

ATTACHMENT 11 – ASSESSMENT OF IMPACT ON RECEIVING SURFACE WATER

The Applicant site lies at the edge of the catchment area for the Ward River which runs approximately 4km north of the site. The nearest watercourses to the application site are artificial (man made) ditches and/or small tributary streams on the eastern side which flow north towards the Ward River.

The only sub-surface water drainage infrastructure at the site at the site exists across the central infrastructure area where aggregate processing and concrete production activities are currently concentrated. Rain falling across the remainder of the application area either

- runs over unsealed ground into the existing quarry void and the pond on the eastern side of the quarry floor
- percolates down through the existing soil / rock at the ground surface as recharge to groundwater, at which point it joins groundwater flow toward the quarry face.

At the present time, groundwater levels at the North Quarry are lowered by means of sumps in the quarry floor. Surface water falling across the quarry and dewatered groundwater are collected in a pond on the eastern side of the quarry floor and pumped to an existing drainage channel / watercourse at original ground surface level via an existing pipe network. Water pumped to this channel is routed via existing settlement lagoons to discharge to a tributary stream which runs northwards out of the Applicant's property holding toward the Ward River. This discharge is regulated by way of a discharge licence issued by Fingal County Council.

During the infilling operations, the upper surface of the backfilled soil will be graded so as to ensure that surface water run-off falling over the quarry footprint falls to sumps at temporary low points within the quarry floor or backfilled material. These temporary sumps will effectively function as primary settlement ponds and water collecting in them will be pumped (causing minimum agitation to ponded water) to the existing drainage channel / watercourse on the eastern side of the quarry. Water pumped to this channel will be routed via the existing settlement lagoons to discharge to the tributary stream which runs north toward the Ward River. Should it ever be necessary, additional settlement ponds and/or an oil interceptor can be provided to achieve discharge emission standards.

As previously outlined, any suspect contaminated waste imported to the proposed waste facility will be transferred to a covered shed in the south eastern corner of the application site. As the floor of the shed is sealed by a concrete slab and as no rainfall will come into contact with consignments of suspected contaminated waste, there is no requirement to install drainage infrastructure to provide for the separate collection and storage of potentially contaminated surface water run-off at the waste inspection and quarantine facility.

In the longer term, toward the end of the quarry backfilling works, the final restoration surface within and around the backfilled quarry void will be modified to ensure that surface water run-off across the area falls eastward toward the tributary stream of the Ward River (refer to the proposed restoration plan in Figure 2-4 of the Environmental Impact Statement).

Details of the existing surface water environment and the impact of the proposed waste recovery facility and associated emissions thereon are provided in Chapter 6 of the Environmental Impact Statement.

The existing / proposed monitoring regime at surface water bodies is outlined in Chapter 2, Paragraphs 2.132 to 2.135 of the Environmental Impact Statement.

ATTACHMENT I2 – ASSESSMENT OF WASTE WATER DISCHARGE

There are no emissions to public (Local Authority) sewers associated with the operation of the proposed waste recovery facility.

Roadstone Wood Ltd. has one existing wastewater effluent (septic) tank on its property at Huntstown. This septic tank is located south of the existing access road (north of the block shed) and services the existing site offices, canteen and staff welfare facilities.

As these facilities will be shared by staff working at the proposed waste recovery facility for the duration of quarry backfilling and restoration works, there will be negligible additional impact on soil or groundwater quality.

No other waste water emissions are associated with the proposed waste recovery activities.

Details of the proposed sewerage and surface water management system at the application site are provided in Chapter 2, Paragraphs 2.31 to 2.36 of the Environmental Impact Statement. An assessment of the impact of waste recovery activities on surface water and groundwater is provided in Chapter 6 of the Environmental Impact Statement.

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ATTACHMENT I3 – ASSESSMENT OF IMPACT ON GROUND / GROUNDWATER

A ground investigation was completed at the application site in early 2010 to establish the nature of the existing subsoil / bedrock and to install 6 No groundwater monitoring wells. The available information indicates that the general subsurface profile across the application site comprises relatively limited thickness of Made Ground (hardstanding) and/or glacially derived soil overlying bedrock.

Further details of the existing soil and subsoil environment are provided in Chapter 5 of the Environmental Impact Statement. The details of the groundwater well installations are also provided in Appendix 6-1 of the Environmental Impact Statement.

Backfilling and restoration of the former quarry at Huntstown will entail placement and compaction of inert soil and stones and minor quantities of inert construction and demolition waste and/or recovered secondary aggregate. As such, no soil or groundwater contamination will arise from percolation of rainfall through the backfilled ground or flow of groundwater through it.

Details of the existing groundwater environment and the impact of the proposed waste recovery facility and associated emissions thereon are provided in Chapter 6 of the Environmental Impact Statement.

The proposed groundwater monitoring regime is outlined in Chapter 2, Paragraphs 2.120 to 2.123 of the Environmental Impact Statement.

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ATTACHMENT I4 – NOISE IMPACT

Details of the existing noise environment and the noise impacts of the proposed quarry backfilling and restoration scheme are provided in Chapter 8 of the Environmental Impact Statement.

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ATTACHMENT I5 – ASSESSMENT OF ECOLOGICAL IMPACTS AND MITIGATION MEASURES

Details of the existing ecological environment and the impact of the proposed quarry backfilling and restoration scheme and associated emissions thereon are provided in Chapter 4 of the Environmental Impact Statement.

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