Virtus HoldCo Limited

SITE CONDITION REPORT UPDATE

Slough Campus - LONDON 12

70114956
AUGUST 2024

CONFIDENTIAL

Virtus HoldCo Limited

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Slough Campus - LONDON 12

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1 INTRODUCTION

1.1 AUTHORISATION

On the instruction of Virtus HoldCo Slough Limited (hereafter referred to as “Virtus”), an update Site Condition Report (SCR) has been prepared for the Data Centre Campus located at Slough Trading Estate, Slough (hereafter referred to as the “site”). This update accompanies the variation to add Virtus LON12 to the campus (August 2024).

1.2 BACKGROUND INFORMATION

Virtus are in the process of construction of a data centre at Slough Campus which, once complete, will house an additional 16 to the already permitted 31 generators to provide emergency power supply to the site. An Environmental Permit is required for the installation as the total thermal input of the generators (aggregated) will be over 50 MW and the installation is therefore classed as a Part A1 installation as per the Environmental Permitting (England and Wales) Regulations 2016, as amended.

As part of the Environmental Permit variation application process, this Site Condition Report (SCR) update has also been prepared in order to provide information on the LON12 changes. This document is to be viewed as an extension report to the existing SCR for Slough Campus reference 70092911/SCR/001 dated April 2022.

This SCR forms part of the LON12 variation application to include the following generators in the permit, as shown in Table 1-1 below.

Table 1-1 – LON12 Generators

Data Centre	No. Gen sets	Net power output	Max design thermal input MW	Fuel Type
LON12	16	2,470 kWe each	101.44	Gas-oil
Slough Campus Design	31	various	180.51	Gas-oil
Slough Campus Total	47	-	281.95	Gas-oil

This SCR has been developed in accordance with the Environment Agency Guidance Note H5 (Site Condition Report – Guidance and Templates) April 2013.

1.3 OBJECTIVES OF THE SITE CONDITION REPORT (SCR)

The SCR comprises a desk-based research of private and public domain information a review of future site operations. The objectives of this extension SCR are to:

- Provide information on current and proposed site activities and site condition;

- Establish any additional information to the environmental setting and land pollution history for the site;
- Identify activities that are conducted at the new extension to the installation which may cause pollution of the land and / or groundwater;
- Identity and assess the preventative measures that are in place and will be put in place to protect the land and / or groundwater;
- Assess whether there is a risk to the land and / or groundwater beneath the site and potential for impact from existing and proposed site activities; and
- Be sufficient to form the basis of any required further work to establish baseline conditions.

1.4 SCOPE OF WORK

The SCR considered the following elements:

- A desk-study including a review of existing reports, Landmark Envirocheck report, site history, local geology, hydrogeology and hydrology as well as historical Ordnance Survey maps; and
- Information provided by the operator.

2 SITE DETAILS

2.1 INSTALLATION ADDRESS

The installation address is:

Virtus Slough Campus
LONDON 12
485 Berkshire Avenue
Slough
SL1 4PL

OS national grid reference: SU 95864 81174 (LON12).

LON12 is located within the Slough Trading Estate, approximately 3 km north-west of Slough town centre. The Trading Estate dominates a large area of the town and is well located with the Bath Road (A4) to the south providing access to the M4 motorway and the Farnham Road (A355) to the east. The Estate is also bisected by the London (Paddington) to Bristol Railway Line. The Estate comprises a wide variety of business, industrial and warehouse uses.

Description of the surrounding area:

LON 12 is surrounded by a number of business, industrial and warehouse uses which form part of the Slough Trading Estate. Residential areas border the Estate boundary in all directions. Alongside residential properties, these areas consist of typical residential amenities including schools and other educational facilities, supermarkets / grocers, sports and community centres, retail facilities and some restaurants. The closest residential receptors are located approximately 280 m north of LON 12.

2.2 TOPOGRAPHY

The installation area is generally flat. The delivery apron / generator yard has a slight gradation from the outside edges towards a central drain.

2.3 INSTALLATION LAYOUT

The site incorporates a single installation comprising one stationary technical unit (STU), made up of multiple generator engine sets and associated fuel oil storage tanks.

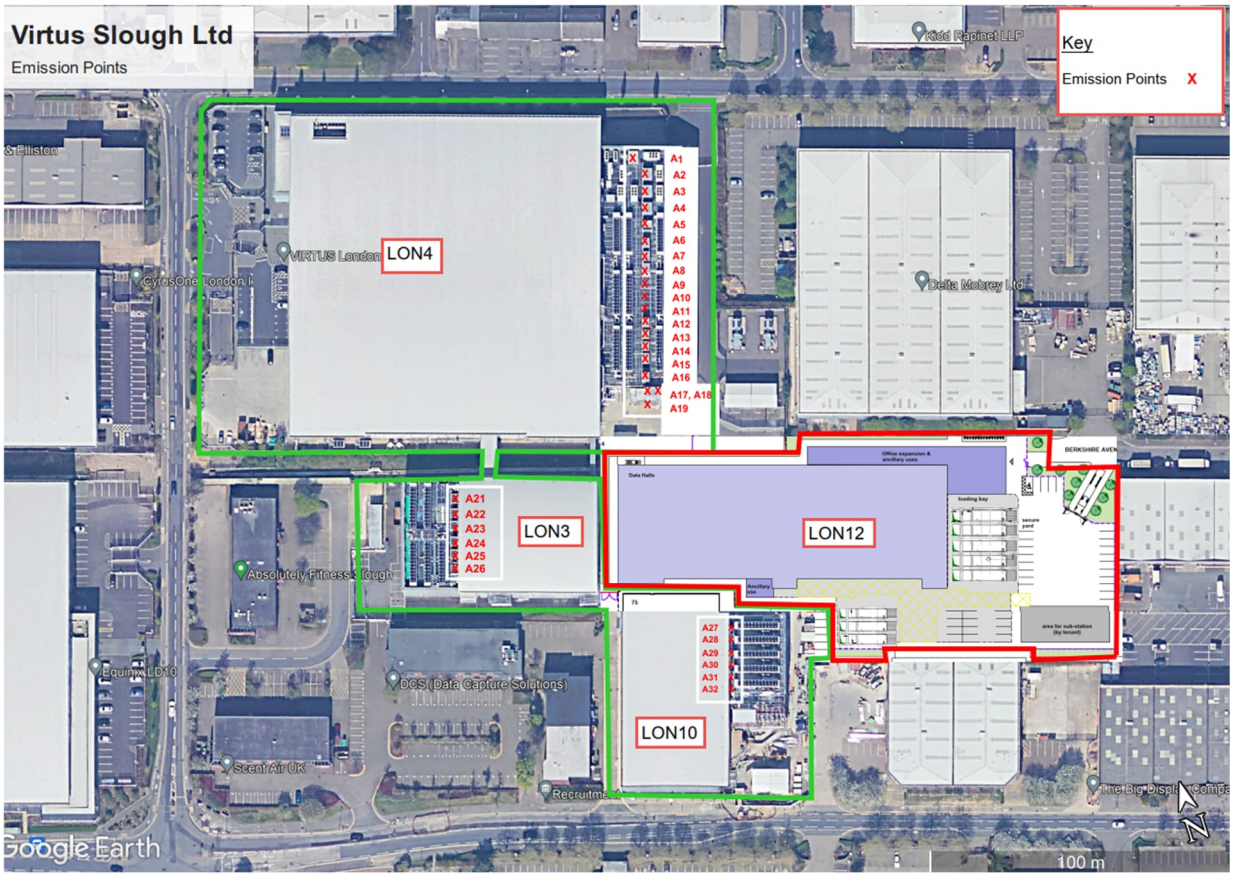
The proposed site layout and installation boundary is illustrated in Appendix A and is described in detail below. Table 2-1 summarises the LON12 generators and the total installed generator sets at Slough Campus.

The LON12 area subject to this SCR is shown in red boundary in Figure 2-1for clarity, the existing campus installation boundary is shown in green.

