

ATTACHMENT I

Existing Environment & Impact of the Facility

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENT L.1

Air

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment I.1 Air

An assessment of the ambient air quality at the site is presented in Section 3.7 of the Project Description that accompanies this application. The assessment included the completion of a baseline dust monitoring programme.

The potential significant impacts associated with the proposed development are dust. An assessment of the baseline dust conditions is presented in Section 3.7 and an assessment of the impact of the proposed development on air quality and the proposed control measures are presented in Section 6.6 of the Project Description that accompanies this application.

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENT I.2

Surface Water

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment I.2 Surface Water

There are no surface water courses/drains within the site boundary. A description of the local the surface water drainage system in the area around the site is presented in Section 3.4 of the Project Description that accompanies this application.

The site activities will not result in any direct discharge to surface waters. An assessment of the surface water drainage system at the site and its environs including details of proposed mitigation measures (oil interceptors) is presented in Section 4.8 of the Project Description that accompanies this application.

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENT I.3

Sewer

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment I.3 Sewer

The site activities will not result in any discharge to sewer on or adjacent to the site. It is proposed to collect and remove leachate/contaminated run-off for disposal at an off-site wastewater treatment plant. Details of the leachate quality and volumes are presented in Section 4.9 of the Project Description that accompanies this application.

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENT I.4

Hydrogeology

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment I.4 Hydrogeology

A detailed assessment of the site geology and hydrogeology is presented in Section 3.3 of the Project Description that accompanies this application and is summarised below.

The bedrock beneath the site comprises thinly laminated slaty mudstones and siltstones belonging to the Ballylane Formation. The depth to rock beneath the site has not been established, but based on the results of the trial pits across the site is more than 3.5 m. The subsoils at the site comprise made ground overlying silty Sand with layers of sandy Silt/fine Sand and occasionally uniform medium sand. The made ground comprises in-situ material stripped during the development of the sand and gravel pit. The underlying materials are typical of fluvio-glacial outwash deposits.

Although water bearing, the sands and gravels are not an important regional groundwater resource. The bedrock formation beneath the site has a relatively poor permeability. The Ballylane Formation is classified as a 'Poor Aquifer' which is generally unproductive except for local zones using the classification system prepared by the GSI. Based on the available information on the thickness of the subsoils across the site, the vulnerability of the bedrock aquifer to pollution is High.

The direction of groundwater flow is southerly towards the Three Mile River, which is approximately 1.5 km to the south of the site. There are no major abstractions in the surrounding area. There is no municipal mains water supply and the private residences and business in the area obtain water for potable use from individual wells. Groundwater quality in the bedrock aquifer is generally good, although there is evidence of naturally occurring elevated manganese levels. Nitrate levels are also elevated and these are attributed to possible local agricultural or domestic contamination sources, including fertilisers, farmyard effluent and septic tanks.

There will be no direct emissions to groundwater from the facility. The treated sanitary wastewater from the on-site effluent treatment plant will discharge to ground via a polishing filter. An assessment of the ambient hydrogeological conditions at the site and the impact of the facility on groundwater is included in Sections 3.3 and 6.1 of the Project Description that accompanies this application. The assessment concluded that the facility activities will not have a measurable impact on groundwater quality and that mitigation measures are not required.

ATTACHMENT I.5

Ground Contamination

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment I.5 Ground Contamination

The site is a worked out sand and gravel quarry. There are no known historical pollution incidents or soil/groundwater contamination. There is no available information on groundwater quality beneath the site. Groundwater quality data in the EIS for the landfill on the lands to the west indicates that groundwater quality in the bedrock aquifer is generally good, although there is evidence of naturally occurring elevated manganese levels. Nitrate levels are also elevated and these are attributed to possible local agricultural or domestic contamination sources, including fertilisers, farmyard effluent and septic tanks.

There will be no direct emissions to groundwater from the facility. The treated sanitary wastewater from the on-site effluent treatment plant will discharge to ground via a polishing filter. An assessment of the ambient hydrogeological conditions at the site and the impact of the facility on groundwater is included in Sections 3.3 and 6.1 of the Project Description that accompanies this application. The assessment concluded that the facility activities will not have a measurable impact on groundwater quality and that mitigation measures are not required.

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENT I.6

Noise

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment 1.6 Noise

I.6A

A baseline noise survey was carried out at the site in August 2004. The findings of the baseline noise assessment are included in Section 3.10 of the Project Description that accompanies this application. The results of this survey found the baseline noise levels at the site to be dominated by the nearby N11 roadway.

I.6B

Noise prediction modelling was carried out in order to assess the potential impacts of noise due to the facility. The results of this assessment are presented in Section 6.5 of the Project Description that accompanies this application.

Vibration impacts are not considered to be significant at the site. Given the size of the facility and the design of the site roads any yards, traffic within the site or plant operating on-site should not result in significant vibration impacts either on-site or off-site. Therefore, vibration mitigation measures are not considered necessary.

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENT I.7

Ecology

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Attachment I.7 Ecology

An ecological survey of the site was completed in September 2004 by Roger Goodwillie & Associates. The survey concluded that the site is not of significant ecological value. A copy of the report is included in Appendix 4 of the Project Description which accompanies this application. The subject site is dominated by disturbed ground as a result of its use as a sand and gravel quarry. The site is not located within the boundaries of any designated sites. This includes proposed Natural Heritage Areas and Special Protection Areas under the Birds Directive (79/409/EEC), nor is it designated a Special Conservation Area in accordance with the Habitats Directive (92/43/EEC). Section 3.6 of the Project Description, which accompanies this application, provides a more detailed evaluation of the existing ecology at the site.

The site is of low ecological value therefore the impact of the subject development is considered to be imperceptible and mitigation measures are not required.

*For inspection purposes only.
Consent of copyright owner required for any other use.*