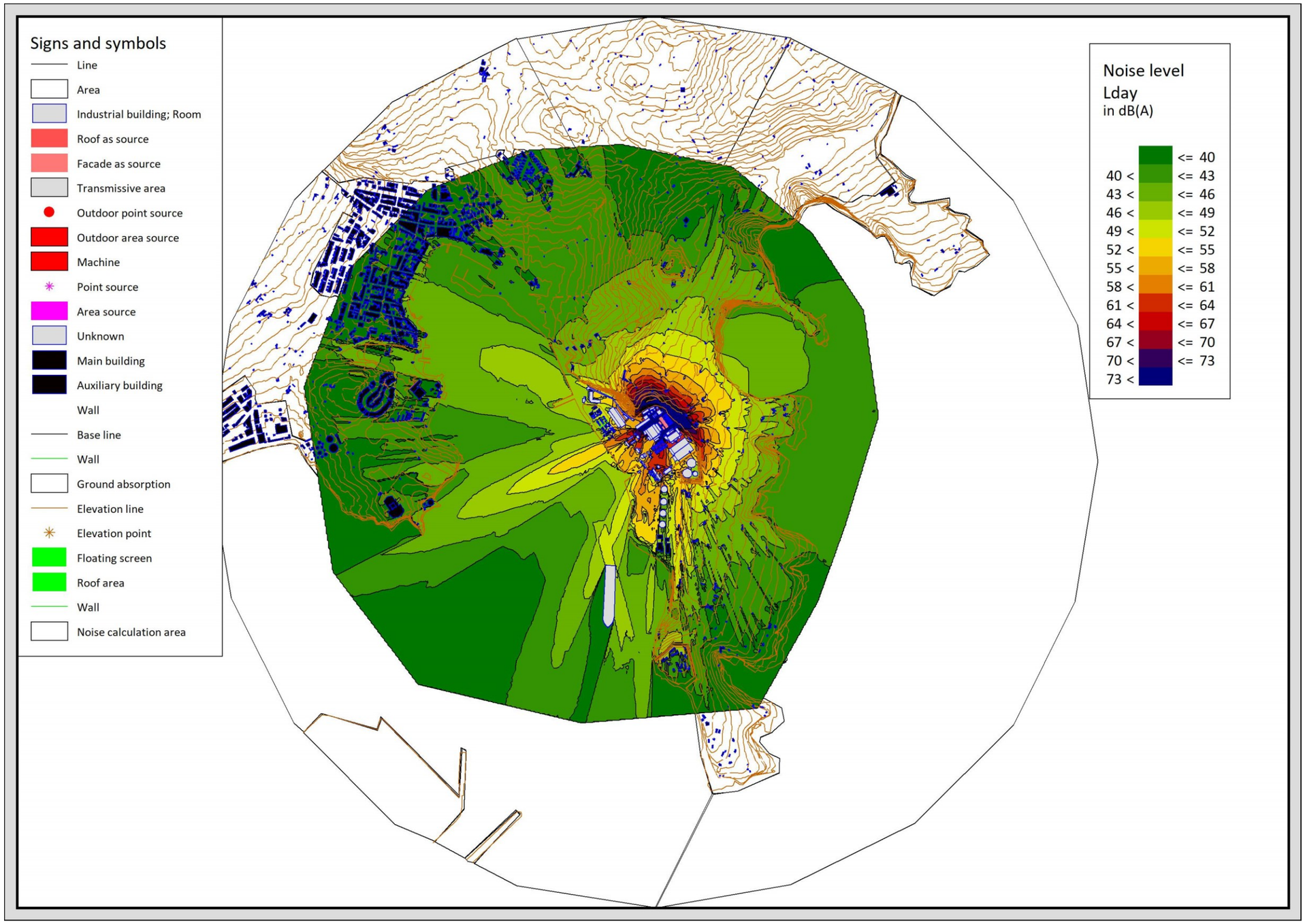


Figure 3-4 20 MW operation continuously over a 24-hour period at Phase 1 location, Lday (07:00-23:00)

Attachment 41: Techniques to Prevent and Reduce Emissions

44. Section 8.5 of the IPPC application Form C requires a description of the techniques that are being proposed to prevent and reduce air, odour and noise emission production on site.

45. The proposed emergency power plant consists of 48 containerised generator plant (XQ 2000 IPP – see Attachment 2 for specifications), which shall be installed at the Delimara Power Station in areas identified as Site 1 and Site 2. The Power Plant shall be connected to the Enemalta electricity grid via two 33kV connections. Scope for emissions is related to:

    - For emissions to air and noise: operation of the plant
    - Odour: handling of fuel

46. The plant shall be fuelled by diesel (gasoil EN590), which will be made available by Enemalta as required by the demand for dispatch of the plant for the generation of electricity. The tender stipulates that Enemalta '*does not envisage that this Plant shall be dispatched for more than 500 hours per year*'.

47. **Odour**: management of this issue is related to the handling of the diesel fuel. The latter:

    - Will be delivered using certified pipework equivalent that those already used on site (where odour is clearly not an issue);
    - Refuelling will utilise automatic shut-off valves and high-level alarms;
    - storage is in containerised bunded tanks integrated with the generation plant; and
    - fuel will not be exposed to air at any time.

