

Signed:  Date: 20/04/2016



OFFICE OF ENVIRONMENTAL SUSTAINABILITY

REPORT OF THE TECHNICAL COMMITTEE ON OBJECTIONS TO LICENCE CONDITIONS

TO:	Directors
FROM:	Technical Committee - Environmental Licensing Programme
DATE:	20 April 2016
RE:	Objection to a Proposed Decision (PD) issued to Crystalhill Inns Limited trading as CHI Environmental for an installation at The Quarry, Grannagh, Kilmacow, County Kilkenny, Licence Register W0260-01.

Application Details

Type of installation	Recovery of waste soil and stone and construction and demolition waste
Classes of Activity under the Waste Management Act 1996, as amended	Class R 5 Class R 10 (P) Class R 13
Licence application received	13 February 2009
PD issued	18 December 2015
First party objection received	25 January 2016

1. Company and background to this report

Crystalhill Inns Limited trading as CHI Environmental are the owners of an exhausted quarry at The Quarry, Grannagh, Kilmacow, County Kilkenny. The activity currently operates under planning permission and a waste facility permit (permit reference number WMP023/2007) issued by Kilkenny County Council.

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. The application also relates to the recycling of construction and demolition waste.

This report relates to a valid first party objection received by the Agency in relation to the Proposed Decision (PD) issued to CHI Environmental on 18 December 2015.

2. Consideration of the objection

The issues raised in the objection are summarised below. The original objection should be referred to at all times for greater detail and expansion of particular points.

Objector's Name	Date Received
Crystalhill Inns Limited trading as CHI Environmental	25 January 2016

The Technical Committee (TC), comprising of Dr. Magnus Amajirionwu (Chair) and Ewa Babiarczyk, has considered all of the issues raised in the objection and this report details the Committee's comments.

Objection 1. Terminology Used - Contaminated Soil

The applicant objects to the following definitions as contained in the Proposed Decision (PD):

Contaminated soil and stone: Soil and stone that contains anthropogenic or man-made substances (such as and stone rubble, concrete, bricks, metal and bitumen) that are not natural to the environment from which the material was extracted.

Construction and demolition (C&D) waste: Wastes that arise from construction, renovation and demolition activities: Chapter 17 of the EWC or as otherwise may be agreed.

The applicant is of the view that the above definitions lead to confusion of third parties and requests that the Agency revise their wording and relate to relevant EWC Codes.

Technical Committee's Evaluation:

The TC is of the view that the definition of contaminated soil and stone, as stated in the PD, outlines clearly and unambiguously what constitutes the contamination of soil and stones in the context of waste acceptance at this facility. Accordingly, the TC considers this definition appropriate and does not accept that it is confusing to third parties. In respect of C&D waste, the TC notes that the classification of construction and demolition waste is as contained in Chapter 17 of the EWC.

Recommendation:

No change is recommended.

Objection 2: Conditions 3.9.1, 9.1 and 9.2

Condition 3.9.1 In advance of the commencement of waste activities, the licensee shall provide and maintain a construction and demolition waste recovery area. This infrastructure shall at a minimum comprise the following:

- (i) an impermeable concrete slab;*
- (ii) collection and disposal infrastructure for all run-off;*
- (iii) appropriate bunding to provide visual and noise screening.*

Condition 9.1 The licensee shall, in advance of the commencement of the activity, ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.

Condition 9.2 The licensee shall, in advance of the commencement of the activity, ensure that a documented Emergency Response Procedure is in place that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.

The applicant stated that Conditions 3.9.1, 9.1 and 9.2 in the PD entail the completion of these requirements in advance of the commencement of the licenced activity.

Technical Committee's Evaluation:

The Committee notes that given that the licence application is for an existing permitted facility (and not a new activity), these requirements should be revised.

Recommendation:

a) Amend the wording of the existing Condition 3.9.1 to read as follows:

3.9.1 The licensee shall, within nine months of the date of grant of this licence, provide and maintain a construction and demolition waste recovery area. This infrastructure shall at a minimum comprise the following:

- (i) an impermeable concrete slab;
- (ii) collection and disposal infrastructure for all run-off;
- (iii) appropriate bunding to provide visual and noise screening.

b) Amend the wording of the existing Condition 9.1 to read as follows:

9.1 The licensee shall, **within six months of the date of grant of this licence,** ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.

c) Amend the wording of the existing Condition 9.2 to read as follows:

9.2 The licensee shall, **within six months of the date of grant of this licence,** ensure that a documented Emergency Response Procedure is in place that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.

