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Natural Resources Wales
William Wallace, Senior Officer, Installation and RSR permitting
By email

DATE
14 May 2026

SUBJECT
CWL11/CWL12 partial transfer, application ref. PAN-030347

REFERENCE
0724643

Dear William,

In response to your letter dated 22/04/2026 requesting further information on the above application, responses are provided below. These responses have been prepared by Environmental Resources Management Limited (ERM) on behalf of VDC CWL12, based on information provided by Vantage Data Centers UK Limited (VDC UK) and VDC CWL12 Limited (VDC CWL12).

1. AIR EMISSION POINT PLAN

NRW Request:

- Provide an air emission point plan in a colour that is not green (Reason: as the site is splitting, we will need a different colour to distinguish the two sites, as done with the overall site plan).

VDC Response:

An updated site layout and installation boundary plan for CWL12 is provided in Attachment A, with CWL12 boundary shown in red. This drawing replaces Figure 2 of the Supporting Information Document.

2. OPERATING TECHNIQUES

NRW request:

- Provide operating techniques for both parts of the site (one for CWL11 and another for CWL12). Reason: the operating techniques will need into the new permit and the existing one to reflect the operations of site (CWL11 and CWL12).

NRW clarification 28/4/26:

- As a partial transfer will split the site into two, we will need a copy of operating techniques for each part to show responsibilities of each operator for the relevant parts as the site would be a multi-operator installation and going from one permit to two permits if transferred. This should include areas where there may be shared operations (such as surface water discharge) to highlight co-ordination between the existing operator and the potential operator of the part transferred permit.

  The overall operations of site however should remain the same as the existing site but updated to reflect a multi-operator installation.

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VDC Response:

A review of operating techniques for CWL11 and CWL12 is provided in Attachment B. This is based on 'Data Centre FAQ Headline Approach', DRAFT version 21.0, Environment Agency, 15/11/2022, which has been adopted by NRW, and is considered to represent appropriate techniques for the facilities.

No changes to operating techniques are proposed as a result of the transfer, with the exception of surface water drainage. An application to vary CWL12 permit (PAN-030468) has been submitted, which includes a new surface water emission point for CWL12 drainage. Until this variation is determined, CWL12 surface water will drain to the existing CWL11 drainage system. Any spills originating from CWL12 will be responded to by CWL12 personnel in accordance with VDC's spill management procedure. Surface water drainage is the only shared operation.

3. CWL12 ENVIRONMENTAL MANAGEMENT SYSTEM

NRW request:

- Provide a more detailed summary of the environmental management system (EMS) for CWL12 and how it meets the requirements.

VDC Response:

A summary of the CWL12 EMS has been submitted to NRW as part of the CWL12 permit variation (PAN-030468), submitted in parallel with this transfer application. A copy of this information is provided in Attachment C.

It is expected that CWL12 will be included in the multi-site ISO14001 certification (see below).

4. CWL11 ENVIRONMENTAL MANAGEMENT SYSTEM

NRW request:

- Provide any details or potential amendments for the site specific EMS for CWL11 as a result of partial transfer.

VDC Response:

VDC operates in accordance with an Integrated Management System (IMS) for quality, health and safety, information security and environment. The EMS is certified to ISO 14001:2015, which covers multiple sites (including CWL11 and CWL13). A copy of the certificate is provided in Attachment D.

Since CWL12 is not yet operational, the current EMS does not include CWL12 and therefore no updates to CWL11 EMS are required.