Table 2-1 – Slough Campus Generators

Data Centre	No. of Installed Generator Sets	Design	Net Power Output kWe each	Current Installed Thermal Input MW (fuel based)	Design Thermal Input MW (fuel based)
LON3	6	6	1,850	28.32	28.32
LON4	5 11 3	5 11 3	2,400 2,200 2,000	36.40 66.44 16.83	36.40 66.44 16.83
LON10	5	6	1,850	27.1	32.52
LON12	0	16	2,470	0	101.44
TOTAL	30	47	-	**175.09**	**281.95**

Figure 2-1 - LON 12 boundary



3 CONDITION OF THE LAND AT PERMIT ISSUE

Information was obtained from both private and public sources including previous geo-environmental assessments made prior to construction during 2022 and 2023 and Landmark Envirocheck Report, dated February 2022. The data obtained from various sources is referenced in Tables 3-1 below. The generic site information in the existing SCR remains applicable for the additional land added as part of this variation application hence, this will not be repeated in this SCR. Please see the existing SCR for this information.

Table 3-1 - Public Domain Information

Document/ Resource Title	Information Obtained
Landmark Envirocheck Report, February 2022	Environmental data relating to: o Operational and non-operational landfills o Abstraction licenses (groundwater and surface water) o Chemical releases o Discharge consents o EPR Authorisations o Pollution Incidents o Operational and non-operational scrap yards and waste transfer / treatment sites o Current industrial land uses o Geology and hydrogeology o Statutory records and authorisations o Borehole and trade directory entries o Flood risk o Protected sites, habitats and species
Environment Agency Website (Get flood risk information for planning in England https://flood-map-for-planning.service.gov.uk/	Environmental data relating to: o Flood risk o
Natural England MAGIC Website http://www.magic.gov.uk/	Environmental data relating to: o Protected sites, habitats and species

A number of reports are available concerning the site however the following reports are the most relevant to support the statement of site condition and baseline data.

Table 3-2 - Ground Condition Reports

Ref	Title	Client	Date	Author
1	Technical Note	SEGRO plc	02/10/2023	Delta-Simons
2	Intermediate Remediation Validation Report	SEGRO plc	20/07/2023	Delta-Simons
3	Environmental Sampling Plan	Slough Trading Estate Limited	26/01/2023	Delta-Simons
4	Human Health Vapour Detailed Quantitative Risk Assessment	Slough Trading Estate Limited	16/12/2022	Delta-Simons
5	Preliminary Risk Assessment Updated Geo-Environmental Assessment	Slough Trading Estate Limited	21/09/2022	Delta-Simons
6	Groundwater Remediation Options Appraisal & Verification Strategy	Slough Trading Estate Limited	14/03/2023	Delta-Simons
7	Updated Detailed Quantitative Risk Assessment	Slough Trading Estate Limited	14/03/2023	Delta-Simons
8	Environmental Sampling Plan	Slough Trading Estate Limited	26/01/2023	Delta-Simons

3.1 ENVIRONMENTAL SETTING

3.1.1 GEOLOGY

The publicly available information regarding underlying geology of the site remains the same as the existing SCR.

Recent Delta-Simons' investigation has identified the ground conditions at the Site to generally comprise the following sequence from ground level:

- Made Ground, typically to depths between 1.00 m and 2.00 m bgl (metres below ground level), locally up to 3.10 m bgl;
- Langley Silt Member comprising sand, silt and clay to depths of up to 3.50 m bgl;

- Taplow Gravel Member comprising predominantly sand and gravel to between 6.70 m and 8.20 m bgl, where proven;
- Lambeth Group comprising sandy clay to a maximum depth of 12.40 m bgl; over Seaford and Newhaven Chalk Formation proven to a maximum depth of 15.00 m bgl.

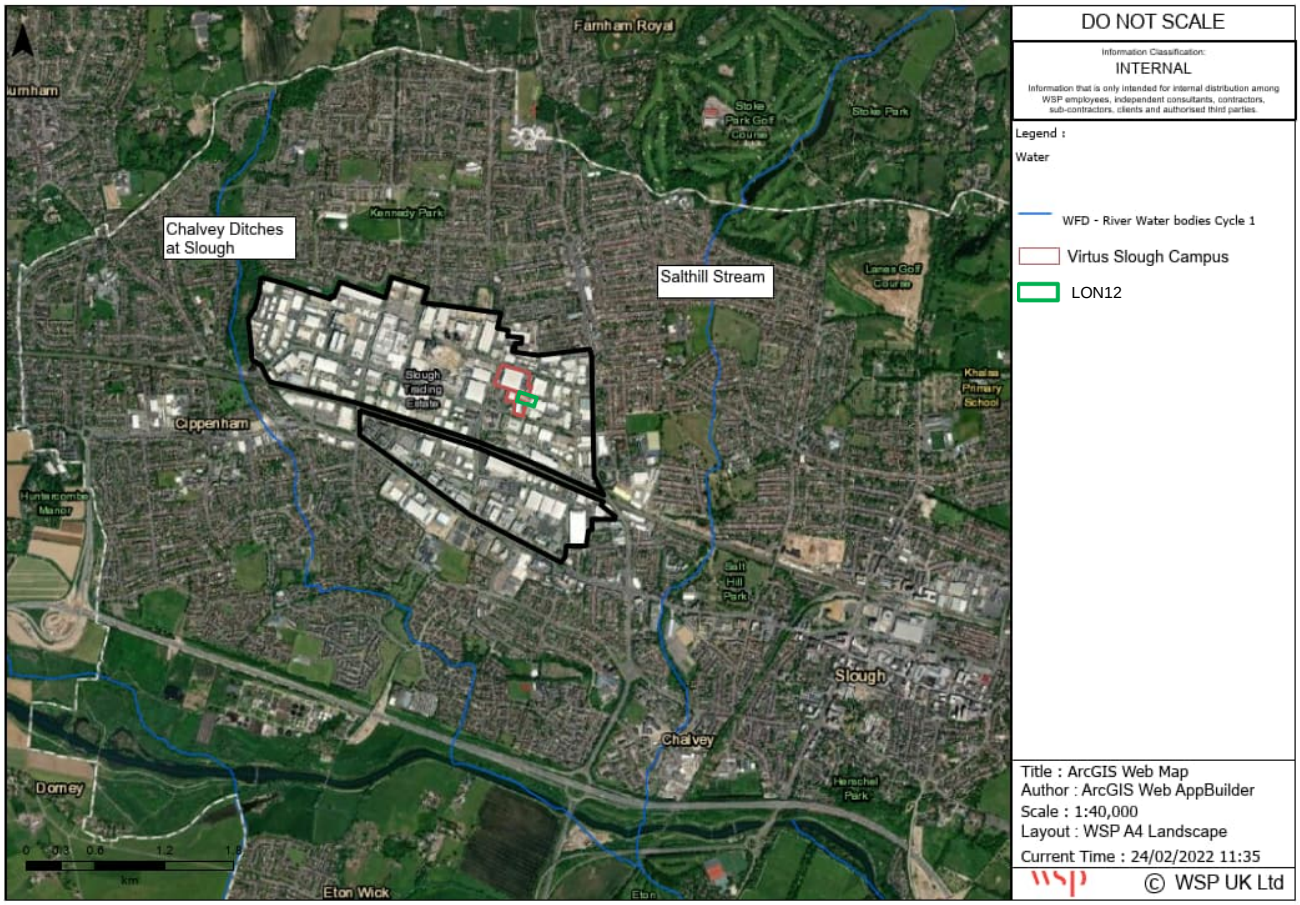
3.1.2 HYDROGEOLOGY

The hydrogeology data provided in the existing SCR remains applicable for the land added as part of this variation.

3.1.3 HYDROLOGY

The Chalvey Ditches at Slough (heavily modified water body) flows in a south-easterly direction passing the western boundary of the Slough Trading Estate. The Salthill Stream (heavily modified water body) flows in a southerly direction approximately 0.65 km from the eastern boundary of the Estate. These river water bodies confluence near the Eton College Golf Course before joining the River Thames (Cookham to Egham), see Figure 3-1.

Figure 3-1 - Surface Water Features



The Landmark Envirocheck Report dated February 2022 indicates that there is one surface water feature within 1 km of the Virtus Slough Campus.