Objection 3: Condition 6.5 and Schedule C.5: Groundwater monitoring

Condition 6.5 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.

C.5 Groundwater Monitoring

Reference No: PT-1, PT-2, PT-3

Location: As per drawing 'Site Layout – Groundwater Monitoring wells – Revision 1' dated 14/01/05 and at additional locations as may be agreed by the Agency.

PT-1: S57736 15008

PT-2: S57682 14713

PT-3: S57992 14798

Parameter	Monitoring Frequency	Analysis Method/Techniques
pH	Quarterly	pH electrode/meter
Conductivity	Quarterly	Standard Method
BOD	Quarterly	Standard Method
COD	Quarterly	Standard Method
TOC	Quarterly	Standard Method
Ammonia (as N)	Quarterly	Standard Method
Nitrate	Quarterly	Standard Method
Total Nitrogen (as N)	Quarterly	Standard Method
Total Phosphorus (as P)	Quarterly	Standard Method
Orthophosphate (as P)	Quarterly	Standard Method
Total Dissolved Solids	Quarterly	Standard Method
Dissolved Metals ^{Note 1}	Quarterly	Standard Method
Total Petroleum Hydrocarbons (to include mineral oils).	Quarterly	Standard Method
Diesel Range Organics	Quarterly	Standard Method
Petrol Range Organics	Quarterly	Standard Method
Aluminium	Quarterly	Standard Method
Arsenic	Quarterly	Standard Method
Boron	Quarterly	Standard Method
Chloride	Quarterly	Standard Method
Chromium	Quarterly	Standard Method
Cyanide	Quarterly	Standard Method
Mercury	Quarterly	Standard Method
Potassium (as K)	Quarterly	Standard Method
Sodium	Quarterly	Standard Method
Sulphate	Quarterly	Standard Method
Total Coliforms	Bi-annual	Standard Method
Faecal Coliforms	Bi-annual	Standard Method

Note 1: Cd, Cu, Fe, Pb, Mg, Mn, Ni and Zn.

The applicant is of the view that Condition 6.5 is not consistent with the Inspector’s Report, which stated that several years of groundwater monitoring at the site show that the activity does not have a negative impact on groundwater. The applicant further stated that Schedules C.5 sets onerous monitoring frequencies for groundwater and requested that Schedule C.5 be revisited.

Technical Committee’s Evaluation:

The Committee considers it unnecessary to amend the PD at this time. Condition 6.5 of the PD provides for monitoring frequencies to be amended with the agreement of the Agency following evaluation of test results. In addition, the applicant did not propose an alternative monitoring frequency.

Recommendation:

No change is recommended.

Objection 4: *Condition 6.16 Topographical Monitoring*

6.16 A topographical survey shall be carried out on an annual basis. The survey shall include measurement of the remaining available void space. The survey shall be in accordance with any written instructions issued by the Agency.

The applicant stated that the annual requirement for topographical monitoring is excessive given that the site has a weighbridge and accurate records of all materials entering and leaving the site. The applicant asserted that current practice at the facility ensures accurate measurement of all recovery material entering the site.

Technical Committee’s Evaluation:

The Committee considers it unnecessary to amend the PD at this time as Condition 6.16 is a standard requirement and an accepted method used to confirm remaining / available void capacity.

Recommendation:

No change is recommended.

Objection 5: *Condition 8.12*

Condition 8.12 Unless otherwise agreed only secondary aggregate that has achieved end-of-waste status shall be used for engineering purposes at the facility.

The applicant stated that along with the members of the Soil Recovery Association (SRA), they have drafted an End of Waste document and are now awaiting a decision on it by the Agency.

Technical Committee’s Evaluation:

The Agency has a number of end-of-waste applications, including one from the applicant in this case, regarding materials recovered from construction and demolition waste and

decisions on these applications will assist the applicant and the industry generally to implement licence conditions such as the one quoted above.

Condition 8.12 of the PD is a way of ensuring that the recycling of C&D waste at the facility is to a high standard and that any recycled waste that is used at the facility will not cause environmental pollution.

Recommendation:

No change is recommended.

