

Permitting Decisions- Bespoke Permit

We have decided to grant the permit for CyrusOne London 4/5 Datacentres operated by CyrusOne UK4 Limited.

The permit number is EPR/EP3508PS.

The application is for 32 emergency diesel generators providing electricity to the two associated data centres in the event of a failure of supply from the National Grid. Each generator has a thermal input of 6.29 MW.

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

The site is an electronic data storage centre which includes back-up generation capacity, a Schedule 1, Section 1.1 Part A (1) (a) activity under the Environmental Permitting (England and Wales) Regulations 2016 (the burning of any fuel in an appliance with a rated thermal input of 50 or more megawatts (MW)).

The combustion plant only operates under limited routine maintenance or in an emergency scenario. The emergency combustion activity comprises 32 diesel fuelled standby generators. Each generator has a thermal input of 6.29 MW and has a stack which is 16.5m in height.

Electrical power is provided to the data centre from the National Grid. However, in the event of a failure in the electrical supply, the operator will utilise the generators to maintain the electrical supply. The generators will be used solely for the purpose of generating power for the facility. No electricity will be exported from the installation. There are two datacentres on the site referred to as LON4 and LON5. Each data centre is served by 16 generators, which are arranged into two banks of 8 generators. There are two electricity feeds from the National Grid. In the event that one of the feeds fails then the generators connected to that feed would start until power is reinstated or until all transformers are supplied by the remaining feed. If both electricity feeds fail, if the supply became variable or there was a National Grid outage then all of the generators would start. Once a secure electricity supply has been established the generators will shutdown sequentially. All the generators are subject to a maintenance testing schedule.

The generators run on diesel fuel. All generators are housed in separate containers with each having a 31,000 litre diesel storage tank located underneath each generator. Each tank has an integral bund of 110% capacity. There are no bulk oil storage tanks located on the site.

The site is covered in concrete hardstanding. The surface drainage system directs run-off into an oil interceptor prior to discharge from site to a series of soakaways. There will be tertiary containment provided throughout the site which will be designed and constructed in line with the requirements of CIRIA 736, full details of the final design will be provided by Improvement Condition 3.

The testing schedule is as follows for each of the 32 generators. All testing is undertaken between 15:00 and 17:00 during school term time and is undertaken between 09:00 and 15:00 during school holiday periods. This is a requirement of the planning permission due to the proximity of a local school:

1. Monthly off load engine runs - 10 months out of 12 in each year. All engines are individually tested for 15-30 minutes each, off-load. Only one engine tested at once.

2. Original Equipment Manufacturer (OEM) servicing – 2 months out of 12 each year service test. All engines are individually tested for 15-30 minutes each, off-load. Only one engine is tested at once.
3. Load Bank Testing - Once per year. All engines are individually tested for 60 minutes each, on-load. Only one engine tested at once.
4. Mains Failure Testing – Once per year. All engines operate simultaneously for 60-90 minutes and support the building load, on-load.

Air Quality

The primary pollutant of concern to air quality is nitrogen dioxide (NO₂) resulting from the combustion process on site. The Applicant submitted an air dispersion modelling report (CyrusOne 4 and 5, Air Quality Assessment, March 2021, Ramboll, Ref 1690013863) and an addendum to this report (CyrusOne 4 and 5, Air Quality Assessment, 12/11/2021, Ramboll, Ref 1620011380); which assesses the potential impact of emissions of NO₂, particulates (PM₁₀), sulphur dioxide (SO₂) and carbon monoxide (CO) from the generators on local air quality.

The operator has confirmed that the generators will be operating at around 80% load during an emergency scenario in the event of the loss of power from the National Grid. The emission concentrations used in the air quality modelling were 2000mg/m³ NO_x. This is consistent with the TA-Luft 2g emissions standard. Emissions data sheets for the engines have been provided by the operator, which we consider as being representative of the emissions from the engines. They confirm that the engine emissions are broadly in line with the TA-Luft 2g standard and are achievable, and thus the emissions concentration used in the modelling is appropriate (See BAT section of this document).