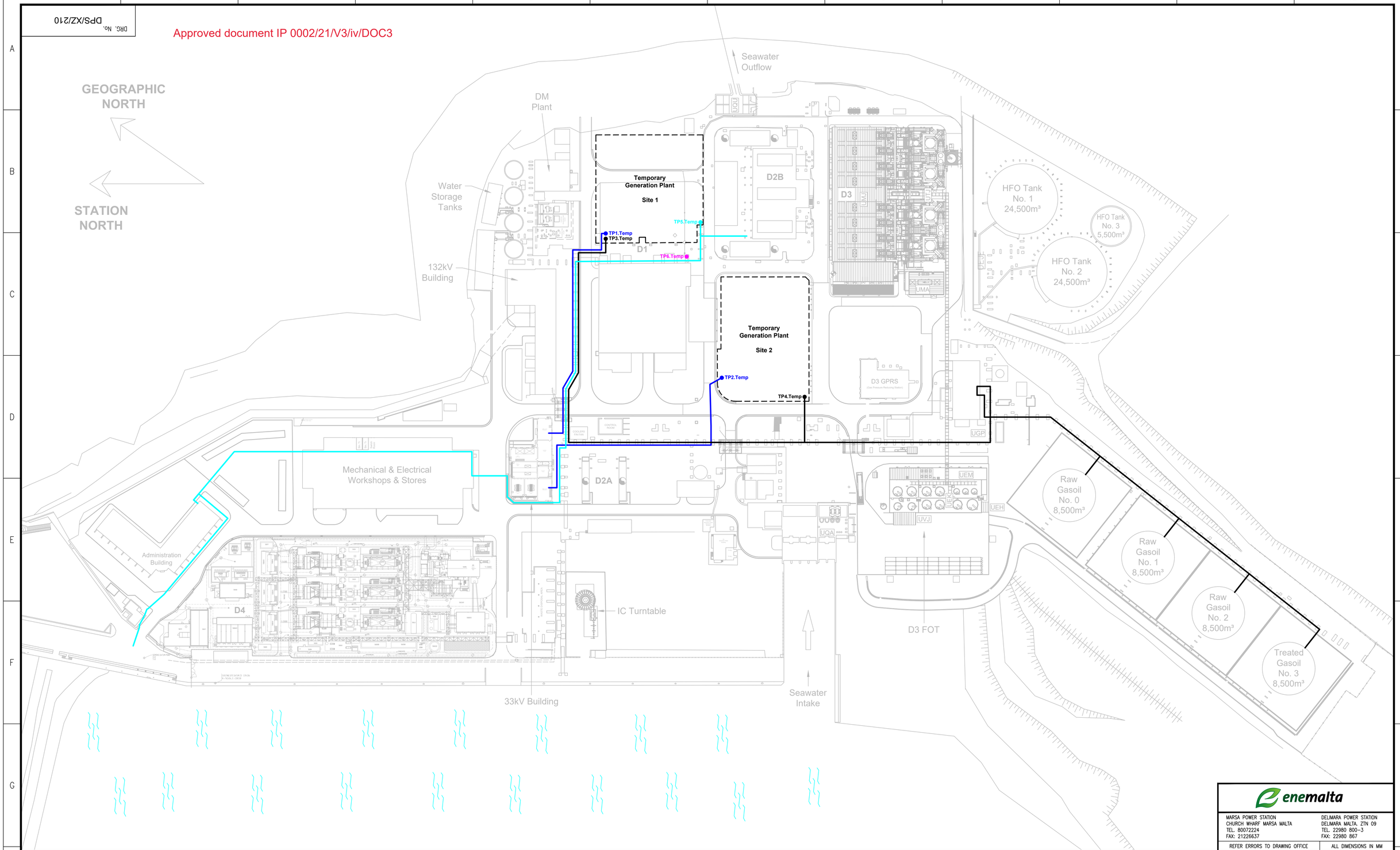
48. **Noise abatement:** the main abatement feature would be that the generator plant is containerised, and exhaust vent provided with silencers, providing immediate abatement. The specifications of the plant, and the noise modelling carried out by Acousti-Cal (Attachment 40), which indicate that this issue has been studied for various operational scenarios, satisfying tender requirements that '*gensets shall have a noise emission limit of 81dB(A) at 7.0m from genset enclosure*'. These also indicate that noise emissions towards sensitive receptors (as identified in the approved monitoring programme) are limited.

49. **Abatement of emissions to air**: as is the case with Medium Combustion Plant, the gensets are not equipped with abatement systems, and optimisation of emissions results from:

- A plant layout which allows flexible deployment of gensets, to optimise power output, thereby limiting fuel consumption and consequent emissions;
- Maintenance of plant to maintain optimal performance, including calibration of fuel burn through the regular certification process.

DRG. No. DPS/XZ/210

Approved document IP 0002/21/V3/iv/DOC3



TP1.Temp - 33kV
TP2.Temp - 33kV
TP3.Temp - Diesel Oil
TP4.Temp - Diesel Oil
TP5.Temp - Potable Water
TP6.Temp - 415V

HV Cable Routes
Diesel Oil
Potable Water

REV	DATE	BY	ALTERATION	CHK	APP

enemalta

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CHURCH WHARF MARSA MALTA
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FAX: 21226637

DELIMARA POWER STATION
DELIMARA MALTA. ZTN 09
TEL. 22980 800-3
FAX: 22980 867

REFER ERRORS TO DRAWING OFFICE | ALL DIMENSIONS IN MM

TITLE

TIE-IN POINTS FOR NEW TEMPORARY GENERATION PLANT AT DELIMARA POWER STATION

SCALE	N.T.S.	ISSUE	1		REV.
DRAWN BY	G. Mifsud	DATE	14/5/2024		
CHECKED BY	P. Spiteri	DRG. No.	DPS/XZ/210		
APPROVED BY	Ing. J. Farrugia				

