

Submission No. 2



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

Dublin North East  
Environmental Health Service  
Co. Clinic  
Navan  
Co. Meath

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Ms. Noeleen Keavey  
Environmental Licensing Programme  
Environmental Protection Agency Headquarters  
PO Box 3000  
Johnstown Castle Estate  
Co. Wexford

9th May 2017

**Re: Waste Licence Application**

**Class and Nature of Activity:**

The proposed facility is a recovery facility for uncontaminated waste soils, which will facilitate the restoration of a quarry.

The principal activity is R 5, "**Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials**".

Other ('non-principal') waste activities have been identified as follows:

- R 3, "**Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), which includes gasification and pyrolysis using the components as chemicals.**"
- R 4, "**Recycling/reclamation of metals and metal compounds.**"
- R 10, "**Land treatment resulting in benefit to agriculture or ecological improvement.**"
- R 12, "**Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11).**"



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- R 13, "Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced)."
- D 15, "Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced)."

Classes of activity have been identified in accordance with the Third Schedule or Fourth Schedule to the Waste Management Acts 1996 to 2010, as amended by the European Communities (Waste Directive) Regulations, 2011.

**Applicant: Kilsaran Concrete**

**Reference No: W0296-01**

**EHIS Reference No: 0604**

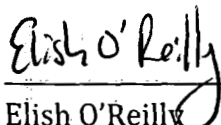
Dear Ms. Keavey,

The Environmental Health Service response to the application is in the attached consultation report. The report was compiled based on the following:

- An assessment of documentation submitted to this office.
- EPA guidance documents
- No additional investigations/measurements were undertaken.
- This report refers only to those sections of the documents which are relevant to the Health Service Executive.

If you have any queries regarding the report the initial contact is Ms. Elish O'Reilly, Principal Environmental Health Officer, County Clinic, Navan, Co. Meath.

Yours sincerely,



Elish O'Reilly  
Principal Environmental Health Officer



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Ms. Elish O'Reilly  
Principal Environmental Health Officer  
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5<sup>th</sup> May 2017

## Re: Waste Licence Application

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**Applicant: Kilsaran Concrete**

**Location of Facility: Tullykane, Kilmessan, Co.Meath.**

**Reference No: W0296-01**

**EHIS Ref No: 0604**

Dear Elish,

Kilsaran Concrete is applying to the Environmental Protection Agency for a Waste Licence for a site at Tullykane, Kilmessan, Co Meath. The existing quarry has been operational for well over 30 years. The proposal is to import 400,000 tonnes of C&D waste and inert material per annum, over a 14 year period, to fill the quarry void and bring the site back to its previous agricultural use.

Only clean, uncontaminated soil and stones will be used for restoration of the quarry void. Other proposed input materials i.e. concrete, bricks, tiles/ceramics, granular fill – will be used, as appropriate, in the construction of site haul roads.

Backfilling of the application site will be completed on a phased basis. The restoration of the site will result in a landform similar to that which existed prior to extraction of rock. The restored site will merge into the surrounding undulating pastoral landscape.

### **Site Location**

The application site (an aggregate quarry) is located entirely within the townland of Tullykane, Kilmessan, Co. Meath, approximately 1.2km south-east of the village of Kilmessan and 8km north-west of Dunshaughlin, Co Meath. The surrounding land use activities are largely agricultural with a mix of tillage and grazing activities predominant. There are a number of one-off residences in the area immediately surrounding the existing facility. Directly to the west of the site there are eight cottages known locally as Swainestown cottages. Kilmessan Public Supply Well is located approximately 750m to the west of the quarry foot print boundary.

### **Public Consultation:**

The applicant outlines details of their public consultation in section 1.5 of the EIS. Representatives for the applicant personally approached each of the local residents to make them aware of the proposed development and to garner their opinions in respect of same. A public open evening was held on 25/10/2016 in Kilmessan village. Kilsaran have given the names and number of their senior managers to the residents and to local community groups and have afforded all parties the opportunity to consult at any stage in this process.

The main issues of concern highlighted by the residents were traffic, waste acceptance, dust, noise, possible contamination of groundwater and the security, screening and operation of the proposed amenity park. The applicant has attempted to address and resolve all these issues in the EIA process.

A very effective method of public consultation was carried out and every effort was made by the applicant to involve the public in this process.

### **Staff Facilities**

A small onsite proprietary waste water treatment plant is operational onsite. This will need to be inspected and recommissioned by adequately qualified persons to determine its suitability to the required duty levels. Mains water is available on site and can be used for any basic sanitary functions.