We audited the air dispersion modelling and report submitted with the permit application. Both the maintenance testing and emergency scenarios within the modelling were assessed. We agreed with the operator's conclusions that predicted levels for the four testing regimes and emergency operations were unlikely to cause an exceedance of the Environmental Standard (ES) for human receptors and ecological receptors for NO₂, PM₁₀, SO₂ and CO.

Three modelling scenarios were run to represent the operations at the installation. Scenarios 1 and 2 represent the routine testing and maintenance operations. Scenario 3 represents an emergency power outage where there is loss of power from the National Grid or from an internal power supply failure.

1. Scenario 1 represents the monthly testing of the generators (maintenance tests 1, 2 and 3 above). Scenario 1 is modelled assuming that all testing is Load Bank Testing (maintenance test 3 above). Therefore, this scenario assumes that each generator is operated individually for 60 minutes and will produce the worst-case results. The consultant has used an emission factoring file to only model emissions from Scenario 1 between the hours of 15:00 and 17:00 Monday to Friday for all weeks of the year except

during August. We consider the consultant's assumptions to be representative of operations.

2. Scenario 2 represents the annual Mains Failure Test (maintenance test 4 above) where each data centre is tested individually for 90 minutes. Therefore, 16 generators are assumed to be operational simultaneously. Although the testing could be conducted during school term time the scenario has assumed that it will be undertaken between 09:00 and 17:00 during the school holidays. The consultant has used an emission factoring file to only model emissions from Scenario 2 between the hours of 09:00 and 17:00 Monday to Friday during August. We consider the consultant's assumptions to be representative of operations.
3. Scenario 3 represents an emergency power outage event where all 32 generators are modelled as operating together for a maximum of 37 hours a year.

Maintenance testing

Human Receptors:

Short Term impacts

Scenarios 1 and 2 – There were no predicted exceedances of any Environmental Standard (ES) for any pollutant assessed.

The short-term emissions either screened out alone where the process contribution (PC) was less than 10% of the significance threshold or, following the consideration of background concentrations, where the Predicted Environmental Concentration (PEC) was less than 100% of the significance threshold. Therefore, on this basis all short-term emissions screen out and no further assessment is necessary.

Our audit of the modelling confirms that short term process contributions are unlikely to cause an exceedance at any of the receptors for any pollutant.

Long Term impacts

Scenarios 1 and 2 - There were no predicted exceedances of any Environmental Standard (ES) for any pollutant assessed.

The long-term emissions either screened out alone where the process contribution (PC) was less than 1% of the significance threshold or, following the consideration of background concentrations, where the Predicted Environmental Concentration (PEC) was less than 100% of the significance threshold. Therefore, on this basis all long-term emissions screen out and no further assessment is necessary.

Our audit of the modelling agrees with the operator's conclusion that exceedances of any relevant long-term environmental standard of any pollutant assessed is unlikely.

Ecological Receptors:

Short-term and long-term impacts were considered. The modelling considered airborne NO_x; In addition to nitrogen deposition and acidification considering inputs from both Nitrogen and Sulphur Dioxide.

The short and long-term emissions either screened out alone where the process contribution (PC) was less than 1% or 10% of the significance threshold or, following the consideration of background concentrations, where the Predicted Environmental Concentration (PEC) was less than 100% of the significance threshold. Therefore, on this basis all short and long-term emissions screen out and no further assessment is necessary.

Our audit of the modelling agrees with the operator's conclusion that NO_x, nutrient nitrogen and acid deposition exceedances of all environmental standards for any pollutant are unlikely.

Emergency scenario

The emergency scenario that has been modelled is based upon all generators operating simultaneously for 37 hours. The number of hours used has not been defined based upon an anticipated emergency scenario or the amount of fuel stored on site (48 hours). It is a calculated value which defines the maximum number of hours the site could operate during an emergency for the probability of an exceedance to be highly unlikely for human receptors or unlikely for ecological receptors.

Prolonged operation of the installation is not expected. Short term operation is more realistic for the reasons described below.