SIZE A1

SITE 1

LEGEND

Nm	DESCRIPTION
1	GS01-GS24 - Diesel Generator Set XQ2000
2	TRC1-TRC7 - Transformer Container Set 2x4MVA, 0.4/33kV, 50Hz + MV RMU
3	SWGR01 - MV Switchgear, 33kV, 2500A
4	AUXTR01 - Auxiliary Transformer 0.4/0.4 kV
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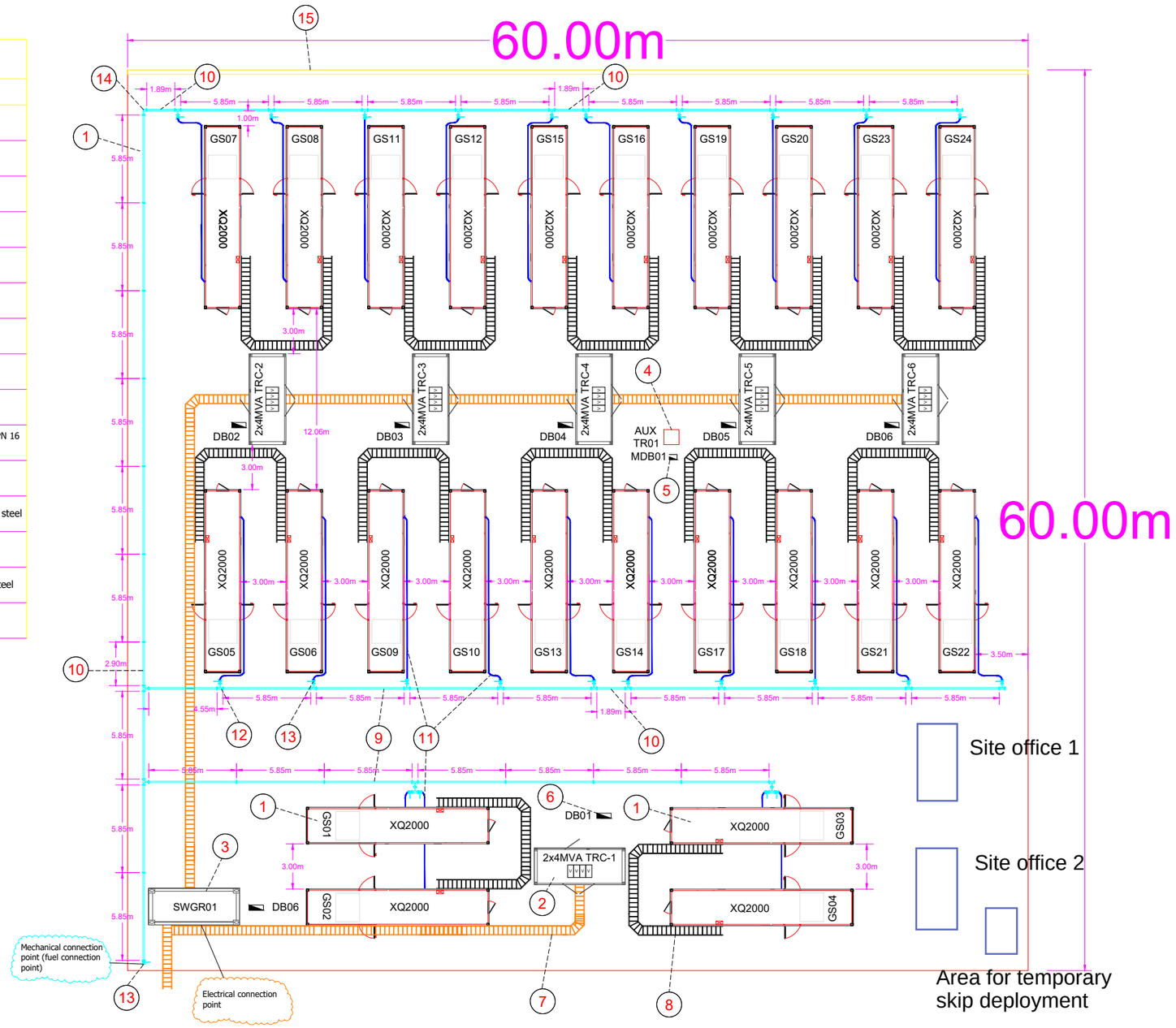

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TRANSFORMER CONTAINERS with MV RMU:
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connected and tap changer adjusted for 33kV@50Hz operating voltage.
SWITCHGEAR CONTAINERS:
- 1 x (2500A, 36kV used 33kV@50Hz)

SITE 2 - 30MW@33kV,50Hz
DIESEL GENERATOR SETS:
- 24 x XQ2000; 0.4kV; 50Hz; 1.4MW; 0.8PF

TRANSFORMER CONTAINERS with MV RMU:
- 6 x (2 x 4 MVA);

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SWITCHGEAR CONTAINERS:
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APPROVED BY: Dragan Milic	DATE: 09-02-2024	PAPER SIZE: A3

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DRAWING TITLE: 60 MW/33 kV @50Hz - SITE 1/2
DRAWING TYPE: SLO
CLIENT'S NAME: ENEMALTA PLC

