This report has been cleared for submission to Director by Senior Inspector Brian Meaney.
Signed: Liz Lacy Date: 16/12/15

Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

CLIMATE, LICENSING, RESOURCES & RESEARCH

INSPECTOR'S REPORT ON A LICENCE APPLICATION

TO:	Director
FROM:	Caroline Murphy - Licensing Unit
DATE:	16th December 2015
RE:	Application for a waste Licence from CHI Environmental Limited in relation to a facility at The Quarry, Grannagh, Kilmacow, County Kilkenny. Licence Register W0260-01.

1 Application Details

Licence application received:	13 February 2009.
EIA Required:	Yes.
Classes of activity under the Waste Management Act 1996, as amended. (**P** = principal activity)	Class R 5. Class R 10 (P). Class R 13[1].
Third party submissions:	1.

2 Applicant and facility

Applicant:	Crystalhill Inns Limited trading as CHI Environmental Limited
Type of facility:	Recovery of waste soil and stone and construction and demolition waste.

[1] These classes are as described in the EIS (received 18 Aug 2014). The classes of activity received with the original application in 2009 were Classes R 3, R 5 (P) and R 13. The classes refer to the same activities but legislative change brought about a change in the numbering system. The classes of activity specified in section 1 above reflect the activities proposed under this licence application.

Existing or new development:	Existing site. Former quarry.
Main class of waste:	Waste natural soil and stone for backfilling of former quarry.
Quantity of waste to be managed:	• 550,000 tonnes soil and stone over the remaining lifetime of the backfill activity. • 45,000 tonnes per annum C&D waste for recovery.
Waste activities:	– Importation and stockpiling of soil/stone. – Use of soil/stone to backfill quarry void. – Importation of C&D waste. – Screening and crushing of inert C&D waste to produce secondary aggregate for resale.

3 Site Description

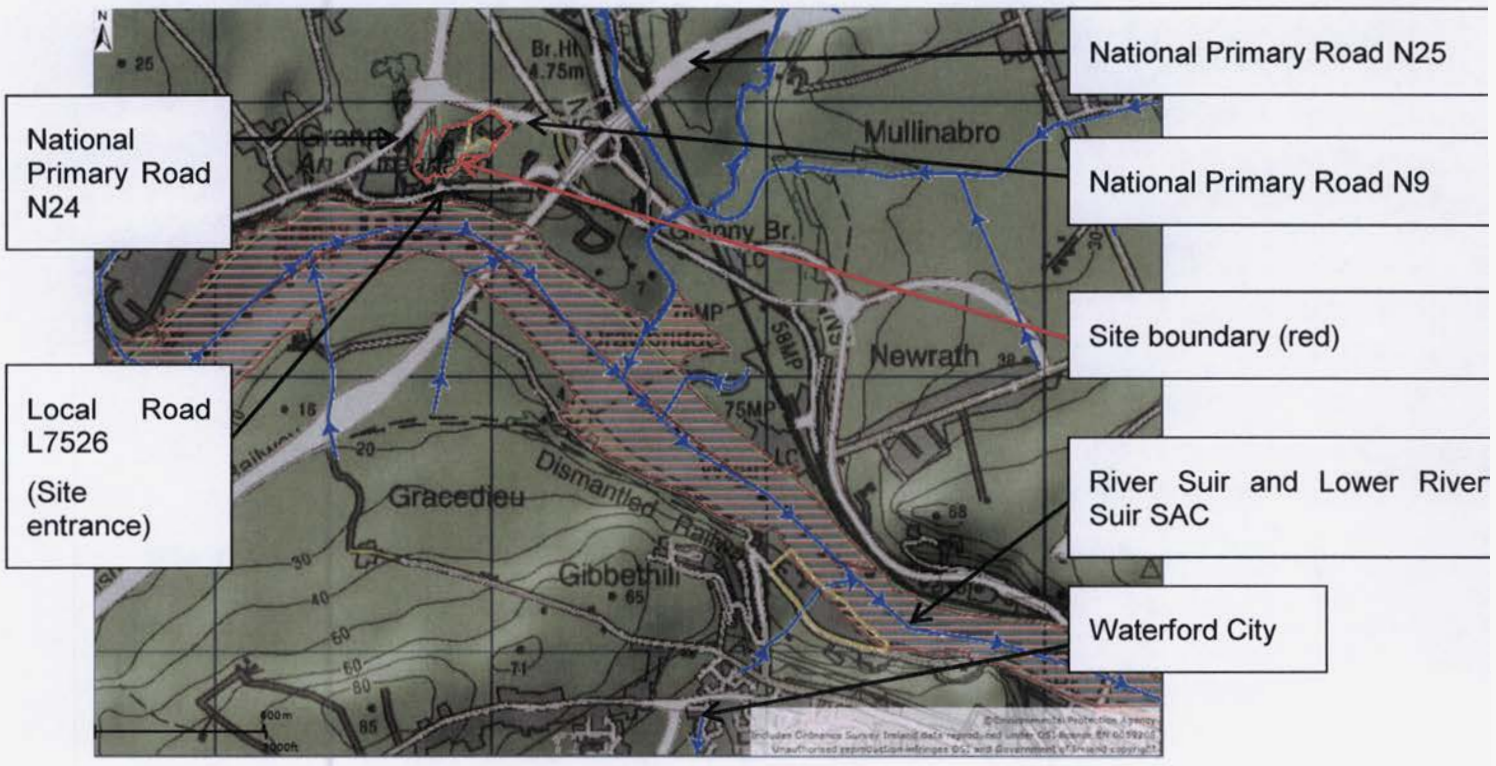
CHI Environmental Ltd are the owners of an exhausted quarry at The Quarry, Grannagh, Kilmacow, County Kilkenny. The facility's entrance is on the local road L7526 approximately 4 km north of Waterford City on the Waterford and Kilkenny County boundary (see Figure 1). The facility is also in close proximity to a number of national primary routes namely the N9, N24 and N25. The River Suir is located approximately 95m south of the facility boundary.

The application boundary covers an area of approximately 5.3 hectares and includes the quarry void, surrounding land and site infrastructure (e.g. weighbridge, site office, canteen etc.). The original quarry void has been split by the construction of the N24 primary road. This licence application deals with the portion of the quarry to the south of the N24. The applicant intends on making a separate application to the Planning Authority with regard to future waste recovery activities in the quarry land holding to the north of the N24.

The licence application relates to the importation and use of 550,000 tonnes of waste soil and stone to backfill the worked-out quarry void. Backfilling of the quarry void will facilitate the restoration of the site and its return to grassland for agricultural use. Some C&D waste (approx. 45,000 tonnes per annum) will also be accepted at the site. The applicant is proposing to recover inert C&D waste in order to produce secondary aggregate for resale. Any non-inert C&D waste will be separated out and removed off-site (see Section 7 below). The applicant proposed to use the 0-40mm fraction of waste resultant from the C&D waste recovery process as part of the backfilling activity. The RD does not provide for the deposit of recovered C&D waste in the void.

The applicant is forecasting that approximately 125,000 tonnes of waste soil and stone will be imported to the site per annum. No peat, unsuitable soil or hazardous waste will be used for backfill.

Figure 1 Location of facility



Historic landfill:

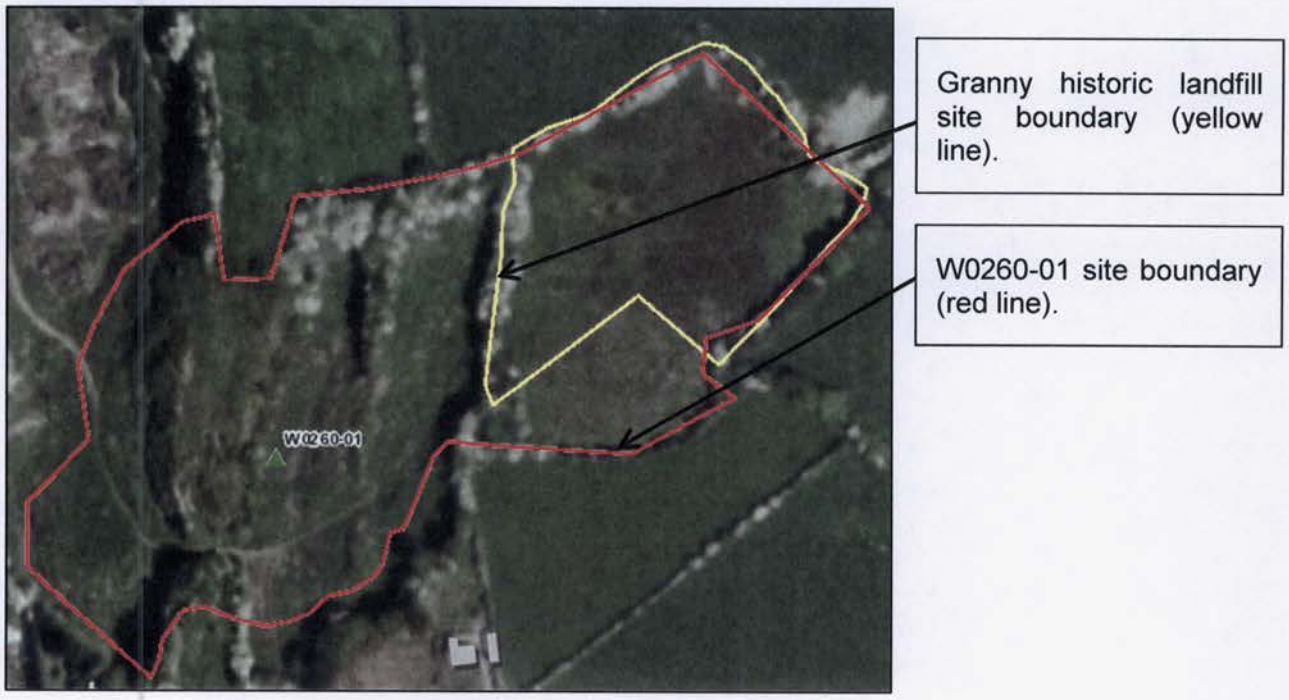
As shown in Figure 2 below, the Granny Landfill (yellow site boundary) is, for the most part, within the waste facility's site boundary (shown in red). This historic landfill was operated by Kilkenny County Council as a Municipal Solid Waste (MSW) landfill. Kilkenny County Council capped the landfill upon closure in 1995[1]. The Council completed a *Tier 1 Risk Assessment* of the landfill in January 2010 which concluded that the landfill was low risk (Class C). The applicant uses this portion of the facility for C&D waste recovery operations. Currently this waste processing area is not concreted; however, **condition 3.9** of the RD requires the provision of a concrete slab with collection and disposal infrastructure for all run-off.

