Permitting Decisions- Bespoke Permit

We have decided to grant the permit for Crawley Data Centre Campus operated by Digital Realty (UK) Limited.

The permit number is EPR/EP3022ST.

Permit Issue date: 02/06/2025

The application is for the operation of stand-by electricity generating plant at a data centre located in Crawley grid reference TQ277380. The data centre is existing and is made up of 2 units, under normal operating conditions both units are powered by grid supplied electricity. Unit 1 houses 10 stand-by generators which are Existing MCP. Unit 2 house 7 stand-by generators which are New MCP.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this Document

This decision document provides a record of the decision-making process. It:

- summarises the decision making process in the decision considerations section to show how the main relevant factors have been taken into account
- highlights key issues in the determination
- shows how we have considered the consultation responses

Unless the decision document specifies otherwise, we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit.

Key Issues of the Decision

1. The Installation

The permit authorises the operation of 17 standby gas oil fuelled generators serving a data centre. The generators will provide electrical power to the data centre in the event of failure in the electrical grid supply. Unit 1 houses 10 stand-by generators which are Existing MCP. Unit 2 house 7 stand-by generators which are New MCP.

The standby power units comprises the following:

Unit 1 – 2 x 1.23MW_{th} generators & 8 x 3.93MW_{th} generators.

Unit 2 – 7 x 5.49MW_{th} generators

Total combustion capacity = 72.6MW_{th}

The permit does not allow the export of electricity to the National Grid.

The installation is subject to the Environmental Permitting Regulations (EPR) as it carries out an activity listed in Part 1 of Schedule 1 to the EPR:

- Section 1.1 Part A(1)(a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.

The activity falls under Chapter II of the Industrial Emissions Directive (IED). The liquid fuelled generators are classed as medium combustion plant (MCP) as part of a Chapter II installation. The Medium Combustion Plant Directive (MCPD) requirements are fulfilled through compliance with Chapter II of Directive 2010/75/EU.

The data centre borders an area designated by Crawley Borough Council as an Air Quality Management Area (AQMA) which is managed for nitrogen dioxide (NO_2-annual mean objective).

The Applicant's assessment of the impact of air quality is set out in the following documents:

- Air Dispersion Modelling Report, dated November 2024

2. Testing and Maintenance

Operation of the generators will occur via testing and maintenance and in the event of an outage of power at the facility. Operating scenarios modelled are as follows:

- Testing scenarios Unit 1
  - Scenario 1: Monthly off load test – Generators tested individually (10 minutes)
  - Scenario 2: Quarterly test – Generators tested individually (3 hours)
  - Scenario 3: Annual load bank test - Generators tested individually (1 hour)
  - Scenario 4: Annual black building test - Generators tested simultaneously (4 hours)
- Testing scenarios Unit 2
  - Scenario 1: Monthly off load test - Generators tested simultaneously (10 minutes)
  - Scenario 2: Quarterly test - Generators tested simultaneously (10 minutes)
  - Scenario 3: Six-monthly test - Generators tested individually (10 minutes)
  - Scenario 4: Annual load bank test - Generators tested simultaneously (2 hours)
- Emergency scenarios 5 and 6: In the event of power grid outage (all generators running simultaneously for 72 hours at 100% load). This has examined each unit operating individually, and a worst-case scenario of both units operating simultaneously.

The Applicant has stated that there have been 2 historic power outages where the standby generators were required to power Unit 1 since it was first operational in 2020 with each outage lasting for less than 1 hour. For Unit 1 there have been no outages since 2015, however one generator was required to run for a period of 32 hours due to a power supply issue in 2021.

3. Air Quality Assessment

The Applicant's assessment of the impact of air quality is set out in Air Dispersion Modelling Report, dated November 2024. The assessment comprises:

- Dispersion modelling of emissions to air from the operation of the installation.
- A study of the impact of emissions on nearby sensitive conservation sites.