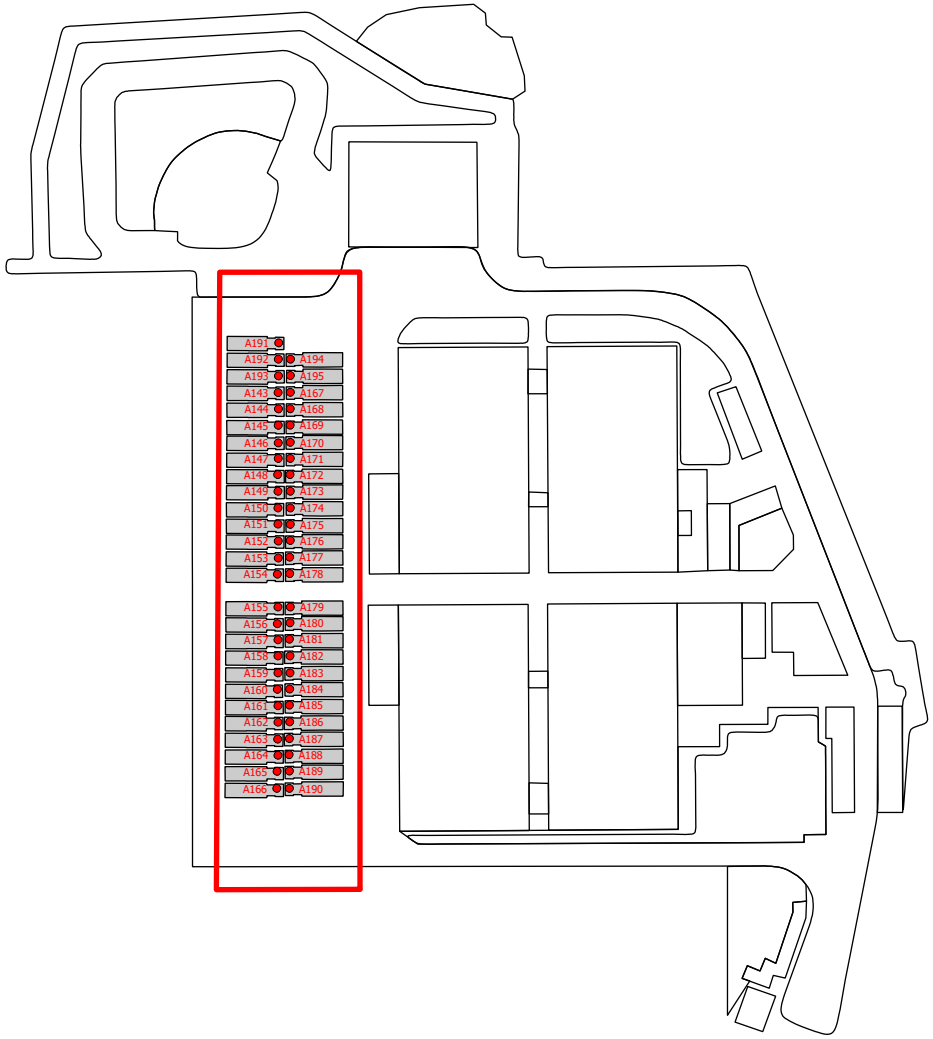
We also accept that addition of unplanned operation cannot be included in the transfer application.

Please let me know if you require any further information.

Yours sincerely,

Kate Riley

ATTACHMENT A CWL12 SITE PLAN (UPDATED)



CWL12 Installation Boundary

Emission Point to Air

0 20 40 60

Metres

N

Figure 2 - CWL12 Site layout, Installation Boundary and Emission Points

SCALE: See Scale Bar	VERSION: A02
SIZE: A4	DRAWN: RW
PROJECT: 0764238	CHECKED: DP
DATE: 11/05/2025	APPROVED: KR

ERM

VANTAGE DATA CENTERS

PROJECTION: British National Grid

Path: \\UKSPRDGISFS01\Data\London\Projects\0724643 - Vantage\Map\0724643 - Vantage.aprx\0764238 - Vantage - Newport Data Centre CWL12 Site layout, installation boundary and emission points - A01

ATTACHMENT B OPERATING TECHNIQUES

OPERATING TECHNIQUES - CWL11

The EA's Data Centre FAQ, dated November 2022, is currently in draft form, but forms the basis for discussion of a common methodology and liaison with individual operators and their industry association. For this application and the selected abatement, this guidance is considered to represent the current NRW position of BAT for data centre back-up generation systems (an EA document now adopted by NRW).

Assessment of CWL11 against this guidance is presented in the table below:

#	Summary Requirement	VDC Response
1	We accept that oil fired diesel generators are presently the default technology for standby generators in data centres. However, the permit application still requires a BAT discussion detailing the choice of engine, the particular configuration and plant sizing meeting the standby arrangement (e.g. 2n). But TBC there are now site-specific issues where abatement (SCR) is now the default for new plant – see the details in the text.	CWL11 includes 141 diesel/HVO generators: 62 existing MCP (A1-A62), 61 new MCP without SCR (A63-A93, A113-A142) and 18 new MCP with SCR (A94-A111). No changes are being made to these engines as part of the permit transfer. The engines in each cell 'block' are in 'n+1' configuration, where n is the actual load requirement of the cell block and the +1 provides additional resilience. Engines A94-A111 have SCR installed for NOx abatement, reducing expected NOx emission levels in the exhaust gas to 190 mg/Nm3, making them compliant against the standard.
2	Standby engine capacities are added together in MWth input at the quoted standby rating, being usually 110% of the continuous rating (if >=50MWth the site then needs an EA 1.1A Combustion Activity EPR permit).	The aggregated capacity of the CWL11 standby engines, following the transfer of CWL12 engines to a new permit, will be 348 MWth. Therefore the CWL11 site will be permitted as a Schedule 1 Part A(1)(a) Combustion Activity.
3	If precise MWth figures are unavailable and spec sheets or face-plates are unclear, the calculation for MWth derived from MVA output is based on: power factor 0.8 and an assumed poor conversion efficiency of 0.35 for MWth to MWe e.g. 3MVA = (3*0.8)/0.35 = 6.86MWth.	MWth figures for the generators have been provided by the suppliers. Calculation of MWth from MVA output is not required.
4	The sum of generator plant capacities is based only on MWth inputs of all plant regardless of the standby configuration. MWe output constraints such as realistic customer load or other practical output limiting factors do not constitute a limit to the MWth input as defined in the EA's guide RGN02.	Generator plant capacities are based on MWth inputs.