Table 3-3 - Surface Water Features within 1 km of the Virtus Slough Campus (Landmark Envirocheck, 2022)

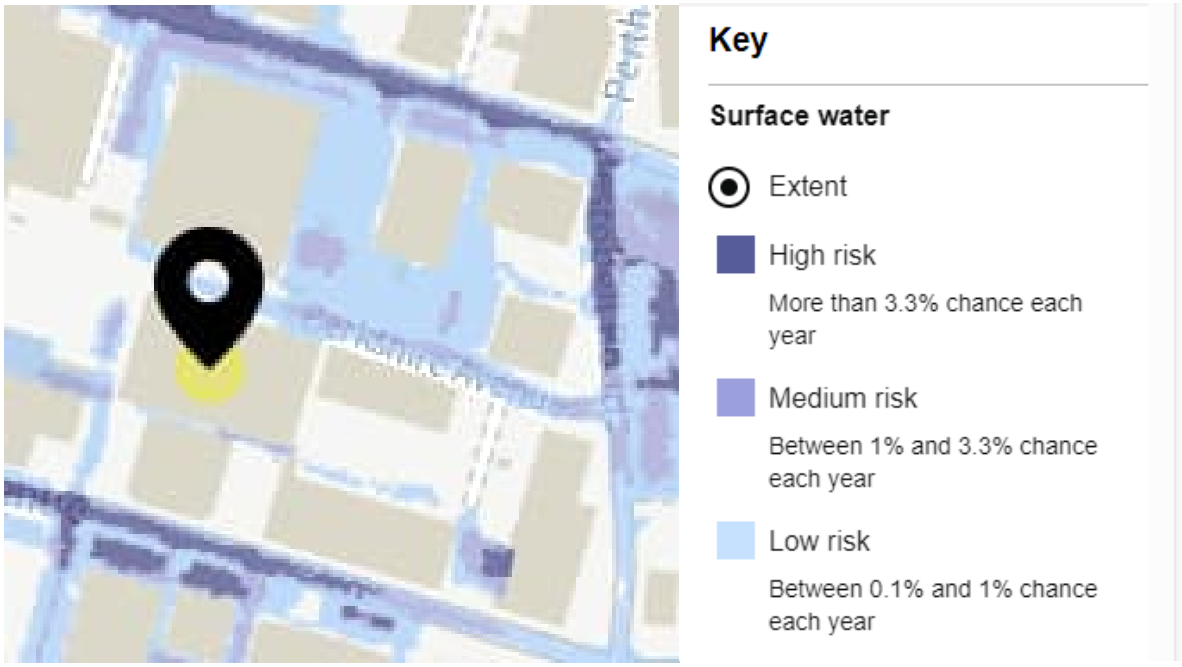
Surface Water Feature	Approximate Distance (m)	Direction	National Grid Reference
Un-named feature	572	South-East	496221; 180837

3.1.4 FLOOD RISK

The Environment Agency's indicative Flood Zones map of LON12 and nearby areas depicts that the Campus is located within Flood Zone 1, an area with a low probability of flooding from rivers and sea.

As shown in Figure 3-2 some areas of the site have a low-medium probability of flooding from surface water.

Figure 3-2 - Probability of Flooding From Surface Water



Nature and Heritage Conservation

A screening exercise has confirmed that no additional nature and heritage conservation sites have been designated when compared with those identified in the existing SCR, therefore the original screening exercise remains valid. Please see the existing SCR for further information.

3.2 POLLUTION HISTORY

3.2.1 HISTORICAL LAND USE AND ASSOCIATED CONTAMINANTS

To determine the history of the Virtus Slough Campus and surrounding areas, the following sources have been consulted:

- Preliminary Risk Assessment Updated Geo-Environmental Assessment Delta-Simons Environmental Consultants Limited, 2022, Project number 22-0316.02; and,
- Intermediate Remediation Validation Report, Delta-Simons Environmental Consultants Limited, 2023, Project number 87482.552491.

Date	Source	Site Description	Surrounding Area
1876 - 1883	OS Mapping	The Site is mapped as agricultural land with no pertinent features.	The area surrounding the Site is similarly agricultural land with a railway running east to west, approximately 275m south of the Site.
1899 - 1900	OS Mapping	No significant changes observed.	The railway is now listed as a Great Western Railway line.
1924 - 1926	OS Mapping	The Site now contains railway lines running east-west across the north of the Site, forked in the north-west corners, leading to the off-site motor works and cable & rubber works to the west. An apparent footpath is present running north-south through the west of the Site. There is also evidence of an embankment constructed in the southeast corner of the Site, possibly associated newly built railway tracks.	The Slough Trading Estate development has begun to the west of the Site. Several commercial/industrial units have been constructed with Bedford Avenue as the access road to the south-west of the Site. A cable & rubber works is located approximately 175m west of the Site, and a motor works 20m north-west. Slough Trading Estate train station has been constructed approximately 200m south of the Site, with an engine house located approximately 80m south. Furthermore, a brick works, kiln, auction mart, nursery, razor factory, restaurant, offices and sweet factories lie within 500m of the Site. A

			chemical works is located, approximately 550m west of the Site.
1932	OS Mapping	The eastern side of the Site comprises the yard area for a neighbouring engineering works and the western edge falls into the yard area for an Aspro (pharmaceutical) production works. A small section of the north of the Site lies within the adjacent sports ground to the north.	The remainder of the Aspro works to the west of the Site is next to a piston ring works, approximately 50m to the south-west, and an engineering works is adjacent to the south-east. Further development to the south includes milling works, upholstery and box works approximately 80m from the Site.
1938	OS Mapping	The railway is no longer present replaced by unnamed roadways associated with the developing Slough Trading Estate to the west and south. Potential building outlines are located in the east, west and centre-south of the Site.	Further development of the Slough Trading Estate has been completed with a preserving works, glass works and bakery now present to the east / west within 500 m of the Site. A tank is noted on the map, approximately 125m south of the Site, likely associated with the railway and a further two tanks are located approximately 400m west of the Site, associated with the cable & rubber works. The sportsground to the north is no longer present.
1947 - 1948	Aerial Photography	Numerous industrial/commercial buildings appear to be present on Site.	Further industrial and commercial buildings have been constructed to the east, north and south, associated with the wider Slough Trading Estate development.
1955 – 1961	OS Mapping	The eastern building on Site now comprises part of a larger industrial unit to the east, labelled as an engineering works. A tank is situated to the north of this unit. Two	Engineering works (alloy casting), paper works and welding machine works are located immediately to the north, and gasket works to the north-west.

		units to the centre and west remain present. Berkshire Avenue is now labelled on the access road to the Site in the north.	Tennis courts are located adjacent to the west of the Site. Further development of the trading estate, particularly to the north with numbers of smaller units constructed. Buckingham Avenue is now labelled to the south. Trading estate train station to the south is now disused. Furniture works, engineering works, engine research works, woodworks and flexible tube factory are present approximately 250m south of the Site.
1961 – 1974	OS Mapping	The engineering works has been split into two units, with the off-Site unit to the east remaining as engineering works, and the on-Site unit now labelled as a fabrics factory.	Adjacent tennis court to the west has now been developed as a zip fasteners factory (1974). Change of use and local configuration changes in commercial warehouse units to include television cabinet factory, glass fibre works and sweet factory are noted in the surrounding industrial estate.
1975 - 1976	OS Mapping	No significant changes observed.	No significant changes observed.
1977 – 1987	OS Mapping	The westernmost building has been demolished, leaving two units on Site (both unnamed).	Buildings associated with engineering works adjoining to the east have been part demolished.
1993 - 1995	OS Mapping	An additional tank is mapped in the north of the Site.	No significant changes observed.
1999	OS Mapping and Arial Photography	The existing units have been demolished and replaced with a single unit across the centre-east in the Site, in its current configuration. A small rectangular	No significant changes observed.

		building structure is also located adjacent to the north-east corner of the building. The tanks in the north of the Site are also no longer present.	
2008 – 2013	Google Earth Imagery	No significant changes observed.	The plot adjacent to the Site in the north-west, and similarly plots further west, have been demolished and are shown as construction Sites. The adjacent plot is later developed into another industrial warehouse by 2013.
2021	Google Earth Imagery	A small structure is noted on the southwest corner of the building.	No significant changes observed.

