

Permitting decisions

Bespoke permit

We have decided to grant the permit for Thomson Reuters Docklands Technical Centre operated by Thomson Reuters Group Limited.

The permit number is EPR-CP3339DZ.

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 checklist to show how all relevant factors have been taken in to account.

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

- highlights key issues in the determination
- summarises the decision making process in the <u>decision checklist</u> to show how all relevant factors have been taken into account
- shows how we have considered the consultation responses.

And

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

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

Key issues of the decision

The Installation

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

And includes the following Directly Associated Activity (DAA):

• Diesel bulk storage tanks, accompanying pipe work and fill points.

The permit authorises the operation of 10 standby diesel generators serving the data centre, in the event of failure in the electrical grid supply and operation of 1 of the 3 gas fired boilers at any one time. The permit does not allow the export of electricity to the National Grid.

The 3 boiler plant fall within the scope of the Medium Combustion Plant Directive (MCPD), being in the thermal input size range of >1 to < 50 MWth and as they in operation before 18th December are classed as existing medium combustion plant.

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 submitted a Site Condition Report (SCR). We have reviewed the SCR and consider that it was unsatisfactory for the following reasons:

- The geology and hydrogeology of the site has been incorrectly described. As a result the presence of sensitive groundwater receptors have been missed. This has implications for assessment of the risks posed via the underground storage of diesel.
- Site history has not included list of associated contaminants.
- The baseline data supplied is not sufficient. Based on the proposed activity covered by the permit, diesel range organics are likely to be the relevant hazardous substance (as defined by IED), yet this is missing from the lists of determinants. Despite groundwater being encountered across the site, no analysis of groundwater quality has been undertaken.
- No monitoring plan with respect to soils or groundwater has been submitted.

In our review we noted that the site is located upon a Secondary A aquifer within the Kempton Park Gravel formation where a shallow water table is present. The use of subsurface infrastructure for the storage and transmission of hazardous substances in such locations are considered high risk and must be accompanied by a risk assessment appropriate to the volumes being stored. This is in line with the position statements found in section D. Pollutant storage and transmission of the "The Environment Agency's approach to groundwater protection" (Nov 2017, V1.1)". The current level of information submitted is not sufficient to demonstrate that the risks posed were both fully understood and would be managed. We asked the applicant via a Schedule 5 notice to provide a revised risk assessment with full structural details of the installation, including details of:

- The excavation.
- The tanks.
- Tank surround.
- Associated pipework.
- Leak detection and management system.

Any assessment of the risk needs to consider both the risks posed from the bulk storage tanks and those posed by the pipework and generators (including day tanks/belly tanks/skid tanks etc.)

The operator responded on the 09/03/18 with a revised H5 Site condition report TR DTC v2 and supporting document "Fuel Storage Appraisal to support EPR application for CP3339DZ issue 1 dated 09/03/2018" to

address the information we requested. The following measures are proposed to prevent soil and groundwater contamination.

- The site has 3 underground bulk tanks contained within a tank room of which only Bulk tank 1remains in use. Bulk tank 2 & 3 was were decommissioned before 2016 & 2017. The tank room itself comprises of concrete 'box' formation with a single central column and is bounded east and west sides by the historic dock wall. The tank room in turn is tied back into DTC structure along its south elevation. According to record drawings, the walls and covering slab are 600mm thick with tank room slab approximately 1300mm thick. A 4m x 2m opening is located within the cover slab which provides ventilation at surface level.
- Generator bulk tanks and day tanks are double skinned and contained in appropriately sized bunds (110% of total capacity), fill points are inside the bunds and over drip trays to capture any spills.
- A fuel interceptor is in place to help ensure that spilt fuel does not reach surface water drains by capturing any oils prior to discharge into the local sewerage system. The interceptor is checked and cleaned annually.
- The site is covered in good quality hardstanding, therefore reducing the likelihood of any potential route to ground for spilt fuel.
- Interconnecting pipework is in a pipe in pipe system with leak detection in place (as required). Permanent / portable fuel polishing units are utilised where necessary.
- Generator and tank rooms are coated to make them impermeable and associated pumps are above drip trays and inside bunds.
- The pipework and fuel tanks are in a closed system meaning if there is a requirement to drain the day tanks the site can dump the fuel back into the underground bulk tanks. The bulk tanks are in their own underground area that is classed as a bund, if they over fill then the alarm will sound. Any fuel that exits the tanks will be captured by the fuel interceptors.
- Each bulk tank is fitted with an overfill alarm float switch which will signal to the tanker operator to stop further filling. Also fitted is an overfill prevention valve, protecting against over filling of the bulk tank should the overfill alarm float switches fail.
- Spill kits are in place onsite and are to be used to contain spills to prevent spilt fuel reaching surface water drains and staff are trained in spill response procedures.
- There are pending plans to colour code surface water drain covers blue and foul sewers red. Staff would then be made aware to avoid carrying out high risk activities such as refuelling activities in the vicinity of blue drain covers.
- The site aims to ensure that any water that may have come into contact with contaminated materials is disposed.
- The report concludes that only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain a condition relating to protection of soil, groundwater and groundwater monitoring. However, the Environment Agency's H5 Guidance states that it is only necessary for the operator to take samples of soil or groundwater and measure levels of contamination where there is evidence that there is, or could be existing contamination.