DRAWING NUMBER:	SHEET	REVISION
OP00867-SLO	1 OF 2	C

SITE 2

LEGEND

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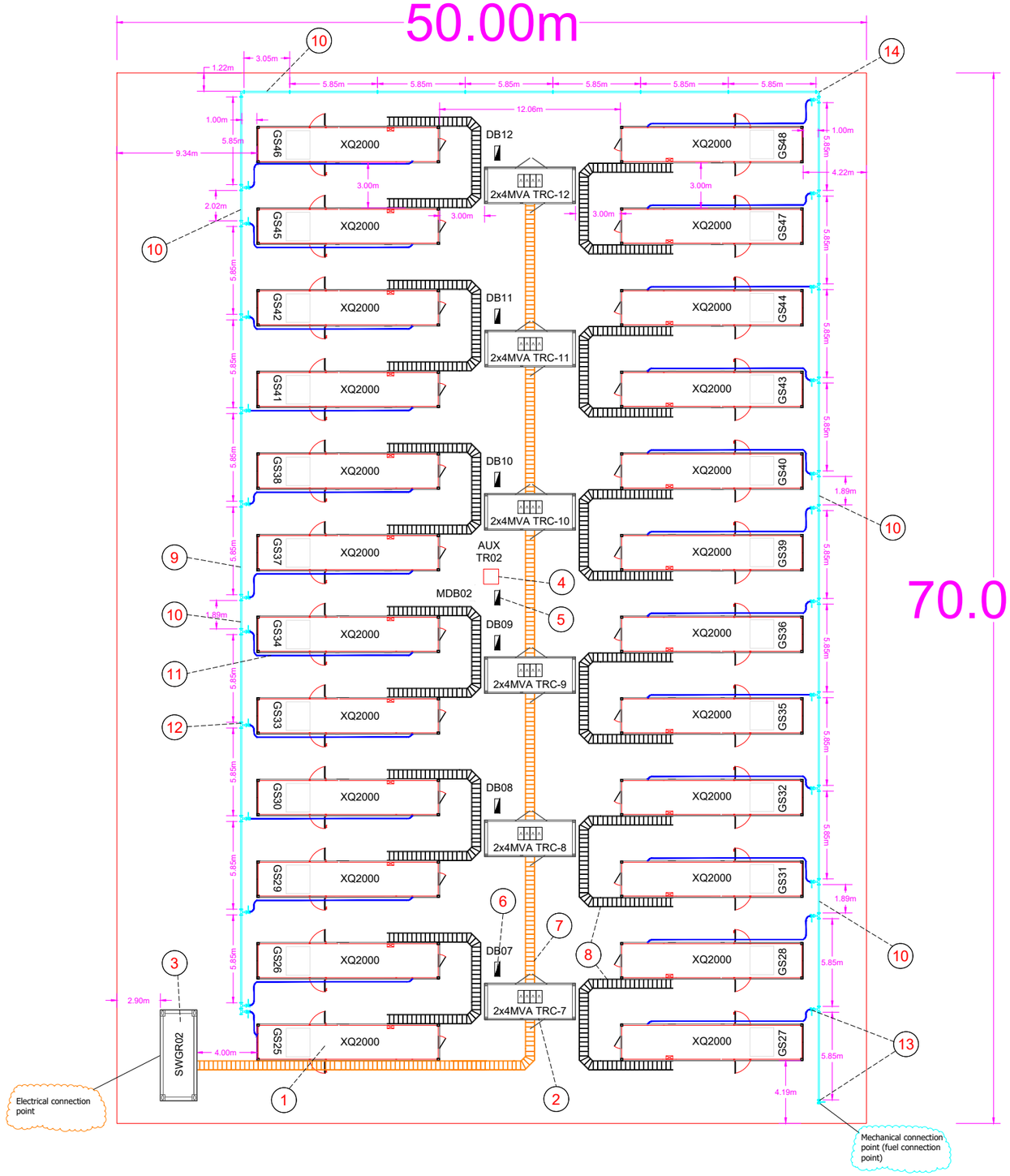

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APPROVED BY: Dragan Milic	DATE: 09-02-2024	PAPER SIZE: A3

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DRAWING TITLE: 60 MW/33 kV @50Hz - SITE 2/2
DRAWING TYPE: SLO
CLIENT'S NAME: ENEMALTA PLC

DRAWING NUMBER:	SHEET	REVISION
OP00867-SLO	2 OF 2	C

March 4, 2024

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To whom it may concern

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- ISO 8528-10:1998 1m derive sound power data from 15 measurements.
- SAE J1074:FEB2000 providing sound pressure measurements at 7 meters.
- Directive 2000/14/EC, Part B, Item 45. The applicable basic noise emission standard is EN ISO 3744:1995 with a measurement radius of 16 meters to derive sound power data from sound pressure measurements.

Note that both 60Hz and 50 Hz generators are combined in a single report (in the case of the 60Hz versions the RPM would be of 1800).

The following information is extracted for the models in use on the proposed site:

- Table 14
  - Sound Pressure Level data at 7 m
  - Operating condition: 100% Standby
  - Power Output: 1800 kVA (400 VAC)
  - Speed / Freq.: 1500 rpm / 50 Hz
  - L_{PA} 80 dBA
- Table 15
  - Sound Pressure Level data at 7 m
  - Operating condition: 100% Prime
  - Power Output: 1600 kVA (400 VAC)
  - Speed / Freq.: 1500 rpm / 50 Hz
  - L_{PA} 80 dBA
- Table 16
  - Sound Pressure Level data at 7 m
  - Operating condition: 100% Continuous
  - Power Output: 1400 kVA (400 VAC)
  - Speed / Freq.: 1500 rpm / 50 Hz
  - L_{PA} 80 dBA

All three use cases (or power configurations) declare a level of 80dBA at 7 meters.

