



ENVIRONMENTAL IMPACT STATEMENT NON-TECHNICAL SUMMARY

SUBMITTED WITH A REVIEW OF WASTE LICENCE W0256-02

For:

**AN EXISTING LICENSED SOIL/STONES RECOVERY FACILITY AT TALLAGH,
BELMULLET, CO. MAYO**

Applicant:



Lennon Quarries Limited

Lennon Quarries Ltd.

Glencastle

Bunnahowen,

Co. Mayo.

Submitted to:

Environmental Protection Agency

PO Box 3000

Johnstown Castle Estate

Wexford.

Prepared By:

Mr. Freddie P.R. Symmons

B.Env. Sc. (Hons) M.C.I.E.E.M

Senior Environmental Consultant

KINGFISHER ENVIRONMENTAL CONSULTANTS

4 Siverhill, Ballisodare,

Co. Sligo.

TEL: +353 87 2641979

Email: freddiesymmons@hotmail.com

WEB: wastepermitireland.com

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4.1. Introduction

This Environmental Impact Statement (EIS) is being submitted to the Environmental Protection Agency (EPA) in accordance with Section 42 (II)(b) of the Waste Management Acts (1996-2013) by Lennon Quarries Ltd., Glencastle, Bunnahowen, Ballina, Co. Mayo to accompany a Review of an existing Waste Licence, W0265-01 for an existing soil recovery facility at Tallagh, Belmullet, Co. Mayo (new EPA reference W0256-02). The EPA has addressed the information submitted for a Review of the existing Waste Licence and considers that the licence review application must be made subject to an Environmental Impact Assessment (EIA).

The existing licensed facility, as per licence W0256-01, is a soil recovery facility, which is licensed for a final topographic level of a 1m Land Raise and with the acceptance of 24,900 tonnes per annum of soil and stone and its recovery, by spreading material over the deposition site area, with a consequential benefit for improving the land for agricultural use.

The site is owned TJ Lennon- Managing Director of Lennon Quarries. It total he owns ca.. 48.5 hectares. The existing licensed soil recovery site has a total area of 27.22ha, which includes the site access road, the proposed area of deposition (20.48ha) and a proposed buffer zone in the northern section of the site (4.46ha), which separates the area of deposition from the Clooneen River, which flows in an easterly direction, along the northern boundary of the site. The site is located ca. 2 ½ km north of the town of Belmullet.

The application for the Review of Waste Licence W0256-01 is for the continued operation per the existing waste licence, with no change to the licensed final topographic level of a 1m Land Raise and with the acceptance of up to a maximum of 90,000 tonnes per annum of soil and stone for recovery as described above – this is to allow for the acceptance of the currently available suitable material from a nearby large infrastructural project, which is to provide for material from a well monitored source of incoming soil and stone. The review of the Licence creates no proposed change to the content, nature, composition or volume of materials intended for recovery by deposition at the site, and the overall tonnage of 265,000 tonnes for which the existing licence was issued remains unaffected. The activity will just take a shorter time span to complete and fully restore to beneficial agricultural use.

The activities carried out under the existing Waste Licence are exempt from Planning Permission, as per the 2009 Waste Licence application. Mayo County Council have confirmed that the proposed alterations to the scheduling of the materials recovery at the site (i.e. the subject matter of the review of the waste licence) does not affect the planning status of the works as exempted development.

Lennon Quarries Ltd. were requested by the Environmental Protection Agency (EPA) to Screen for Appropriate Assessment, for proposed waste management activities at Tallagh, Belmullet, County Mayo, on land under the control of Lennon Quarries Ltd. An Appropriate Assessment Screening Report considers whether any activity or proposed increase in activity on the lands, either individually or in combination with other plans or projects is likely to have a significant effect on Natura 2000 sites, in view of best scientific knowledge and the conservation objectives of the site(s). The Appropriate Assessment Screening Report submitted to the Agency in July 2013 concluded:



“It is considered that no significant adverse effects are expected to arise to Natura 2000 sites from the proposed development and the project can be screened out of further stages of Appropriate Assessment”.

The potential impacts from the proposal to increase the annual tonnage from 24,900 tonnes to 90,000 tonnes poses no change in the scope of the activity, the nature of the activity or potential emissions from the activity (as presently licensed).