3.2.2 EVIDENCE OF DAMAGE TO POLLUTION PREVENTION MEASURES

The installation is a new site therefore, this section does not apply.

3.2.3 ENVIRONMENTAL CONSENTS, LICENCES, AUTHORISATIONS, PERMITS AND DESIGNATIONS

The following section contains regulatory information related to potentially polluting activities associated with the Site and within a 1km radius of the Virtus Slough Campus. Much of this information has been obtained from the Envirocheck Report, 2022.

3.2.3.1 Pollution Incidents which may have Affected the Land

The Envirocheck Report, 2022 identifies 13 pollution incidents to controlled waters within 1 km of the Virtus Slough Campus (Table 3-4). There are no entries on the Substantiated Pollution Incident Register.

Table 3-4 - Pollution incidents to Controlled Waters within 1 km of the Virtus Slough Campus

Details	Direction	Distance (m)	Incident Category	Incident Year
Chemicals - Unknown	North-West	191	Category 1 – major incident	1997
Unknown sewage	North-West	194	Category 3 – minor incident	1997
Chemicals - Unknown	South-West	207	Category 3 – minor incident	1998

Oils - Unknown	North	300	Category 3 – minor incident	1998
Chemicals - Unknown	South-east	305	Category 3 – minor incident	1994
Chemicals - Unknown	South-west	335	Category 1 - major incident	1998
Miscellaneous – Fire Water / Foam	North-west	338	Category 3 – minor incident	1996
Oils - Unknown	South	552	Category 3 – minor incident	1999
Miscellaneous – Fire Water / Foam	North-east	566	Category 3 – minor incident	1996
Agricultural: General	South-west	707	Category 3 – minor incident	1995
Oils - Unknown	South	716	Category 3 – minor incident	1996
Unknown sewage	South-east	983	Category 3 – minor incident	1997
Chemicals - Unknown	South	990	Category 3 – minor incident	1997

3.2.3.2 Environmental Permitting Regulations (EPR) Authorisations

The Envirocheck Report, 2022 indicates that there are 7 effective permits and 1 revoked permit under the Integrated Pollution Prevention and Control (IPPC) / Environmental Permitting Regulations located within 1 km of the Virtus Slough Campus (

Table 3-5). There are also 18 Local Authority Integrated Pollution Prevention and Control permitted facilities which comprise the following types of premises / industries:

- Combustion (power station);
- Adhesive coating;
- Packaging;
- Re-spraying of road vehicles;
- Textile and fabric coating;
- Iron, steel and non-metal foundry processes; and,
- Dry cleaning.

Table 3-5 - EPR/ IPPC Authorisations

Licensee	Details	Approximate Distance (m)	Direction	Status
Slough Heat & Power Limited	- 1.1 A (1) (A) Combustion; any fuel greater or equal to 50 MW - 5.1 A (1) (B) The incineration of non-hazardous waste in an incineration or co-incineration plant with a capacity exceeding 3 tonnes/hour	211	North-West	Effective (26 October 2020)
Cyrusone Uk3 Limited	- 1.1 A (1) (A) Combustion; any fuel greater or equal to 50MW	311	North-West	Effective (16 February 2021)
Metal Colours Limited	- 6.4 B (B) Coating Printing and Textiles; Repainting or Respraying Vehicles Greater than 1T/12 months - 2.3 A (1) (A) Surface Treating Metals and Plastics; Electrolytic/Chemical greater than 30 m^3.	343	West	Revoked (4 April 2018)
Equinix (UK) Limited	- 1.1 A (1) (A) Combustion; any fuel greater or equal to 50MW	452	West	Effective (8 November 2021)
Cyxtera Technology UK Limited	- 1.1 A (1) (A) Combustion; any fuel greater or equal to 50MW	585	South	Effective (1 July 2019)
Mars Chocolate UK Limited	- 6.8 A (1) (D) (I) Animal Vegetable & Food - 5.4 A (1) (a) (ii) Disposal of > 50T/D non-hazardous waste (>100 T/D if only AD) involving physico-chemical treatment	587	West	Effective (27 February 2014)
Lonza Biologics	4.5 A (1) (A) Pharmaceuticals; Producing Pharmaceuticals using chemical/biological processes	668	South	Effective (3 March 2017)
Ntt Gdc Emea UK Limited	25 A (a) New Medium Combustion Plant	774	South-East	Valid

3.2.3.3 Discharge Consents

The Envirocheck Report, 2022 indicates that there are no recorded discharge consents located within 1 km of the Virtus Slough Campus. This was confirmed on the Environment Agency Public Register which revealed that the two closest former discharge consents have now been revoked (in December 1990 and May 2019).

3.2.3.4 Operational and Non-operational Landfill Sites

There are five historical landfill sites and no active landfill sites located within 1 km of the Virtus Slough Campus (Table 3-6).

Table 3-6 - Historical Landfill Sites

Licensee	Details	Waste Deposited	Direction	Approximate Distance (m)
Nicholas Recreation	Historical landfill	Inert industrial and commercial waste	South-West	699
Pennine Road	Historical landfill	Inert and industrial waste	North-West	737
Galvin and Thirkleby Road	Historical landfill	Inert, industrial and commercial waste	South	772
Northborough Road	Historical landfill	Inert industrial and commercial waste	North-West	845
Galvin and Thirkleby Road	Historical landfill	Inert waste	South	938

3.2.3.5 Licensed Waste Management Facilities

The Envirocheck Report, 2022 identifies five licensed waste management facilities located within 1 km of the Virtus Slough Campus (Table 3-7). Only 1 facility, namely Fibre Fuel Limited, is permitted.

Table 3-7 - Licensed Waste Management Facilities within 1 km of Virtus Slough Campus

Operators	Details	Licence Status	Direction	Approximate Distance (m)
Slough Borough Council	Kennedy Park	Closure	North-West	788
Fibre Fuel Limited	Physical treatment facilities	Surrendered	North	140
Fibre Fuel Limited	Physical treatment facilities	To PPC	North-West	417
Slough Recycling Ltd	Greener World Recycling Centre	Revoked	South-East	816
Benton Plant Ltd	Metal recycling	Expired	South-East	854

3.2.3.6 British Geological Survey Recorded Mineral Sites

The Envirocheck Report, 2022 indicates that there are no active BGS Recorded Mineral Sites within 1 km of the Virtus Slough Campus. There are 5 ceased Recorded Mineral Sites which are detailed below (Table 3-8).

Table 3-8 - British Geological Survey Recorded Mineral Sites

Operator/Site Name	Details	Licence Status	Direction	Distance (m)
Timbertown Brick Works	Opencast	Ceased	East	251
Biddles Farm Gravel Pit	Opencast	Ceased	North-West	829
Salthill Gravel Pit	Opencast	Ceased	South	866
Cippenham Gravel Pit	Opencast	Ceased	South-West	969
Cippenham Gravel Pit	Opencast	Ceased	South-West	986

3.2.3.7 Radioactive Substances

The Envirocheck Report, 2022 indicates that there is one Radioactive Substance authorisation within 1 km of the Virtus Slough Campus which is showing the status as 'Application has been determined by EA'. This relates to a site owned / operated by Ucb Celltech on Bath Road. The remaining Radioactive Substance Authorisations within 1 km have either been revoked or cancelled.

3.3 EVIDENCE OF HISTORIC CONTAMINATION

A summary of the previous ground investigations carried out on the site is provided below, extracted from Delta-Simons, Intermediate Remediation Validation Report (July 2023).