3 Noise map of operating site.

A series of simulations have been conducted of the proposed units installed at the proposed location as seen in Figure 3-1.

Figure 3-1 Equipment layout on site.

The contained gensets are off the proposed ground level by 0.5 meters of the minimum ground level at present. The units have been simulated as full sources i.e. all panels are emission points and not point sources due to their physical size in relation to the environment. Ground absorption is set for the area using both CORINNE 2000 and other areas from satellite imagery.

The source sound power used is as in Table 3-1. With the 2MW versions running at 1400 kVA and the 1.6MW version running at 1200 kVA. Spare units are not considered running and not on standby.

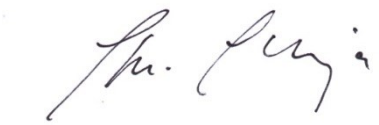
Table 3-1 Sound power data from Table 40 of Test Report No. EPD2012-004.

Supplementary Information - Sound Power Level											ISO 8528-10 (15 pts. per Figure 3)
Power kVA	**Load %**	**Rating**	**Overall dB(A)**	**OBCF 63 Hz dB**	**OBCF 125 Hz dB**	**OBCF 250 Hz dB**	**OBCF 500 Hz dB**	**OBCF 1k Hz dB**	**OBCF 2k Hz dB**	**OBCF 4k Hz dB**	**OBCF 8k Hz dB**
1800	100	Stdby	110	119	119	116	108	104	100	95	95
1600	100	Prime	109	119	119	115	107	103	100	95	97
1400	100	Cont.	109	118	118	115	107	103	100	95	99
1200	75	Prime	109	118	119	115	107	103	100	95	100
800	50	Prime	109	118	119	115	107	104	100	95	91
400	25	Prime	110	118	118	115	108	105	100	96	88
0	0		108	118	117	113	107	102	99	94	88

The transformers are passive and hence placed for their physicality and not as noise sources. The propagation model is based on ISO 1996-2:2017 Acoustics - *Description, measurement, and assessment of environmental noise Part 2: Determination of sound pressure levels*, thereby all the levels are the worst-case scenario with the ISO assumption of the wind or most favourable propagation conditions exist between each source and receiver. There are over 215 thousand receivers in these models as they are based on a 5 x 5-meter grid with height off the ground of 2 meters. The results shown are based on a sixteen-hour day; between 07:00 and 23:00.

Results presented are for these scenarios:

- The proposed units fully operating to provide the 60MW generation over a 24-hour period,
- The proposed units operating to provide the 60MW generation over two 2-hour periods (07:00 to 10:00 and 17:00 to 20:00),
- The proposed units operating to provide the 20MW generation over a 24-hour period with units at old Phase 1 location.



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Christian Calleja Dip.Ind.Elec. AMIOA

