ATTACHMENT E6 ENVIRONMENTAL NUISANCES

General

Backfilling and restoration activities at the application site will require a number of environmental controls to eliminate or minimise the potential nuisance to the public arising from the importation, placement and compaction of inert soils. The planned environmental control measures are outlined in detail in the following sections.

The quarry backfilling and restoration works to be undertaken at the application site will ultimately be regulated by conditions attaching to any grant of planning permission issued by Wicklow County Council or waste licence issued by the Environmental Protection Agency (EPA). Any additional control measures required by these consents, in addition to those outlined below, will also be implemented.

Bird Control

As the soil and stones being placed / recovered at the application site are free of putrescible (food / kitchen) waste, site activities are unlikely to attract scavenging birds such as gulls and crows for the duration of the restoration works. Accordingly, it is not intended to implement any specific bird control measures at the site.

In the unlikely event that any putrescible waste is identified among imported materials, it shall be immediately removed to the waste quarantine area pending removal off-site to a licenced waste disposal or recovery facility.

Dust Control

In dry, windy weather conditions, the quarry backfilling and restoration activities may give rise to dust blows across, and possibly beyond the application site. In order to control dust emissions, the following measures will be implemented:-

- water will be sprayed from a tractor drawn bowser on any dry exposed surfaces (roads and hardstand areas);
- dust blows will be partially screened by the quarry side walls as backfilling progresses upwards;
- as the level of the backfilled materials approaches final surface levels, the site will be seeded with grass on a phased basis, as soon as practicable after placement of cover soils (subsoil and topsoil). This will help to minimise soil erosion and potential dust emissions;
- the area of bare or exposed soils will, insofar as practicable, be kept to a minimum. If excessive dust emissions arise, consideration will be given to establishing temporary vegetation cover over exposed soil surfaces and stockpiles pending backfilling and restoration to final ground levels;
- all HGV's exiting the site shall be routed through the proposed wheelwash facility in order to minimise transport of clay and/or fines by HGVs onto the public road network;
- stockpiling of imported soil materials will be minimized. Soils will ideally be placed and compacted in-situ immediately after being imported to site and end tipped. If and when temporary stockpiling of soil is required, it will be placed as far as practicable from nearby residences.

The amount of dust or fines carried onto the public road network will be further reduced by periodic sweeping of internal paved site roads and the existing public roads, if required.

Fire Control

The inert soil and stone material being placed / recovered at this site is free of flammable materials and biodegradeable waste which could create a fire or explosion risk. Site activities will not therefore present a fire risk for the duration of the restoration works. Accordingly, no specific fire control measures shall be implemented at the site.

Notwithstanding this, the following operational practices will be implemented in order to prevent fire at the application site:

- (i) any biodgradeable or flammable waste identified or suspected in waste materials imported to site shall be immediately transferred to the waste quarantine area pending removal off-site to a licensed waste disposal or recovery facility
- (ii) plant and equipment will be removed if they exhibit signs of overheating etc.

In the unlikely event that a fire does occur, the local fire stations in Bray and Wicklow will be contacted and emergency response procedures will be implemented. Fire extinguishers (water / foam / CO_2) will be provided at the site office to deal with any small outbreaks which may occur.

Litter Control

As the materials being placed or recovered at this site will be largely free of litter, the site restoration activities are unlikely to give rise to problems with windblown litter. Accordingly, it is not intended to implement any specific litter control measures at the site.

In the unlikely event that any litter waste is identified among imported materials, it shall be immediately removed to the waste quarantine area pending removal off-site to a licenced waste disposal or recovery facility.

Traffic Control

The proposed backfilling operations at the Calary Quarry will entail importation of approximately 3,280,000 tonnes of material. This translates to approximately 182,200 HGV round trips (at 18 tonnes per load) over the lifetime of the facility in order to backfill the quarry void.

Based on recent operations at its Fassaroe recovery facility nearby, Roadstone Ltd has defined a relatively optimistic scenario, where it would backfill the void at Calary Quarry over a 12 to 15 year period. This scenario is considered sufficiently onerous for modelling and assessment of traffic related impacts arising from the proposed development. Notwithstanding this (and as noted previously), if soil intake rates were to be significantly lower than anticipated, the backfilling period for the quarry could extend up to 20 years.

Assuming a maximum soil intake rate of 300,000 tonnes / year generates an average of 6 HGV return trips per hour, equivalent to 12 movements into or out of the quary per hour. Note that this assumes an average 18 tonne HGV payload, 50 working weeks in a calendar year, 5.5 working days per week and 10 hour working day.

As indicated in Chapter 13 of the Environmental Impact Statement which accompanies this waste licence application, operation of the proposed waste recovery facility will have little or no adverse impact on traffic flow along the existing R755 Regional Road and N11 National Primary Road *in an optimistic (ie. most conservative) case scenario.*

A number of potential mitigation measures are identified along the length of the R755 Regional Road from Kilmacanogue village to Calary Quarry to enhance the safety of road users. Many of these measures were approved and/or required under a previous planning permission for the quarry (WCC Ref. 06/6189 / ABP PL 27.224400) and include

- localised road widening works at the site entrance where the requisite forward site visibility cannot be achieved;
- placing signage at strategic locations at approaches to the application site to improve driver awareness of the potential dangers of slow moving traffic ahead and
- improving stopping sight distances and safety in general by regular trimming of vegetation (which would otherwise reduce or impede driver visibility), particularly around the site entrance and along the property boundary with the public road.

Vermin Control

As the soils and stones being placed / recovered at this site are free of putrescible (food / kitchen) waste, site activities are unlikely to attract vermin (rats) for the duration of the restoration works. Accordingly, no specific vermin control measures shall be implemented at the site.

In the unlikely event that any putrescible waste is identified among imported materials, it shall be immediately transferred to the waste quarantine area pending removal off-site to a licenced waste disposal or recovery facility.

Odour Control

As the soil and stones being placed / recovered at this site are not biodegradeable and do not therefore emit odourous gases, site activities will not give rise to odour nuisance. Accordingly, it is not intended to implement any specific odour control measures at the site.

In the unlikely event that any biodegradeable waste is identified among imported materials, it shall be immediately removed to the waste quarantine area pending removal off-site to a licenced waste disposal or recovery facility.

Mud Control / Road Cleansing

HGV movements around the proposed recovery facility at Calary Quarry will generally be over hardstanding and/or paved ground. As such, the proposed development would not be expected to give rise to significant quantities of mud, clay or dust deing carried off-site onto the local road network.

Haul routes / paved and unpaved areas within the recovery facility will be regularly inspected and maintained as required as part of routine 'housekeeping' operations in order to minimise potential accumulation of mud on wheels of HGV lorries.

Notwithstanding this, in order to prevent transport of mud, clay and dust onto the public road network, a wheelwash will be installed along the paved egress route leading out of the facility. All HGV and tipper trucks exiting the proposed facility will be required to pass through the proposed wheelwash facility.

The location of the proposed wheelwash and traffic routing arrangements are indicated in Drawing D1-1 in Attachment D1. Plans and elevations of the proposed wheelwash are provided in Drawing D1-2, while those for the associated pumphouse, storage tank and settlement lagoon are provided in Drawing D1-3, both also included in Attachment D1.

In addition, and in the unlikely event it is ever required, a road sweeper will be deployed to ensure local public roads are cleaned as and if required.

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