#	Summary Requirement	VDC Response
5	Proximity of data centres with a company campus, adjacent, neighbouring or close-by buildings in urban locations (e.g. within a common trading estate but only separated by a road width or notional distance) may constitute a single site for determining the boundary of the installation as 'same site – same operator' as per RGN02 – see the details in the text	CWL11 Data Centre is part of the CWL1 campus, which comprises CWL11, CWL12 and CWL13. This transfer application relates to the separation of CWL11 and CWL12 into separate permitted sites. CWL13 Data Centre, located 120m southeast of CWL11 Data Centre, is operated as a separate site with a separate permit.
6	Permits will 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; and thereby emission limit values ELVs to air (and thus engine emissions monitoring) are not required within the permit.	The permit includes a maximum 500 hours limit per MCP per year, consistent with the emergency MCP exemption. There are no ELVs set in the permit.
7	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.	It is noted that emergency hours' operation for the CWL11 site applies to unplanned run hours to repair electrical infrastructure related to the CWL11 site only.
8	Each individual generator with its own discharge stack, can be maintained, tested and used in a planned way for up to 500 hours per calendar year each without ELVs (and hence no monitoring) under IED/MCPD. Though clearly the EA expects planned testing and generator operations to be organised to minimise occasions and durations (subject to client requirements). Ideally a target should seek to keep individual generator testing to below 50 hours/annum each as required for MCPD specified generator exclusion. Accepting <50hours/gen/annum as a default upper limit for bespoke large data centres, the EA regards a BAT aspiration to aim for a more routine 1hour/month per generator.	The existing permit includes a limit of 50 hours per MCP per year for testing and 500 hours per MCP per year for operation. The duration of engines tests will be minimised. Duration of engine tests will be approximately 5 hours per engine per year.
9	In summary 7, & 8 means the whole or part site can only operate as emergency plant up to 500 hours as an absolute limit for grid backup issues; but that individual plant (at any load) with its own stack (or a stack with multiple plant) with justification can be operated for up to 500 hours (ideally <50) each as part of its non-emergency role under maintenance and testing.	See point 8.

#	Summary Requirement	VDC Response
10	For the purposes of determining operating hours, data centre diesel generators are regarded as having a minimal start-up or shut-down times. Operational hours start on the first fuel ignition.	Noted.
11	Data Centre permits (unless they apply and justify it in a permit application) will expressly have a limit on the activity to exclude voluntary 'elective power operation' such as demand side response (i.e. on-site use) or grid 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 or MCPD specified generators' that voluntarily operate within the balancing market, and importantly a clear way to demonstrate minimisation of emissions to air as 'Emergency plant'.	No voluntary elective power operation is proposed.
12	The default engine specification as a minimum for new plant to minimise the impacts of emissions to air (NOx) is 2g TA-Luft or EPA Tier 2 or equivalent standard. A detailed cost benefit analysis (CBA) is otherwise needed existing, old plant justifying worse emission such as 4g TA-Luft plant or for example a justification under FCDM. TBC There are now site specific issues where abatement (SCR) is the default for new plant – see details in the text.	Refer to point 1 above. Engines A94-A111 have SCR installed for NOx abatement, reducing expected NOx emission levels in the exhaust gas to 190 mg/Nm3 (TA Luft levels). The impact of emissions has been considered in the Air Quality Assessment submitted with the V4 permit application.
13	CBA for improved exhaust emissions, dispersion and mitigations from the plant is expected for the maintenance/testing and the emergency standby roles. We would be looking for improvements particularly if Local Air Quality (LAQ) modelling (under H1) indicates anything other than an insignificant contribution to short term local air quality for the 'planned' maintenance emissions of the plant.	An H1 risk assessment was completed as part of the V4 permit application. A detailed dispersion model was also prepared to assess the impact of maintenance testing and emergency operation of the engines.
14	Retrofit abatement techniques for existing installations for engine emissions such as selective non-catalytic or catalytic reduction (SNCR or SCR) would not normally be expected for standby plant to mitigate the emissions for standby/emergency operation. BAT might include improved flue gas dispersion (e.g. stack modifications, increased height) or improved low NOx engine management controls or possibly fuel choice.	SCR is installed on engines A94-A111 to mitigate NOx emissons. Engines A94-A111 normally run on HVO, with diesel as a back-up fuel.