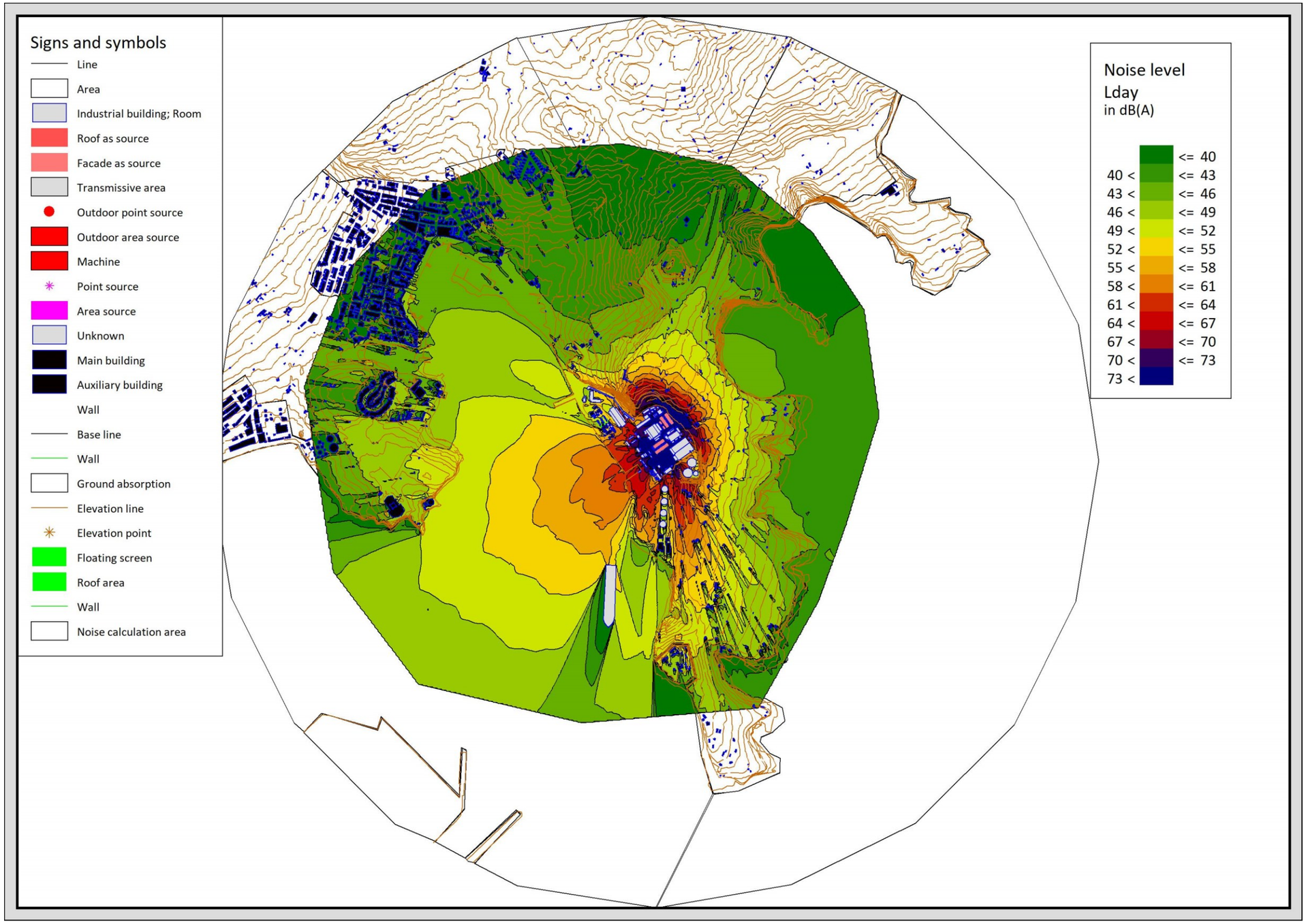

Figure 3-2 Full 60 MW operation continuously over a 24-hour period, L_{day} (07:00-23:00)

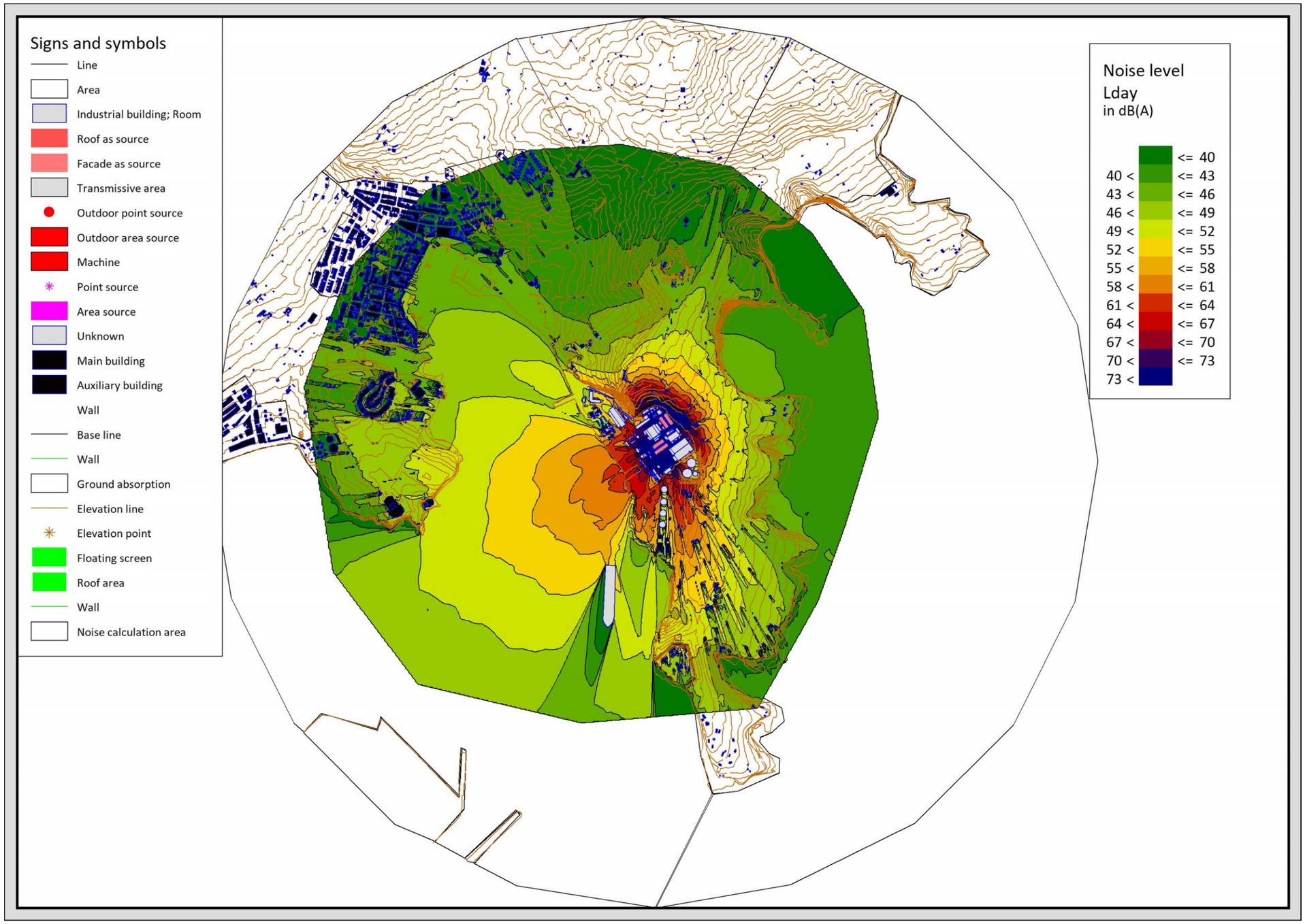

Figure 3-3 Full 60 MW operation continuously over a 6-hour period; 07:00 to 10:00; 17:00 to 20:00, Lday (07:00-23:00)