- The development sequence will still be to fill the site progressively (as presently licensed).
- The lands are presently marginal agricultural land and will be restored using imported soil and stones to more productive agricultural land thereby having a consequential benefit to agriculture (as presently licensed).
- The exact same proposed activity will occur as licensed i.e. a total of 265,000 tonnes of soil and stones but over a shorter time span (i.e. ca. 2.5 – 3 years). The activity will just take a shorter time span to complete and fully restore to beneficial agricultural use.
- The site survey drawings submitted with the Waste Licence Review remain unaltered as there will be no change whatsoever in the proposed topographical levels based on the reclamation of the site occurring over a shorter time period. Therefore there is no change to finished site survey drawings.
- Therefore the proposed review creates no proposed change to the content, nature, composition or volume of materials intended for recovery by deposition at the site, and the overall tonnage of 265,000 tonnes for which the existing license was issued remains unaffected.

With regards to potential impacts relating to Surface Water and dust, the proposed proposals in the licence review to increase the annual tonnage from 24,900 to 90,000 tonnes provides **an environmental gain**.

The phasing and restoration of the site will occur over a much shorter time period thereby speeding up the process by which the lands are seeded; stabilised and put back into productive agriculture. This obviously minimises the potential for sedimentation of surface waters (notwithstanding the control measures already in place) and it provides even greater compliance with Condition 6.11.3: *Developed areas shall be seeded as soon as practicable after placement of cover soils, in a manner appropriate to the surrounding area and in any event in accordance with condition 10.2.2.*

Lennons Quarries Ltd. have the support of the local community with regards to the matters contained in the review of the waste licence. This is in the form of letters of support for the proposed increase in annual tonnage from all the nearest residential dwellings (which would be considered the nearest potential noise and dust sensitive receptors). Furthermore, there is the full support of the local GAA Club, an adjoining land-use and a major part of the local rural community. Finally, Lennon Quarries have a letter of support from the Fisheries Board for the proposed changes. Therefore Lennon Quarries Ltd. have demonstrated to the Agency



that the licence review is supported by the local community as being a positive and pro-active step with environmental gains and benefits. The site has been up and running since January 2006 under a Waste Permit and under a Waste Licence for the past ca. two years without any complaints or enforcement issues as proven by Agency records. Furthermore, the compliance monitoring is all up to date and is all compliant with the license requirements. All in all, it is considered that the existing soil recovery facility is operated as an extremely well run and well-monitored licensed facility.

4.2 Summary of Site Activities

4.2.1 Principal Elements

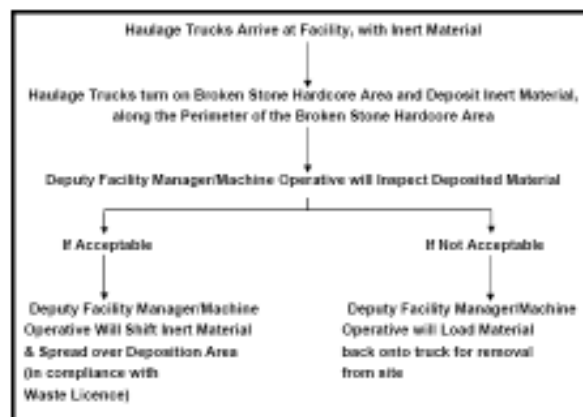
The lands within the site boundary are currently in use for agricultural purposes, but are low lying and of poor quality as evidenced from the site vegetation, drainage channels and watercourses. □The works proposed under the existing waste licence and under the review are for the purpose of land reclamation so as to enable the lands to be effectively used for agricultural purposes. The word 'reclamation' implies claiming back from some unsuitable state. The definition might imply an unsuitable state arising from topography, drainage, poor-quality soils, damage to soils, presence of rock or vegetation etc. □The reclamation works will raise the lands by approximately 1 metre.

The works proposed the Application for a Technical Review of Waste Licence W0256-01 are for the acceptance of a maximum of 90,000 tonnes per annum of non-hazardous/inert material and its recovery (Soil & Stone (EWC 17 05 03)., by spreading the material over the site deposition area, with a consequential benefit of improving the land for agricultural use.