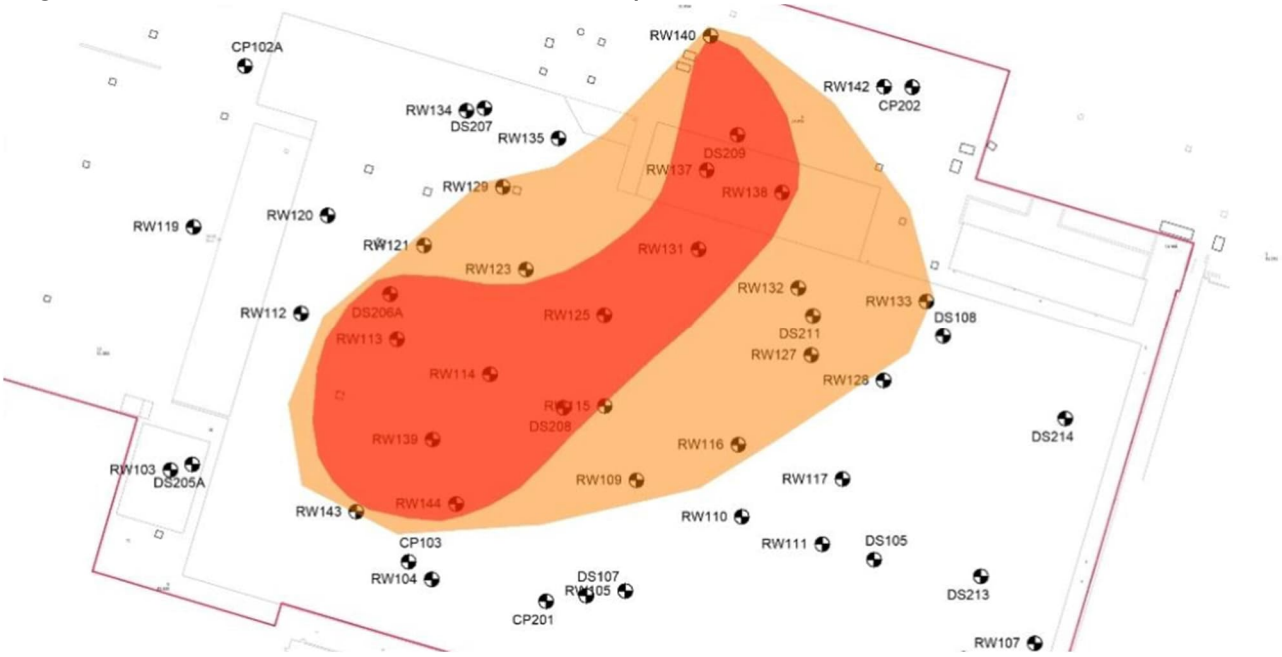
- WSP Remediation Ltd (WSP) undertook ground investigation works at the Site in 2000, which included advancement of three cable percussion boreholes in the vicinity of identified free-phase LNAPL (light non-aqueous phase liquids) in the north of the Site, adjacent to the existing building, which was newly developed at that time. The investigation identified 400 mm of LNAPL in one of the three installed boreholes, which laboratory testing identified as degraded diesel;
- It is understood from EA correspondence that WSP, on behalf of the landowner, undertook a programme of remediation in the vicinity of the LNAPL-impacted location, which involved LNAPL removal and groundwater treatment. Remediation was undertaken between 2000 and 2004, when the case was made to discontinue the works on the basis of little further environmental benefit. The works are understood to have been undertaken in external areas in the northeast of the Site, around the existing building;
- In support of the current redevelopment of the Site, Delta-Simons' undertook two phases of investigation on-Site in 2022, prior to and then following the demolition of the on-Site building. Investigation works included assessment of both the shallow ground conditions and the deeper

chalk aquifer. The investigation identified a potentially significant area impacted by LNAPL beneath the former footprint of the building to the south of the area identified as impacted by WSP, affecting the shallow Taplow Gravel Member. No detectable concentrations of hydrocarbons were identified in the deeper chalk;

- Initial detailed quantitative risk assessment (DQRA) identified potentially unacceptable risks posed to human health and controlled waters receptors, and remediation works were proposed to, as a minimum, involve LNAPL removal from the identified area of impact and groundwater treatment, if required, to improve the dissolved phase concentrations in groundwater. The DQRA generated target levels were designed to be protective of the wider controlled waters and were intended to provide targets by which to judge the effectiveness of remediation efforts on dissolved phase concentrations in groundwater. Given the degree of uncertainty around the ground model used for the initial DQRA and the restricted timeframes of the development, it was proposed that the initial works as part of the remediation would provide supplementary information and sampling locations to facilitate the development of an improved ground model and a revision of the DQRA;
- A remediation options appraisal was undertaken to identify the best options for remediation methodologies to be applied at the Site, taking into consideration the contaminant, the ground conditions, the cost and the timescales involved. It identified the preferred methods for the remediation to be dual phase vapour extraction or a groundwater pump and treat (bioslurping) system. The options appraisal acknowledged that, given the tight timescales imposed on this project, groundwater treatment through chemical oxidation, enhanced biodegradation or natural attenuation might be required to achieve the target levels for groundwater;
- Following the identification of potential risk to human health from groundwater concentrations and the vapour generation potential of LNAPL, a standalone vapour assessment was undertaken during the tender process for the remediation works to quantify the concentrations of volatile compounds in the unsaturated zone beneath the ground slab, and determine the degree of actual risk to human health. The assessment did not identify significant concentrations of vapours in the unsaturated soils in the context of the proposed commercial use of the Site, and vapour protection measures were not determined to be required;
- The remediation works were tendered in late 2022 and commenced in early 2023, with an updated DQRA produced from the initial monitoring results provided by the Remediation Contractor and independent sampling by Delta-Simons. With the significantly improved resolution of the ground model allowing for the risk modelling to be better calibrated to the Site conditions, the DQRA assessment determined that the Site did not represent an unacceptable risk to wider controlled waters, and that betterment of dissolved phase concentrations through LNAPL removal works would be sufficient to reduce any residual risk, without need for additional groundwater treatment. Remedial target concentrations were generated for dissolved phase concentrations in boundary monitoring wells rather than the main source area in recognition that construction works following the remediation would result in the loss of monitoring wells across the source area prior to the completion of a post-remediation monitoring programme;
- The following figure shows the estimated size and extent of the groundwater source area following the input of the initial information from the Remediation Contractor. The central red area indicates the extent of the significant LNAPL thicknesses, whilst the surrounding orange area was the extent of a detected LNAPL smear (typically 1 mm or less of LNAPL). Locations on the boundary of this area recorded intermittent detections of LNAPL. The source was characterised,

based on the dissolved phase concentrations, as a degraded diesel. The groundwater flow direction across the source zone was determined to be generally southwesterly.

Figure 3-3 - Source zone area, defined for updated DQRA.



3.3.1.1 Contaminants of concern

According to a Technical Note (Delta-Simmonds, October 2023), following the appointment of Geo2 as the remediation contractor and completion of delineation works at the Site, the DQRA and Remediation Strategy were updated by Delta Simons to reflect the static nature of the NAPL plume and to allow a pragmatic end point for remedial works to be completed at the Site comprising the recovery of readily removal of NAPL from the groundwater at the Site. The updated RVS also set out that treatment of the dissolved phase groundwater was not required.

Remedial works were completed at the Site using dual phase vapour extraction techniques and by the end of the works limited NAPL was extracted from the recovery wells at the end of each week which was considered to be reflective of an effective end point. Delta Simons attended the Site during the remedial works to inspect the progress and to obtain regular boundary groundwater samples to assess the impact of the remedial works on the boundary, details of which are included within the intermediate validation report.

The following text and associated tables have been extracted from Delta-Simons Intermediate Validation Report (July 2023). The table below sets out the results of the Delta-Simons' groundwater sampling throughout the remedial works (January, February and March 2023) and two post-remediation rounds (May and June 2023) for the boundary monitoring wells (including RW101-RW106, CP103, DS107, DS205A and DS212) compared against the Site-specific target levels generated during the updated DQRA applicable along the boundary.

Results from RW134, RW143, RW202 and RW208 are discounted from the assessment below as the remediation target levels were generated to provide acceptable concentrations at the Site

boundary, whereas these locations are positioned further into the Site, closer to the modelled source zone with RW143 located specifically down hydraulic gradient of the LNAPL plume.