#	Summary Requirement	VDC Response
15	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.	The duration of engine tests will be minimised to the extent practicable. Individual engine tests and Black-building tests will be carried out for each cell. The permit specifies that there shall be no overlapping of any type of testing scenarios, and only one cell test shall be carried out in any one day.
16	When AQ modelling the emissions from the engines, the certified technical standard provided by the manufacturer should be used (i.e. likely worst case emissions). However any 'fit for purpose' monitoring of the actual emissions from installed plant will be considered as evidence of the likely real impacts as part of the permitting decision process.	Likely 'worst-case' emissions have been used in dispersion modelling.
17	The groundwater monitoring of fuel storage tanks and distribution pipework using GW boreholes is risk based for the site condition report (SCR) and IED 5-yearly monitoring. Should GW monitoring be required for underground tanks and/or the SCR, the boreholes should be positioned for whole site surveillance (for the SCR) rather than as a very local control immediately around the buried fuel oil tanks (i.e. not be just an addition to double skinned tanks already protected by leak detection and hence ignoring distribution pipework etc.).	VDC does not operate or plan to operate underground fuel storage tanks and consider that their operational approach to prevention of releases to land minimises this risk to site condition.
18	5-yearly GW sampling & 10-yearly soil sampling under IED is normally not needed but still needs some justification.	5-yearly groundwater sampling and 10-yearly repeat soil sampling is not considered warranted on the basis of the nature of the permitted operation and its low potential for emissions to land.
19	The permit application must assess and provide evidence of actual reliability data for the local electricity grid distribution (including data centre internal electrical design) for the EA to judge the realistic likelihood of the plant needing to operate for prolonged periods in an emergency mode (especially if emissions model so as to exceed short term air quality standards).	The site is not expected to operate for a prolonged period in emergency mode. The extent of back-up power generation capacity and fuel storage reflects the VDC business model of providing customers with a high assurance of continuity, not an expectation of loss of grid supply in practice. The Site currently has four substation feeds (will be increasing to six) so there is a good level of redundancy in power supply.
20	Optimising grid reliability within the site as part of general BAT to minimise emergency operating hours is required – evaluation is needed within the permit application on the Tier reliability standard under ISO27001 and Uptime.	CWL11 is a Tier 3 site with an expected uptime of 99.999%. The Site takes its power supply from a National Grid 400 kV substation.

#	Summary Requirement	VDC Response
21	Reporting of standby engine operational run hours and discussion of any electrical outages (planned or grid failures regardless of duration) required annually.	Engine operating hours are recorded monthly and after any unplanned events. Engine operating hours are reported to NRW as part of annual reporting.
22	AQ modelling for permitting split into two parts: 1) for the routine planned testing regime , including scheduled on-load use supporting maintenance works like UPS or HV – if no other details are known the default is 50 hours/gen/year; Commissioning of significant new plant may be included or possibly assessed separately as a 'one off' under a permit 'pre-op condition 2) A prolonged reasonable maximum full load outage (so accepting not all installed engines will run) which the default is assumed 72 hours. Looking at ambient AQ and potential areas for Acute exposure (AEGL).	Detals of AQ modelling were provided in the V4 permit application AQIA. 1) The test regime defined the application AQIA was considered in the AQ modelling assessment. A planned testing regime of 5 hours per year has been modelled, comprising individual engine tests and black building tests. 2) 1-hour and 72-hour emergency outages have been modelled.
23	Assuming AQ modelling, based on operating scenarios, indicates a local air quality risk then notification to the EA of unplanned (and pre-notification of planned) continuous grid outage exceeding 18 hours LAQM (or the otherwise assessed short term interval from modelling) is likely required under a permit schedule 5 notification.	VDC will notify NRW or any plannedor unplanned interruptions to the grid supplies relating to the site. VDC will continue to update and maintain their Air Quality Management Plan (AQMP), most recent updated submitted to NRW 15 April 2026.
24	The notification requirement stated in the permit should also indicate the actual number of generators that need to be operating above which the local air quality is at risk e.g. 'notification of continuous emergency operation exceeding 18 hours with 5 or more engines operating together is required' (i.e. model shows 4 or less engines unlikely to breach LAQ)	The permit requires that the operator notifies NRW in the event that operation or activities gives rise to an incident or accident that significantly affects or may significantly affect the environment. The AQMP identifies outage scenarios that have potential to breach the Air Quality Standard (AQS) or AEGL-1, and requires that VDC notifies NRW.