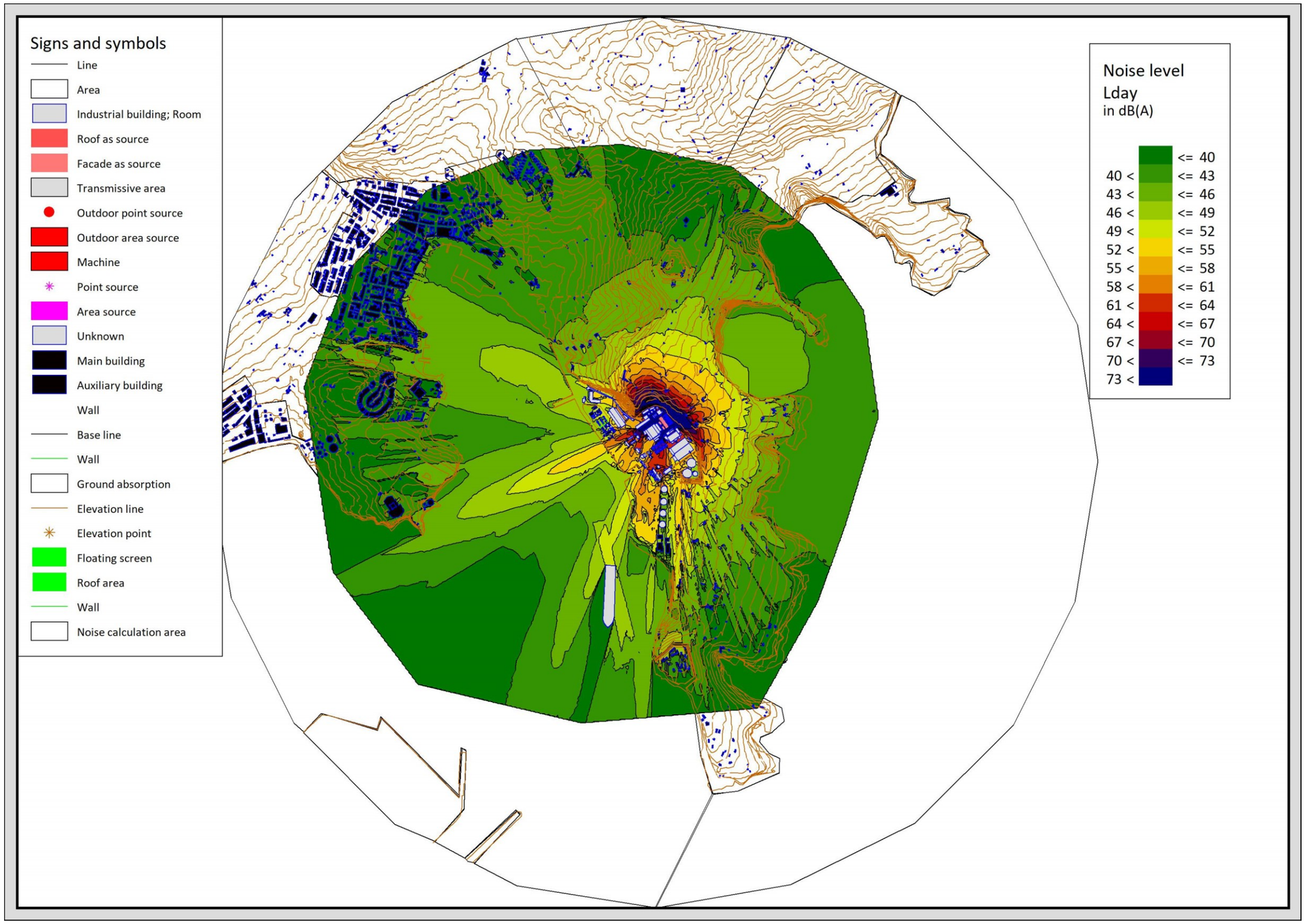

Figure 3-4 20 MW operation continuously over a 24-hour period at Phase 1 location, Lday (07:00-23:00)

Attachment 41: Techniques to Prevent and Reduce Emissions

44. Section 8.5 of the IPPC application Form C requires a description of the techniques that are being proposed to prevent and reduce air, odour and noise emission production on site.

45. The proposed emergency power plant consists of 48 containerised generator plant (XQ 2000 IPP – see Attachment 2 for specifications), which shall be installed at the Delimara Power Station in areas identified as Site 1 and Site 2. The Power Plant shall be connected to the Enemalta electricity grid via two 33kV connections. Scope for emissions is related to:

    - For emissions to air and noise: operation of the plant
    - Odour: handling of fuel

46. The plant shall be fuelled by diesel (gasoil EN590), which will be made available by Enemalta as required by the demand for dispatch of the plant for the generation of electricity. The tender stipulates that Enemalta '*does not envisage that this Plant shall be dispatched for more than 500 hours per year*'.

47. **Odour**: management of this issue is related to the handling of the diesel fuel. The latter:

    - Will be delivered using certified pipework equivalent that those already used on site (where odour is clearly not an issue);
    - Refuelling will utilise automatic shut-off valves and high-level alarms;
    - storage is in containerised bunded tanks integrated with the generation plant; and
    - fuel will not be exposed to air at any time.