Granny landfill meets the definition of a closed landfill in accordance with the *Waste Management (Certificate of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008*. In accordance with Regulation 7(1) of the above Regulations Kilkenny County Council are required to make an application to the Agency for a certificate of authorisation. To-date an application for a certificate of authorisation has not been received by the Agency for this closed landfill.

This licence application will not deal with the authorisation of the historic landfill; it will be dealt with separately when Kilkenny County Council makes an application to the Agency in accordance with the above Regulations.

[1] "Closed landfill" means a landfill site operated by the local authority for the recovery or disposal of waste without a waste licence on any date between 15 July 1977 and 27 March 1997.

Figure 2 Historic landfill Site Boundary



4 Planning Permission, EIS and EIA Requirements

4.1 EIA Screening

In accordance with Section 40(2A) of the Waste Management Act 1996, as amended, the Agency must ensure that before a licence or revised licence is granted, that the application is made subject to an environmental impact assessment (EIA), where the activity meets the criteria outlined in Section 40(2A)(b) and 40(2A)(c).

The Planner's Report (planning permission register no. 06/1772) completed by Kilkenny County Council on the 7th December 2006 confirmed that having regard to the provisions of the Planning and Development Regulations 2001, an Environmental Impact Statement (EIS) was not required.

In accordance with the EIA Screening Determination, the Agency has determined that the activities are likely to have a significant effect on the environment, and accordingly has requested an EIS and is carrying out an assessment for the purpose of EIA.

The EIS was requested by the Agency on the 28th February 2014 and it was subsequently submitted by the applicant in support of this Waste Licence application on 18th August 2014.

4.2 Planning Status

A number of planning applications have been made by the applicant for the site of the activity since 2005. Details of these planning applications and permissions have been provided in the application form.

Kilkenny County Council granted permission for deposition works (planning permission register number 06/1772) on the 7th December 2006. Details of this planning application and permission have been provided in the application form.

Kilkenny County Council did not require an Environmental Impact Statement (EIS) in support of any planning application for this site.

Having specific regard to EIA, this report is intended to identify, describe and assess for the Agency the direct and indirect effects of the proposed activity on the environment, as respects the matters that come within the functions of the Agency, including any interaction between those effects and the related development forming part of the wider project, and to propose conclusions to the Agency in relation to such effects.

The EIS submitted, the licence application, the submission and observations received from third parties, consultations with the planning authority, the relevant planning decisions and any additional information submitted by the applicant have been examined and assessed and are considered below for that purpose.

4.3 Content of the EIS and the licence application

I have considered and examined the content of the licence application, the EIS and other relevant material submitted with it.

It was considered that the EIS and the licence application did not adequately address the following areas and this information was requested under Article 14(2)(b)(ii) and Article 16(i) of the Waste Management (Licensing) Regulations 2004, as amended:

1. Company name.
2. Classes of activity.
3. Site boundary.
4. Consideration of the waste hierarchy.
5. Prevention, minimization and reduction of waste.
6. Sampling points.
7. Confirmation of any emissions to an aquifer.
8. Historic (closed) landfill.
9. Waste deposition to-date.
10. Final site profile.
11. Waterford shellfish waters.
12. Fit and proper person.
13. Appropriate assessment.

On receipt of further information under Article 14(2)(b) and Article 16(1) of the Waste Management (Licensing) Regulations 2004, as amended, all of the documentation received was examined and I consider that the information as submitted contains a satisfactory description of the project, the alternatives studied by the applicant, the aspects of the environment likely to be significantly affected by the activity, the likely effects of the activity on the environment, the forecasting methods used, the prevention and mitigation measures envisaged, the lack of difficulties and deficiencies encountered and a non-technical summary.

I consider that the EIS, when considered in conjunction with the additional material submitted with the application, also complies with the requirements of the *Waste Management (Licensing) Regulations 2004*.

In section 12 of this report I have addressed the issues that interact with the matters that were considered by the above authority and which relate to the activity.

Having considered the application and EIS, the submission by the Health Service Executive and the matters resulting from the planning authority decision, I consider

that the likely significant effects of the activity on the environment are as set out in Section 12 below.

4.4 Consultation with Competent Authorities

Consultation was carried out between Kilkenny County Council and the Agency as follows:

Table 1: Correspondence with the planning authority

Notice	Description
Notice under Article 18(1) of the Waste Management (Licensing) Regulations 2004, as amended. Issued: 16 Feb 2009.	Notice to the Planning Department of Kilkenny County Council that a waste licence application has been received and inviting submissions on same.
Notice under Article 18(3) of the Waste Management (Licensing) Regulations 2004, as amended. Issued: 20 August 2014.	Notice to the Planning Department that an EIS has been received and inviting submissions on same.
Notice under Section 42(1I)(e)(i) of the Waste Management Act 1996, as amended. Issued: 20 August 2014. Reissued (as the first letter was reported as not being received): 23 September 2014.	Notice to the Planning Department that an EIS has been received and inviting observations on same. Response received: 25 September 2014.
Notice under Section 42(1I)(e)(iii) of the Waste Management Act 1996, as amended. Issued: 1 October 2014.	Notice to the Planning Department requesting confirmation of the scope of the planning permission in relation to the activities proposed. Response received: 14 October 2014.

Kilkenny County Council had no observations to make on the EIS; however, they highlighted the following in relation to planning permission register No. 06/1772:

- The activities to which the licence application relates are not excluded or restricted by the planning permission granted for the site.
- The applicant is in breach of their planning permission as a Quarry Closure Plan, detailing amongst other things the restoration of the facility, was not submitted to the Planning Authority.

The following is noted in relation to the grant of planning permission by Kilkenny County Council;

- Condition 7 of the planning permission requires all storage tanks/drums to be stored in an impermeable bunded area and for the minimum net capacity of the bunded area to be the greater of 110% of the volume of the largest tank or drum stored within the bunded area or 25% of the total volume of

substance which could be stored within the bunded area. **Condition 3.12.2** of the RD reflects these requirements.

- Condition 9 of the planning permission requires noise levels (measured from the closest residence) shall not exceed 55dB(A) L_{Aeq} (30 minutes), during the day (0800 – 2200) and 45dB(A) L_{Aeq} (30 minutes), during the night (2200 to 0800). ***Schedule B.3*** of the RD requires daytime, evening time and night-time noise limits to remain below 55, 50 and 45 dB $L_{Aeq,T}$ (over 30 minutes) respectively.
- Condition 10 of the planning permission requires measures to be employed to control dust arising from the operation of the facility, including the immediate access roads, such that the operation of the activity does not cause a nuisance. Dust deposition levels shall not exceed 350mg/m^2/day. **Condition 3.9.2** requires stockpiles of construction and demolition waste to be managed to minimise dust generation. **Condition 5.5** requires the licensee to ensure that dust does not cause a nuisance outside the facility boundary. **Condition 6.11** requires measures to be put in place to control dust. ***Schedule C.3*** requires dust deposition to be monitored biannually and ***Schedule B.4*** specifies a dust deposition emission limit value of 350mg/m^2/day.
- Condition 11 of the planning permission requires the installation of 2 groundwater monitoring boreholes – one to be located up-gradient and one down-gradient. It also requires annual groundwater analysis to be carried out for COD, pH, temperature, total ammonia, nitrate, total phosphorous, total hydrocarbons (to include mineral oils), total organic content, potassium, chloride and sulphate. ***Schedule C.5*** of the RD requires quarterly groundwater monitoring which includes the above parameters at three groundwater monitoring locations which includes one up gradient and two down gradient monitoring locations.

5 Submissions

One submission was received in relation to this application.

5.1 Submission from the Health Service Executive (HSE) (received 13 October 2014):

The HSE is concerned that the Noise Report (2006) does not address the additional plant listed in the EIS and as such the noise levels and potential impacts on the nearest sensitive receptors have not been addressed in the EIS.

It was also noted that details of the wheel wash or proposed drainage from this system was not provided in the application.

