

Wennington Quarry Environmental Permit Application for Inert Waste Landfill (EPR/FB3507SP /A001):

Non – Technical Summary

Introduction

This Non-Technical Summary has been prepared in support of question 5c to Environmental Permit Application Form Part B2 and seeks to provide a concise summary of the application in non-technical language.

Ingrebourne Valley Limited (IVL) is seeking appropriate permission from the Environment Agency (EA) to allow the restoration by inert landfill of the c.25 ha Wennington Quarry (the Site), less than 1 km south-east of Rainham, Essex as shown in Drawing number 66250D1.

The documents which form this Environmental Permit application seek to provide sufficient information for the EA to determine and issue an Environmental Permit for inert landfill at the Site.

Site history and proposed development

The Site itself is currently in rotational agricultural use. Though much of the surrounding area has been subject of mineral extraction and subsequent landfill.

Planning permission reference APP/B5480/W/16/3159082 allows for the winning and working of mineral with restoration to agricultural use. The quarry is thought to provide a void of c.1,400,000 m³, to be filled at a rate of 300,000 tonnes per annum.

The permit application seeks to allow infilling of the resulting quarry by inert landfill (L05). Screening plant will also be employed for the physical treatment of waste prior to infill (A16).

Waste acceptance and permitted activities

When operational, for mineral extraction and landfill, access to the Site will be via a dedicated new access point from the A1306 New Road.

All incoming loads will be weighed and checked. A waste acceptance check will be undertaken at the weighbridge with additional visual checks being undertaken at the point of discharge.

Staffing and general maintenance

No operations shall be undertaken at the Site except during the following hours:

- 0800 – 1800 Monday to Friday;
- 0800 – 1300 Saturday; and
- With no working on Sundays, Public or Bank Holidays.

In accordance with the Site's planning permission, start times will be delayed to 0900 during works in Phases 6 and 7.

Staff will have clearly defined roles and responsibilities. Appropriate training will be undertaken and written instructions will be given where necessary.

All site-based machinery and equipment will be serviced and maintained in accordance with the manufacturers' recommended maintenance schedules.

Lockable gates will be used at the entrance to prevent unauthorised access and prevent against unauthorised access. All gates will remain locked when the Site is not operational.



Prior to exiting the Site, vehicles will, if necessary, be stopped and inspected and cleaned of any material adhering to the wheels or chassis using the wheel-wash facilities within the receiving area to prevent mud being deposited on the local road network.

Should it become apparent that mud has been tracked onto the public highway, sweeping of relevant areas, including the public highway, will be undertaken as soon as possible. A road-going sweeper will be employed, if required.

Due to the inert nature of the materials that will be received at the Site there will not be a significant odour, litter, pest, vermin or fire risk.

Fuels will only be stored for the purpose of refuelling on-Site plant. Fuel storage facilities will be contained within the secure receiving area with storage tanks being of modern construction featuring adequate secondary containment. Appropriate firefighting equipment will be available at the Site.

A noticeboard will be displayed near the Site entrance and will include: the company name, emergency contact details, the site Permit number and the EA's contact details.

Any complaints received and subsequent action undertaken will be recorded in accordance with the Environmental Management System for the Site.

Operator competence

The Site will be operated by IVL which has a strong track record of landfill and brownfield site restoration and has not been convicted of any relevant offences or subject to insolvency or bankruptcy.

Relevant staff within IVL who will be managing the restoration of the Site will be assessed to be technically competent for inert waste management operations under an Industry Standard Operator Competence Scheme.

IVL operates a comprehensive Environmental Management System that meets the requirements of ISO 14001.

Environmental and hydrogeological risk assessment

Although various residential properties are positioned within 50 m of the Site boundary, the proposed operational management controls are considered adequate to constrain any potential impacts relating to odour, noise, vibration, and dust, mud, litter, pests and vermin.

Risks to surface and groundwater, have been assessed through a detailed Hydrogeological Risk Assessment (HRA). The HRA does not predict any discernible impact to groundwater. The risk to the underlying Chalk has been qualitatively screened out from the assessment on the basis of the site geometry and geological barriers. As some of the contaminant migration will have occurred before the Site is filled, the model predictions at one year are presented as realistic maximum concentrations.

Stability of the landfill has been assessed through the Stability Risk Assessment (SRA), which provides a preliminary assessment of the six principal components of the stability Site conceptual model.

Environmental monitoring

Proposed environmental monitoring for the Site is proposed in the Monitoring Plan.

Control and compliance limits have been set based on the detailed HRA for ammoniacal nitrogen, chloride and nickel. As the nickel limits are based on a limited dataset (3No.) only, it is recommended that this limit is reviewed once more data has been collected.

A series of groundwater and surface water monitoring points are proposed and are presented in Figure 1.

Groundwater monitoring points (WEN02 and WEN03) are provided to ensure that groundwater conditions at the downgradient of the Site can be monitored.

Surface water monitoring points (SW6 and WENSW2) are provided for the monitoring of surface water quality, upstream and downstream of the Site, respectively.

It is proposed that quarry dewatering (including surface water run-off) will leave the Site via the balancing pond (Pond 1) close to the Site's southern boundary. It is proposed this is monitored to confirm that this water does not pose a risk to receiving waters.

Figure 1 Monitoring locations