Table outlining existing and proposed waste quantities to be accepted on site

Waste Type	Existing Tonnage per Annum	Proposed Tonnage Per Annum	Total Over Lifetime of Activity
Soil and Stones 17 05 04	24,900 Tonnes	90,000 Tonnes	265,000 Tonnes to reach licensed 1m land raise

As under the existing waste licence, the facility operates following a very simple process, as shown in the 'Flow Diagram' below:





Based on the proposed annual intake of a maximum of 90,000 Tonnes, it is expected that there will be approximately 4,500 truckloads of soil and stone delivered to the site on an annual basis (i.e. a maximum of 90 truckloads per week). Such a small number of truck movements is not expected to have any effect on traffic in the area of the site.

The site drawings with existing and proposed levels and cross sections provided in the EIS clearly show the Land Raise by 1m, with a slope of 3:1 down to all existing perimeter surface water drains, which will remain untouched. The existing open surface water drains that cut through the Area of Waste Deposition, will also be raised by 1m, as shown on the Cross Section Drawings.

Following completion of the recovery activity in a particular section, topsoil will be spread evenly over the site to a minimum depth, after firming, of at least 300 mm. Any topsoil which is delivered to the site during the recovery activity will be stockpiled separately for this purpose. The site will then be prepared for seeding by raking or harrowing, and by rolling. The site will then be restored for agricultural purposes. All temporary fences will be removed. The land will be returned to productive agricultural land to be used for grazing probably for sheep or cattle and will be subject to standard agricultural practises.

Once the soil & stone recovery and land reclamation is complete, the site accommodation (Portocabin & Portoloo) will be removed from the site and the materials recovered. The site surface water drainage system (including 5 no. Settlement Ponds) will remain untouched, following facility closure. This will allow the surface water continue to be treated for suspended solids long after the facility has stopped accepting material for recovery/reclamation.

4.2.2 Site Infrastructure and Operations

There is no discharge of trade effluent or other matter, to sewer (existing or proposed) from the site.

The 'Proposed Hours of Operation' for the facility are 8.00am to 6.00pm - Monday to Friday, 8.00am to 2.00pm - Saturday, and Closed on Sundays & Bank Holidays. The 'Proposed Hours of Waste Acceptance/Handling' are 8.30am to 5.30pm - Monday to Friday, 8.30am to 1.30pm - Saturday, and Closed on Sundays & Bank Holidays. The difference between the 'Proposed Hours of Operation' and the 'Proposed Hours of Waste Acceptance/Handling' reflect the time allowed for set-up and clean up works each day.

The Site Office is located along the site entrance road. Waste Quarantine skips are located adjacent to the site office. As licensed as part of the current waste licence W0256-01, a hardcore area (with a surface dressing of clean broken stone) was developed close to the entrance gate. As undertaken under the existing waste licence, this allows haulage trucks to enter the site, turn, and deposit their material, along the perimeter of the hardcore area.

As undertaken under the existing waste licence, the Deputy Facility Manager/Machine Operative will inspect each load, as it is being deposited, to ensure the material is fully compliant with the Waste Licence. If the material is non-compliant, the Deputy Facility



Manager/Machine Operative will insist that the material is reloaded onto the haulage truck and removed from the site, for authorised disposal elsewhere.

Once the haulage trucks deposit their material, along the perimeter of the hardcore area, the excavator will shift the inert material, from where it is deposited by the haulage trucks, and spread it over the area of the deposition site, in compliance with the Waste Licence. If waste objects are identified within the inert material (whilst shifting/reclaiming the material), which are not compliant with the Waste Licence (eg. pieces of wood, plastic, metal), they will be removed and transported to the Waste Quarantine skips, located adjacent to the site office.

The Deputy Facility Manager/Machine Operative will keep a record of all material arriving at the facility, including the following information:

- Date;
- Time;
- Owner Truck;
- Truck Licence Plate No.;
- Type of Material;
- Origin of Material;
- Quantity of Material.

It is not proposed to install a weighbridge at the facility as the small quantity of truck arrivals does not justify the expense.