#	Summary Requirement	VDC Response
25	Assuming AQ modelling, based on emergency outage operating scenarios, indicates a very significant risk to local air quality and identified receptors, the EA will ask the operator to have a written action plan to manage the issue for prolonged emergency running of the plant (including sensitive receptors list and mitigations, assessments and impacts evaluation against modelled risk conditions i.e. occurrence at periods of most concern in the year, possibly ambient air monitoring surveillance at very sensitive receptors). An AQ outage action plan is also likely required for sites which might operate in conjunction with other neighbouring large sites during an outage i.e. data centre hubs. A template AQMP is available.	CWL11/12 currently has an active AQMP in place. The most recent update to the AQMP was submitted to NRW on 15 April 2026. VDC will update the AQMP in line with the transfer.
26	Due to the emphasis of the permit on electrical (and cooling) systems it is noted that the EA considers the F-Gas regulations as falling under the remit of the EPR permit (for notifications and management) where F-gases (or potentially any polluting potential substance) are used directly under the combustion aspects of the permitted activity (e.g. switchgear). It is important to notify the EA of any significant releases. Other uses of F-gases e.g. for server room cooling are not strictly under the EA permit but are regulated by the EA generally so it may still be prudent to make the EA aware of your F-gas releases.	F-gases are used within the high voltage switchgear and cooling system. Vantage keeps a register of F-gas usage to monitor any releases (if any). In an instance where F-gas releases are significant VDC will notify NRW. The F-gas register is available to NRW upon request.
27	The permit application should detail the likely quantities of waste engine oil generated annually – EWC 13 02 waste oils following servicing for example. Although unlikely to be huge, the Pollution inventory has a reporting threshold of 1 tonne for non-hazardous waste but technically no lower thresholds for hazardous waste oil.	Waste oil will be removed by the same appointed subcontractors who perform servicing and maintenance of the generators at the Site. The reporting thresholds are noted and the data collected from the sub-contractor as part of the annual NRW reporting process. Given the lack of routine operation anticipated at the Site, lubricating oil degradation is not expected, therefore bulk replacement is unlikely.

#	Summary Requirement	VDC Response
28	The permit application is for the combustion plant and associated environmental concerns and not for the Data Centre itself. The applicant should be aware that the permitting process and application is accessible to the public so should have regard to 'Commercial in Confidence' and Critical National Infrastructure. In the first instance discuss particular concerns directly with the EA [NRW in this case] and/or exclude such priority information from the application but indicate that such is 'available on request'.	Noted.

OPERATING TECHNIQUES - CWL12

The EA's Data Centre FAQ, dated November 2022, is currently in draft form, but forms the basis for discussion of a common methodology and liaison with individual operators and their industry association. For this application and the selected abatement, this guidance is considered to represent the current NRW position of BAT for data centre back-up generation systems (an EA document now adopted by NRW).

Assessment of CWL12 against this guidance is presented in the table below:

#	Summary Requirement	VDC Response
1	We accept that oil fired diesel generators are presently the default technology for standby generators in data centres. However, the permit application still requires a BAT discussion detailing the choice of engine, the particular configuration and plant sizing meeting the standby arrangement (e.g. 2n). But TBC there are now site-specific issues where abatement (SCR) is now the default for new plant – see the details in the text.	CWL12 includes 53 diesel/HVO generators, all new MCP with SCR (A143-A195). No changes are being made to these engines as part of the permit transfer. The engines in each cell 'block' are in 'n+1' configuration, where n is the actual load requirement of the cell block and the +1 provides additional resilience. Engines A143-A195 have SCR installed for NOx abatement, reducing expected NOx emission levels in the exhaust gas to 190 mg/Nm3, making them compliant against the standard.
2	Standby engine capacities are added together in MWth input at the quoted standby rating, being usually 110% of the continuous rating (if >=50MWth the site then needs an EA 1.1A Combustion Activity EPR permit).	The aggregated capacity of the CWL12 standby engines is 172.4 MWth. Therefore the CWL12 site will be permitted as a Schedule 1 Part A(1)(a) Combustion Activity.
3	If precise MWth figures are unavailable and spec sheets or face-plates are unclear, the calculation for MWth derived from MVA output is based on: power factor 0.8 and an assumed poor conversion efficiency of 0.35 for MWth to MWe e.g. 3MVA = (3*0.8)/0.35 = 6.86MWth.	MWth figures for the generators have been provided by the suppliers. Calculation of MWth from MVA output is not required.
4	The sum of generator plant capacities is based only on MWth inputs of all plant regardless of the standby configuration. MWe output constraints such as realistic customer load or other practical output limiting factors do not constitute a limit to the MWth input as defined in the EA's guide RGN02.	Generator plant capacities are based on MWth inputs.