The permit application has assessed and provided evidence of the reliability of the National Electricity Grid distribution allowing the Environment Agency (EA) to judge that the realistic likelihood of the plant needing to operate for prolonged periods in an emergency mode is low. As this is a new bespoke application, there are no records available for historical outages at the site. There are historic records for the operational CyrusOne UK4 Limited datacentres referred to as CyrusOne London 1 (not regulated by the EA), CyrusOne London 2 (not regulated under EPR) and CyrusOne London 3 (not regulated by the EA). There is no record of any grid failure at these installations (response to request for information 23/02/2022).

This is a new site and all generators installed meet TA-Luft 2g emissions standards. The stack height for the generators is 16.5m which is above the height of the surrounding buildings. The diesel generators installed are in line with BAT, and dispersion has been maximised.

An emergency outage is an event that will be for a number of hours. Therefore, only short-term assessment criteria need to be considered. No exceedances are predicted for the pollutants PM₁₀, SO₂ and CO. These screen out and are not considered below. Discussion below is with regards to short term NO₂ and NO_x.

Human Receptors:

For Scenario 3, the operator predicts that the 99.79th percentile 1-hour NO₂ ES is likely to be exceeded if Scenario 3 operates for 19 hours or more during the worst-case meteorological conditions.

The next stage is to calculate the probability of this predicted exceedance occurring through a hypergeometric probability distribution assessment. The results of the assessment were that the probability of an exceedance of the 1-hour NO₂ ES remains below 1% as long as the number of hours of operation do not exceed 37 hours a year. A probability of less than 1% is defined as a highly unlikely event in our guidance. The predicted emissions during Scenario 3 are therefore, concluded as being acceptable.

Our audit of the modelling confirms that short term process contributions of NO₂ are highly unlikely to cause an exceedance at any of the receptors. Therefore, we agree with the operators conclusions.

Ecological Receptors:

The operator predicts exceedances of the daily mean NO_x critical level of 75 µg/m³ at all of the non-statutory ecological sites included in the assessment based on Scenario 3 occurring for 24-hours during the worst-case meteorological conditions. The operator concludes that due to the infrequent operations of Scenario 3, exceedances of the daily mean NO_x critical level are unlikely to occur in reality. The consultant has not gone to the next stage and provided quantitative evidence for their conclusions such as a statistical analysis based upon a hypergeometric probability distribution.

The consultant does not predict any exceedances at European designated statutory ecological sites.

Our audit of the modelling confirms that short term process contributions of NO₂ are unlikely (less than 5% probability) to cause an exceedance at any of the habitats receptors. This is based on our own statistical analysis using the hypergeometric probability distribution and consideration that Scenario 3 is an event that is highly unlikely to occur.

Cumulative Long-term Impacts of Maintenance testing and Emergency scenario

The operator does not predict any exceedances of the long-term environmental standards for any pollutant during any scenario. The operator has considered the long-term impacts of pollutants for each scenario individually and has not considered the cumulative impacts of all scenarios throughout the year. We included this as Scenario 4 as part of our audit. All pollutants assessed against the relevant long term environmental standards were insignificant when the impacts are considered cumulatively.

Permit conditions

The permit will include a maximum 500 hours per annum 'emergency/standby operational limit' for any or all the plant producing on-site power under the limits of the combustion activity. This operational limit applies to the installation as a whole. As operations are restricted to 500 hours, emission limit values (ELVs) to air are not required within the permit.

The Environment Agency expects the number of and duration of planned testing and generator operations to be minimised as much as possible (subject to client requirements). The BAT expectation is that individual generator testing is below 50 hours/annum which is drawn from the MCPD specified generator guidance. In this instance the operator is maintaining and testing each generator for a total of 9.5 hours a year (based on email attachment provided 12/11/2021). This is in line with BAT and below the level at which ELVs would be needed.

The permit has a limit on the activity to exclude voluntary 'elective power operation' such as demand side response (i.e. on-site use) or grid short term operating reserve (STOR) (i.e. off-site export of electricity) and Frequency Control by Demand Management (FCDM) for grid support. This is primarily to differentiate data centres from 'diesel arrays' that voluntarily operate within the balancing market and importantly provide a clear way to demonstrate minimisation of emissions to air as 'emergency plant'.