The Deputy Facility Manager/Machine Operative on the Waste Licensed site will have a record of the capacity of each of the trucks, which will allow him to keep an accurate record of volumes/quantities of inert materials being accepted at the facility on a daily basis.

The only fuels required at the site will be Diesel (ca. 100 Litres/week) and Hydraulic Oil (ca. 40 Litres/Annum), to run the onsite plant (Hitachi 200 excavator) and the small generator required to provide electricity to the site accommodation (Portocabin). It is not proposed to store any fuel onsite. A fuel tanker will visit the site, when required and fill the onsite plant (Hitachi 200 excavator & small generator). The refuelling will be carried out on the proposed concrete hardstand. All runoff from the hardstand area will be directed through a petrol interceptor, prior to discharge into the surface water drainage system.

Water will be provided to the facility (Portocabin) by tanker, and stored in a holding tank.

No chemicals (e.g. Insecticides, Herbicides, Rat Poisons, Cleaning Agents, Water Treatment Chemicals, Cooling Water/Boiling Water Additives, Laboratory Chemicals, etc.) will be required or accepted at the facility. The only 'Energy' proposed to be used at the facility will be that to run the facility plant (Hitachi 200 excavator) and the generator (to provide electricity to the site Portocabin). To ensure energy efficiency, the facility plant engine will be switched off when not in use and the generator will only be used when absolutely necessary. Based on the above, it is anticipated that the proposed facility will be very energy efficient



4.2.3 Emissions and Potential Impacts from the Recovery Activity

From scoping the existing recovery activity and the content of the licence review and in particular Sections E.1 - E.6 of the application for the Review the potential Emissions associated with the facility have been clearly identified. The scoping concludes that, as currently licensed, the main emissions from the facility are to Surface Water at 5 no. locations and there will be no change in this regard in the application for a Review of the Waste Licence.

There are Noise Emissions from one item of plant onsite, (Hitachi 200 excavator) and a fugitive/minor emission to the atmosphere from the exhaust of this machine.

Dust produced by the unloading of material from the haulage trucks, and the subsequent movement/spreading of Soil and Stone over the area of the deposition site is discussed in relation to dust as a potential environmental nuisance rather than a site emission.

The Treatment/Abatement/Control System which manages the emissions to surface water are discussed in this EIS - Per requirements of Licence W0256-01, 5 no. Settlement Ponds have been put in place on the drainage channels, prior to their emission to the main surface water body (Clooneen River). The purpose of these Settlement Ponds is to allow suspended solids drop out of solution, prior to the surface water discharging from the site, into the Clooneen River.

Emission from the mobile plant (i.e. Hitachi 200 excavator) (Noise & Exhaust) are managed by ensuring that the machine is serviced regularly in order to ensure that exhaust emissions are kept to a minimum, and that the engine produces the lowest noise levels possible, and this will be maintained.

It is proposed to manage the potential environmental nuisance caused by dust by bringing a tractor with water bowser onto site during extended periods of dry weather, to sprinkle water over hardcore areas and the access road, to dampen down any dust.

4.2.4 Environmental Monitoring

There is an established programme of environmental monitoring at the site which complies with the requirements the existing Waste licence (W0256-01) issued by the Environmental Protection Agency. Monitoring of 'Surface Water' at 5 no. locations on the Clooneen River (including samples from upstream & downstream of the site) on a quarter yearly basis is undertaken. Monitoring of 'Settlement Dust' at 3 no. locations around the site boundary, on a biannual basis is undertaken. Monitoring of 'Noise' at 3 no. locations around the site boundary, and at 2 no. noise sensitive locations (i.e. the two closest houses), is undertaken on an annual basis.

Environmental sampling, monitoring and testing for noise, dust, and surface water and groundwater is undertaken by independent external consultants as required. Records of environmental monitoring and testing will be maintained on-site and will be forwarded to the EPA as required.



The existing soil recovery site at Tallagh has been up and running since it was granted a Waste Permit back in January 2006. It has also operated for the past ca. 2 years under a Waste Licence without any complaints or enforcement issues as proven by Agency records.

Furthermore the compliance monitoring is all up to date and is all compliant with the license requirements and therefore indicates that the inert soil recovery works undertaken at the existing site to date have not had any detrimental impact on the local water environment.