Comment:

- Noise:
  - **Condition 4.3** requires that noise from the facility shall not give rise to sound pressure levels ($L_{Aeq,\ T}$) measured at the boundary of the facility which exceed the limit values.
  - **Condition 5.3** requires that there shall be no clearly audible tonal component or impulsive component in the noise emissions from the facility at noise sensitive locations.

- **Condition 6.11.1** requires the licensee to implement adequate measures for the control of noise and dust, including fugitive dust emissions, from the facility.
- **Condition 6.12** requires the licensee to carry out a noise survey of the site operations as required by the Agency.
- ***Schedule B.3*** recommends noise emission limit values for the facility.
- ***Schedule C.2*** recommends noise monitoring at various noise sensitive locations.

➢ Wheel wash facility:

- **Condition 3.7** requires:
  - the provision and maintenance of a wheel cleaner at the facility;
  - the wheel cleaner to be used by all vehicles leaving the facility as required to ensure that no wastewater, waste or storm water is carried off-site;
  - all water from the wheel cleaning area to be directed to a vehicle wash water interceptor sump; and
  - the wheel cleaner interceptor sump to be inspected on a weekly basis. Silt, stones and other accumulated material shall be removed as required and sent off-site for disposal or, subject to agreement by the Agency, used as fill on-site.

6 Best Available Techniques (BAT)

Even though the facility is not a landfill (i.e. it is not a waste disposal activity) BAT for the activity is taken to be best represented by the guidance given in the Agency's Guidance Note on Best Available Techniques for the Waste Sector: Landfill Activities (2011), insofar as it relates to the backfill activities at this facility. The Reference Document on the Best Available Techniques for the Waste Treatments Industries (IPPC Bureau 2006) is also relevant as a reference for BAT for the recycling of C&D waste.

I have examined and assessed the application documentation and I am satisfied that the technologies and techniques, as specified in the application, and as confirmed, modified or specified in the RD will ensure that the relevant requirements of BAT as stipulated in the above documents will be applied at the facility. These include the development of an Environmental Management System, waste acceptance procedures, waste characterisation, emissions control and monitoring, management of storm water, environmental liabilities and CRAMP. In addition, I consider that the proposed activities, as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the location of the installation and to the way in which it is designed, built, managed, maintained, operated and decommissioned.

7 Waste Acceptance

Wastes that are imported to the facility will be managed as follows:

Waste	Use
Imported soil, stone (including track ballast[1]) and dredge spoil.	Recovery - Backfill of quarry void where they meet the relevant Waste Acceptance Criteria (See below for more detail).
Mixed C&D waste	Separation by mechanical treatment of inert and non-inert fractions.
Inert waste stream separated from C&D waste (e.g. concrete, bricks, tiles)	Used on-site to produce secondary aggregate. Where the secondary aggregate achieves end-of-waste status it can be used for the construction of haul roads at the facility (See below for more detail).
Non-inert waste streams separated from imported C&D waste (e.g. metal, wood, plastic, contaminated soil)	Off-site recovery or disposal.

Schedule A.1 *Waste Acceptance* of the RD specifies the types and amounts of waste that can be accepted at the facility.

Waste Acceptance Criteria

The RD permits only three waste streams to be used for backfill, these being:

(i) greenfield soil and stone,
(ii) non-greenfield soil, stone and
(iii) dredge spoil.

The above terms are defined in the RD.

Schedule A.2 *Waste Acceptance Criteria for Backfill Material* of the RD specifies Waste Acceptance Criteria for the above waste streams.

For greenfield soil/stone it is proposed that greenfield soil and stone should be declared suitable for backfill by a suitably qualified person (such as a chartered engineer) following which the material can be imported without the need for testing/characterisation. Therefore the waste acceptance criterion for greenfield soil/stone is a 'letter of suitability' from a 'qualified person' which will state (prior to its use as backfill) the nature and suitability of the material for backfill. All relevant terms are defined in the RD and this matter is addressed in **condition 8.4** and ***Schedule A*** of the RD. Overall it is considered that this provision reflects the very low level of risk associated with accepting greenfield soil and stone and will facilitate the ease of its movement to sites where it is needed for backfill. It should be noted that **Condition 8.4.3** of the RD allows the Agency to direct that testing of greenfield soil and stone is carried out. In addition, **Condition 11.9(x)** of the RD requires that original copies of letters of suitability are held on-site.

For non-greenfield soil and stone more stringent waste acceptance criteria are recommended as there is potential for this particular waste stream to be

[1] Crushed stone used on railway lines.

contaminated. The relevant waste acceptance criteria are set out in ***Schedule A.2*** of the RD. Initially it must be ensured that the material contains less than 2% non-natural materials (e.g. concrete, tar etc.). The material must then be tested and characterised in accordance with ***Schedule A.3*** *Waste Characterisation for non-greenfield soil and stone* of the RD. Before it can be used as backfill the non-greenfield soil and stone must meet maximum contaminant concentration levels which must be agreed in advance with the Agency under **Condition 8.5.1** of the RD.

The following is a summary of the range of provisions recommended in the RD which will ensure that backfill activities at the facility do not cause environmental pollution:

Provision in RD	Description
Glossary	A range of terms are used in the RD and defined for clarity
Condition 8.4	Greenfield soil and stone: Requirements in relation to the 'letter of suitability' to confirm the nature and suitability of greenfield soil and stone
Condition 8.5	Non-greenfield soil and stone: Requirements in relation to non-greenfield soil and stone including the development of maximum contaminant concentration levels and testing protocols
Condition 8.6	Specifies materials that can and cannot be used for backfill
Condition 8.13	Requirements in relation to the development of waste acceptance and characterisation procedures
Condition 11.10	Requirements in relation to records for each waste delivery including a letter of suitability for greenfield soil and stone
Schedule C.4	Requires monitoring of deposited waste
Schedule C.5	Requires monitoring of groundwater on a quarterly basis (aside from coliforms)

Should contamination of soil or groundwater be revealed by monitoring of deposited waste (***Schedule C.4***) the Agency will be in a position to require or carry out an intrusive investigation at the facility to verify and determine the extent of inappropriate use of contaminated backfill.

Secondary Aggregate

The applicant is proposing to accept C&D waste for treatment from which will be recovered inert materials for the production of secondary aggregate. In order to ensure that the secondary aggregate is produced to a suitable quality standard and will not cause environmental pollution when used, **Condition 8.12** of the RD requires that (unless otherwise agreed with the Agency) only secondary aggregate that has achieved end-of-waste status can be used at the facility. It should be noted that ***Schedule A.1*** *Waste Acceptance* of the RD sets an import limit of 45,000 tonnes per annum on C&D waste although this can be increased with the Agency's

agreement. **Condition 3.9** of the RD includes controls related to the construction and operation of the C&D waste recovery area.

As highlighted above, given the risk of contamination, **Condition 8.6.2** prohibits the use of fines derived from C&D waste as backfill material.

8 Emissions

8.1 Emissions to Air

There will be no point source emissions to air. Activities at the facility may lead to fugitive dust emissions. **Condition 6.11** requires that measures are implemented to control emissions of dust. ***Schedule B.4*** *Dust Deposition Limits* of the RD sets a limit on ambient dust deposition while ***Schedule C.3*** *Ambient Monitoring* of the RD requires bi-annual monitoring of ambient dust deposition.

8.2 Emissions to Sewer

There are no emissions to sewer.

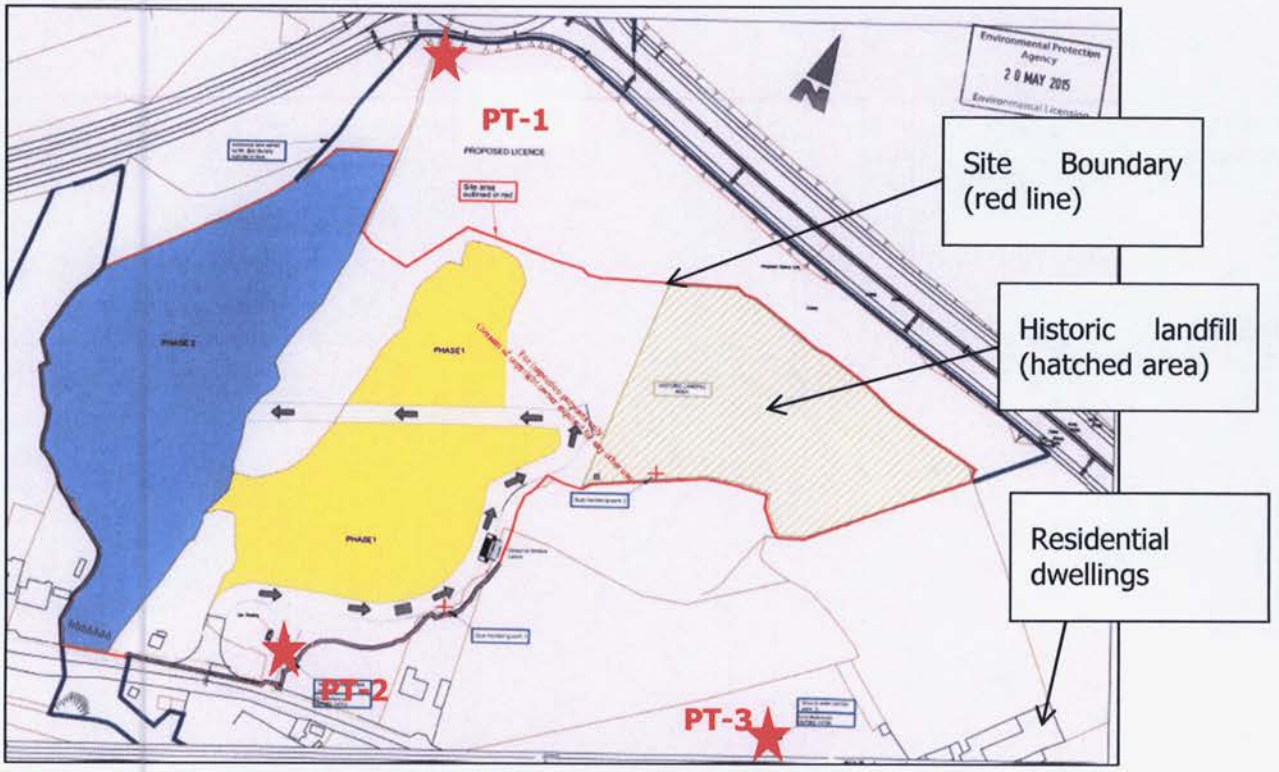
Sanitary effluent is directed to a concrete holding tank which is emptied as required by an approved waste contractor.

