Attachment-4-8-4-Site Condition Report

1.0 INTRODUCTION

This attachment addresses the requirements for a Site Condition Report to be submitted as part of the application by ADSIL for an IE licence review.

The Baseline Report (Attachment 4-8-3) has been completed in accordance with the European Commission guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions.

The Agency's 2018 *Licence Application Form Guidance (Version 2)* states that a baseline report may fulfil the requirements of the site condition report. As such, this assessment outlines where the reader can find the required information in the Baseline Assessment as well as including the current site condition regarding air and noise quality.

2.0 PREVIOUS SITE REPORTS

A Baseline report and Site Condition report were completed and previously submitted with the existing Licence (P1186-01) application for the Installation.

The following Environmental Site Investigation reports have been previously produced for the site and the results are summarised in Attachment 4.8.3; including:

- Clonshaugh Business Park Environmental Assessment, Ground Investigations Limited, 22nd August 2019.
- Due Diligence Dub 90 JCD Clonshaugh Geotechnical Desk Study, Arup, 27th August 2020.
- Site Investigation Report. DUB090 Data Centre & Ski Lodge Clonshaugh, Dublin 17. Site Investigations Ltd, September 2021;
- Due Diligence Report DUB090 JCD Clonshaugh. ARUP, January 2021;
- Environmental Assessment Report. Clonshaugh Business Park. Ground Investigations Ireland, February 2020.

The baseline condition of the site is covered in Section 7.0 *Stage 5 – Environmental Setting* and Section 9.0 *Stage 7 – Site Investigation* of the Soil and Groundwater Water Baseline Assessment (Attachment 4.8.3 of this licence review application). The following sections surmise summary details of the soil, ground and groundwater quality are discussed in relation to current quality standards. This includes details of all the major and minor surface water features in the area along with current quality status of these where applicable.

3.0 ENVIRONMENTAL CONDITIONS OF THE SITE

3.1 Soil

The Baseline Report (Attachment 4-8-3) review of the site history has not identified any intrusive investigations completed for the existing Installation site; however, a site investigation was carried out in June 2019 for the extended Installation site. The GSI

geological web viewer shows the existing Installation site is primarily underlain by made ground. It is likely that the made ground designation relates to the hardstanding and buildings associated with the industrial estate as opposed to any historic made ground or infilling. Made ground was encountered during the S.I. for the extended Installation site, to levels ranging between 0.8 and 1.3 mbgl, comprising brown slightly sandy slightly gravelly clay with rare fragments of charcoal, wood, red brick; ceramics, metal, plastic and concrete.

The made ground is underlain by till which has been confirmed by the S.I. for the extended Installation site and at neighbouring sites within the immediate vicinity of the Clonshaugh Business and Technology Park. The subsoil has been classified as limestone till (Carboniferous), with a gravel layer also recorded at the extended Installation site. Till is the dominant subsoil type in the region and is a glacial deposit which is known as Dublin Boulder Clay.

The Site history noted that the historic site uses for the existing Installation have utilised chemicals as part of their manufacturing and printing processes. These chemicals were likely to be stored in smaller containers and within the footprint of the building reducing the risk of potential historic contamination occurrences. The only bulk chemical likely to be present was fuel oil. Historic uses for the extended Installation included large industrial units previously used as a toy production factory.

There is no record of any spills at the overall site prior to redevelopment. However, based on the natural conditions present if any localised leaks or spills occurred, these would be contained within the clays on site and naturally degrade over time.

The only relevant bulk hazardous substances currently stored on site (substances stored or used onsite and which are classified as hazardous by the EPA under the Groundwater Regulations and contained in bulk storage) is fuel oil for emergency back-up generators.

The risk prevention measures present at the Installation significantly reduce the potential for an environmental impact to soil or water to occur. These measures include bunded or double contained vessels, dual-contained fuel pipe system (when underground), spill management procedures and incorporation of interceptors on stormwater lines.

Source-pathway-receptor linkages were assessed for the bulk storage areas. It was concluded that there are no direct pathways to either the soil and groundwater environment. Interceptors are installed on the surface water drainage. A leakage from a bulk/top-up tank would be fully contained in the designated bund or the double skin lining of the tank, with leaks during delivery fully contained within the continuous hard stand delivery areas. Any leakage outside of the delivery areas would be treated through hydrocarbon interceptors within the drainage system prior to discharge from the site.