The air dispersion modelling carried out by the applicant used the ADMS 6 software which we consider an appropriate air quality modelling tool for regulatory purposes. The model used 5 years meteorological data (2019-2023) from the Gatwick airport meteorological station and included the potential effects of buildings in the modelling domain on the dispersion of the emitted pollutants. The assessment carried out by the Applicant also included a sensitivity analysis of the modelling set up and a statistical interpretation of short-term exceedances of air quality standards. The statistical analysis was based on the hypergeometric probability distribution and followed the methodology set out in our web guidance on dispersion modelling assessment for generators. The 6 operating scenarios detailed above were modelled.

Each generator has its own exhaust stack.

Generator operating parameters and emission concentrations are based on the generator manufacturer's performance and emission data.

The way in which the Applicant used dispersion models, its selection of input data, use of background data and the assumptions it made have been reviewed by the Environment Agency to establish the robustness of the Applicant's air impact assessment. The output from the model has then been used to inform further assessment of health impacts and impact on habitats and conservation sites.

Our review of the Applicant's assessment leads us to agree with their conclusions.

The Applicant's modelling predictions are summarised in the following sections.

Air Quality Impacts (human health)

The Applicant's assessment included an assessment of impacts against both short-term and long-term environment standards. The assessment showed that there would be no exceedance of long-term environmental standards NO_2, PM_{10}, $PM_{2.5}$ and CO. Note that there is no long-term environmental standard (ES) for SO_2. Also, there is no short-term ES for $PM_{2.5}$ and therefore has not been assessed for short-term impacts.

Predicted impacts Testing Scenario 1 Unit 1 & Unit 2 – monthly load testing:

The predicted pollutant concentrations for scenario 1, representing monthly standby generator testing, were below the relevant short-term environmental standards (ES) for NO_2, PM_{10}, CO and SO_2 at all receptor locations and are not considered to be significant.

Predicted impacts for Testing Scenario 2 Unit 1 & Unit 2 - quarterly testing:

The predicted pollutant concentrations for scenario 2 were below the relevant short-term environmental standards (ES) for NO_2, PM_{10}, CO and SO_2 at all receptor locations and are not considered to be significant.

Predicted impacts Testing Scenario 3 Unit 1 - Annual Load Bank Testing & Unit 2 – Six monthly testing:

The predicted pollutant concentrations for scenario 3 were below the relevant short-term environmental standards (ES) for NO_2, PM_{10}, CO and SO_2 at all receptor locations and are not considered to be significant

Predicted impacts for Testing Scenario 4 Unit 1 – Annual Black Building Test & Unit 2 – Annual Load Bank Test:

For Unit 1 the predicted pollutant concentrations for scenario 4 were below the relevant short-term environmental standards (ES) for PM_{10}, CO and SO_2 at all receptor locations and are not considered to be significant. For short-term pollutant concentration for NO_2 exceedances were predicted for human health, however annual testing is 4 hours, so more than 18 exceedances of the short-term standard is not possible.

Our check modelling assessment showed that there is a potential for exceedance of the short-term NO_2 environmental standard for Unit 1, however the probability of an exceedance is considered less than 5% and therefore unlikely.

For Unit 1 an exceedance of the 1-hour Acute Exposure Guidance Level (AEGL) 1 was also predicted by the Applicant's modelling assessment, the PEC is predicted to be 100.1% of the AEGL1. The Applicant stated that "AEGL 1 represents the least severe health effects which are transient and reversible upon cessation of exposure". The assumptions used in the modelling assessment are considered to be highly conservative and therefore the marginal exceedance of the AEGL1 is unlikely to occur under actual operating conditions and we are therefore satisfied there will be no significant health impacts.

The predicted pollutant concentrations from Unit 2 were below the relevant short-term environmental standards (ES) for NO_2, PM_{10}, CO and SO_2 at all receptor locations and are not considered to be significant.

Predicted Impacts for Testing Scenarios 5 & 6 Unit 1 & Unit 2 - In the event of power grid outage (all generators running simultaneously for 72 hours at 100% load). This has examined each unit operating individually, and a worst-case scenario of both units operating simultaneously.

