
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.

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

There have been no prior Baseline reports or Site Condition reports completed for the site.

The following Environmental Site Investigation reports have been previously produced for the site and the results are summarised in Attachment 4-8-3:

- *IGSL Ltd. Cyrus One – Grange Castle Business Park South, Geotechnical Investigation Report, Project No. 20544 January 2018.*

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). In these sections, 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 included a review of the 'IGSL Ltd. Cyrus One – Grange Castle Business Park South, Geotechnical Investigation Report, Project No. 20544 January 2018' and the 12 no. trials pits that were completed across the site.

The Teagasc soil mapping indicates that the soils are comprised primarily of deep well drained mineral soil derived from limestones (BminDW) to the east of the site with areas of Poorly drained mineral soils derived from mainly basic parent materials (BminPD) to the west of the site. Depth to bedrock has been shown to be very shallow in this area based on site investigation at the site prior to development. Bedrock depth varies from at surface to 0.7 to 2.7 m bgl based on site specific information recovered during the IGSL site investigation in 2017.

A review of the site history and land use confirms the site was formerly a green field site (under agricultural use) prior to construction of the data storage facilities. The lands surrounding the site are under, agricultural and commercial uses with some individual residential properties.

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 diesel for emergency back-up generators.

The risk prevention measures present at the facility significantly reduce the potential for an environmental impact to soil or water to occur. These measures double contained vessels and spill management procedures and incorporation of interceptors on stormwater lines.

Source-pathway-receptor linkages were assessed for the diesel 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 tanks would be fully contained in the double skin lining of the tank, with leaks during delivery fully contained within the continuous hard stand delivery area. Any leakage outside of the delivery area would be contained within the drainage system.

3.2 Groundwater

The Baseline Report identified that, there have been no groundwater investigations completed at the site.

The flow direction in the overburden generally follows no fixed pattern or trend. Flows of this nature are typical of low permeability clay strata with discontinuous gravel lenses, where often the water level measures represent pore water seepages into the overburden monitoring well (opposed to bedrock wells) or perched groundwater conditions (not bedrock aquifer water). Regional groundwater flow would be assumed to be to the east towards Dublin Bay.

The Groundwater Body (GWB) underlying the site is the Dublin GWB (EU Groundwater Body Code: IE_EA_G_008). Currently, the EPA (2018) classifies the Dublin GWB as having 'Good Status', with a Ground Waterbody Risk score is 'under review'

There are no recorded groundwater resource protection zones in the area of the proposed site i.e. zones surrounding a groundwater abstraction area. There is no risk to any public water supply as the nearest drinking water protection area is located 9 km south of the site in Co. Kildare at Killeel.

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3.3 Surface Water

The topography is relatively flat across the site with a gentle slope to the northwest (approximately +77 metres above ordinance datum (mAOD) in the south to +72 mAOD in the north and +75 mAOD in the east to +72mAOD in the west). The ADSIL site is within the sub catchment of the Griffeen River and Baldonnell Stream which are tributaries of the River Liffey.

The drainage from site is directed to SDCC public stormwater drain to the northwest of the site along the Baldonnell Road. The SDCC stormwater system discharges to the River Griffeen to the north of the site. The River Griffeen is a tributary of the River Liffey located 4.5 km North of the site. There are no streams on the site itself or along its boundaries.

The Installation is located within the former ERBD (now the Irish River Basin District), as defined under the European Communities Directive 2000/60/EC, establishing a framework for community action in the field of water policy – this is commonly known as the Water Framework Directive (WFD). It is situated in Hydrometric Area No. 09 of the Irish River Network. It is located within the Liffey Catchment.

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.

There are three water quality monitoring stations located on the River Griffeen, one upstream of the site and two downstream of the site. The upstream location (Griffeen first Bridge E of Milltown) has a Q rating of 3, 'Poor' status (in 1991), the two downstream locations (Griffeen – Esker Bridge and In Lucan Village) both have a Q rating of 3, 'Poor' status in 1991 and 2019 respectively.

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 River Griffeen and the River Liffey waterbody as having '*Moderate Status*' (Cycle Status 2013-2018) 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 the project.

3.5 Noise

An environmental noise survey was conducted to quantify the existing noise environment. 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 (Attachment-4-8-3-Complete 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.