Objection 6: Condition 8.17

Condition 8.17 Unless agreed by the Agency the licensee shall not dispose of any waste that has been accepted at the facility for the purpose of recovery.

The applicant stated that Condition 8.17 appears contradictory, as it appears to insist that if material enters the site in the C&D part of the operation and subsequently upon closer inspection it does not meet waste acceptance criteria, the licensee is not allowed to send this off-site for disposal. The applicant requires the Agency to clarify this condition so that any ambiguity is removed.

Technical Committee's Evaluation:

The TC is of an opinion that Condition 8.17 clearly sets out the term under which the licensee shall dispose of any waste that has been accepted at the facility for the purpose of recovery. It is also noted that the purpose of waste acceptance criteria is to ensure that waste is only accepted if it is suitable for processing (i.e. recovery) at the facility. It seems likely that the instance quoted by the applicant should be an exceptional instance where waste is accepted and subsequently found to be not recoverable.

Recommendation:

No change is recommended.

Objection 7: Condition 10.2

Condition 10.2 Closure, Restoration and Aftercare Management Plan (CRAMP)

10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a revised, fully detailed and costed plan for the decommissioning, closure, restoration and aftercare of the facility or part thereof. This plan shall be submitted to the Agency for agreement within three months of the date of grant of this licence.

10.2.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the agreement of the Agency.

10.2.3 The licensee shall have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) when implementing Conditions 10.2.1 and 10.2.2 above.

The applicant stated that the requirements of Condition 10.2 should be commensurate to the risk of the classes of activities. The applicant is of the view that sites for the improvement or development of land using inert waste should be regarded as restoration sites from the outset and all conditions relating to these sites should reflect this context.

Technical Committee’s Evaluation:

The TC notes that it is a general policy to require a CRAMP for all licensed activities. Condition 10.2 requires the licensee to prepare the CRAMP subject to the licensed activities, albeit to the satisfaction of the Agency. The PD (in its Introduction) recognises that the principal activity at the facility is the backfilling of an exhausted quarry void using imported natural soil and stone. Conditions in the PD were set hence in this regard.

Recommendation:

No change is recommended.

Objection 8: *Condition 3.17.2 regarding Groundwater Monitoring Wells*

Condition 3.17.2 Any new groundwater monitoring wells shall be constructed having regard to the guidance given in the Guidance Note Landfill Manual – Guidance Note on Landfill Monitoring, which was published by the Agency.

The applicant is of the view that Condition 3.17.2 made reference to landfill manual, adding that the licence application was rather prepared in line with guidelines contained in the SRA Guidance note for the sector.

Technical Committee’s Evaluation:

The TC notes that Condition 3.17.2 specifies the requirements for the construction of new groundwater monitoring wells at the facility. The reference to the landfill manual is a standard licence condition with no suggestion whatsoever that the facility in this case is a landfill.

Recommendation:

No change is recommended.

Objection 9: *Conditions 12.2.2 and 12.2.3*

Condition 12.2.2 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) which addresses the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the CRAMP. A report on this assessment shall be agreed by the Agency not later than three months from the date of grant of this licence. The ELRA shall be reviewed and updated as necessary to reflect any significant change on site, and in any case every three years following initial agreement. Review results are to be notified as part of the AER.

Condition 12.2.3 Within six months of the date of grant of this licence, the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities associated with the operation (including closure, restoration and aftercare). The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 12.2.1.

The applicant stated that Conditions 12.2.2 and 12.2.3 leave the licensee open to liability for others past actions - i.e. the former Kilkenny County Council landfill that is located within the facility boundary. The applicant claims that the condition makes no reference whatsoever to the exclusion of the former landfill from the liability of the proposed licensee. The applicant further stated that Kilkenny County Council will separately make an application to the Agency in accordance with existing Regulations. Finally, the applicant requested as follows:

- i. that the Agency fully clarifies this condition and acknowledge that the liability of the historic landfill lies solely with Kilkenny County Council, and
- ii. that the applicant only need prepare reports in relation to their site and their waste recovery activities.

Technical Committee's Evaluation:

The TC noted that the so-called 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 said 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.

The TC also found that 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 Inspector's Report also noted that there was no evidence of environmental pollution arising from the landfill.

