

EMISSIONS TO GROUND – CONTROL MEASURES

This waste licence application provides for the importation of inert material for backfilling / recovery purposes at an existing worked out sand and gravel pit and some adjoining agricultural lands. There will be no construction impacts other than some topsoil stripping and vegetation removal across the agricultural lands. Some mitigation measures are proposed for the site preparation and operational stage of the proposed inert waste recovery facility. The site preparation stage is of relatively short duration and is required before the recovery of the inert material can commence. The operational stage comprises the importation and placement of the inert material at the facility.

During the site preparation stage, topsoil will be stripped from existing agricultural land in advance of the placement of imported inert material. The excavated topsoil will be stockpiled elsewhere on site for re-use in restoration works.

During the operational phase, there is potential for accidental spills or leaks of fuel, hydrocarbons or other hazardous substances being used or stored at the facility to adversely impact land quality. The potential for uncontrolled emissions to ground exists at the permitted facility at present and is minimised by implementing a series of mitigation measures (outlined in section on groundwater impacts below) and adhering to the Environmental Management System (EMS), which includes, amongst other features, detailed systems and procedures providing for the implementation of these mitigation measures and for proper handling, storage, control and monitoring for all potentially hazardous substances.

The existing office and canteen facilities at Kilsaran Concrete's existing concrete production facility at Halverstown are shared with staff working at the adjoining permitted waste recovery facility. These facilities will continue to be available for the use of current (and any additional / future) staff assigned to the waste recovery facility. Sewage from these established facilities is treated at an existing septic tank and percolation area located beyond the north-western corner of the application site. No new or upgraded wastewater treatment facilities are required or proposed to service the proposed waste recovery facility.

Experience at the existing permitted facility to date is that management practices can serve to minimise and prevent any uncontrolled emissions to ground and any potentially adverse implications for land quality or ground contamination.

With the mitigation measures in place, it is considered that any potential impacts on land quality will be slight. With the long-term restoration of the application site to agricultural use and/or woodland habitat, the significance of any temporary loss of productive agricultural land is considered to be slight. The restoration of the previously excavated / disturbed land elsewhere within the application site is considered to be both positive and beneficial.

Specific Control Measures (to Give Effect to EU Council Directives)

In order to minimise the risk of pollution to groundwater arising as a result of waste recovery and backfilling activities, a number of mitigation measures are implemented to protect groundwater, prevent accidental discharge of fuel or chemicals and detect / monitor potential adverse impacts.

These measures, give effect to the requirements of *Council Directive 80/68/EEC of 17 December 1979 on the Protection of Groundwater Against Risk of Pollution by Dangerous Substances* and the requirements of *Directive 2006/118/EC of 12 December 2006 on the protection of groundwater against pollution and deterioration*. They also give effect to the requirements of the national transposing legislation, specifically the *European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010)*. Measures are identified under a range of headings below.

Inspection of Imported Material

Consignments of imported soil and stone waste are screened and inspected in line with an approved waste acceptance plan to confirm they are inert prior to deposition at the facility. Additional precautionary measures associated with the acceptance and handling of inert soil waste are detailed in Attachment 4-8-1 of this application (Operational Report) and Chapter 2 (Project Description) of the Environmental Impact Assessment Report accompanying this waste licence application.

Infiltration of Suspended Solids

There are potential impacts on groundwater from increased mobilisation of soil fines in infiltrating rainfall / run-off. In order to minimise soil erosion and transportation of fines in groundwater the following measures will be implemented:

- soils stockpiles / surfaces will be at a safe angle of repose and will be bladed off; and
- soil stockpiles / surfaces will be re-vegetated where they are / will be in place for a sufficient length of time to justify such a measure.
- surface water runoff containing suspended solids will be directed to a temporary holding area at the site where the water can infiltrate to the ground;

Fuel Storage / Refuelling

- fuel storage will continue at the existing storage facility there is / will be no fuel storage within the backfill areas;
- refuelling will take place at the designated paved refuelling area;
- no refuelling or plant / machinery maintenance or repairs will take place within the working area to prevent accidental spillages during refuelling or repairs/maintenance;

Plant / Equipment Maintenance

- plant/machinery maintenance and repairs will take place on the hardstanding area at the refuelling point;
- no servicing or maintenance of mobile plant and machinery will be undertaken at backfilling areas;
- all petroleum-based products (lubricating oils, waste oils, etc.) are stored on drip trays under cover in the workshop to prevent pollution due to accidental leakages;
- a spill kit and drip trays will be kept on site and will be deployed if there is an accidental spillage from plant / machinery;
- plant operators will be briefed during 'toolbox' talks and site induction on where the spill kit is kept and how and when it is deployed;

Management of Potential Contaminated Waste

- any imported waste which is accepted at the facility but subsequently suspected to be non-compliant with waste acceptance criteria for the facility will be re-loaded onto HGV trucks and transferred across the application site to a proposed covered waste inspection and quarantine facility for closer examination and/or testing;
- the waste inspection facility comprises a covered shed over a sealed concrete slab;
- incident rainfall will not come into contact with consignments of suspected contaminated waste stored at the covered shed;

- should any subsequent inspection or testing of suspect soil waste at the inspection and quarantine facility identify any non-inert material which cannot be accepted or reused in the restoration of this site it will be segregated and temporarily stockpiled (quarantined) pending removal off site by permitted waste collectors to an authorised waste disposal or recovery facility; and
- provision will also be made for temporary storage of any separated non-inert construction and demolition waste (including metal, timber, plastic etc.) in skips prior to removal off site to a licenced recovery facility.

Traffic Movements

- A site specific traffic management system is / will be in place to reduce potential conflicts between HDV's travelling to/from the recovery facility and adjoining concrete production facility, to reduce the risk of an accidental vehicle collision;
- the speed limit is enforced to further reduce the likelihood and significance of collisions between vehicles;
- all plant is regularly maintained and inspected daily for leaks of fuels, lubricating oil or other contaminating liquids/liquors.

Monitoring

- Groundwater monitoring measures have been implemented at the existing permitted recovery facility. These monitoring measures will continue at and around the recovery facility / application site in order to monitor any potential impact of the inert waste recovery operations on groundwater quality.
- The results of all groundwater monitoring undertaken will be recorded and submitted to Kildare county council and/or the EPA in an Annual Environmental Report for their record and review;
- The groundwater monitoring regime will remain in place for the duration of the proposed backfilling and restoration works. Sampling and monitoring will continue as long as backfilling activities continue and for a short period thereafter.