We are satisfied that there are sufficient measures in place to ensure there is adequate protection of soil and groundwater from these operations and that there is no evidence of historic contamination. Periodic monitoring will be required at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination, condition 3.1.2.

Operating Techniques

We have specified that the Operator must operate the installation in accordance with the following documents contained in the application:

Description	Parts Included	Justification
The application Response to Schedule 5 Notice, dated 25/01/2018	Parts B2 and B3 and the supplementary information supplied with these parts. The following documents:	Each of the indicated sections contains information regarding the manner in which the installation is operated. Each of the indicated sections contains information
	 TR DTC Environmental Permit and Compliance Manual Issue 2.0, Feb 2018 which details site procedures to ensure permit compliance. Fuel Storage Appraisal to support EPR application for CP3339DZ issue 1 dated 09/03/2018 H5 Site condition report TR DTC v2 	regarding the manner in which the installation is operated.
Additional information request dated 27/02/18	Air Quality Controls TR DTC v1	Contains information regarding the manner in which the installation is operated.

The details set out in the sections above, describe the techniques that will be used for the operation of the installation and have been assessed by the Environment Agency as Best Available Techniques (BAT); they form part of the permit through permit condition 2.3.1 and Table S1.2 in the permit schedules

Air Quality Impacts

The data centre is located within the Tower Hamlets Air Quality Management Area (AQMA) which is managed for NO₂ and PM₁₀. There are no other industrial sources of air pollution within 500m of the facility.

The Operator's assessment of the impact of air quality is set out in section 8.2 of the application document titled "Local Air Quality Modelling Report". The assessment comprises:

- dispersion modelling of emissions to air arising from the daily running of the one boiler along with the monthly and annual testing of the generators and an outage during poor meteorological conditions.
- a study of the impact of emissions on nearby sensitive habitat and conservation sites.

The Operator's modelling predictions has considered three operating scenarios described as scenario 1, 2 and 3 in the application. The air quality assessment considered emissions of nitrogen dioxide (NO2), particulate matter (PM10) and sulphur dioxide (SO2) from 10 diesel generators and continuous operation of one boiler under the following events:

• Scenario 1 (Monthly generator test) – each month the generators are tested for a maximum of one hour at site load which is approximately 30%. The model the tests assume 50% load emissions data.

- Scenario 2 (Annual generator tests in July) all 10 generators are started at the same time and the tests last up to 5 hours
- Scenario 3 (unplanned outage) They assumed one hour of unplanned outage per year occurring on the worst-case met hours with 9 engines.one unplanned outage each year resulting in 9 of the generators running for one hour operating at 50% load, and it will occur on the worst case meteorological hour of the year.

Our Air Quality Modelling and Assessment Unit (AQMAU) audited the air dispersion modelling and report submitted with the permit application. Both the maintenance testing and emergency scenarios within the model were assessed.

Of the 3 boiler plants only one is being used. All are due to be replaced with newer burners, and emissions data for the proposed new burners were assumed in the assessment. Based on this assumption we agree that boiler plant as an emission source has no contribution to the overall predictions and are insignificant in comparison.

With the exception of the Long Term NO_2 impact to human receptors we agree with conclusion of the report and are satisfied that the Environmental Standards (ES) are unlikely to be exceeded as direct consequence from the proposed operation, including the unassessed Environmental Assessment Level (EAL) for benzene for the testing scenario.