8.3 Emissions to ground/groundwater

There are no proposed process emissions to groundwater from this facility.

The overall groundwater flow under the facility is in a north to south direction; however, there are variations on that due to the tidal influence of the neighbouring Middle Suir Estuary located approximately 95m to the south of the facility at its nearest point. Groundwater monitoring has been carried out once each year in 2012, 2014 and 2015 at two monitoring wells (PT-1 and PT-2) and a domestic well (PT-3) was also monitored on one occasion in 2015. The monitoring well PT-1 is located up-gradient and northwest of the facility. PT-2 is located south of the facility just inside the site boundary. PT-3 is a domestic well serving neighbouring residential dwellings to the southeast of the site boundary. PT-2 and PT-3 are down-gradient of the facility (inclusive of the historic landfill). See Figure 3 for an overview of these locations.

Figure 3: Location of groundwater monitoring wells PT1, PT2 & PT3.



Groundwater samples from groundwater monitoring wells PT-1, PT-2 and PT-3 were tested for the groundwater pollution identifiers identified in the *Methodology for Establishing Groundwater Threshold Values, the Assessment of Chemical and Quantitative Status for Groundwater and Groundwater Trends* (EPA, 2010). These pollution identifiers included the parameters ammonia, nitrate, conductivity and sulphate.

The results obtained for each of the three wells were compared to the Groundwater Threshold Values listed in Schedule 5 of the European Communities Environmental Objectives (Groundwater) Regulations 2010, as amended.

- Each of the three wells tested reported the lower limit for detection of ammonia as <0.2mg/l; however, the threshold value for this parameter is 0.175mg/l. Two out of the seven monitoring results across the three wells exceeded the lower limit of detection for ammonia; these exceedances were at monitoring location PT-2. In 2012, 2014 and 2015 monitoring results for ammonia at PT-2 were 0.344mg/l, <0.2mg/l and 0.203mg/l respectively.
- Sulphate was detected at 287mg/l at monitoring well PT-2 in 2014; the threshold value is 187.5mg/l for this parameter. However, in 2012 and 2015 monitoring results were below the threshold value. The sulphate threshold value was not exceeded at monitoring wells PT-1 and PT-3.
- The lower limit of detection reported for cyanide was <50µg/l; however, the threshold value is 37.5µg/l. All seven results were reported as <50µg/l across the three wells.
- All other parameters monitored at the three wells were below the threshold values for that parameter.

- This monitoring demonstrates that the facility inclusive of the historic landfill is not having a significant impact on the groundwater body.

The RD includes a range of requirements which will ensure that groundwater is not contaminated while licensed activities are being carried out. Only soil and stone that meets the appropriate waste acceptance criteria will be used for backfill (see Section 7 for more detail). Re-fuelling and maintenance of site vehicles will take place within designated areas protected against spillage and run-off. No re-fuelling of waste delivery vehicles will take place at the facility. All fuels and vehicle lubricants must be stored in bunded areas. All wastes that are generated at the facility must also be stored within designated areas. These measures address a number of key provisions of the Groundwater Directive (2006/118/EC), namely that hazardous substances should not be allowed to enter groundwater, and will ensure compliance with the European Communities Environmental Objectives (Groundwater) Regulations 2010.

Water in the wheel wash is self-contained within the wheel wash facility. This water is drained by an approved contractor as required. **Condition 3.7.2** requires all water from the wheel cleaning area to be directed to an interceptor sump.

Schedule C.5 *Groundwater Monitoring* of the RD requires quarterly monitoring of groundwater (inclusive of the groundwater pollution identifiers), which will reveal any significant contamination of groundwater should it occur.

8.4 Emissions to Surface Waters

There are no emissions to water of environmental significance.

8.5 Storm Water Runoff

Rainwater that falls on the area of fill or quarry void percolates to ground. Currently there are no storm water discharges from the facility.

The quarantine area is currently the only concreted area at the facility. Refuelling of vehicles takes place in this area. Rainwater run-off from the quarantine area is collected, passed through an oil interceptor and stored in an underground storage tank for dispatch from the facility only when a suspect load of waste is being stored on the concrete slab.

The RD requires the provision of concrete slabs in certain areas and the collection of storm water run-off from these areas:

- **Condition 3.4** requires hardstanding areas to be appropriately paved;
- **Condition 3.9** requires the construction and demolition waste treatment area to be fully concreted; and
- **Condition 3.10 (ii)** requires water run-off to be collected from paved areas.

The licensee may either collect storm water from paved areas for dispatch from the site for suitable treatment or agree a storm water discharge location with the Agency. The following conditions/schedules provide for the treatment, control and monitoring of any agreed storm water discharge:

- **Condition 3.14** requires storm water run-off to pass through an oil interceptor and silt trap prior to discharge;
- **Condition 5.7** prohibits the discharge of contaminated storm water from the facility;

- **Condition 6.17** requires the agreement of any storm water discharge with the Agency and requires trigger levels to be established and agreed with the Agency for any storm water discharge. This condition also requires any storm water exceeding these trigger levels to be diverted for retention prior to suitable disposal; and
- ***Schedules C.6.1 and C.6.2*** specifies the control and monitoring requirements of any agreed storm water discharge (SW1).

Any storm water discharge that complies with these conditions will not cause environmental pollution in the River Suir.

8.6 Noise

Activities at the facility have the potential to generate noise. The nearest sensitive receptor is 38m from the facility boundary. Taking the proximity of the nearest sensitive receptor into consideration **condition 4.3** requires noise from the facility not to exceed emission limit values (***Schedule B.3)*** at the boundary of the facility. **Condition 6.11.1** requires that measures are taken at the facility to control noise emissions. In addition, the RD sets noise limits and **condition 6.12** requires noise surveys to be carried out in accordance with Agency guidance.

8.7 Nuisance

Given the nature of the activities at the facility, there is potential for nuisance other than noise. **Condition 5.5** of the RD includes requirements to ensure that nuisance associated with vermin, mud, dust and litter is not generated. In addition, the facility is required to operate a wheel wash for vehicles leaving the facility (**condition 3.7** of the RD).

9 Use of Resources

There is a water mains connection which supplies potable water to the office and welfare facilities. All lighting and heating required at the facility will be provided by the existing mains power connection. Site vehicles will use diesel as fuel (approximately 490 litres/week). **Condition 7** of the RD sets out the requirements with regard to resource use and energy efficiency.

10 Waste Management Plan and National Policy

The Southern Region Waste Management Plan 2015 – 2021 states that soil and stone comprised 68% of all construction and demolition waste arising in the Region in 2012. The Plan recognises there are signs of recovery in construction and this will lead to a greater demand for outlets for soil and stone. The Plan quantifies the amount of capacity as "pending" (i.e. awaiting authorisation) at 1,648,700 tonnes.

Activities will also conform with national policy for the following reasons:

- It maximises waste recovery and minimises waste disposal.
- The activities will conform to the principles of proximity and self-sufficiency.

11 Compliance with Directives/Regulations

The RD as drafted takes account of the requirements of the following relevant Directives/Regulations:

Directive/Regulation	Comment
Water Framework Directive	See sections 8.3, 8.4 and 8.5 above for detail.
Environmental Liabilities Directive	**Condition 12.2.2** requires that an Environmental Liabilities Risk Assessment (ELRA) is completed within three months of the date of grant of this licence. **Condition 12.2.3** of the RD will require the licensee to make adequate financial provision to cover any liabilities associated with the activity within six months of the date of grant of this licence. See Section 14 below for more detail.
Waste Framework Directive	Activities at the site will adhere to the waste hierarchy as well as to the provisions in the Directive related to reuse, recovery, recycling, self-sufficiency and proximity.

12 Environmental Impact Assessment Directive (85/337/EEC)

The following section identifies, describes and assesses the likely significant direct and indirect effects of the proposed activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following factors: human beings, flora, fauna, soil, water, air, climate, the landscape, material assets and cultural heritage.