Table 3-9 - Groundwater sampling

Contaminant of Concern	Remediation Target (µg/l)	Boundary Monitoring Wells (µg/l)				
		January 2023	February 2023	April 2023	May 2023	June 2023
Benzene	85.8	<1	<3	<3	<3	<3
Aliphatic TPH >C6-C8	1,420	<1	<1	<1	<1	<1
Aliphatic TPH >C8-C10	NC	<1	<1	<1	<1	<1
Aliphatic TPH >C10-C12	NC	<10	<10	<10	<10	<10
Aliphatic TPH >C12-C16	NC	21	<10	<10	<10	<10
Aliphatic TPH >C16-C21	NC	27	<10	<10	<10	<10
Aliphatic TPH >C21-C35	NC	38	<10	<10	<10	<10
Aromatic TPH >C8-C10	166,000	<1	<1	<1	<1	<1
Aromatic TPH >C10-C12	8,200	14 (RW103)	<10	<10	<10	43 (RW103)
Aromatic TPH >C12-C16	668	75 (RW105)	<10	<10	<10	74 (RW103)
Aromatic TPH >C16-C21	330	204 (DS107)	<10	<10	<10	56 (CP103)
Aromatic TPH >C21-C35	NC	860	<10	<10	<10	<10

Notes: Shaded = Concentrations exceeding target values.

Shaded = Concentration above detection limits but below target values.

Shaded = Concentration below laboratory detection limits.

Unshaded – No remediation target value generated due to very low mobility of contaminant of concern.

NC = Not calculated

As demonstrated in the table above, no samples from boundary wells have been recorded with concentrations exceeding the remediation targets applicable at the boundary. Concentrations above detection but below applied target criteria were recorded in January during the visit that coincided with the commencement of the system operations and in June, 6 weeks following the cessation of the system operation. Concentrations in June are at comparable levels to those recorded in January and remain anorder of magnitude below the remediation targets. Further monitoring was due to be undertaken in August 2023.

The following table includes the data from CP103, RW103, RW104, RW105, RW106, and RW143 which have had detectable concentrations of hydrocarbons present, and have been sampled over multiple sampling rounds. In terms of the positions of these monitoring wells, RW143 is considered to be within the on-Site down-gradient plume area from the main source of LNAPL, whilst the other locations are closer to the boundary.

The full sampling results from the three rounds of sampling and two post remediation events undertaken can be made available upon request.

3.3.1.2 Future Remediation Work

According to the Delta-Simons Intermediate Validation Report (July 2023) a further four boundary monitoring wells sampling events are to be undertaken during the construction phase of the redevelopment and will be included in a further Validation Report.

In line with the Environmental Sampling Plan, it was expected that the following monitoring wells will be sampled by low flow sampling methodologies and testing as a minimum would include speciated TPH (CWG) with BTEX, with natural attenuation indicators as appropriate:

- Boundary monitoring wells: RW101-RW106 and CP103; and
- Mid-plume monitoring wells: RW143 and RW202 (RW208 substituted following RW202's destruction).

In line with the Remediation Strategy, additional betterment may be achieved through the identification and, where necessary, the removal of any areas of previously unidentified contamination through the implementation of a hotspot protocol during the enabling works for the construction. Any hotspots would be assessed by a suitably qualified environmental consultant with verification testing undertaken on any retained soils to confirm their suitability to remain. The results of any validation works would be included within a Final Validation Report.

Table 3-10 - Monitoring results

Contaminant of Concern	RW103 (Boundary Well) (µg/l)				RW105 (Boundary Well) (µg/l)						RW143 (µg/l)				
	January 2023	February 2023	April 2023	May 2023	June 2023	January 2023	February 2023	April 2023	May 2023	June 2023	January 2023	February 2023	April 2023	May 2023	June 2023
Benzene	<1	<3	<3	<3	<3	<1	<3	<3	<3	Location Obstructed.	Location Not Installed.	<3	<3	<3	<3
Aliphatic TPH >C6-C8	<1	<1	<1	<1	<1	<1	<1	<1	<1			<1	<1	<1	<1
Aliphatic TPH >C8-C10	<1	<1	<1	<1	<1	<1	<1	<1	<1			<1	<1	<1	<1
Aliphatic TPH >C10-C12	<10	<10	<10	<10	<10	<10	<10	<10	<10			<10	<10	<10	14
Aliphatic TPH >C12-C16	**21**	<10	<10	<10	<10	<10	<10	<10	<10			<10	<10	<10	**54**
Aliphatic TPH >C16-C21	**27**	<10	<10	<10	<10	<10	<10	<10	<10			<10	<10	<10	**43**
Aliphatic TPH >C21-C35	**38**	<10	<10	<10	<10	<10	<10	<10	<10			<10	<10	<10	**46**
Aromatic TPH >C8-C10	<1	<1	<1	<1	<1	<1	<1	<1	<1			<1	<1	<1	<1
Aromatic TPH >C10-C12	**14**	<10	<10	<10	**43**	<10	<10	<10	<10			**180**	**75**	**85**	**140**

Aromatic TPH >C12-C16	**50**	<10	<10	<10	**74**	**75**	<10	<10	<10			**1,200**	**260**	**590**	**670**
Aromatic TPH >C16-C21	**54**	<10	<10	<10	**53**	**230**	<10	<10	<10			**1,200**	**200**	**560**	**700**
Aromatic TPH >C21-C35	<10	<10	<10	<10	<10	**530**	<10	<10	<10			**750**	**210**	**210**	**300**

Notes: **Bold** = Detectable concentration above lower laboratory limit of detection.

NS = Not Sampled.

Contaminant of Concern	RW10 (Boundary Well) (µg/l)					CP103 (Boundary Well) (µg/l)					RW106 (Boundary Well) (µg/l)				
	January 2023	February 2023	April 2023	May 2023	June 2023	January 2023	February 2023	April 2023	May 2023	June 2023	January 2023	February 2023	April 2023	May 2023	June 2023
Benzene	<1	<3	<3	<3	<3	<1	<3	<3	<3	<3	NS	<3	<3	<3	<3
Aliphatic TPH >C6-C8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NS	<1	<1	<1	<1
Aliphatic TPH >C8-C10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NS	<1	<1	<1	<1
Aliphatic TPH >C10-C12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS	<10	<10	<10	<10
Aliphatic TPH >C12-C16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS	<10	<10	<10	<10
Aliphatic TPH >C16-C21	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS	<10	<10	<10	<10

Aliphatic TPH >C21-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS	<10	<10	<10	<10
Aromatic TPH >C8-C10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NS	<1	<1	<1	<1
Aromatic TPH >C10-C12	<10	<10	<10	<10	**28**	<10	<10	<10	<10	**29**	NS	<10	<10	<10	**28**
Aromatic TPH >C12-C16	<10	<10	<10	<10	**56**	<10	<10	<10	<10	**71**	NS	<10	<10	<10	**72**
Aromatic TPH >C16-C21	<10	<10	<10	<10	**35**	<10	<10	<10	<10	**56**	NS	<10	<10	<10	**55**
Aromatic TPH >C21-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS	<10	<10	<10	<10

Notes: **Bold** = Detectable concentration above lower laboratory limit of detection.

NS = Not Sampled.

As shown in the table above, the boundary monitoring well locations with detectable dissolved phase concentrations and RW143, which is in the on-Site down-gradient plume area, have displayed a downward trend in concentrations across the monitoring rounds undertaken during the remediation period, with only a recent increase observed since the cessation of the remediation works. It is noted that in the intervening time, the conditions on the Site have also changed, with the ongoing enabling works including the removal of the building's ground slab and foundations which will be resulting in a temporary increase in infiltration as well as short-term ground disturbance.

Whilst RW143 was not installed at the time of the first monitoring round, it's position further in on the Site, closer to the original source area, affords it a position where small changes to groundwater flow are likely to have less of an effect on concentrations than wells along the boundary. Concentrations observed in RW143 have increased since the April monitoring; however, the concentrations of the three most recent monitoring rounds still remain below those of the February round.

The wells monitored along the boundary are proposed to be retained for the duration of the post-remediation monitoring works and it is also proposed that RW143 and RW202/RW208 within the central plume area and immediate down-gradient area will be retained for as long as possible during the construction work, in order to confirm conditions including residual LNAPL thickness within the central and on-Site down-gradient plume areas post-remediation. It is anticipated that, with the exception of short-term disturbance from the construction work, that the trends of reduced concentrations will continue through the post-remediation period, once hardstanding and building cover is completed.