#	Summary Requirement	VDC Response
5	Proximity of data centres with a company campus, adjacent, neighbouring or close-by buildings in urban locations (e.g. within a common trading estate but only separated by a road width or notional distance) may constitute a single site for determining the boundary of the installation as 'same site – same operator' as per RGN02 – see the details in the text	CWL12 Data Centre is part of the CWL1 campus, which comprises CWL11, CWL12 and CWL13. This transfer application relates to the separation of CWL11 and CWL12 into separate permitted sites. CWL13 Data Centre, located 120m southeast of CWL11 Data Centre, is operated as a separate site with a separate permit.
6	Permits will 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; and thereby emission limit values ELVs to air (and thus engine emissions monitoring) are not required within the permit.	The permit includes a maximum 500 hours limit per MCP per year, consistent with the emergency MCP exemption. There are no ELVs set in the permit.
7	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.	It is noted that emergency hours' operation for the CWL12 site applies to unplanned run hours to repair electrical infrastructure related to the CWL12 site only.
8	Each individual generator with its own discharge stack, can be maintained, tested and used in a planned way for up to 500 hours per calendar year each without ELVs (and hence no monitoring) under IED/MCPD. Though clearly the EA expects planned testing and generator operations to be organised to minimise occasions and durations (subject to client requirements). Ideally a target should seek to keep individual generator testing to below 50 hours/annum each as required for MCPD specified generator exclusion. Accepting <50hours/gen/annum as a default upper limit for bespoke large data centres, the EA regards a BAT aspiration to aim for a more routine 1hour/month per generator.	The existing permit includes a limit of 50 hours per MCP per year for testing and 500 hours per MCP per year for operation. The duration of engines tests will be minimised. Duration of engine tests will be approximately 5 hours per engine per year.
9	In summary 7, & 8 means the whole or part site can only operate as emergency plant up to 500 hours as an absolute limit for grid backup issues; but that individual plant (at any load) with its own stack (or a stack with multiple plant) with justification can be operated for up to 500 hours (ideally <50) each as part of its non-emergency role under maintenance and testing.	See point 8.

#	Summary Requirement	VDC Response
10	For the purposes of determining operating hours, data centre diesel generators are regarded as having a minimal start-up or shut-down times. Operational hours start on the first fuel ignition.	Noted.
11	Data Centre permits (unless they apply and justify it in a permit application) will expressly have a limit on the activity to exclude voluntary 'elective power operation' such as demand side response (i.e. on-site use) or grid 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 or MCPD specified generators' that voluntarily operate within the balancing market, and importantly a clear way to demonstrate minimisation of emissions to air as 'Emergency plant'.	No voluntary elective power operation is proposed.
12	The default engine specification as a minimum for new plant to minimise the impacts of emissions to air (NOx) is 2g TA-Luft or EPA Tier 2 or equivalent standard. A detailed cost benefit analysis (CBA) is otherwise needed existing, old plant justifying worse emission such as 4g TA-Luft plant or for example a justification under FCDM. TBC There are now site specific issues where abatement (SCR) is the default for new plant – see details in the text.	Refer to point 1 above. Engines A143-A195 have SCR installed for NOx abatement, reducing expected NOx emission levels in the exhaust gas to 190 mg/Nm3 (TA Luft levels). The impact of emissions has been considered in the Air Quality Assessment submitted with the EPR/BB3599CW/V004 permit application.
13	CBA for improved exhaust emissions, dispersion and mitigations from the plant is expected for the maintenance/testing and the emergency standby roles. We would be looking for improvements particularly if Local Air Quality (LAQ) modelling (under H1) indicates anything other than an insignificant contribution to short term local air quality for the 'planned' maintenance emissions of the plant.	An H1 risk assessment was completed as part of the EPR/BB3599CW/V004 permit application. A detailed dispersion model was also prepared to assess the impact of maintenance testing and emergency operation of the engines.
14	Retrofit abatement techniques for existing installations for engine emissions such as selective non-catalytic or catalytic reduction (SNCR or SCR) would not normally be expected for standby plant to mitigate the emissions for standby/emergency operation. BAT might include improved flue gas dispersion (e.g. stack modifications, increased height) or improved low NOx engine management controls or possibly fuel choice.	SCR is installed on engines A143-A195 to mitigate NOx emissons. Engines A143-A195 normally run on HVO, with diesel as a back-up fuel.