The main mitigation measures proposed to address the range of predicted significant impacts arising from the activity have also been outlined. The cumulative impacts with other developments in the vicinity of the activity have also been considered, as regards the impacts of emissions from the activities. This section must be read in conjunction with the analysis carried out in all sections of this report.

Assessment of effects

12.1 Human Beings

Likely significant effect	Description of effect	Assessment addressed in section:
Traffic	Traffic and its associated emissions, risks and disamenity effects.	12.1.1

Impact on air quality	Emissions of dust.	12.5.1
Noise	Disamenity from noise emissions due to licensed activities.	12.1.2
Accidents	Emissions to the local atmosphere, ground and water bodies.	12.1.3

Assessment of Effects on Human Beings

12.1.1 Traffic

Waste will be transported to the facility by road. This is likely to create noise and possible dust nuisance and potentially escape of waste onto roadways on the approaches to the facility. The impact of traffic as it moves outside of the facility boundary is a matter for the planning authority and permission was granted for this activity in 2006.

There is a risk of dirty vehicles tracking dirt from the facility onto the public road.

Mitigation Measures

The RD requires use of a wheel wash (**condition 3.7**) and sets hours of waste acceptance (**condition 1.7**) which will limit the potential traffic impact to those hours. The licence also requires that the licensee keep clean the environs of the facility (**condition 5.5**).

Conclusion

Based on the above assessment and the mitigation measures in place and as regards matters that come within the functions of the Agency, I am satisfied that the likelihood of a negative impact as a result of traffic connected with the facility is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.1.2 Noise

There will be vehicles, machines and other equipment in operation at the facility, all with the potential for noise emissions. The nearest sensitive receptor is 38m from the facility boundary. The noise impact assessment completed by the applicant predicted that noise levels from the proposed activity will not exceed 55dB(A).

Mitigation Measures

The RD requires the licensee to carry out a noise survey if so directed by the Agency. ***Schedule B.3*** *Noise Emissions* of the RD includes limit values for emissions during day, evening and night time hours. The noise emission limit value during daytime hours is 55dB $L_{Ar,T,\ 30\ min}$.

Conclusion

Based on the assessment carried out and the mitigation measures in place, I am satisfied that the likelihood of a negative impact as a result of noise emissions connected with the facility is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.1.3 Accidents

Due to the non-hazardous and inert nature of the waste to be accepted at the facility (with the exception of construction and demolition waste which might contain small amounts of non-inert waste), the risk of adverse effects on human beings and the environment as a result of an accident is low.

The accidental release of silt or other solid material to watercourses could impact on water quality downstream.

The risk of groundwater pollution is low due to the absence of hazardous substances at the facility.

The risk of fire is low due to the absence of flammable waste at the facility.

Mitigation measures

The RD requires the licensee to:

- implement waste acceptance procedures to prevent the acceptance of unauthorised (including contaminated) wastes at the facility (**condition 8.13**);
- employ a suitably qualified and experienced facility manager (**Condition 2.1.1**);
- put in place a documented Accident Prevention Procedure which addresses all hazards on-site (**Condition 9.1**);
- put in place an Emergency Response Procedure which will ensure any effects of an emergency on-site are minimised (**Condition 9.2**);
- implement a preventative maintenance programme (**Condition 2.2.2.8**); and
- implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled (**Condition 2.2.2.5**).

Conclusion

Based on the mitigation measures in place, I am satisfied that the likelihood of an accident connected with the facility is low.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.2 Flora and Fauna

Likely significant effect	**Description of effect**	**Assessment addressed in section:**
Impact on local habitat and flora and fauna in the area.	Removal and filling over any existing plants and habitats at the facility.	12.2.1
Accidents	Emissions to the local atmosphere, ground and water bodies.	12.1.3

Assessment of Effects on Flora and Fauna

12.2.1 Flora and fauna.

Waste activities at the facility have been on-going for many years.

Whilst the construction of any facility can displace existing flora and fauna, an ecological assessment of the potential impacts on flora and fauna on and near the site concluded that the activity will not negatively impact on flora and fauna because the site and the local area is not designated as of ecological interest.

The potential impact on European sites is addressed in section 13 of this report.

Mitigation Measures

The RD requires the licensee to:

- Monitor groundwater quality and dust emissions from the facility (***schedule C***);
- Establish and maintain a fully detailed and costed plan for the closure, restoration and aftercare of the facility (**condition 10.2**); and
- Establish and maintain an invasive species prevention and eradication plan, to cover at least, Japanese Knotweed, Giant Knotweed, Bohemian Knotweed and any other relevant invasive species. (**condition 2.2.2.10**).

Conclusion

Based on the ecological assessment carried out and the mitigation measures in place, I am satisfied that the likelihood of a negative impact on flora and fauna is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.3 Soil

Likely significant effect	Description of effect	Assessment addressed in section:
Impact on soil.	Accidental spillage or discharge to ground due to the deposition of contaminated soil. Overall a positive effect is predicted as the backfill of the quarry will restore the natural protective soil layer over the bedrock.	12.3.1
Accidents.	Emissions to the local atmosphere, ground and water bodies.	12.1.3

Assessment of Effects on Soil

12.3.1 Soil

Operations at the facility could have an impact on soil due to the potential for spillage of fuel and oil.

The acceptance of contaminated soil and stone could result in contamination of soil already deposited at the facility and the soil and geology beneath the facility.

Mitigation Measures

The RD includes requirements for safe storage and handling of fuels and other materials.

The RD requires an accident prevention policy and emergency response procedure.

Waste acceptance procedures, if implemented in accordance with the RD, will prevent the deposit of contaminated soil and other unauthorised waste.

Conclusion

Based on the assessment carried out and the mitigation measures in place, I am satisfied that the likelihood of a negative impact on soil is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.4 Water

Likely significant effect	Description of effect	Assessment addressed in section:
Impact on surface water.	Contamination of surface water due to accidental discharge of contaminated storm water.	12.4.1
Impact on groundwater.	Contamination of groundwater due to accidental spillage or discharge to ground. Overall a positive effect is predicted as the backfill of the quarry will restore the natural protective soil layer over the bedrock and the groundwater.	12.4.1
Accidents.	Emissions to the local atmosphere, ground and water bodies.	12.1.3

Assessment of Effects on Water

12.4.1 Surface water and groundwater

There are no process emissions to surface water or groundwater.

There are no surface water features in the quarry, no linkages to surface water features or discharge to surface water features.

Rainwater run-off from concrete areas is collected in an underground tank prior to dispatch off-site. Spillages or deposit of contaminated soil could result in contaminated water percolating to ground causing groundwater pollution.

The applicant proposes to carry out C&D recovery activities in the portion of the facility situated over the historic landfill. This will require this area of the site to be concreted and as such will prevent further infiltration of rainwater in this area. See section 8.3 in relation to groundwater quality.

The RD provides for the discharge of uncontaminated, treated storm water from the facility should the volumes of storm water increase due to infrastructural developments at the facility in accordance with the RD.

Mitigation Measures

The RD requires impermeable concrete surfaces to be maintained in the construction and demolition waste treatment and storage area.

The RD requires the capture and treatment of all run-off from yard areas.

The RD requires trigger levels to be set for specific parameters for any discharge of storm water to surface water. The licensee is required to have regard to the Environmental Protection Agency "*Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities*" when establishing trigger levels. This

guidance requests the licensee to have regard to the water quality status of and the possible impacts on the receiving water when setting trigger levels. Any storm water that exceeds these trigger levels is required to be diverted for retention prior to disposal off site.

The RD prohibits any direct emission to groundwater.

See also section 12.3, Soil.

Conclusion

Based on the mitigation measures in place, I am satisfied that the likelihood of a negative impact on surface water and groundwater is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.5 Air

Likely significant effect	**Description of effect**	**Assessment addressed in section:**
Impact on air quality.	Emissions of dust.	12.5.1
Accidents.	Emissions to the local atmosphere, ground and water bodies.	12.1.3

12.5.1 Impact on Air Quality

Dust is the main potential emission to air that could affect air quality. There will be no odorous wastes accepted so there is no potential for odour emissions.

Mitigation Measures

The RD requires:

- that dust control measures are employed to minimise the emission of dust during dry periods (**conditions 3.9.2, 4.4, 5.5 and 6.11**); and
- ***Schedule C.3*** of the RD requires periodic monitoring of dust deposition rates at the facility boundary.

Conclusion

Based on the nature of the activity and the mitigation measures required by the RD, I am satisfied that the likelihood of a negative impact as a result of emissions to air connected with the facility is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental

emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.6 Climate

Likely significant effect	Description of effect	Assessment addressed in section:
Release of climate altering substances.	Emission of greenhouse gases.	12.6.1

Assessment of Effects on Climate

12.6.1 Release of climate altering substances

Operation of vehicles and machines at the facility will generate exhaust gases with greenhouse gas potential.

Mitigation Measures

Condition 7.1 of the RD requires that the licensee undertake periodic energy efficiency audits.

The operation of the facility as a soil recovery facility is a finite undertaking. At the waste deposition rates proposed to be authorised in the RD (125,000 tonnes per annum, see ***Schedule A*** of the RD), the facility will be full in approximately 15-20 years. Vehicles and machines used in the soil deposition activity will cease operation at that time.