For the emergency scenario we agree that exceedence are likely if emergency operation is for more than 24 hours. The applicant has provided evidence of actual reliability data for the local electricity grid distribution (including data centre internal electrical design).

The site is served via two substations at West Ham and Simpsons Road. Grid reliability is very good with the last outage being in 2002. In addition a further substation is proposed within the new data centre building, which will further improve the reliability of grid supply. Based on this information we are satisfied that the likelihood of the plant needing to operate for prolonged periods in an emergency mode is not likely.

Permit conditions

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 IC1 and IC2 as an improvement programme requirement in the permit. This requires the operator to produce an Air Quality Management Plan and undertake a cost/benefit analysis of the increased stack heights or their orientation (to enable better dispersion). This is based on the outcome of the modelling assessment and the 'standalone' controls required in addition to those in the EMS and permitted Operating Techniques.

The permit will also include a maximum 500 hour 'emergency/standby operational limit' for any or all the plant producing on-site power under the limits of the combustion activity. Therefore, emission limit values ELVs to air (and therefore emissions monitoring) are not required within the permit. Emergency hours' operation includes those unplanned hours required to come off grid to make emergency repair of electrical infrastructure associated but occurring only within the data centre itself.

In addition, each individual generator with its own discharge stack can each be maintained, tested and used in a planned way for up to 50 hours per calendar year without ELVs or associated monitoring under IED/MCPD. The maintenance scenarios are detailed above and controlled though permitted Operating Techniques.

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 a clear way to demonstrate minimisation of emissions to air as 'emergency plant'.

Operations and management procedures should reflect the outcomes of the air quality modelling by minimising the duration of testing, phasing engines 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. This is controlled in the permit through the operating techniques.

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

Emission Limits and Monitoring Requirements

The generators are only planned to operate for one hour per month with an annual 5 hour black building test as part of the maintenance regime to ensure integrity of plant operation. Based on this mode of operation, we have not set any emission limits or monitoring requirements for these generators. Furthermore, Article 30 para 8(a) of the IED states that, the Emission Limit Values (ELV's) in Annex V do not apply to diesel generators.

As there are no limits or monitoring requirements, condition 2.3.3 'The activities shall not operate for more than 500 hours in emergency use' has been included to restrict the hours of operation. The Operator will be required to record operating hours for each generator and the number of runs for each of the generators. Furthermore, the Operator will also ensure that standby generators are well maintained in line with the operating techniques submitted in their application, in order to minimise the likelihood of impact from air pollutants.

With respect to the boiler plant as the emissions to air are insignificant we have not set any ELV's or monitoring at this time. However, the ELVs and monitoring requirements as set in part 1 of MCPD will apply from the 1 January 2030.

Emissions to Sewer

There will be no emissions to sewer.

Emissions to Water

There will be no emissions of process waters to surface water from the proposed installation.

Emissions to Land

There will be no emissions to land from the proposed installation.

Odour and Waste

The type of activity that will be carried out at the proposed facility is unlikely to give rise to odour issues. A waste management plan will be developed for the proposed site and reviewed every four years. There will be no waste accepted at the site. Waste will not be generated during normal operations. Waste oil would normally only occur during a spillage, contamination or degradation of the oil stocks. Small quantities of waste items may be generated during routine maintenance activities. The site management system will include procedures for the collection and disposal or recovery of any waste oils and any other wastes that are generated.

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 odour and waste.

Noise and Vibration

The application contained an Environmental Risk Assessment which concluded that due to the infrequent operation of the backup generators, the presence of sound attenuation measures and the distance to the nearest sensitive receptors there will be only a low noise impact. In addition they provided a noise impact assessment, undertaken by Hann Tucker Associates, which looked at the installed plant operating at maximum design duty and the noise impact at the nearest noise sensitive window, a hotel. Noise measurements were undertook around the site with the generators operating at full design duty along with background noise prior to operating the generators. The noise impact assessment also concluded that there would be no adverse effect as the measured noise levels were below the average background. However the assessment only looked at 4 generators running, rather than all 10 generators. Limited background data was considered and limited measurement undertaken. It assumed that the generator were not tonal.