#	Summary Requirement	VDC Response
15	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.	The duration of engine tests will be minimised to the extent practicable. Individual engine tests and Black-building tests will be carried out for each cell. The permit specifies that there shall be no overlapping of any type of testing scenarios, and only one cell test shall be carried out in any one day.
16	When AQ modelling the emissions from the engines, the certified technical standard provided by the manufacturer should be used (i.e. likely worst case emissions). However any 'fit for purpose' monitoring of the actual emissions from installed plant will be considered as evidence of the likely real impacts as part of the permitting decision process.	Likely 'worst-case' emissions have been used in dispersion modelling.
17	The groundwater monitoring of fuel storage tanks and distribution pipework using GW boreholes is risk based for the site condition report (SCR) and IED 5-yearly monitoring. Should GW monitoring be required for underground tanks and/or the SCR, the boreholes should be positioned for whole site surveillance (for the SCR) rather than as a very local control immediately around the buried fuel oil tanks (i.e. not be just an addition to double skinned tanks already protected by leak detection and hence ignoring distribution pipework etc.).	VDC does not operate or plan to operate underground fuel storage tanks and consider that their operational approach to prevention of releases to land minimises this risk to site condition.
18	5-yearly GW sampling & 10-yearly soil sampling under IED is normally not needed but still needs some justification.	5-yearly groundwater sampling and 10-yearly repeat soil sampling is not considered warranted on the basis of the nature of the permitted operation and its low potential for emissions to land.
19	The permit application must assess and provide evidence of actual reliability data for the local electricity grid distribution (including data centre internal electrical design) for the EA to judge the realistic likelihood of the plant needing to operate for prolonged periods in an emergency mode (especially if emissions model so as to exceed short term air quality standards).	The site is not expected to operate for a prolonged period in emergency mode. The extent of back-up power generation capacity and fuel storage reflects the VDC business model of providing customers with a high assurance of continuity, not an expectation of loss of grid supply in practice. The Site will have four substation feeds so there is a good level of redundancy in power supply.
20	Optimising grid reliability within the site as part of general BAT to minimise emergency operating hours is required – evaluation is needed within the permit application on the Tier reliability standard under ISO27001 and Uptime.	CWL12 is a Tier 3 site with an expected uptime of 99.999%. The Site takes its power supply from a National Grid 400 kV substation.

#	Summary Requirement	VDC Response
21	Reporting of standby engine operational run hours and discussion of any electrical outages (planned or grid failures regardless of duration) required annually.	Engine operating hours are recorded monthly and after any unplanned events. Engine operating hours are reported to NRW as part of annual reporting.
22	AQ modelling for permitting split into two parts: 1) for the routine planned testing regime , including scheduled on-load use supporting maintenance works like UPS or HV – if no other details are known the default is 50 hours/gen/year; Commissioning of significant new plant may be included or possibly assessed separately as a 'one off' under a permit 'pre-op condition 2) A prolonged reasonable maximum full load outage (so accepting not all installed engines will run) which the default is assumed 72 hours. Looking at ambient AQ and potential areas for Acute exposure (AEGL).	Detals of AQ modelling were provided in the EPR/BB3599CW/V004 permit application AQIA. 1) The test regime defined the application AQIA was considered in the AQ modelling assessment. A planned testing regime of 5 hours per year has been modelled, comprising individual engine tests and black building tests. 2) 1-hour and 72-hour emergency outages have been modelled.
23	Assuming AQ modelling, based on operating scenarios, indicates a local air quality risk then notification to the EA of unplanned (and pre-notification of planned) continuous grid outage exceeding 18 hours LAQM (or the otherwise assessed short term interval from modelling) is likely required under a permit schedule 5 notification.	VDC will notify NRW or any plannedor unplanned interruptions to the grid supplies relating to the site. VDC will continue to update and maintain their Air Quality Management Plan (AQMP), most recent updated submitted to NRW 15 April 2026.
24	The notification requirement stated in the permit should also indicate the actual number of generators that need to be operating above which the local air quality is at risk e.g. 'notification of continuous emergency operation exceeding 18 hours with 5 or more engines operating together is required' (i.e. model shows 4 or less engines unlikely to breach LAQ)	The permit requires that the operator notifies NRW in the event that operation or activities gives rise to an incident or accident that significantly affects or may significantly affect the environment. The AQMP identifies outage scenarios that have potential to breach the Air Quality Standard (AQS) or AEGL-1, and requires that VDC notifies NRW.