Conclusion

Based on the nature of the activity and the mitigation measures in place, I am satisfied that the likelihood of a negative impact on climate as a result of emissions from the facility is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.7 Landscape, Material Assets and Cultural Heritage

Likely significant effect	Description of effect	Assessment addressed in section:
Visual impact on nature of landscape.	No significant effect is predicted. No new structures are proposed. Activities will lead to eventual restoration of the site to agricultural land which will improve the overall visual aspect of the site.	12.7.1

Impact on material assets and cultural heritage.	Potential for impact on local material assets (e.g. roads, road signage, power supply, housing), architectural and archaeological artefacts. Potential for nuisance impact.	12.7.2

Assessment of Effects on Landscape, Material Assets and Cultural Heritage.

12.7.1 Visual impact on nature of landscape.

A landscape and visual impact assessment was carried out and it was concluded that the proposed development will not create a significant landscape and visual impact on the existing environment in terms of visual impact or compatibility of use.

Mitigation Measures

Condition 4 of the grant of planning permission by Kilkenny County Council requires the submission of a Quarry Closure Plan which will address the reinstatement, remediation and rehabilitation (including landscaping) of the complete site so as to restore the site to a beneficial use.

Conclusion

Based on the proposed mitigation measures, I am satisfied that the likelihood of a negative visual impact as a result of the facility's presence is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.7.2 Material assets and cultural heritage.

An assessment of material assets which includes land, local settlement, employment and road network concluded that the proposed development will not result in any significant environmental impacts.

The existing quarry is included in the Record of Protected Structures listed in the 2002 County Development Plan as Grade 4 industrial archaeology site (RPS Ref. D129 - extensive remains of abandoned deep workings).

Mitigation Measures

The RD requires nuisance monitoring. This requirement should ensure residential quality in the area is maintained.

Condition 3 of the facility's planning permission requires the applicant to employ a suitably qualified archaeologist to monitor all site clearance associated with the development of the existing quarry area.

Conclusion

Based on the proposed mitigation measures in place, I am satisfied that the likelihood of a negative impact on material assets and cultural heritage is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

12.8 Interaction of effects

I have considered the interaction between the factors referred to in Tables 12.1 to 12.7 above and the interaction of the likely effects identified.

The interaction between factors as a results of the operation of the facility are summarised in Figure 4.

Figure 4: Interaction of effects.

	Flora & Fauna	Water	Climate Air Quality & Dust	Noise	Hydrogeology geology, groundwater and soils	Cultural Heritage	Human Beings & Material Assets	Landscape & Visual Assessment
Flora & Fauna								
Water								
Climate, Air Quality & Dust								
Noise								
Hydrogeology geology, groundwater and soils								
Cultural Heritage								
Human Beings & Material Assets								
Landscape & Visual Assessment								

Based on the assessment in parts 12.1 to 12.7 above, and the mitigation measures proposed (including the relevant conditions in the licence), I do not consider that the interactions identified are likely to cause or exacerbate any potentially significant environmental effects of the activity.

12.9 Reasoned Conclusion on Environmental Impact Assessment

Having regard to the impacts (and interactions) identified, described and assessed above, I consider that the mitigation measures proposed will enable the activity to operate without causing environmental pollution. I also consider that the potential impacts on the environment identified above, even if they occur, are unlikely to damage the environment as a whole, and the risk of them occurring is not unacceptable.

13 Appropriate Assessment

The facility itself is not within a designated area and the RD does not authorise any process discharges into a European Site. There are currently no surface water linkages from the facility to the Lower River Suir. The RD provides for a storm water

discharge to be agreed with the Agency to the Lower River Suir which is a designated site. As shown in the table below, there are two European Sites in proximity to the facility:

Natura 2000 Site	Site Code	Direction from Facility	Approximate Distance from the Facility (Km)
Lower River Suir SAC [Note 1]	002137	South	<100m
River Barrow and River Nore SAC	002162	Southeast	12

Note 1: Special Area of Conservation (SAC).

The facility is located <100m from the Lower River Suir SAC. Approximately 12km downstream the River Suir flows into the River Barrow and River Nore SAC. Reference Appendix 1 for an overview of the location of each designated site in relation to the facility.

Appendix 2 lists the European Sites assessed, their associated qualifying interests and conservation objectives along with the assessment of the effects of the activity on the European Sites.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activities, individually or in combination with other plans or projects are likely to have a significant effect on any European Site. In this context, particular attention was paid to the European sites at the Lower River Suir SAC [site code: 002137] and the River Barrow and River Nore SAC [site code: 002162].

The activities are not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it cannot be excluded, on the basis of objective information, that the activities, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activities was required, and for this reason determined to require the applicant to submit a Natura Impact Statement.

This determination is based on the following reasons:

1. The facility's proximity to the Lower River Suir SAC;
2. The presence of a historic landfill within the site boundary;
3. The groundwater analysis provided with the application does not take into consideration the entire facility i.e. the historic landfill; and
4. There is the potential for effects due to the disturbance from noise and dust.

An Inspector's Appropriate Assessment has been completed and has determined, based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, pursuant to Article 6(3) of the Habitats Directive, that the activities, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular the Lower River Suir SAC [site code: 002137] and the River Barrow and River Nore SAC [site code: 002162], having regard to their conservation objective's and will not affect the preservation of these sites at favourable conservation status if carried out in accordance with the recommended decision and the conditions attached hereto for the following reasons:

- The facility is not located within a European site;
- The activity will not result in damage to, or loss of, habitat in a European Site;
- There will be no process discharge from this facility to the European Site;
- The only emission to water authorised from the facility is of storm water which will be treated via a silt trap and oil separator (**Condition 3.14**);
- **Condition 6.17.3** requires trigger levels to be set for specific parameters for any discharge of storm water to surface water. The licensee is required to have regard to the Environmental Protection Agency "*Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities*" when establishing trigger levels. This guidance requests the licensee to have regard to the water quality status of and the possible impacts on the receiving water when setting trigger levels. Any storm water that exceeds these trigger levels is required to be diverted for retention prior to disposal off site;
- ***Schedule B*** has set out emissions limit values for dust deposition and noise. ***Schedule C*** has set out the monitoring requirements for both dust deposition and noise at the facility. These measures will prevent any significant disturbance of the European Sites;
- **Condition 2.2.2.5** requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled to prevent a recurrence of the breach;
- The RD requires the establishment of waste characterisation and acceptance procedures which will ensure that all wastes arriving at the facility are handled in such a manner so as to prevent any impact on the European Sites;
- Kilkenny County Council completed a *Tier 1 Risk Assessment* of the landfill in January 2010 which concluded that the historic landfill was low risk (Class C). The Council are required to make an application to the Agency for a certificate of authorisation for the site.

In light of the foregoing reasons no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of those European Sites: the Lower River Suir SAC [site code: 002137] and the River Barrow and River Nore SAC [site code: 002162].

14 Fit & Proper Person Assessment

The 'fit and proper person' assessment requires three areas of examination:

i. Technical Ability

Crystalhill Inns Ltd trading as CHI Environmental Ltd is concerned with an existing authorised waste facility which has been authorised since April 2004 by Kilkenny County Council to carry out the backfilling of the quarry with waste soil and stone and the recovery of C&D waste. Kilkenny County Council confirmed, on the 24th September 2014, that they have not noted any breach of the waste permit conditions from 2004 – 2014. The applicant confirmed, on 17th April 2015, that to that date the facility had not received any complaints from local residents.

ii. Legal Standing

Crystalhill Inns Ltd trading as CHI Environmental Ltd has not been convicted of any relevant offence.

iii. Financial Standing

It is expected that the financial provision required to cover the environmental liabilities and restoration activities associated with this activity will be low. The applicant has committed to meeting the costs of any on-going or future legal and/or environmental responsibilities.

Conditions 10.2.1 and **12.2.2** respectively of the RD require the submission of revised CRAMP and ELRA within three months of the date of grant of this licence. **Condition 12.2.3** of the RD requires the licensee to make financial provision in a manner that is to the satisfaction of the Agency within six months of the date of grant of this licence.

There is no information at this time which would indicate the applicant is not a Fit & Proper Person.

15 Cross Office Liaison

In preparing this report and Recommended Decision the following technical and sectoral advisors were consulted:

Inspector	Assistance provided
Pamela McDonnell (OCLR)	Matters related to Environmental Impact Assessment
Deirdre French (OCLR)	Matters related to Appropriate Assessment
Fiona McCoole (OCLR)	Matters related to the types of waste accepted at the facility.
Dermot Burke (OEE)	Matters related to environmental complaints.

The OEE informed the ELP, on the 15th July 2015, of a complaint they received in relation to this facility.

The complainant felt that some of the activities at this facility were not in accordance with the waste facility permit and planning permission. These concerns included:

- Operation outside the site boundary;
- Operation with an expired waste facility;
- Multiple working faces;
- Stability of compacted waste;
- Final profile;
- Potential leachate generation from the historic landfill;
- Uncovered waste vehicles entering the facility; and

- Alleged non-compliance with condition 1 (activities on site), Condition 2 (site boundary) and Condition 6 (design of the entrance) of the planning permission granted.

The ELP confirmed to the OEE, on the 15th July 2015, that the application for a waste licence was made on the 13th February 2013 and as such under Article 2(4) of the Waste Management (Licensing) Regulations 2004, as amended, the waste facility permit remains valid until the Agency makes a decision to grant or refuse a waste licence under Article 34 of the above Regulations. As such, all complaints regarding the facility should be directed to Kilkenny County Council.