## **Waste**

The facility will implement a Waste Acceptance Procedure in agreement with the EPA. Only inert material is to be accepted and the proposed waste types are: concrete, bricks, tiles and ceramics, soil and stone and minerals e.g. sand, stone. No hazardous waste will be accepted at the facility.

The fill materials will be imported by permitted waste contractors only. The source of each consignment of soil imported to site for backfilling purposes shall be identified in advance. All incoming loads will be weighed and their details recorded upon entering the site. Clean soil and stones are to be tipped directly to the active restoration area. Other inert materials will be tipped in a recovery/inspection area. It is stated that should small items of non-conforming material (e.g. timber, plastic, metal) be delivered in an incoming load, they will be picked out, by hand, and stored in skips at the recovery area, pending off-site removal to an appropriately authorised facility.

A representative sample shall be taken from one in every 200 loads of inert soil accepted at the facility and subjected to compliance testing, focusing on key contaminant indicators. The applicant shall use this data to confirm that the accepted soils are inert and comply with acceptance criteria.

Office and on-site waste will be segregated for (off-site) recycling. Full records of materials removed off-site will be retained.

## **Groundwater**

There are numerous private wells in the vicinity of the site and the Kilmessan Public Supply Borehole is located only 750m to the west of the quarry boundary. The current quarry has excavated to the water table and pumping of groundwater currently takes place on site. Considerable potential damage to local groundwater bodies could occur from the incorrect operation of the facility. Possible impacts on groundwater were examined in section 3.4 of the EIS and numerous mitigation measures were outlined. Some of the proposals are that:

- All wells on the quarry floor to be backfilled and grouted up to current quarry floor level.
- Only granular wastes will be deposited into areas immediately above the groundwater table to prevent the influx of suspended solids into groundwater.
- Only inert soil and stones shall be used in the restoration area.

It is stated in the EIS that due to these control measures "*no water quality impacts on these wells are anticipated.*"

A range of measures are specified to ensure there is no contamination of groundwater from operations taking place on site. All fuel on site will be stored in double skin receptacles located on the hardstanding area. No re-fuelling of HGV trucks will take place on site. Oil and lubricant changes for wheeled or tracked plant will be undertaken on-site at the existing hardstanding area. Records of fuel usage and waste oil removal off-site will be retained. Dedicated sand piles and/or spill kit(s) will be retained on site to contain and absorb hazardous liquid material in the event of a leak or accidental spillage from plant/equipment. All oil barrels and lubricants will be stored on spill pallets/ spill trays. No major vehicle servicing/repairs will be carried out on site.

A surface water collection system (to underground, double-skinned tanks) is proposed at the waste inspection/quarantine area. It is proposed to construct an interceptor proximate to the quarantine area to catch any potential run-off from contaminated material stored in the area. Monitoring of the volume of contents in the underground tanks will be routinely completed as part of the facility's Environmental Management System.

It is proposed that groundwater shall be sampled at 4 separate monitoring wells located on the site to show that there is no impact on local groundwater quality. Groundwater quality monitoring will be completed on a quarterly basis during the operation of the facility and on a yearly basis thereafter for two years.

It is considered that backfilling the site with inert material will provide better aquifer protection on the site in the long term and that this project could have a positive impact on groundwater quality, if carried out correctly.

### **Surfacewater**

The quarry infilling will require significant earthworks and site levelling, and there is a high risk of poor quality surface water runoff (*i.e.* suspended sediments) entering the dewatering system and being pumped off-site to local surface waters.

A range of mitigation measures for the control of surface water are outlined in the EIS, including proposals to construct new settlement ponds for the removal of suspended sediments.

A Trade Effluent Discharge Licence D/L 13/07 issued by Meath County Council is currently still operational on the site. It is proposed that discharge volumes will be monitored using a v-notch weir and data logger

in line with the requirements of this licence. Water quality monitoring shall be carried out every three months. It is proposed to continue this monitoring for a period of two years after restoration work is completed.

### **Dust**

Temporary stockpiling of topsoil and subsoil is proposed on the site. There is potential that emissions from dust from the facility could result in air quality impacts and nuisance in the vicinity. The applicant outlines a series of detailed mitigation measures in the EIS to control and minimise the impacts of dust.

Site staff will conduct routine site inspections, which will include checks to ensure that dust control measures are working effectively and that public roads outside the site are clean.

Berghoff gauges shall be placed at 4 locations along the boundary of the site, closest to the nearest sensitive receptors and regular dust monitoring shall be carried out to confirm that there is no dust nuisance to neighbours from the site's activities.

It is anticipated that no long-term associated impacts on air quality will occur in the area as a result of the proposed facility development

### **Noise**

The proposed hours of operation/waste acceptance are between 08.00hours and 18.00hours each weekday and 08:00hours to 14:00hours on Saturday. The site will not operate at any other time.