48. **Noise abatement:** the main abatement feature would be that the generator plant is containerised, and exhaust vent provided with silencers, providing immediate abatement. The specifications of the plant, and the noise modelling carried out by Acousti-Cal (Attachment 40), which indicate that this issue has been studied for various operational scenarios, satisfying tender requirements that '*gensets shall have a noise emission limit of 81dB(A) at 7.0m from genset enclosure*'. These also indicate that noise emissions towards sensitive receptors (as identified in the approved monitoring programme) are limited.

49. **Abatement of emissions to air**: as is the case with Medium Combustion Plant, the gensets are not equipped with abatement systems, and optimisation of emissions results from:

- A plant layout which allows flexible deployment of gensets, to optimise power output, thereby limiting fuel consumption and consequent emissions;
- Maintenance of plant to maintain optimal performance, including calibration of fuel burn through the regular certification process.

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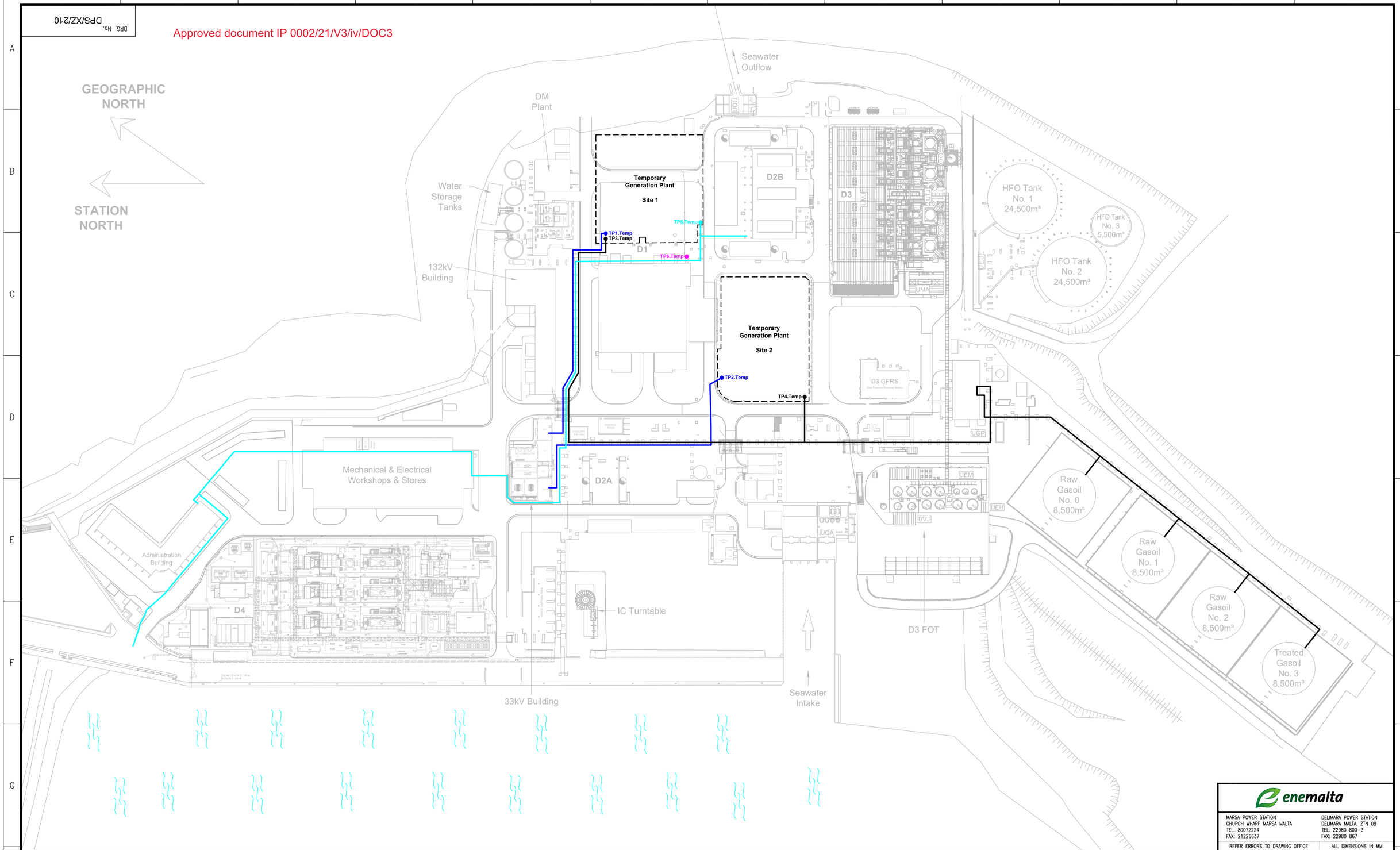

TP1.Temp - 33kV
TP2.Temp - 33kV
TP3.Temp - Diesel Oil
TP4.Temp - Diesel Oil
TP5.Temp - Potable Water
TP6.Temp - 415V

HV Cable Routes
Diesel Oil
Potable Water

REV	DATE	BY	ALTERATION	CHK	APP

enemalta

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REFER ERRORS TO DRAWING OFFICE | ALL DIMENSIONS IN MM

TITLE

TIE-IN POINTS FOR NEW TEMPORARY GENERATION PLANT AT DELIMARA POWER STATION

SCALE	N.T.S.	ISSUE	1		REV.
DRAWN BY	G. Mifsud	DATE	14/5/2024		
CHECKED BY	P. Spiteri	DRG. No.	DPS/XZ/210		
APPROVED BY	Ing. J. Farrugia				

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