As stated in section 14(i) above, Kilkenny County Council confirmed that they have not received any complaints in relation to the facility from local residents.

16 Recommended Decision

The RD if granted will authorise the acceptance of suitable soil and stone for backfill of an exhausted quarry. Backfilling of the quarry void will facilitate the restoration of the site and its return to agricultural use. The RD also authorises the acceptance for treatment of C&D waste. The RD includes a wide range of conditions that will ensure proper handling of wastes, the control and monitoring of dust and noise emissions, the treatment of storm water runoff and the prevention of nuisance. Overall, I am satisfied that the conditions set out in the RD will adequately address all emissions from the facility and will ensure that the carrying on of activities in accordance with the conditions of the RD will not cause environmental pollution.

17 Charges

The financial charge proposed in the RD is €6,306. This has been calculated based on the enforcement effort predicted for this facility.

18 Recommendation

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached RD and for the reasons as drafted.

Signed:

Caroline Murphy

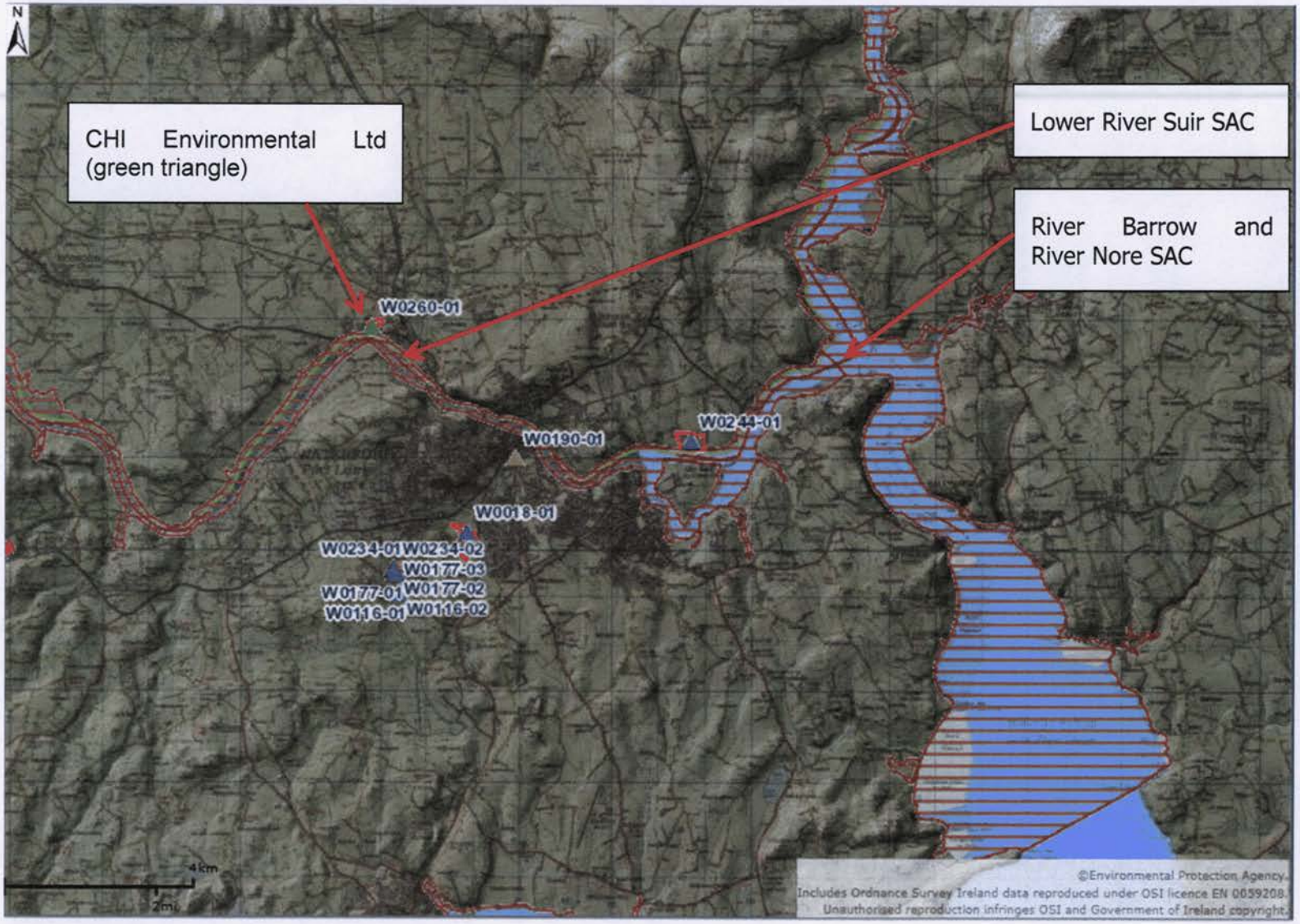
Caroline Murphy
Inspector
Environmental Licensing Programme

Procedural Note

In the event that no objections are received to the Proposed Decision on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Act 1996, as amended.

Appendix 1

Figure 5: Designated sites in the proximity of the facility.



Appendix 2

Table 2: Assessment of the effect of potential storm water discharge on the Lower River Suir SAC and proposed mitigation measures.

European Site (site code):	**Lower River Suir SAC** (002137)
Distance/ Direction from discharge(s)	**There are currently no discharges from the facility.** The licence provides for the agreement of a storm water discharge from the facility with the Agency from the construction and demolition recovery area. The facility is located <100m from the above SAC.
Conservation objectives:	As per NPWS (2015) Conservation objectives for Lower River Suir SAC [002137]. Generic Version 4.0. Department of Arts, Heritage and the Gaeltacht (dated 13/2/15).

Qualifying interests (* denotes a priority habitat)	**Assessment**
Habitats (water dependant [Note 1]): **Code** **Description** 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) 1410 Mediterranean salt meadows (*Juncetalia maritimi*) 3260 Water courses of plain to	**Emission to Water** The Water Framework Directive Transitional risk score for the Lower River Suir is *at risk of not achieving good status*. There are no *Margaritifera* locations in the portion of the Lower River Suir adjacent to and downstream of the facility and this stretch is not in a *Margaritifera* catchment area. Any change in water quality has the potential to impact on water dependant habitats and species. **Conclusion:** The only emission to water authorised from the facility is of storm water which will be treated via a silt trap and oil separator (Condition 3.14).

montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)** **Habitats** (not categorised as water dependant [Note 1]): 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles 91J0 *Taxus baccata* woods of the British Isles* **Species** (all water dependant [Note 1]): **Code** / **Common Name** / **Scientific Name** 1029 Freshwater Pearl Mussel — *Margaritifera margaritifera* 1092 White-clawed Crayfish — *Austropotamobius pallipes*	The discharge of storm water to surface water would be required to be under trigger levels for specific parameters set in accordance with Condition 6.17.3. The licensee is required to have regard to the Environmental Protection Agency "*Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities*" when establishing rigger levels. This guidance requests the licensee to have regard to the status of and the possible impacts on the receiving water when setting trigger levels. Condition 6.17.3 requires any storm water that exceeds these trigger levels to be diverted for retention prior to disposal off site. Condition 2.2.2.5 requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled to prevent a recurrence of the breach. The setting of trigger levels for any potential storm water discharge in accordance with the above guidance document will ensure that the status and impact of the receiving water is taken into consideration. This shall ensure any discharge will comply with the requirements of the *European Communities Environmental Objectives (Surface Water) Regulations, 2009, as amended*, and as a consequence contribute towards the receiving waters achieving 'good' status as required under the Water Framework Directive. Therefore, protecting the qualifying interests of the European sites. **Emission to Air** There is no point source emission to air associated with this facility. Dust is an emission associated with soil and stone recovery and construction and demolition waste recovery. Dust deposition will be monitored at locations just inside the facility boundary and this monitoring is required to demonstrate that dust deposition levels specified in the licence are not exceeded. Preventative and corrective measures are required to be put in place for an exceedance of dust deposition levels at these locations. The risk of dust deposition levels impacting the qualifying interests of the SAC is low. **Conclusion:** Condition 5.5 requires the licensee to ensure dust associated with the activity does not result in an impairment of, or interference with, amenities or the environment at the facility

1095	Sea Lamprey	*Petromyzon marinus*	or beyond the facility boundary. *Schedule C.3* of the RD requires dust deposition to be monitored bi-annually. *Schedule B.4* of the RD sets a dust deposition limit which the results of this monitoring should be under. Condition 9.3 requires an exceedance of an emission limit value to be reported as an incident. Condition 2.2.2.5 requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled to prevent a recurrence of the breach. The above measures will protect the SAC from dust deposition associated with the activity; therefore, protecting the qualifying interests of the European sites. **Noise emissions:** Noise is an emission associated with soil and stone recovery and construction and demolition waste recovery. Noise will be monitored at locations to be agreed with the Agency and this monitoring is required to demonstrate that noise levels are under the levels specified in the licence. Preventative and corrective measures are required to be put in place for an exceedance of noise levels at these locations. The risk of noise levels impacting the qualifying interests of the SAC is low. **Conclusion:** Condition 3.9 of the RD requires noise screening to be installed at the construction and demolition waste recovery area. Condition 6.11.1 requires the licensee to implement adequate measures for the control of noise from the facility. Condition 4.3 requires noise from the facility not to give rise to sound pressure levels measured at the boundary of the facility which exceed limit values. Condition 5.3 requires no clearly audible tonal component or impulsive component in the noise emissions from the facility at noise sensitive locations. Condition 6.12 and *Schedule C.2* of the RD requires noise levels to be monitored as required by the Agency. *Schedule B.*3 of the RD sets daytime, evening time and night time noise emission limits which the results of this monitoring should be under. Condition 9.3 requires an exceedance of an emission limit value to be reported as an incident.
1096	Brook Lamprey	*Lampetra planeri*	
1099	River Lamprey	*Lampetra fluviatilis*	
1103	Twaite Shad	*Alosa fallax fallax*	
1106	Salmon	*Salmo salar*	
1355	Otter	*Lutra lutra*	