Noise emissions will be associated with incoming/outgoing HGVs and mobile restoration plant and machinery. The existing quarry planning permission provides for up to 150 truck movements in and out of the site each day. This new development proposes 72 truck movements per day, which is a significant reduction. No further increase in traffic levels, over and above this level, is envisaged in future years.

The noise survey focused predominantly on the noise impact generated from the facility during previous operations. I am unable to determine if the quarry was in operation when this background noise monitoring was carried out. From these results it has been determined that the site of the proposed development is not by definition an "Area of Low Background Noise". There are no up to date monitoring results of the existing background noise environment as it is now. Background noise monitoring is critical for noise impact assessment. Once the existing noise environment has been established, the predicted increase in noise from the proposed restoration activities should then be quantified. It is this department's opinion that adherence to specified noise limit values does not always protect sensitive receptors from noise nuisance. The



significance of the predicted change in the noise environment should be fully assessed and to do this correctly up to date background noise monitoring results should be provided.

Numerous noise mitigation measures are outlined in the EIS which aim to control and reduce noise. These include:

- Speed restrictions on internal haul roads
- Locating haul roads away from sensitive receptors
- Acoustic screening and berms
- Use of alternative audible reversing alarms
- Routine servicing and maintenance of plant
- Staff training

The EIS concluded that, during normal operation of the facility, there should be a negligible noise impact at all nearby residents.

It is proposed that noise monitoring will be carried out every three months at two locations along the site boundary, close to the nearest sensitive receptors to prove that noise limits are being adhered to.

It is stated within the EIS that predicted noise emissions should be well within recommended criteria levels if mitigation measures are implemented and that there should be a negligible noise impact at all nearby residents.

#### **Litter:**

The inert nature of the incoming materials is typically not litter-generating. Small volumes of non-inert waste, which may inadvertently be delivered to the site, mixed with soil and stones, will be segregated and stored in skips at the temporary hardstanding area. These materials will be stored in such a manner as to prevent wind-blown litter. Site staff will conduct routine site inspections, which will include checks to ensure that the site is not causing litter issues.

#### **Pest Control**

Due to the inert nature of incoming materials, vermin control is not anticipated as being required

#### **Complaints**

The facility notice board (to be positioned at the site entrance) will include contact details, including out-of-hours contact information, for the operator/nominated individual, who can respond to potential emergency situations. An Emergency Response Procedure will be documented and maintained as part of the facility's Environmental Management System.

## **Closure and Decommissioning**

An outline Closure, Restoration and Aftercare Management Plan (CRAMP) for the facility is included in the EIS. It provides details on site activities; closure tasks; restoration tasks and aftercare tasks. It is proposed that environmental monitoring will be carried out for two years after closure to ensure that there are no residual issues and a closure validation report will be carried out by a competent person. The site will be inspected by a competent engineer approximately one year post-closure to confirm that restoration conditions are acceptable in terms of settlement, drainage and overall landform.

## **Conclusion**

1. The current quarry has excavated below the level of the water table. If this proposed facility is not operated correctly there is potential that leachate from contaminated infill could lead to the contamination of groundwater. **The waste acceptance procedure is of the utmost importance.** The applicant must ensure that every effort is made to ensure only clean, inert soil and c&d waste are accepted and used in the facility. All materials imported onto the site shall be accounted for and fully traceable.
2. It is suggested within the EIS that "*Characterisation testing will be undertaken in advance by Clients and/or Contractors forwarding soil to the application site*" and that "*site management visit each source site and inspect the nature of the development ongoing there in advance of the commencement of reception of material from that site.*" The Environmental Health Department would strongly recommend that this is carried out as part of the waste acceptance criteria.
3. It is stated in that "*Should small items of non-conforming material (e.g. timber, plastic, metal) be delivered in an incoming load, they will be picked out, by hand*". Measures should be taken by the applicant to protect the health of their staff working in this manner. Suitable and adequate sanitary facilities must be provided on the site i.e. handwashing facilities with instantaneous hot and cold running water.
4. The Environmental Health Service recommends current and up-to-date baseline monitoring data is used to establish the existing noise environment. The only noise monitoring data provided in the EIS was the results of noise monitoring carried out in 2012 when its

stated the quarry was in operation. This is not a true representation of the existing noise environment as exists at present.

The restoration of the quarry is considered a recovery operation, and if it is operated correctly, will have positive benefits in terms of returning the site to pre-quarrying conditions.

Yours sincerely,



Lisa Maguire

Environmental Health Officer

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