3.3.1.3 Groundwater Geochemical Indicators

Indicators for ongoing natural attenuation have been identified within the Taplow Gravel formation. This is characterised initially by a reduction of the dissolved oxygen concentrations, and then characterised by reductions in nitrate to nitrite, manganese dioxide to manganese (II), iron (III) to iron (II), and sulphate to sulphide, and then finally generation of methane.

The following table summarises the recorded indicator factors for each of the locations sampled during the three remediation monitoring rounds across the plume and surrounding areas in centre and east of the Site. Full records of the collected geochemical data can be made available upon request.

No iron concentrations have been detected in any of the samples, indicating that iron is not available in the aquifer in significant enough quantities to be used as an electron receptor in the microbial reduction process. Additionally, sulphide has not been detected; however, sulphate reduction may be resulting in a separate end-product other than sulphide.

Table 3-11 - Groundwater Geochemical Indicators

Location	Maximum Total TPH (µg/l)	Dissolved oxygen (mg/l)	Natural Attenuation Suite Indicator Compound Concentrations – Range				
			Nitrate (mg/l)	Nitrite (mg/l)	Manganese (II) (mg/l)	Sulphate (mg/l)	Redox Potential (mV)
Mid-plume							
RW134	**2,827**	5.24	**2.71**	**0.29**	**0.39**	152	53.2
RW143	**3,300-744**	**0.00-0.22**	**0.26**-13.2	0.005 -**2.34**	**1.16-2.34**	212-67.4	**-280**-784.7
RW202	**23,066-2,513**	**0.17**	**1.68**	0.0079	**1.48**	393	**-316.5**
RW208	**76,900**	**0.07**	**0.05**	**0.013**	**0.63**	115	**-33.7**
Down-gradient/ Boundary							
RW103	**204**-<10	3.56-4.84	22.8-30.9	<0.005-**0.018**	<0.02	67.1-85.6	58.3-122.7
RW104	**120**-<10	**0.28-0.74**	**<0.05**-27.1	**0.011-5.0**	**0.05-0.66**	20.2-35.6	**-91.0**-179.6
RW105	**835**-<10	2.37-5.48	150-350	**0.21-0.057**	<0.02-**0.03**	126-464	**-44.5**-181.5
CP103	**156**-<10	**0.00-0.14**	**0.15**-10.7	<0.005-**0.25**	**0.25-1.59**	19.7-41.7	-209.4-**180.2**
DS107	**1,163**	3.39	398	**0.019**	**0.51**	425	159.4
DS205A	<10	5.98	21.2	<0.005	<0.02	48.5	131.2
Cross-gradient							
RW102	<10	2.04-3.82	21.7-22.7	<0.005-**0.024**	<0.02	41.5-57.0	65.5-191.1

RW106	**155**-<10	4.01-5.18	21.7-22.7	<0.005-**0.024**	<0.02	41.5-57.0	65.5-191.1
RW111	<10	NR	20.4	**0.18**	**0.03**	38.0	181.5
RW112	<10	NR	8.13	**0.096**	**0.49**	54.6	179.4
RW119	<10	1.83	26.5-33.5	**0.037-0.085**	<0.02	42.8-48.3	105.0
DS212	<10	2.37	18.5	<0.0005	<0.02	37.7	105.0

Notes: **Bold** = Value indicative of natural attenuation.

NR = Not recorded. Multiparameter probe calibration error for dissolved oxygen in February 2023

Identified reductions in dissolved oxygen and nitrate, and increased concentrations of nitrite and manganese as well as negative redox potential in affected wells correspond strongly with the wells impacted with hydrocarbons, or in the immediate down-gradient plume area, indicating that natural attenuation through biodegradation is occurring.

Previously, reporting identified detections of sulphate reduction and the generation of methane which indicated that the plume was well developed; however, sulphate reduction is now not significantly noticeable and dissolved methane has not been tested for. In the case of those locations within the main plume, sulphate levels have actually been noted to be higher than background levels, suggesting a potential mechanism in the bacterial activity which offsets the sulphate reduction through generation.

As previously shown in the updated DQRA, and in the table above, the dissolved oxygen concentrations in wells that are cross-gradient and on the outskirts of the plume are strongly aerobic (dissolved oxygen >1.0 mg/l), and permeability is known to be significant, indicating a good throughflow of aerated groundwater across the plume promoting aerobic degradation, and preventing the exhaustion of electron receptors during anaerobic microbial degradation.

The TPH concentrations in the central plume area are noted to have reduced from the previous elevated concentrations recorded in DS208 in August 2022 (maximum total TPH of 528,012 µg/l), as seen in RW202 and RW208 (23,066 µg/l and 76,900 µg/l respectively). Resultantly, toxicity in the centre of the plume would be anticipated to have reduced, allowing for more widespread microbial survival which is anticipated to have had the beneficial effect of increasing natural attenuation mechanisms.

Whilst free-phase LNAPL is known to remain present, albeit at levels that are not practically recoverable using the DPVE system, the reduction in dissolved phase concentrations is considered to indicate that the more mobile, soluble LNAPL has been recovered in preference to the less mobile and less soluble fractions.

4 STAGE 1-3 ASSESSMENT FOR HAZARDOUS SUBSTANCES

STAGE 1 ASSESSMENT – IDENTIFY SUBSTANCES ON SITE

Stage 1 of the assessment requires a list of the substances used, produced, or released (excluding emissions to air) on-site – identifying those that are hazardous. These are detailed in Table 1 below.

Table 1 – Identified substances

Substance	Hazardous? Y/N
Diesel Oil	Y
Lubricating Oil	N

STAGE 2 ASSESSMENT – IDENTIFY RELEVANT SUBSTANCES

The aim of Stage 2 is to identify which of the hazardous substances identified on site (in Stage 1) can cause soil and / or groundwater contamination. To identify Relevant Hazardous Substances (RHS), the composition, solubility, toxicity, mobility, persistence, and physical state of each substance must be considered. This is detailed in Table 2 below.

Table 2 – Relevant Hazardous Substances

Substance	Classification	Physical State	Solubility	Toxicity	Mobility	Persistence	Soil and Groundwater Pollution Potential	Relevant Substance
Diesel Oil	H226 - Flammable liquids -- Category 3 H304 -- Aspiration Hazard -- Category 1 H315 -- Skin corrosion/irritation -- Category 2 H332 -- Acute toxicity, Inhalation -- Category 4 H351 -- Carcinogenicity -- Category 2 H373 -- Specific target organ toxicity (repeated exposure) -- Category 2 H411 -- Hazardous to the	Liquid	Negligible	Toxic to mammals with repeated exposure. Toxic to fish and aquatic organisms	A liquid which can be carried on the surface of water, some volitisation. Adsorption in soil	Complex combinations of hydrocarbons, not readily biodegradable. Some easily degraded by microorganisms but some persistent	High – some persistent hydrocarbons	YES

	aquatic environment, chronic toxicity -- Category 2							

* However, suitable pollution prevention measures will still be implemented for these substances as described in the main environmental permit variation application document

STAGE 3 ASSESSMENT – SITE SPECIFIC POLLUTION POSSIBILITY

The aim of Stage 3 is to identify if there is an actual risk of pollution to soil and groundwater from the RHS identified in Stage 2. This stage of the assessment considers the quantity of the RHS used and stored, the existing pollution prevention measures and whether they are fit for purpose. These are detailed in Table 3 below.

Table 3 – Summary of Pollution Risk

Relevant Substance	Amount used annually	Maximum amount stored at the site	Details of existing pollution prevention measures	Pollution risk YES/NO
Diesel Oil	**19.29 t**	**490,000 litres**	**Industry standard storage tanks, integral bund (internal void alarm), accompanied delivery, fill procedures, at risk drain covers, full retention separaptr with automatic shut off device**	**No**

5 PERMITTED ACTIVITIES

A detailed description of the activities can be found in the main EPR permit application. For the purpose of this SCR only, a summary of the permitted and non-permitted activities is described below.