Operational and management procedures should reflect the outcomes of the air quality modelling by minimising the duration of testing, phasing generators into subgroups, avoiding whole site tests and planning off-grid maintenance days and most importantly times/days to avoid adding to "at risk" high ambient pollutant background levels.

As explained previously in the Air Quality section of this document, under the heading Emergency Scenario, the risk of the generators needing to operate for a prolonged period of time is low.

Reporting of standby engine maintenance run hours is required annually and any electrical outages (planned or grid failures regardless of duration) require both annual reporting and immediate notification to the Environment Agency.

Noise

The site will only run each generator regularly as part of the testing regime for 9.5 hours per year. This occurs during daytime hours between 15:00 and 17:00 during week days. Maintenance and testing is not classed as part of normal operations.

Prolonged operation will only occur in an emergency situation where the National Grid supply is lost. As this is a new installation then it is not possible to consider historical outage. There are no records available for historical outages at the site. There are historic records for the operational CyrusOne UK4 Limited installations referred to as CyrusOne London 1 (not regulated by the EA), CyrusOne London 2 (not regulated by the EA) and CyrusOne London 3 (EPR/EP3608PM/A001). There is no record of a grid failure at these installations (response to request for information 23/02/2022). In addition, evidence in the application of the reliability of the National Electricity Grid distribution has been provided to support the Environment Agency's view that the realistic likelihood of the plant needing to operate for prolonged periods is low. Therefore, the potential for prolonged noise is also considered to be low.

Despite this, the operator has taken measures to minimise noise emissions. These include the housing of the generators within acoustic enclosures (containers). The engine exhausts are fitted with reactive noise attenuators. Vehicle movements are limited to day time hours and fuel deliveries will be infrequent. All plant is maintained and operated in line with the manufacturer's instructions. The operator also commissioned a noise impact assessment which concluded that there would not be an impact on background daytime and night time noise levels. There is a low impact from noise. We have not reviewed this assessment, although agree that the impacts will be low due to the limited hours of operation combined with the proposed noise mitigation measures which we accept are sufficient to control noise arising from the installation.

BAT

As outlined in the Environment Agency's '*Data Centre FAQ*' document, we accept that oil fired diesel generators are presently a commonly used technology for standby generators. We requested a BAT assessment detailing the choice of engine, the particular configuration and plant sizing to meet the standby arrangement (e.g. 2n).

The default generator specification as a minimum for new plant to minimise the impacts of emissions to air of NO_x is 2g TA-Luft (or equivalent standard) or an equivalent NO_x emission concentration of 2000mg/m³. The emissions from the

engines at 92% load is 2019mg/m³. The engines would typically operate at 80% load during emergency operations. The emissions data sheet is considered to be broadly representative of the expected emissions from the plant. The emissions are slightly over the emissions standard, however, this is still considered as acceptable.

All the generators meet the TA-Luft standard emissions based upon the confirmed typical operation of the generators at approximately 80% load.

The site comprises of two datacentres, LON4 and LON5. The number and size of the generators matches the demand requirements of each datacentre suite. The site operates to an n+1 standby arrangement, where n is the load requirement of the data centre.

Each of the engines is sized to meet the electrical load of the electrical system it serves. The largest most efficient engine has been chosen based upon the design load requirement. The configuration is based upon a single generator type to optimise maintenance processes and deliver resilience through the familiarity of the generator systems. The number of generators is equal to the number of electrical systems. As each generator supports a specific electrical system it will only operate if supply to that specific system fails. This allows flexibility in operation where there is an onside localised failure of an electrical system.

Therefore, the selection of multiple smaller generator sets provides a flexibility advantage over the selection of fewer, larger generator sets. Depending on the scale of a utility interruption event, it allows for a reduced number of generators to run as each generator only runs to support its individual system. If fewer, larger sets were installed to support multiple systems, the generator would run whether some or all of the systems it supported were affected, leading to potentially significant overcapacity and higher fuel use. The result of which would lead to potentially higher emission of combustion gases. Therefore, it is considered in this situation that a greater number of small-scale generators is BAT.