The TC observed that the Granny landfill is situated within the proposed licence boundary. Conditions 12.2.2 and 12.2.3 clearly outline the Agency's requirements for the completion of an Environmental Liabilities Risk Assessment (ELRA), taking into account the Closure, Restoration and Aftercare Management Plan (CRAMP) and addressing the liabilities from past and present activities. It is therefore not expedient to grant the applicant's request as proposed.

Recommendation:

No change is recommended.

Objection 10: *Schedule A.1: Waste Acceptance*

Table A.1.1 *Waste Categories and Quantities*

EWC CODE	WASTE TYPE ^{Notes 1 & 2}	MAXIMUM (TONNES PER ANNUM)
17 05 04	<i>Soils and stones other than those mentioned in 17 05 03</i>	125,000
17 05 06	<i>Dredge spoil other than those mentioned in 17 05 05</i>	
17 05 08	<i>Track Ballast other than those mentioned in 17 05 07</i>	
17 01 01	<i>Concrete</i>	45,000
17 01 02	<i>Bricks</i>	
17 01 07	<i>Mixtures of concrete, bricks, tiles and ceramics (other than those mentioned in 17 01 06)</i>	
17 09 04	<i>Mixed construction and demolition wastes</i>	
Total		170,000

Note 1: Any proposals to accept other compatible inert waste types shall be agreed in advance by the Agency.

Note 2: The limitation on individual inert waste types may be varied with the agreement of the Agency subject to the total limit for inert waste staying the same.

The applicant stated that *Table A.1.1: Waste Categories and Quantities* excluded bituminous material EWC 17 03 02 and mixed metals EWC 17 04 07 which were authorised under their existing waste permit. The applicant further stated that no reason was given as to why these waste types were not included into the PD, and requested these EWC codes be included in the licence.

Technical Committee's Evaluation:

The TC noted that the applicant had applied to accept C&D waste for treatment. The recovered inert materials from the C&D waste would be used for the production of secondary aggregate.

The applicant also applied for acceptance of EWC 17 03 02 *Bituminous material* and EWC 17 04 07 *Mixed metals* at the facility. The TC noted from the licence application that metal waste (which occurred amongst the C&D waste imported to the site) would be separated out and removed offsite to appropriately licensed waste disposal facilities. The TC is of the opinion that having granted EWC 17 09 04 *Mixed construction and demolition wastes*, it was not appropriate to allow EWC 17 04 07 *Mixed metals* to be accepted at the facility, as the applicant is not a specialised mixed metal recycling facility.

The Environment Agency¹ allows bituminous mixtures to be used in the production of secondary aggregates. The bituminous mixtures must however meet the end-of-waste criteria for the production of aggregates from inert waste. The TC notes that the Agency is currently assessing a similar application for end-of-waste criteria for secondary aggregates including bituminous materials.

¹ Environment Agency. 2013. Aggregates from inert waste. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296499/LIT_8709_c60600.pdf and accessed on 13/04/2016

Construction and demolition waste – bituminous mixtures, coal tar and tarred products

Type and restrictions	Waste code
Bituminous mixtures other than those mentioned in 17 03 01	17 03 02
Allowed only if: Bituminous mixtures from the repair and refurbishment of the asphalt layers of roads and other paved areas (excluding bituminous mixtures containing coal tar and classified as waste code 17 03 01). Must not include coal tar or tarred products. Must not include freshly mixed bituminous mixtures.	

In order to ensure that the secondary aggregate is produced to a suitable quality standard that will not cause environmental pollution when used for engineering purposes at the facility, the TC observed that Condition 8.12 of the licence requires that (unless otherwise agreed with the Agency) only secondary aggregate that has achieved end-of-waste status can be used at the facility. If not used at the facility, the recycled bituminous material will leave the facility as waste or, if end-of-waste criteria exist and are met, as a product. In this regard, the TC would be disposed to recommending the acceptance of EWC 17 03 02 *Bituminous material* for processing at the applicant’s facility.