	Condition 2.2.2.5 requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled to prevent a recurrence of the breach. The above measures will protect the SAC from noise emissions associated with the activity; therefore, protecting the qualifying interests of the European sites. **Potential for Accidents to Arise** There is the potential for accidents and emergency situations arising at soil and stone recovery facility resulting in partially treated or untreated storm water discharging to the receiving waters. Such incidents or events could lead to the discharge of storm water which exceeds trigger levels, which could potentially impact the Lower River Suir. An accidental discharge of untreated storm water is unlikely as Condition 2.2.2.8 requires a maintenance programme which includes preventative maintenance. Condition 6.8 requires silt traps and oil separators to be inspected weekly and desludged as necessary. A storm water retention facility is also required by the licence for storm water that exceeds trigger limits. Taking the above into consideration the discharge of untreated storm water into the River is unlikely and the overall risk is low. **Conclusion:** Condition 6.17.3 requires storm water that exceeds trigger levels to be retained for suitable disposal. Condition 2.2.2.5 requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled to prevent a recurrence of the breach. Condition 9 requires the licensee to put in place a documented Accident Prevention Procedure and an Emergency Response Procedure. The above measures will protect the SAC from accidents associated with the activity; therefore, protecting the qualifying interests of the European sites.

Note 1: Environmental RTDI Programme 2000 - 2006. Water Framework Directive – Water Status: Identification and Ranking of Nature Conservation Designated Areas (2002-W-DS-10) Final Report.

Table 3: Assessment of the effect of potential storm water discharge on the River Barrow and River Nore SAC and proposed mitigation measures.

European Site (site code):	**River Barrow and River Nore SAC** (002162)
Conservation objectives:	As per NPWS Conservation objectives for River Barrow and River Nore SAC [002162]. Version 1.0. Department of Arts, Heritage and the Gaeltacht (dated 19/07/11).
Distance/ Direction from discharge(s)	**There are currently no discharges from the facility.** The licence provides for the agreement of a storm water discharge from the facility with the Agency from the construction and demolition recovery area. The facility is located <100m from the above Lower River Suir SAC and this SAC flows into the River Barrow and River Nore SAC approximately 12 km downstream of the facility.

Qualifying interests (* denotes a priority habitat, <u>underlined text</u> denotes species/habitats common to the Lower River Suir SAC)	**Assessment**
<u>Habitats</u> (water dependant [Note 1]**):** **Code** **Description** 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonising mud and sand	**<u>Emission to Water</u>** The Water Framework Directive Transitional risk score for the Lower River Suir is *at risk of not achieving good status*. There are no *Margaritifera* locations in the portion of the Lower River Suir adjacent to and downstream of the facility and this stretch is not in a *Margaritifera* catchment area. Any change in water quality has the potential to impact on water dependant habitats and species. **Conclusion:** The only emission to water authorised from the facility is of storm water which will be treated via a silt trap and oil separator (Condition 3.14). The discharge of storm water to surface water would be required to be under trigger levels

1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) 1410 Mediterranean salt meadows (*Juncetalia maritimi*) 1421 Killarney fern (*Trichomanes speciosum*) 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 7220 Petrifying springs with tufa formation (*Cratoneurion*)* 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)** **Habitats** (not categorised as water dependant [Note 1]): 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles 4030 European dry heaths **Species**(all water dependant [Note 1]):	for specific parameters set in accordance with Condition 6.17.3. The licensee is required to have regard to the Environmental Protection Agency "*Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities*" when establishing rigger levels. This guidance requests the licensee to have regard to the status of and the possible impacts on the receiving water when setting trigger levels. Condition 6.17.3 requires any storm water that exceeds these trigger levels to be diverted for retention prior to disposal off site. Condition 2.2.2.5 requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled to prevent a recurrence of the breach. The setting of trigger levels for any potential storm water discharge in accordance with the above guidance document will ensure that the status and impact of the receiving water is taken into consideration. This shall ensure any discharge will comply with the requirements of the *European Communities Environmental Objectives (Surface Water) Regulations, 2009, as amended*, and as a consequence contribute towards the receiving waters achieving 'good' status as required under the Water Framework Directive. Therefore, protecting the qualifying interests of the European sites. **Emission to Air** There is no point source emission to air associated with this facility. Dust is an emission associated with soil and stone recovery and construction and demolition waste recovery. Dust deposition will be monitored at locations just inside the facility boundary and this monitoring is required to demonstrate that dust deposition levels specified in the licence are not exceeded. Preventative and corrective measures are required to be put in place for an exceedance of dust deposition levels at these locations. The risk of dust deposition levels impacting the qualifying interests of the SAC is low. **Conclusion:** Condition 5.5 requires the licensee to ensure dust associated with the activity does not result in an impairment of, or interference with, amenities or the environment at the facility or beyond the facility boundary.

Code	Common Name	Scientific Name	
1016	Desmoulin's whorl snail	*Vertigo moulinsiana*	*Schedule C.3* of the RD requires dust deposition to be monitored bi-annually. *Schedule B.4* of the RD sets a dust deposition limit which the results of this monitoring should be under. Condition 9.3 requires an exceedance of an emission limit value to be reported as an incident. Condition 2.2.2.5 requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled to prevent a recurrence of the breach. The above measures will protect the SAC from dust deposition associated with the activity; therefore, protecting the qualifying interests of the European sites. **Noise emissions:** Noise is an emission associated with soil and stone recovery and construction and demolition waste recovery. Noise will be monitored at locations to be agreed with the Agency and this monitoring is required to demonstrate that noise levels are under the levels specified in the licence. Preventative and corrective measures are required to be put in place for an exceedance of noise levels at these locations. The risk of noise levels impacting the qualifying interests of the SAC is low. **Conclusion:** Condition 3.9 of the RD requires noise screening to be installed at the construction and demolition waste recovery area. Condition 6.11.1 requires the licensee to implement adequate measures for the control of noise from the facility. Condition 4.3 requires noise from the facility not to give rise to sound pressure levels measured at the boundary of the facility which exceed limit values. Condition 5.3 requires no clearly audible tonal component or impulsive component in the noise emissions from the facility at noise sensitive locations. Condition 6.12 and *Schedule C.2* of the RD requires noise levels to be monitored as required by the Agency. *Schedule B.3* of the RD sets daytime, evening time and night time noise emission limits which the results of this monitoring should be under. Condition 9.3 requires an exceedance of an emission limit value to be reported as an incident. Condition 2.2.2.5 requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled
1029	Freshwater Pearl Mussel	*Margaritifera margaritifera*	
1092	White-clawed Crayfish	*Austropotamobius pallipes*	
1095	Sea Lamprey	*Petromyzon marinus*	
1096	Brook Lamprey	*Lampetra planeri*	
1099	River Lamprey	*Lampetra fluviatilis*	
1103	Twaite Shad	*Alosa fallax fallax*	
1106	Atlantic Salmon	*Salmo salar* (only in fresh water)	
1355	Otter	*Lutra lutra*	

1990	Nore Pearl Mussel	*Margaritifera durrovensis*	to prevent a recurrence of the breach. The above measures will protect the SAC from noise emissions associated with the activity; therefore, protecting the qualifying interests of the European sites. **Potential for Accidents to Arise** There is the potential for accidents and emergency situations arising at soil and stone recovery facility resulting in partially treated or untreated storm water discharging to the receiving waters. Such incidents or events could lead to the discharge of storm water which exceeds trigger levels, which could potentially impact the Lower River Suir. An accidental discharge of untreated storm water is unlikely as Condition 2.2.2.8 requires a maintenance programme which includes preventative maintenance. Condition 6.8 requires silt traps and oil separators to be inspected weekly and desludged as necessary. A storm water retention facility is also required by the licence for storm water that exceeds trigger limits. Taking the above into consideration the discharge of untreated storm water into the River is unlikely and the overall risk is low. **Conclusion:** Condition 6.17.3 requires storm water that exceeds trigger levels to be retained for suitable disposal. Condition 2.2.2.5 requires the licensee to implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled to prevent a recurrence of the breach. Condition 9 requires the licensee to put in place a documented Accident Prevention Procedure and an Emergency Response Procedure. The above measures will protect the SAC from accidents associated with the activity; therefore, protecting the qualifying interests of the European sites.

Note 1: Environmental RTDI Programme 2000 - 2006. Water Framework Directive – Water Status: Identification and Ranking of Nature Conservation Designated Areas (2002-W-DS-10) Final Report.