5.1 PERMITTED ACTIVITIES

This document has been developed to provide the key information required for an Environmental Permit application. The Virtus Slough Campus is to be regulated as a listed activity under Schedule 1 of the Environmental Permitting (England and Wales) Regulations 2010, as amended (EPR), as follows:

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

Directly Associated Activities (DAA) are carried out within the installation boundary. These include the following:

- Raw material handling and storage (most notably bulk fuel oil); and,
- Waste handling and storage.

5.1.1 PROCESS DESCRIPTION

The Virtus Slough Campus incorporates a single installation comprising one stationary technical unit (STU) made up of multiple generator engine sets and associated fuel oil storage tanks.

The installation at Slough Trading Estate comprises four data centres referred to as London 3 (LON3), London 4 (LON4) London 10 (LON10) and London 12 (LON12), the latter of which this SCR covers. The data centres are built to Uptime Tier III standard which means that there is no interruption to the operation of the computer hardware located in the centre, for example during routine maintenance of power and cooling systems. The emergency generators provide an important part of achieving the standard. LON3 has six generators; LON4 has nineteen generators; LON10 has six generators (permitted) and LON12 will have sixteen generators.

The total rated thermal input (under standby power operating conditions) of all the LON 12 generators will be 101.44 MWth and 281.95 MWth across the Virtus Slough Campus.

5.2 NON-PERMITTED ACTIVITIES

There are no relevant polluting non-permitted activities.

6 RISKS TO LAND AND GROUNDWATER

This section of the SCR identifies potential risks to the land and groundwater posed by the current activities which are undertaken on site and associated materials. The Environmental Risk Assessment summarises the potential risks and the proposed mitigation measures which will be put in place to minimise the risk.

6.1 STORAGE TANKS AND ASSOCIATED PIPEWORK

The LON12 above ground fuel oil storage tanks and associated containment measures are described in Table 6-1. The Virtus Slough Campus has no below ground storage tanks.

Visual inspections of the external structures of the tanks and containment features will be undertaken on a daily basis for signs of corrosion in line with the Campus procedures. This is undertaken in accordance with the Asset Integrity Programme. Checks are also carried out as the generators are serviced (minor and major service) by the OEM or OEM approved provider 6-monthly and annually.

All transfer pipes including the delivery point are held within the tank with the exception of the rising pipe to the generator enclosure. Transfer / balancing pipework between the tanks provides the facility to pump fuel oil between adjacent tanks if necessary. These are routinely kept closed.

Table 6-1 - Above Ground Fuel Oil Storage Tanks

Data Centre	Tank No.	Contents	Volume/ Capacity litres (each)	Primary Containment	Secondary/ Tertiary Containment Feature
LON12	1-16	Ultra low sulphur gas oil	31,000	double skinned self bunded steel tanks, alarmed internal void space.	concrete floor/slope and interceptor; alarmed drainage system with full retention separator and automatic shut off device

Subsurface pipework infrastructure is associated with the drainage network (Table 6-2).

Table 6-2 - Underground Infrastructure

Infrastructure	Secondary/Tertiary Containment Feature	Observation (e.g. loss of integrity, spillage, staining)
Surface Water Drains	Each engine enclosure area has a central drain which has a slope/slight fall to the central surface water drainage network. Any spills will flow towards the central drain.	The data centres is under construction in 2024 and there is no observed evidence of loss of fuel oil.

	LON12 Data Centre has a full retention separator namely: - Spel Class 1 Puraceptor Type P080/1C/ESR	

6.2 CONCRETE HARDSTANDING

LON12 will comprise mainly hardstanding with very few landscaped areas external to the any vehicle movement area. The hardstanding is kerbed.

The engine enclosure areas have a slope / slight fall to the central surface water drainage network.

6.3 NATURE OF THE STORAGE AND HANDLING OF MATERIALS

Ultra low sulphur gas oil stored in tanks has been detailed in Table 6-2. Refer to Table 5-3 for risks from potentially polluting substances including their storage and handling.

The ERA summarises the potential risks and the proposed mitigation measures which will be out in place to minimise the risk.

6.4 SURFACE WATER AND FOUL DRAINAGE

The surface water drainage strategy is contingent on catastrophic failure having been designed out of the diesel storage system. The existing Virtus procedures address potential local spills or overfill, notwithstanding that alarm systems and supervised delivery safe systems of work procedures are in place, as well as protection of 'at risk' drains during deliveries.

The LON12 generator areas and diesel belly tanks are served by a separate drainage system which lead to a SPEL Class 1 Puraceptor Type P080/1C/ESR separator with automatic shut off device once the oil storage level is at maximum. An alarm is also fitted. Discharge from the separator is to a storm water attenuation tank where it joins other rain water streams and then via a pumping chamber and rising main to manhole TW 9252, of the Thames Water surface water sewer system.

6.5 POLLUTING SUBSTANCES AND RELEVANT ACTIVITIES

An assessment of pollution potential has been made on polluting materials based upon their properties, toxicity and volume stored, used or manufactured. The following potentially polluting substances/chemicals are presented in Table 6-3 below.

Table 6-3 - Potentially Polluting Substances

Substance	Activity	Potential for Pollution
Ultra Low Sulphur Gas Oil	Delivery, storage and combustion in engines	Stored in steel belly tanks, each one underneath each engine/generator set container. All transfer pipes including the delivery point are held within the tank with the exception of the rising pipe to the generator enclosure. There are 3 fill points located to the east side of the building. The area is fitted with drainage to a full retention interceptor.

		Balancing pipework between the tanks provides the facility to pump fuel oil between adjacent tanks if necessary. These are routinely kept closed. Delivered to the Data Centres by road tanker with trained operator and supervised by site employee whilst off-loading. This is undertaken in accordance with Virtus oil/fuel delivery procedure as defined in the Virtus Operational Manual.
Oil lubricants	Lubricants for motors, drives and transformer	Small volumes brought to site by contractors for maintenance of generators. A spill response procedure is in place with spill kits deployed strategically throughout the Virtus Slough Campus. Drainage is via the SPEL Class 1 Puraceptor.
Glycol	Anti freeze for water circuit	Small volumes brought to site by contractors for maintenance of generators. A spill response procedure is in place with spill kits deployed strategically throughout the Virtus Slough Campus.

7 OPERATIONAL PHASE SITE CONDITION REPORT

In accordance with the template detailed in the Environment Agency publication: EPR H5 Site Condition Report: Guidance and Templates, the Operational Phase SCR requires the maintenance of four key areas:

- 4.0 Changes to the activity;
- 5.0 Measures taken to protect land;
- 6.0 Pollution incidents that may have had an impact on land, and their remediation; and
- 7.0 Soil, gas and water quality monitoring (where undertaken).

This is a new installation and therefore each of these key areas will be updated and altered as required when changes are made to the site or further information becomes available with regards to land condition or potential pollution.

Table 7-1 - 4.0 Changes to the Activity

Have there have been any changes to the permitted activities?	N/A
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	N/A

Table 7-2 - 5.0 Measures taken to protect the land

Measures taken to protect the land	N/A
Checklist of supporting information	N/A

Table 7-3 - 6.0 Pollution incidents that may have had an impact on land and their remediation

Pollution incidents that may have had an impact on land, and their remediation	N/A
Checklist of supporting information	N/A

Table 7-4 - 7.0 Soil Gas and Water Quality Monitoring (where undertaken)

Soil gas and water quality monitoring (where undertaken)	N/A
Checklist of supporting information	N/A

Appendix A

SITE LAYOUT AND EMISSION POINTS


Key
Emission Points Air
Surface Water Sewer
Virtus Slough Ltd
Emission Points
W1 (S1)
W2 (SL2)
W3 (SL2)
W4 SU 95907 81228
LON4
LON3
LON12
LON10
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17, A18
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A33
A34
A35
A36
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A39
A40
A41
A42
A43
A44
A45
A46
A47
A48
Edinburgh Avenue
Liverpool Road
Delta Mobrey Ltd
VIRTUS London
CyrusOne London I
Absolutely Fitness Slough
DCS (Data Capture Solutions)
Scent Air UK
Equinix LD10
100 m
Google Earth

1 Capital Quarter
Tyndall Street
Cardiff
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