For noise assessments, for permit applications full BS 4142:2014 to be undertaken rather than the simplistic approach undertaken. BS4142 assesses the impact of industrial and commercial sound on residential receptors by subtracting the measured background from the rating level. BS4142 states: "A difference of +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context." and "A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context." It is likely that had the worst case scenario considered then this would indicate a significant adverse impact during the night time. However, the context of the operations needs to be taken into account. The generators are only likely to be operational infrequently, less than 0.2% of the year for maintenance and national grid failure. Each month (currently the last Friday of the month at 10pm) the generators are powered up and run for approximately 60 minutes at site load (approx. 25% load). All generators will start but then drop off as required. Annual Generator maintenance where the generators are powered up and run for a maximum of 5 hours at site load (approx. 25% load). All generators will start but then drop off as required. Currently this is undertaken on the last Friday in July at 10pm. This has been undertaken without complaint.

Grid failure is most likely due to overload during peak periods, which is normally daytime hours, or due to extreme weather conditions which are rare, difficult to predict and will change the soundscape significantly. Therefore, although the assessment indicates the potential for significant adverse noise impact at the most sensitive receptor during the night time, the probability of this occurring is likely to be very small. It is noted that the site is operational and are applying retrospectively for the permit; the local authority have already checked the noise levels coming from the site and it is understood noise is not a current problem.

It is considered that the operator has taken appropriate measures to minimise the risk of significant noise emissions. The generators are either located within the building or housed with their own containers which provide noise attenuation, the generators are not tonal and have been designed to meet the Local Authority Planning and Environmental Health requirements that the noise level are no greater than the existing background noise level LA₉₀ is likely to operate (daytime or night-time). We do not consider it necessary to impose any Noise Alternative Conditions.

An incident reporting procedure is contained within the environmental management system. Although no noise management plan has been requested to date, condition 3.4 enables the Environment Agency to request one if considered necessary in the future.

Best Available Techniques (BAT)

The Applicant submitted a BAT assessment with the permit application. We considered the assessment lacked detail on how the selection of the technology, oil fired diesel generators to provide backup power had been undertaken .The applicant was requested to submit a revised BAT assessment as part of a Schedule 5 request for further information dated 25/01/2018. The revised BAT assessment was submitted on the 09/05/2018.

The key findings are as follows:

- Fuel cell technology may have potential in future but as there are not yet a significant set of examples proving it as a reliable option for backup power provisions it is unlikely to be appropriate for application at such a critical facility.
- Backup power solutions that rely on piped natural gas are unlikely to be able to provide sufficient
 resilience due to risk that the natural gas supply could be cut off at the same time as a mains failure for
 example due to a natural disaster or domestic industrial action. On-site storage of natural gas has not
 been considered in detail due to the excessive storage space requirements that this would entail on such
 a constrained site.
- Phosphoric Acid Fuel Cells (PAFCs) and Molten Carbonate Fuel Cells (MCFCs) have been developed for stationary power generation, such as combined heat and power. They both share characteristics that make them unsuitable for providing back up power due to their high operating temperatures and consequential slow start up time. This is a particular problem for MCFCs which operate at 650°C and have a load ramping of 0.5kW per minute.
- Hydrogen gas is difficult to store over long periods. Hydrogen can be generated on site from electricity but use of grid electricity to generate hydrogen has high conversion losses and the carbon intensity of grid electricity is such that this is not a low carbon solution. Hydrogen can also be obtained on site using hydrogen reformer technology from natural gas but this presents similar problems for back up generation as other natural gas solutions.
- Liquid petroleum gas (LPG) based generation technology would have a lower air quality and global warming impact. However there is reduced resilience due to the less reliable frequency stability of LPG as compared to diesel generators. Although this could be corrected using an optimisation device the system is nevertheless less desirable as a technology for provision of backup power to mission critical IT systems. Given that the generation equipment is not expected to operate for a significant proportion of time, the environmental benefit over diesel generation technology is not considered significant enough justification.

We accept that oil fired diesel 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 technique 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/m3. The operator has committed to ensure future generators, which would be subject to a permit variation, meet BAT requirements.

Decision checklist

Receipt of application		
Confidential information	A claim for commercial or industrial confidentiality has been made. We have not accepted the claim for confidentiality. The reasons for this are given in the notice of determination for the claim. 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		
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.	
	The application was publicised on the GOV.UK website.	
	We consulted the following organisations:	
	Director of Public Health	
	Environmental Health, London Borough of Tower Hamlets	
	Food Standards Agency (FSA)	
	Health & Safety Executive	
	Public Health England (PHE)	
	Thames Water	
	The comments and our responses are summarised in the <u>consultation</u> <u>section</u> .	
Operator		
Control of the facility	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 facility		
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 RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.	