4.3 Flora and Fauna

The Ecological Assessment included in the EIS has set out all necessary mitigation measures associated with the existing and proposed activities on site to ensure that any potential impacts identified are mitigated against. One key mitigating measure was that 5 no. 'Settlement Ponds' have been put in place on the drainage channels, prior to their emission to the main surface water body as shown. The purpose of these Settlement Ponds is to allow suspended solids drop out of solution, prior to the surface water discharging from the site, into the Clooneen River.

Surface water monitoring of the Clooneen River continues on a quarterly basis, per the existing licence requirements, in order to identify any possible contamination to the river. With regards to potential impacts relating to Surface Water and dust, the proposed proposals in the licence review to increase the annual tonnage from 24,900 to 90,000 tonnes provides **an environmental gain**.

The phasing and restoration of the site will occur over a much shorter time period thereby speeding up the process by which the lands are seeded; stabilised and put back into productive agriculture. This obviously minimises the potential for sedimentation of surface waters (notwithstanding the control measures already in place) and it provides even greater compliance with Condition 6.11.3: *Developed areas shall be seeded as soon as practicable after placement of cover soils, in a manner appropriate to the surrounding area and in any event in accordance with condition 10.2.2.*

Lennon Quarries Ltd. have consulted with and have received a letter of support from the Fisheries Board for the review of their Waste Licence with mitigation measures outlined in this EIS and the review of Waste Licence W0256-01.

The Ecological Assessment Report carried out in January 2009 and included in the main EIS, concluded that:

In conclusion the habitats on site are considered to be of low ecological value. Mitigation measures have been suggested to avoid impacts on the Broadhaven Bay complex (pNHA & SAC) which is the nearest designated site located at a distance of 0.2km from the site. Suggested mitigation measures will also minimise any impacts on local fauna, particularly as a number of Birds of Conservation Concern in Ireland including snipe, skylark and stonechat have been recorded utilising the site.

The Appropriate Assessment Screening Report included in the main EIS concludes that:



"It is considered that no significant adverse effects are expected to arise to Natura 2000 sites from the proposed development and the project can be screened out of further stages of Appropriate Assessment".

The proposal to increase the annual tonnage from 24,900 tonnes to 90,000 tonnes poses no change in the scope of the activity, the nature of the activity or potential emissions from the activity (as presently licensed). There will therefore be no negative impact upon ecology and flora and fauna in granting the review of Waste Licence W0256-01.

4.4 Surface Water

The site is drained by a number of open surface water drains. An open surface water drain surrounds the perimeter of the entire deposition site (with the exception of the northwest corner of the site), and a number of open drains are cut through the deposition site in a north-south direction. All of the open drains, drain into the local Clooneen River (which runs along the northern site application boundary in an easterly direction), at five locations. The five locations refer to the five no. currently licensed emission points to surface water (Clooneen River) from the site.

5 no. 'Settlement Ponds' have been put in place on the drainage channels, prior to their emission to the main surface water body. The purpose of these Settlement Ponds is to allow suspended solids drop out of solution, prior to the surface water discharging from the site, into the Clooneen River.

Surface water monitoring of the Clooneen River continues on a quarterly basis, per the existing licence requirements, in order to identify any possible contamination to the river.

With regards to potential impacts relating to Surface Water, the proposed proposals in the licence review to increase the annual tonnage from 24,900 to 90,000 tonnes provides **an environmental gain**. The phasing and restoration of the site will occur over a much shorter time period thereby speeding up the process by which the lands are seeded; stabilised and put back into productive agriculture. This obviously minimises the potential for sedimentation of surface waters (notwithstanding the control measures already in place) and it provides even greater compliance with Condition 6.11.3: *Developed areas shall be seeded as soon as practicable after placement of cover soils, in a manner appropriate to the surrounding area and in any event in accordance with condition 10.2.2.*

Lennon Quarries have consulted with and have received a letter of support from the Fisheries Board for the proposed Licence amendments with mitigation measures outlined in this EIS and the review application of Waste Licence W0256-01. To conclude, there will be no significant impacts upon the water environment as identified in this section of the EIS.

