

Pure Data Centre – Permit Variation

784-B047734

Non-Technical Summary

Environmental Permit Variation Application

PDCG (GROUP SERVICES LIMITED)

September 2023

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704



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1.0 INTRODUCTION

1.1 APPLICATION REQUIREMENTS

- 1.1.1 This Environmental Permit Application has been prepared by Tetra Tech on behalf of the Operator, PDCG (Group Services Limited) (PDCG) in accordance with the requirements of the Environmental Permitting (England and Wales) Regulations 2016 as amended.
- 1.1.2 PDCG currently operate a site known as Pure Data Centre, JVC Business Park, Staples Corner, London, NW2 7BA. The site is centred at approximate National Grid Reference (NGR) TQ 22296 87216. The site operates under permit EPR/QP3706LH granted on 05/09/2022.
- 1.1.3 The data centre comprises permanent buildings that contain data storage and associated IT infrastructure. The facility will, under normal operating conditions, be powered by grid supplied electricity. A contingency standby power solution, comprising multiple liquid-fuelled engines, provides onsite electrical generating capacity to be used in the event of power outages to the site.
- 1.1.4 The data centre is required to be permanently online and will be powered by the national electricity supply grid. In consultation with relevant stakeholders and following a review of historic electricity outages and forecast ongoing grid resilience it is considered that the electricity supply grid will remain sufficiently stable to enable the data centre to operate on grid supplied electricity only. However, the provision of standby power generating plant is essential in accordance with best practice and contractual obligations.
- 1.1.5 The existing permit (EPR/QP3706LH) authorises the operation of 16 standby electric generating plant in the event of a National Grid failure and for testing purposes. The generators can operate on either gas oil or an agreed equivalent substitute.
- 1.1.6 PDCG are now seeking to expand the permit boundary and subsequently the quantity of generators on site, by constructing a further 40 gas engines each rated at 3.3MW.
- 1.1.7 The generating plant will be limited to operating less than 500 hours/year including the testing regime on a rolling 3-year average. Schedule 24 of the Environmental Permitting Regulations section 2 (4) states: *The requirement for a cost-benefit analysis in sub-paragraph (1) or (3) does not apply to peak load and back-up electricity generating relevant installations for which the application for the grant or a variation of an environmental permit states that operation under 1,500 operating hours per year as a rolling average over a period of 5 years is planned.* Due to the operating hours being less than 500hours/year schedule 24 does not apply to this application.
- 1.1.8 The new generators will be located adjacent to the western side of building LON1B1 as shown on Drawing Numbers PURE/B047734/GEN/01 and GA PROPOSED SITE PLAN (EAST AND WEST)- PHASE 02. The Generators will be over five floors and will be fully enclosed. The generators will be situated in pairs totalling eight per floor with the fuel stores located below on the ground floor.

2.0 NON-TECHNICAL SUMMARY

2.1 APPLICATION FORMS

- 2.1.1 Forms A, C2, C2.5, and F1 have been included as part of this application. These forms are provided as Appendix A.

2.2 BEST AVAILABLE TECHNIQUES

Part C2.5, Section 2a

- 2.2.1 A review of Best Available Techniques for the installation including associated fuel storage and impact of emissions is provided as part of the Best Available Techniques and Operating Techniques (Appendix B of the Environmental Permit Application)

2.3 MANAGEMENT SYSTEM

Part C2, Question 3d

- 2.3.1 The site has an appropriate environmental management system in place which meets the Environment Agency's (EA) requirements on management systems. A summary of the environmental management system is provided as part of the Best Available Techniques and Operating Techniques (Appendix B of the Environmental Permit Application).

2.4 SITE PLAN

Part C2, Question 5a

- 2.4.1 In accordance with the guidance notes, a site plan (Drawing Reference GA PROPOSED SITE PLAN (EAST AND WEST)- PHASE 02 and PURE/B047734/GEN/01) has been prepared.

2.5 SITE CONDITION REPORT

Part C2, Question 5b

- 2.5.1 As required under the EA Regulatory Guidance Note RGN 9 – Surrender, a Site Condition Report (Appendix D) has been prepared.

2.6 ENVIRONMENTAL RISK ASSESSMENT

Part C2, Question 6

- 2.6.1 An Environmental Risk Assessment (Appendix C) has been prepared to consider the potential impact of the proposed activity. The Environmental Risk Assessment (ERA) is concerned with the nature and extent of any linkages between the source of any environmental hazards and the receptors which may be susceptible to harm; such linkages being termed pathways. Where potential for harm is identified, the assessment identifies the management techniques which will be utilised to mitigate such impacts.

2.7 TECHNICAL STANDARDS

Part C3, Section 3a

- 2.7.1 Site infrastructure plans, location plans, layout and receptor plans have been provided within the drawings folder incorporated as part of this environmental permit application.
- 2.7.2 Descriptions of the type of facility applied for, including site infrastructure, operations and processes undertaken for the site has been provided as part of the Best Available Techniques and Operating Techniques (Appendix B of the Environmental Permit Application) along with the ISO 14001 certificate and/or EMS.

2.8 RAW MATERIALS

Part C3, Section 3c

- 2.8.1 The types and amounts of raw materials are provided as part of the Best Available Techniques and Operating Techniques (Appendix B of the Environmental Permit Application).

2.9 MONITORING

Part C3, Section 4a

- 2.9.1 The measures used for monitoring emissions are provided as part of the Best Available Techniques and Operating Techniques (Appendix B of the Environmental Permit Application).

2.10 RESOURCE EFFICIENCY AND CLIMATE CHANGE

Part C3, Section 6 a,b,c,d & e

- 2.10.1 Details of the resource efficiency and climate change impacts of the site are provided as part of the Best Available Techniques and Operating Techniques (Appendix B of the Environmental Permit Application).

2.11 APPLICATION FEES

Part F1, Question 1

- 2.11.1 It is considered that the application fee will comprise the following: -

Activity Reference	Description	Application Type	Fee
1.10.1	Section 1.1 - Combustion plant rated thermal input of 50mwth or more.	Substantial variation	£17,193
Total			£17,193

APPENDIX A - APPLICATION FORMS

APPENDIX B – BEST AVAILABLE TECHNIQUES AND OPERATING TECHNIQUES

APPENDIX C – ENVIRONMENTAL RISK ASSESSMENT

APPENDIX D – SITE CONDITION REPORT

APPENDIX E – AIR QUALITY ASSESSMENT