Aspect considered	Decision		
	activities are defined in table S1.1 of the permit.		
The site			
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing 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.		
	We have advised the operator what measures they need to take to improve the site condition report. See key issues		
Biodiversity, heritage, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.		
	We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.		
	There are 2 Special Protection Areas (SPAs), 2 Special Areas of Conservation (SACs), and 2 Ramsars within 10 KM of the site; one local nature reserve (LNR) and 22 local wildlife sites (LWSs) located within two kilometres of the installation.		
	With the exception of exceedances of the 24-hour NOX critical level at the Local Wildlife Sites: East India Dock Basin, Saffron Avenue Pond and Robin Hood Gardens. We consulted with the Local Authority that managed these to see if they had any concerns regarding the operating regime affecting the habitats, they did not respond to our consultation. We also consulted with our Biodiversity Technical Specialist, Kent, South London & East Sussex Area who expressed no concerns.		
	We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.		
	We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.		
Environmental risk assessment			
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.		
	The operator's risk assessment is satisfactory. The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment, all emissions may be categorised as environmentally insignificant with the exception of long term NO2. However, our consideration of this is given in more detail in the 'Key Issues' section of this document.		

Aspect considered	Decision		
Operating techniques			
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.		
Operating techniques for emissions that do not screen out as insignificant	Emissions of long term NO2 cannot be screened out as insignificant. We have assessed whether the proposed techniques are BAT.		
	This is explained in more detail in the "Key Issues" section of this document.		
Operating techniques for emissions that screen out as insignificant	Emissions of other pollutants have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation.		
	We consider that the emission limits included in the installation permit reflect the BAT for the sector.		
Permit conditions			
Improvement programme	Based on the information on the application, we consider that we need to impose an improvement programme. Why we have imposed an improvement programme as outlined in the key issues sections above.		
Emission limits	We have decided that emission limits are not required in the permit.		
Reporting	We have specified reporting in the permit.		
	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 operated in emergency scenario mode.		
Operator competence			
Management system	There is no known 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.		
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared.		
	No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.		
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.		

Aspect considered	Decision
Growth Duty	
Section 108 Deregulation Act 2015 – 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

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

Response received on 12/12/2017 from PHE

Brief summary of issues raised

Recommended the following:

- That any Environmental Permit issued for this site should contain Conditions to ensure that the following potential emissions do not impact upon public health: Products of combustion (nitrogen dioxide, sulphur dioxide and particulate matter) from the backup diesel generators used on site in case of power failures that also undergo periodic testing.
- That we audit the Air Quality Modelling to check its robustness and as the results show that in the event of a complete power failure and/or emergency testing of the generators the relevant short-term ambient air quality standards for nitrogen dioxide would be significantly exceeded at nearby receptors. However they accept that this based on a worst case scenario and the probability of this is predicted to be low as the generators are tested very infrequently and the site has a dual connection to the national grid.
- That we should consider the potential emissions from other current and planned data centres located in the vicinity of the site

Finally they recommended that we consult with following organisation(s) in relation to their areas of expertise:

- the local authority on matters relating to impact upon human health of contaminated land; noise, odour, dust and other nuisance emissions;
- Food Standards Agency, where there is the potential for deposition on land used for the growing of food crops or animal rearing;
- Director of Public Health for matters relating to wider public health impacts.

Summary of actions taken or show how this has been covered

We carried out an assessment of the air quality modelling provided with the permit Application. Our Air Quality Assessment and Modelling team audited the assessment. As outlined in the key issues above, we agree with the Applicant's conclusions, that the maintenance scenario is unlikely to cause an exceedence of the EQSs. The site has not operated in emergency scenario in10 years, however we have specified a number of improvement conditions which require the operator to carry out additional work in relation to the potential short term predictions resulting from the emergency scenario.

These include working with the Local Authority to put together an Air Quality Management Plan and considering additional measures that could be put in place to reduce potential emissions of short term NOx which could include abatement measures.

We consulted the Local Authority, the Food Standards agency and the Director of Public Health. No responses to our consultation were received.

Response received from

Our Biodiversity Technical Specialist, Kent, South London & East Sussex Area

Brief summary of issues raised

No concerns, no comments made

Summary of actions taken or show how this has been covered

No Action required