For emergency scenario 5 for Unit 1 & Unit 2, the Applicant's assessment predicted no exceedances of short-term environmental standards (ES) for PM_{10}, CO and SO_2 at all receptor locations and are not considered to be significant.

For NO_2 the Applicant's assessment showed an exceedance of the short-term environmental standard was predicted, however the hypergeometric probability calculation shows less than 0.01% probability of exceeding the objective more than the 18 allowed exceedances. They also predicted a marginal exceedance of the

1-hour AEGL1, the PEC is predicted to be 100.1% of the AEGL1. However emergency operation for an extended period is considered extremely unlikely to occur as it represents a complete loss of mains power. As noted earlier in this document the Applicant has stated that there have been 2 historic power outages where the standby generators were required to power the data centre (Unit 2) with each outage lasting for less than 1 hour.

For emergency scenario 6, both units operating simultaneously, they predicted exceedances for short-term NO_2 only; however, the calculated a probability of exceeding the objective more than the 18 allowed exceedances is less than 0.01%. Exceedances were also predicted for the maximum 1-hour mean NO_2 concentrations at human receptors in regard to the US EPA AEGL1 and the 24-hour NO_X at ecological receptors. The Applicant considers that emergency operation of the plant (Unit 1 and Unit 2 simultaneously) is extremely unlikely to take place given that it only applies to when there is a loss of main power to the site and, in addition, it is also extremely unlikely that mains power to both units would fail concurrently as they have separate supplies.

Air Quality Impacts (Habitats)

No European sites are located within the 10km screening distance of the facility.

No Sites of Special Scientific Interest are located within 2km screening distance of the facility.

The following non-statutory local wildlife and conservation sites are located within 2km of the installation:

- Gratton Park Local Nature Reserve (LNR)
- Willoughby Fields LNR
- Punch Copse Ancient Woodland (AW)
- The Lag Furze Field AW
- The Hawth AW and Local Wildlife Site (LWS)
- Summerveres AW
- Forge Wood Three Acre AW
- Tinslow AW
- Titchmeres AW
- Rowley Wood Local LWS and AW
- Ewhurst Wood LWS
- Willoughby Fields LWS
- Gratton Ponds LWS
- Worthway LWS

Assessment of conservation sites

Conservation sites are protected in law by legislation. The Habitats Directive provides the highest level of protection for SACs and SPAs and domestic

legislation provides a lower but important level of protection for SSSIs. Finally the Environment Act provides more generalised protection for flora and fauna rather than for specifically named conservation designations. It is under the Environment Act that we assess other sites (such as local wildlife sites) which prevents us from permitting something that will result in significant pollution; and which offers levels of protection proportionate with other European and national legislation. However, it should not be assumed that because levels of protection are less stringent for these other sites that they are not of considerable importance. Local sites link and support EU and national nature conservation sites together and hence help to maintain the UK's biodiversity resilience.

For SACs SPAs, Ramsar and SSSIs we consider the PC and the background levels in making an assessment of impact. In assessing these other sites under the Environment Act we look at the impact from the Installation alone in order to determine whether it would cause significant pollution. This is a proportionate approach, in line with the levels of protection offered by the conservation legislation to protect these other sites (which are generally more numerous than Natura 2000 or SSSIs) whilst ensuring that we do not restrict development.

Critical levels and loads are set to protect the most vulnerable habitat types. Thresholds change in accordance with the levels of protection afforded by the legislation. Therefore, the thresholds for SAC SPA and SSSI features are more stringent than those for other nature conservation sites.

Therefore, we would generally conclude that the Installation is not causing significant pollution at these other sites if the PC is less than the relevant critical level or critical load, provided that the Operator is using BAT to control emissions.

The Applicant's assessment shows that the PCs at the non-statutory local wildlife and conservation sites listed above will be below the relevant critical levels or loads. We are therefore satisfied that the Installation will not cause significant pollution at the sites. The Operator is required to prevent, minimise and control emissions using BAT, and this is considered further in Section 5.

4. Noise and Vibration

Based upon the information in the Application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise noise and vibration and to prevent pollution from noise and vibration outside the site.