3.2 Groundwater

Based on the S.I. for the extended Installation site and assessments on neighbouring sites within the Clonshaugh Business and Technology Park, it has been determined that groundwater flows are in a south easterly direction towards Dublin Bay; however, the permeability of soils within the region are generally low as characterised by the Dublin GWB.

There are no source protection areas relating to group water schemes or public water supplies within 3km of the site, i.e. zones surrounding a groundwater abstraction area.

The only relevant bulk hazardous substances (substances stored or used onsite and which are classified as hazardous by the EPA under the Groundwater Regulations and contained in bulk storage) stored onsite is fuel oil for emergency back-up generators.

There is only bulk fuel oil storage at the facility. The risk prevention measures present at the facility significantly reduce the potential for an environmental impact to soil or water to occur. These measures include bunded or double contained vessels, dualcontained fuel pipe system (when underground), spill management procedures and incorporation of interceptors on stormwater lines.

Source-pathway-receptor linkages were assessed for the bulk storage areas. It was concluded that there are no direct pathways to either the soil and groundwater environment. Interceptors are installed on the surface water drainage. A leakage from a bulk/top-up tank would be fully contained in the designated bund or the double skin lining of the tank, with leaks during delivery fully contained within the continuous hard stand delivery areas. Any leakage outside of the delivery area would be treated through hydrocarbon interceptors within the drainage system prior to discharge from the site and would be unlikely to reach ground water.

3.3 Surface Water

The area is drained by the Santry River which runs to the south of the site. Storm water drainage from the site currently discharges to attenuation storm cells on site (2 no. for the existing Installation and 1 no. for the extended Installation) prior to discharge to the existing storm water systems within the Clonshaugh Business Park via Class 1 hydrocarbon interceptors and flow control devices. This eventually discharges into the Santry River at two locations.

There are no streams on the site itself or along its boundaries.

The EPA assess the water quality of rivers and streams across Ireland using a biological assessment method, which is regarded as a representative indicator of the status of such waters and reflects the overall trend in conditions of the watercourse. The biological indicators range from Q5 - QU. Level Q5 denotes a watercourse with good water quality and high community diversity, whereas Level Q1 denotes very low community diversity and bad water quality.

With reference to the site setting, the nearest downstream EPA monitoring station is situated along the Santry River to the south of the site.

There is one water quality monitoring station located on the Santry River downstream of the proposed site which has quality ratings available within the last ten years. Clonshaugh Road Bridge RS09S010300) obtained a Q rating of 2-3 - Poor Status (in 2022). There is also a station downstream on the River Mayne at the Hole-in-the-Wall Bridge (RS09M030500). This also obtained a Q rating of 2-3 (in 2022) which also denotes a "poor" rating for the same period.

In accordance with the WFD, each river catchment within the former ERBD was assessed by the EPA and a water management plan detailing the programme of measures was put in place for each. Currently, the EPA classifies the WFD Ecological Status for the Mayne and Santry waterbodies as having '*Poor Status*' (Cycle Status

2016 - 2021) with a current WFD River Waterbody risk score of 1a, 'At risk of not achieving good status'.

3.4 Air

Ambient air quality monitoring was not undertaken as part of the preliminary assessment for this site. Reference has been made to the latest air quality monitoring programs that have been undertaken in recent years by the EPA. Attachment-7-1-3-2-Air Emissions Impact of this application provides a summary of the relevant air quality that has been used as a baseline for the air dispersion modelling completed for Installation.

3.5 Noise

An environmental noise survey was conducted prior to construction of the Installation to quantify the existing noise environment prior to construction and operation of the existing Installation. The survey was conducted in general accordance with guidance contained in the EPA NG4 publication and ISO 1996-2:2017 Acoustics - Description, Measurement and Assessment of Environmental Noise -Determination of Sound Pressure Levels. Specific details are set out in Attachment-7-1-3-2-Noise Emissions Impact Assessment of this application.

4.0 CONCLUSIONS

As stated in the EPA 2018 Licence Application Form Guidance (Version 2):

"If a baseline report is submitted as part of this applications this may also fulfil the requirements to describe the condition of the site".

The baseline report submitted with this application and the information included within this document fulfils this requirement in relation to soil, surface water and ground water. The included Attachments, Attachment-7-1-3-2-Air Emissions Impact and Attachment-7-1-3-2-Noise Emissions Impact Assessment details the site condition in relation to Air and Noise.