To minimise the need for emergency operation, the site has two electricity supplies. To address short term fluctuations, brown-outs or black-outs, the site has uninterruptable power supplies. This can supply power for short periods preventing the need for the generators to kick in.

Protection of Groundwater

There are no fugitive emissions to land or groundwater from the data centre. There is a controlled discharge of surface water to ground via soakaways. All surface water discharged via soakaways first goes through an oil interceptor.

The generators are located in containers on a concrete hardstanding. All operational areas, roads and external areas are on impermeable surfacing with surface waters directed to the drainage system. Raw materials used on the

installation are diesel fuel, lubricating oils and coolant. Diesel fuel is stored in bunded tanks. Lubricating oils and coolants are stored within the engine containers and are manually topped up during servicing. Therefore, the risk of any source of potential contamination discharging to land is minimised. No wastes are stored on site. Waste oil and coolant is removed off-site for disposal following any maintenance.

The diesel belly tanks are designed to comply with the Oil Storage Regulations 2001. Suitable measures are in place with regards to fuel containment which include:

- The diesel storage tanks are fully-bunded with an integral bund providing 110% of the volume of the storage tank. There are no bulk storage tanks.
- Tertiary containment will be in place at the installation which will comply with the requirements of CIRIA C736. This will allow the retention of more than 110% of the capacity of a 31,000 litre diesel storage tank on the installation. Full details will be provided through Improvement Condition 3
- The diesel tanks have bund alarms which would sound in the event of failure of the primary containment.
- The generator container is designed to hold the entire contents of the day tank (stores diesel for use in generator transferred from diesel storage tank), coolant and lubrication oil. The container has a raise lip at the entrance, is constructed of steel with all joints welded.
- An oil interceptor is fitted with an automatic inflatable shut-off device that diverts surface waters to a storage tank associated with the interceptor in the event that oil or silt is detected. A high-level alarm would also sound.
- There is fuel pipework which connects the diesel storage tanks to the day tanks and generators. There is also pipework from the oil delivery point that connects to the diesel storage tanks. All pipework is located within the generator compound where there is no vehicular access. All pipework is above ground and will be suitably supported (detail to be provided via IC3). All joints will be fully welded. Where there are valves and flanges drip trays will be used in conjunction with regular inspection.
- The fuel level in the diesel storage tanks is monitored continuously. Safety devices are fitted to prevent overfilling of the tanks.
- High level alarms are fitted to the diesel storage tanks.
- The diesel storage tanks are fitted with a leak detection system which is monitored continuously and alarms which are linked to the building management system would sound in the event of a leak from the primary containment system.
- Fuel filling points remain locked when not in use and have drip trays to capture any leaks. They are also fitted with visual and audible fill alarms.
- Spill kits are provided around all refuelling areas.
- The diesel storage tanks are subject to an annual inspection by suitably trained individuals.

The operator will have emergency response procedures in place in the event of a release of oil or diesel, processes for the planning for such eventualities and checklists to audit the response in case such an event occurs. As the

Environment Management System and associated procedures have not yet been completed an Improvement Condition (IC6) has been included requesting that we are informed when these are ready for inspection.

Drainage drawings are provided in the application, with the final drainage design being provide in accordance with Improvement Condition 5. Details of the existing condition of the Site can be found in the Site Condition Report supplied with the application. We have reviewed the SCR and consider it to provide a suitable basis for defining the condition of the land at permit issue.

Monitoring

We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.

In particular we have specified monitoring of emissions of carbon monoxide from emission points for all standby generators as listed in table S3.1 of the permit (EPR/EP3508PS) (new medium combustion plant), with a minimum frequency of once every 1500 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 Medium Combustion Plant Directive, which specifies the minimum requirements for monitoring of carbon monoxide emissions, regardless of the limited operating hours of the plant.