The Operator and the local Environment Agency compliance team have confirmed that the site does not have a history of noise complaints. The generators have acoustic housing to reduce noise emissions. Other than in the unlikely event of a complete loss of power to the site the generators will only operate for short periods (see testing scenarios in section 3 above) and the Applicant has confirmed that testing of the generators will not take place at night.

We have included condition 3.4.2 in the permit which requires the Operator to submit a noise and vibration management plan should the activities carried out on the installation give rise to pollution outside the site due to noise and vibration.

5. Best Available Techniques (BAT)

Technology and Fuel

The generators are using gas oil as fuel and we accept that gas oil powered generators are presently a commonly used technology for standby generators in data centres. We are satisfied that the applicant has provided sufficient justification to show that their proposal is BAT.

The default generator specification as a minimum for new plant to minimise the impacts of emissions to air (NOx) is 2g TA-Luft (or equivalent standard) or an equivalent NOx emission concentration of 2000mg/m^3 at reference conditions and 5% O2. The generator specifications on the site have emissions significantly higher than this. For the generators in Unit 1 which were first put into operation before 2018, and which precedes the introduction of the guidance on minimum emission standards for standby generators we acknowledge that it would not be practicable to require the operator to upgrade this plant to BAT standards. However, the generators in Unit 2 were first put into operation after 2018 and therefore we consider it is appropriate for the Operator to reduce emissions from these generators to a level that is in line with BAT. For this reason, we have included an improvement condition (IC2) in the permit requiring the Operator to submit a report detailing proposals to reduce NOx emissions from the generators in Unit 2.

Fuel Storage

Unit 1

Gas oil is stored in 3 above ground bulk storage tanks. Two tanks have a capacity of 35,000L and one has a capacity of 3,050L. There are also 8 generator day tanks and 2 shell and core generator day tanks with capacity of 1,000 litres within the generator enclosures. The Applicant confirmed that all tanks and pipework comply with the Oil Storage Regulations (SI 2001/2954) and The Control of Pollution (Oil Storage) (England) Regulations 2001).

Unit 2

Gas oil fuel is stored in 2 above ground bulk storage tanks with capacity of 38,000 litres each in the south compound of the facility, and in 3 generator day tanks with capacity of 2,000 litres capacity each in the generator enclosures. The Applicant confirmed that all tanks and pipework comply with the Oil Storage

Regulations (SI 2001/2954) and The Control of Pollution (Oil Storage) (England) Regulations 2001).

Fuel Delivery

We are satisfied that the necessary controls will be in place to minimise the risk of pollution during fuel delivery. Refuelling is expected to only occur twice a year. The fuel tanker will be parked on an area of impermeable surfacing. The integrity of the impermeable slab will be regularly checked. Drains in the vicinity of the re-fuelling will be covered during filling operations. Delivery & filling activities will be supervised by trained staff. The drains in the refuelling areas are connected to the drain network which incorporate oil-separators. There will be spill kits and drip trays at fill points and high-level alarms on tanks.

Choice of Fuel

The applicant confirmed that the emergency generators will be operated on gas oil. We have specified in the permit that gas oil can have a maximum sulphur content of 0.001% (w/w). we have also specified than an equivalent substitute fuel can be used if agreed in writing with the Environment Agency.

6. Site Condition Report and Protection of Groundwater

A site condition report (SCR) is required for any facility regulated under the EPR, where there may be a significant risk to land or groundwater. Article 22(2) of the IED requires the applicant to provide a baseline report containing at least the information set out in paragraphs (a) and (b) of the Article before starting operation. The baseline report is an important reference document in the assessment of contamination that might arise during the operational lifetime of the installation and at cessation of activities at the installation.

At the definitive cessation of activities, the operator has to satisfy us that the necessary measures have been taken so that the site ceases to pose a risk to soil or groundwater, taking into account both the baseline conditions and the site's current or approved future use. To do this, the operator has to apply to us for surrender, which we will not grant unless and until we are satisfied that these requirements have been met.

The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the IED.