Recommendation:

Amend the wording of the existing Table A.1.1 to read as follows:

Table A.1.1 Waste Categories and Quantities

EWC CODE	WASTE TYPE ^{Notes 1 & 2}	MAXIMUM (TONNES PER ANNUM)
17 05 04	Soils and stones other than those mentioned in 17 05 03	125,000
17 05 06	Dredge spoil other than those mentioned in 17 05 05	
17 05 08	Track Ballast other than those mentioned in 17 05 07	
17 01 01	Concrete	45,000
17 01 02	Bricks	
17 01 07	Mixtures of concrete, bricks, tiles and ceramics (other than those mentioned in 17 01 06)	
17 03 02	Bituminous material	
17 09 04	Mixed construction and demolition wastes	

Total	170,000
<p>Note 1: Any proposals to accept other compatible inert waste types shall be agreed in advance by the Agency.</p> <p>Note 2: The limitation on individual inert waste types may be varied with the agreement of the Agency subject to the total limit for inert waste staying the same.</p>	

Objection 11: *Schedules B.3: Noise Emissions and C.2: Noise Monitoring*

Schedule B.3 Noise Emissions

Daytime dB L _{Ar,T} (30 minutes)	Evening time dB L _{Ar,T} (30 minutes)	Night-time dB L _{Aeq,T} (15-30 minutes)
55	50	45 ^{Note 1}

Note 1: There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise-sensitive location.

Schedule C.2 Noise Monitoring

Location: At locations agreed by the Agency

Period	Minimum Survey Duration ^{Note 1}
Daytime (07:00 to 19:00 hrs)	A minimum of 3 sampling periods at each noise monitoring location
Evening-time (19:00 to 23:00 hrs)	A minimum of 1 sampling period at each noise monitoring location.
Night-time ^{Note 2} (23:00 to 07:00 hrs)	A minimum of 2 sampling periods at each noise monitoring location.

Note 1: Sampling period T will be in accordance *Schedule B.3 Noise Emissions* of this licence. This applies to day, evening and night time periods.

Note 2: Night-time measurements shall be made between 2300hrs and 0400hrs, Sunday to Thursday, with 2300hrs being the preferred start time.

The applicant stated that the Agency have set out noise monitoring to be carried out at three different specified time periods including "Evening Time". The applicant argued that the noise monitoring in the evening time (7-11 pm) is unacceptable and excessive, since the Grannagh site is closed from 6pm and requested the Agency to amend this condition accordingly.

Technical Committee's Evaluation:

The TC took cognisance of *Condition 1.7 Hours of Operation* and notes that the PD specifies that waste and other material acceptance may be carried out not later than 18:00 hours. The facility is not authorised to operate on Sundays or on Public or Bank Holidays.

The TC also notes that *Condition 6.12 Noise* of the PD provides for carrying out a noise survey of the site operations as required by the Agency. This means that the frequency and timing of noise surveys are flexible, and should be as required by the Agency. There is no provision in the PD that specifically requires the licensee to carry out noise monitoring in the "Evening Time".

Recommendation:

No change is recommended.

3. Environmental Impact Assessment Directive – Reasoned Conclusion Update

The TC has reviewed the assessment in the Inspector's Report and, taking into account the objection received, and the contents of this TC report, the TC considers that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as respects the matters that come within the functions of the Agency, and as required by Section 40(2A) and Section 42(1I) of the Waste Management Act.

It is considered that the mitigation measures as proposed in the Inspector's Report will adequately control any likely significant environmental effects from the activity.

It is also considered that the proposed activity, if managed, operated and controlled in accordance with the licence conditions included in the PD, with the inclusion of the amendments proposed in this report, is unlikely to damage the environment as a whole and the risk of potential impacts occurring is not unacceptable.

It is further considered that the proposed activity, if managed, operated and controlled in accordance with the licence conditions included in the PD, with the inclusion of the amendments proposed in this report, will not cause environmental pollution or the breach of any environmental quality or emission standard, and can be authorised by the Agency in accordance with Section 40(1) of the Waste Management Act.

Additional items

A typo was noted in the name of the applicant.

Recommendation:

Amend the wording of the current name which reads:

"Crystalhill Inns Limited trading as CHI Environmental Limited"

to read as follows:

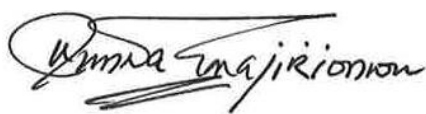
*"Crystalhill Inns Limited trading as **CHI Environmental**"*

4. Overall Recommendation

It is recommended that the Board of the Agency grant a licence to the Applicant

- (i) for the reasons outlined in the Proposed Decision, and
- (ii) subject to the conditions and reasons for same in the Proposed Decision, and
- (iii) subject to the amendments proposed in this report.

Signed:



Dr. Magnus Amajirionwu, Inspector
for and on behalf of the Technical Committee