#	Summary Requirement	VDC Response
25	Assuming AQ modelling, based on emergency outage operating scenarios, indicates a very significant risk to local air quality and identified receptors, the EA will ask the operator to have a written action plan to manage the issue for prolonged emergency running of the plant (including sensitive receptors list and mitigations, assessments and impacts evaluation against modelled risk conditions i.e. occurrence at periods of most concern in the year, possibly ambient air monitoring surveillance at very sensitive receptors). An AQ outage action plan is also likely required for sites which might operate in conjunction with other neighbouring large sites during an outage i.e. data centre hubs. A template AQMP is available.	CWL11/12 currently has an active AQMP in place. The most recent update to the AQMP was submitted to NRW on 15 April 2026. VDC will update the AQMP in line with the transfer.
26	Due to the emphasis of the permit on electrical (and cooling) systems it is noted that the EA considers the F-Gas regulations as falling under the remit of the EPR permit (for notifications and management) where F-gases (or potentially any polluting potential substance) are used directly under the combustion aspects of the permitted activity (e.g. switchgear). It is important to notify the EA of any significant releases. Other uses of F-gases e.g. for server room cooling are not strictly under the EA permit but are regulated by the EA generally so it may still be prudent to make the EA aware of your F-gas releases.	F-gases are used within the high voltage switchgear and cooling system. Vantage keeps a register of F-gas usage to monitor any releases (if any). In an instance where F-gas releases are significant VDC will notify NRW. The F-gas register is available to NRW upon request.
27	The permit application should detail the likely quantities of waste engine oil generated annually – EWC 13 02 waste oils following servicing for example. Although unlikely to be huge, the Pollution inventory has a reporting threshold of 1 tonne for non-hazardous waste but technically no lower thresholds for hazardous waste oil.	Waste oil will be removed by the same appointed subcontractors who perform servicing and maintenance of the generators at the Site. The reporting thresholds are noted and the data collected from the sub-contractor as part of the annual NRW reporting process. Given the lack of routine operation anticipated at the Site, lubricating oil degradation is not expected, therefore bulk replacement is unlikely.

#	Summary Requirement	VDC Response
28	The permit application is for the combustion plant and associated environmental concerns and not for the Data Centre itself. The applicant should be aware that the permitting process and application is accessible to the public so should have regard to 'Commercial in Confidence' and Critical National Infrastructure. In the first instance discuss particular concerns directly with the EA [NRW in this case] and/or exclude such priority information from the application but indicate that such is 'available on request'.	Noted.

ATTACHMENT C CWL12 EMS

VDC CWL12 will operate under a new Integrated Management System (IMS) which will replicate the current IMS in place for CWL11/12. The IMS focuses on quality, health and safety, information security and environment. Is it anticipated that the IMS will be certified to ISO 14001:2015.

The following is a summary of the contents of the VDC CWL12 IMS:

1. Purpose
2. Organisational Context
    - 2.1 Organisation and Its Context
    - 2.2 Needs and Expectations of Interested Parties
    - 2.3 Determining the Scope of the Management System
    - 2.4 Management System and its Processes
3. Leadership
    - 3.1 Leadership & Commitment
    - 3.2 IMS Policy
    - 3.3 Organisation Roles Responsibilities and Authorities
    - 3.4 Consultation and Participation of Workers
4. Planning
    - 4.1 Actions to address risks and opportunities
    - 4.2 IMS Objectives and Planning to Achieve Them
    - 4.3 Planning of Changes
5. Support
    - 5.1 Resources
    - 5.2 Competence
    - 5.3 Awareness
    - 5.4 Communication
    - 5.5 Documented Information
6. Operation
    - 6.1 Operational Planning and Control
    - 6.2 Requirements for Products and Services
    - 6.3 Design and Development of Products and Services
    - 6.4 Control of Externally Provided Processes, Products and Services

6.5 Production and Service Provision

6.6 Release of Products and Services

6.7 Control of Nonconforming Process Outputs, Products and Services

6.8 Control of Emergency situations/Emergency Preparedness and response

7. Performance Management

7.1 Monitoring, Measurement, Analysis and Evaluation

7.2 Internal Audit

7.3 Management Review

7.4 Communication

7.5 Document Management

8. Improvement

8.1 General

8.2 Incident, Nonconformity and Corrective Action

8.3 Preventive actions

8.4 Continual Improvement

9. Document Control

9.1 Revision Control

9.2 Annual Review

10 Appendices

10.1 Appendix 1. Operational Process Interaction

10.2 Appendix 2. In Scope Sites

10.2 Appendix 3. Environmental Management Lifecycle

ATTACHMENT D ISO14001 CERTIFICATION