7. Emission Limits

As the plant is limited to less than 500 hours of emergency operation in accordance with permit condition 2.3.6, we have not set any emission limits.

The Operator will be required to record operating hours and the number of runs for each of the generators.

8. Monitoring Requirements

We have specified monitoring of emissions of carbon monoxide (CO) from emission points A1 to A17, with a minimum frequency of once every 1,500 hours of operation or every five years (whichever comes first). This monitoring has been included in the permit in order to comply with the requirements of the MCPD, which specifies the minimum requirements for monitoring of carbon monoxide emissions, regardless of the reduced operating hours of the plant.

We have also specified monitoring of emissions of oxides of nitrogen (NOx) from emission points A1 to A17, with the same frequency specified for the monitoring of carbon monoxide emissions. In setting out this requirement, we have applied our regulatory discretion, as we consider that this limited monitoring, to happen in concurrence with the carbon monoxide monitoring, is proportionate to the risk associated with the emissions of NOx from the installation.

Taking into account the limited hours of operation of the generators operating at the installation, and the fact that we are not setting emission limits for carbon monoxide and NOx, we consider this monitoring can be carried out in line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5).

We have set an improvement condition (IC3) requesting the operator to submit a monitoring plan for approval by the Environment Agency detailing the operator's proposal for the implementation of the flue gas monitoring requirements specified in the permit.

For the new MCP in Unit 2, we have set a requirement for the first monitoring to happen within 4 months of the issue date of the permit or the date when each new medium combustion plant is first put into operation, whichever is later (permit condition 3.5.5) unless otherwise agreed under Improvement Condition IC3.

For the existing MCP in Unit 1 which have a net rated thermal input between 1MW-5MW monitoring applies from 01/01/2030, which is the relevant MCPD compliance date. We have set a requirement for the first monitoring to happen at any time, but no later than the relevant compliance date (permit condition 3.5.5) unless otherwise agreed under Improvement Condition IC3.

9. Emissions to Sewer

There will be a point source emission of uncontaminated surface water runoff to combined sewer at points S1 and S2 as shown on the site plan in Schedule 7 of the permit.

10. Emissions to Water

There no point source emission to water.

11. Emissions to Land

There will be no point source emissions to land.

12. Waste

The site generates several waste streams from its operations. This includes hazardous waste (waste oil and lighting tubes) and non-hazardous waste (paper, cardboard, and general waste). Hazardous waste is removed by a third-party provider and waste from the oil interceptor is removed by another third-party provider.

Based upon the information in the application, we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise pollution from waste.

13. Operational hours

We set operational hour limits for data centres at 500-hours as they are permitted for emergency use only. The limit on the emergency use of 500 hours is for the installation as a whole i.e. as soon as one generator starts operating the hours count towards the 500 hours.

The operational hours on the site will be monitored and reported as follows:

Emergency operation limited to 500 hours for the installation via permit condition 2.3.6.

Maintenance and testing regime limited to <50 hours per generator, linked to operating techniques table S1.2

14. Permit Conditions

Permit condition 2.3.6
The permit includes a maximum 500-hour operational limit for the emergency standby generators. The 500 hours includes testing and maintenance.

Table S1.1 (Activities)
Includes some additional operational controls:

- Testing of the generators shall only take place during daytime periods.
- Electricity produced at the installation cannot be exported to the National Grid.

The first bullet is to minimise the impact from noise, refer to the Noise and Vibration section of this document.

Table S1.1 (second bullet point) also places a limit on the activity to exclude voluntary 'elective power generation' such as Balancing Services, Demand Side Response operations including Frequency Control Demand Management (FCDM) or Triad Avoidance. This is primarily to differentiate data centres from 'diesel (gas oil) arrays' that operate commercially within the balancing market, and importantly, this is a clear way to demonstrate minimisation of emissions to air as 'emergency plant'.

Table S1.2 (Operating techniques)
The testing and maintenance scenarios are detailed in this document and controlled though permitted operating techniques in table S1.2 of the permit.