We have also specified monitoring of emissions of nitrogen oxides from emission points for all standby generators as listed in table S3.1 of the permit (EPR/EP3508PS) (new medium combustion plant), 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 NO_x 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 NO_x and carbon monoxide, 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 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.

We have set an improvement condition (IC2) 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.

Decision considerations

Confidential information

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

The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

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

The decision was taken in accordance with our guidance on confidentiality.

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 and Safety Executive (HSE)
- Local Authority – Planning – Slough Borough Council
- Local Authority - Environmental Health – Slough Borough Council
- National Grid
- Sewage Authority – Thames Water
- Director of Public Health
- UK Health and Security Agency

The comments and our responses are summarised in the [consultation responses](#) section.

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 a plan which we consider to be satisfactory.

This shows the extent of the site of the facility.

The plan is included in the permit.

Site condition report

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 Industrial Emissions Directive.

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.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have not consulted Natural England and a Habitats Regulation Assessment Stage 1 (HRAS1) was sent for information only.

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.

Climate change adaptation

We have assessed the climate change adaptation risk assessment.

We consider the climate change adaptation risk assessment is satisfactory.

General operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

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

Raw materials

We have specified limits and controls on the use of raw materials and fuels.

Pre-operational conditions

Based on the information in the application, we consider that we need to include pre-operational conditions.

- PO1 - The operator has not yet completed their Environmental Management System and does not have all procedures in place. We wish to review these to ensure that they provide suitable environmental protection for the installation.

Improvement programme

Based on the information on the application, we consider that we need to include an improvement programme.

We have included an improvement programme to ensure that

- IC1 - short term nitrogen dioxide concentrations are minimised during emergency operations. We have requested that an Air Quality Management Plan is produced. This plan which will detail how the

generators will be used during emergency operation and is to be produced jointly with the Local Authority.

- IC2 - We have set this improvement condition 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.
- IC3 – We have set this improvement condition to ensure that the final design of the tertiary containment system and that the proposed measures for the above ground pipework meet the requirements of CIRIA C736. Therefore, providing robust systems in the event of a spillage or loss of containment, minimising any risk of diesel escaping into the environment.
- IC4 – The drainage design that has been provided with the application may be subject to change as part of the final design. This improvement condition requests the details of the final design to allow us to review this and to ensure that it provides suitable environmental protection.

Emission Limits

We have decided that emission limits are not required in the permit.

Monitoring

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified:

- Oxides of Nitrogen (NO and NO₂ expressed as NO₂)
- Carbon monoxide

See Key Issues section for further details.

Reporting

We have specified reporting in the permit to ensure that the installation is being operated in line with that specified in the operating techniques and to ensure that we are notified immediately in the instance that the site ever operates in emergency scenario mode.

Management System

We are not aware of any reason to consider that the operator will not have the management system to enable it 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.

Previous performance

We have assessed operator competence. There is no known reason to consider the applicant will not comply with the permit conditions.

Financial competence

There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.

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.

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.

No responses were received from: Health and Safety Executive (HSE), Local Authority – Planning – Slough Borough Council, Local Authority - Environmental

Health – Slough Borough Council, National Grid, Sewage Authority – Thames Water, Director of Public Health and UK Health security Agency.

Responses from organisations listed in the consultation section:

Response received from: UK Health Security Agency

Brief summary of issues raised:

The response identifies that the main pollutants from the generators are nitrogen dioxide, carbon monoxide, particulate matter, sulphur dioxide and hydrocarbons. They highlight that air quality modelling has been undertaken and, as the proposals are for back-up generators, they state that the hours of usage will be low and that conservative modelling does not identify any significant impacts. They note that there has been no assessment of hydrocarbons in the modelling.

They recommend that the Environment Agency should satisfy themselves that modelling of hydrocarbons is not required by the operator.

They identify that they have no significant concerns regarding the risk to the health of the local population from the installation.

Summary of actions taken:

The modelling assesses all of the key pollutants identified in the consultee's response. We audited the modelling and did not have any concerns regarding the absence of hydrocarbons from the assessment. The modelling assessment is in line with our expected requirements.