Table S1.3 (Improvement programme)

IC1 - Air Quality Management Plan (AQMP)
Whilst we are satisfied that the maintenance and testing regime is appropriate, given the local issues regarding air quality, including the designation of the

AQMA, we have included an improvement condition in the permit. This requires the operator to produce an Air Quality Management Plan.

IC2 – Requires the operator to provide a plan to reduce NOx emissions from the generators in Unit 2. See section 5 above for further details of why this condition has been set.

Table S4.2 (Performance parameters)

Reporting of testing and maintenance run hours is required annually. Operation during an emergency scenario requires both notification within 24 hours and annual reporting.

Annex 1 - Decision Considerations

Confidential Information

A claim for commercial or industrial confidentiality has not been made.

Identifying Confidential Information

We have not identified information provided as part of the application that we consider to be confidential.

Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

Health & Safety Executive (HSE)

Local Authority (planning and environmental health)

UK Health Security Agency (UKHSA) (formerly Public Health England (PHE))

Sewage Authority

The comments and our responses are summarised in the Consultation Responses section of this document.

Operator

We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.

The Regulated Facility

We considered the extent and nature of the facility at the site in accordance with RGN2 ‘Understanding the meaning of regulated facility’, Appendix 2 of RGN2 ‘Defining the scope of the installation’ and Appendix 1 of RGN 2 ‘Interpretation of Schedule 1’.

The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

The Site

The operator has provided plans which we consider to be satisfactory.

These show the extent of the site of the facility including the discharge points.

The plan is included in the permit.

Nature Conservation, Landscape, Heritage and Protected Species and Habitat Designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process. Refer to Air Quality Impacts (Habitats) section of this document.

The decision was taken in accordance with our guidance.

Environmental Risk

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator’s risk assessment is satisfactory.

Operating Techniques

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

National Air Pollution Control Programme

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting controls in the permit we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

Raw Materials

We have specified limits on the use of gas oil.

Improvement Programme

Based on the information in the application, we consider that we need to include an improvement programme. See key decisions section for details of the conditions include.

Emission Limits

We have decided that emission limits are not required in the permit, refer to Monitoring Requirements section of this document.

Reporting

We have specified reporting in the permit to gather information on emissions to air from A1 to A17 and performance parameters.

Management System

We are not aware of any reason to consider that the operator will not have the management system to enable them to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

Growth Duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution.

This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Annex 2 - Consultation Responses

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public, and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section:

Responses received from:

1. **UK Health Security Agency (UKHSA)** (Environmental Public Health Scientist) – response received 06/01/2025

Response Received from UK Health Security Agency	
Brief summary of issues raised:	Summary of action taken / how this has been covered
Concern raised that further detailed assessment of the PM10 and PM2.5 contributions for each scenario was required.	We are satisfied that potential PM_{10} and $PM_{2.5}$ emissions have been adequately assessed for all scenarios and emissions will not be significant and therefore will not cause significant harm to human health. See section 3 above for details of the assessment.
Concern raised that additional mitigation measures are necessary to provide assurance that process contributions from this installation will not exceed air quality thresholds.	We are satisfied that the proposed testing scenarios and emergency scenario will not result in a significant adverse impact on air quality. See section 3 above for details of our assessment. With regard to additional measures we have required the Operator to submit a plan to reduce NOx emissions from the generators located in Unit 2 (IC2 in Table S1.3). Also, the Operator is required to produce an AQMP in conjunction with the Local Authority outlining response measures to be taken in the event of a grid failure (IC1 in Table S1.3) with the aim of minimising impacts.

Concern raised about potential exceedances of occupation health limits and the the Health and Safety Executive should be consulted.	We are satisfied that there is unlikely to be an exceedance of occupational health limits, see section 3 above for further details. We have consulted with the Health and Safety Executive and they have not raised any concerns.
The Environment Agency may wish to consider whether a complaints procedure would be appropriate.	The Operator has an ISO14001 Environmental Management System in place. This will include procedures for dealing with complaints.

2. **Thames Water** – response received 21/01/2025

Brief summary of issues raised:

No issue raised.

Summary of actions taken:

No action required.