4.5 Air Quality and Dust

There are certain measures that are adhered to in effectively minimising dust emissions from the proposed operations. Air emission abatement measures are achieved through the following on site measures:



- Provision of paved internal roadways, where appropriate.
- Provision of on-site speed limits to prevent unnecessary generation of Fugitive dust emissions.
- Mobile water bowsers deployed around the site and/or mobile road sweeper deployed around the site and site entrance.
- Reduction in the volume of the stockpiles
- All stockpiles are conditioned with water to minimise dust during dry weather.
- Minimising drop heights of material.
- All completed areas of land reclamation will be spread with topsoil and grass seeded to eliminate any wind blown dust.
- Dust monitoring will be carried out biannually, per licensed requirements.
- Water spraying stockpiles and access roads during prolonged dry periods;

If the level of dust is found to exceed 350mg/m²/day in the vicinity of the site, further mitigation measures will be incorporated into the operation of the facility. It is expected that some dust generation can arise as a result of continuing material recovery/reclamation activities on the site. However, it is likely that dust generation will remain below the accepted EPA emission limit, with proper site management. With the above mitigation measures in place, no likely significant effects on air quality are envisaged.

With regards to potential impacts relating to dust, the proposed proposals in the licence review to increase the annual tonnage from 24,900 to 90,000 tonnes provides an **environmental gain**. The phasing and restoration of the site will occur over a much shorter time period thereby speeding up the process by which the lands are seeded; stabilised and put back into productive agriculture. This obviously minimises the potential for dust emissions (not withstanding the control measures already in place) and it provides even greater compliance with Condition 6.11.3: *Developed areas shall be seeded as soon as practicable after placement of cover soils, in a manner appropriate to the surrounding area and in any event in accordance with condition 10.2.2.*

These above measures ensure that dust from the operation of the soil recovery facility at Tallagh does not have any significant environmental impacts upon air quality. Lennons Quarries Ltd. have the support of the local community with regards to the proposed review to their existing Waste Licence W0256-01. This is in the form of letters of support for the proposed review from all the nearest residential dwellings (which would be considered the nearest potential dust sensitive receptors). Furthermore, there is the full support of the local GAA Club, an adjoining land-use and a major part of the local rural community.

Therefore the licensee has demonstrated to the Agency that the licence review is supported by the local community as being a positive and pro-active step with environmental gains and benefits. The site has been up and running for the past ca. 2 years without any complaints or enforcement issues relating to dust or dust nuisance as proven by Agency records. Furthermore, the compliance monitoring is all up to date and is all compliant with the license requirements. All in all it is considered that Lennon Quarries Ltd. operate an extremely well run and well-monitored licensed soil recovery facility



Monitoring of Dust Levels at site boundary locations will continue at the site as part of the Environmental Management Monitoring Programme. There is already an existing Dust Monitoring Programme in place as demonstrated by the existing monitoring results presented in the EIS. Certificates of dust results will be maintained on-site as part of the on-going Environmental Management Program.

4.6 Noise

The soil recovery facility is located in a sparsely populated rural area with surrounding land uses comprising of sheep farming; peat extraction; GAA pitch; former Mushroom Farm and dispersed one-off housing developments and old farmsteads. The nearest densely populated area close to the site is Belmullet some 2 ½ km to the south. The site is far removed from the public road. A baseline noise monitoring study took place to assess the existing noise levels associated with the operation of the soil recovery facility at Tallagh and how this might have an impact on air quality.

The only Noise Emission from the facility will be mobile plant (Hitachi 200 excavator) and occasional trucks delivering soil material.

Lennons Quarries Ltd. have the support of the local community with regards to the review to their existing Waste Licence W0256-01. This is in the form of letters of support for the licence review from all the nearest residential dwellings (which would be considered the nearest potential noise sensitive receptors). Furthermore, there is the full support of the local GAA Club, an adjoining land-use and a major part of the local rural community. Therefore the licensee has demonstrated to the Agency that the licence review is supported by the local community as being a positive and pro-active step with environmental gains and benefits.

The site has been up and running for the past ca. 2 years without any complaints or enforcement issues relating to noise or noise nuisance as proven by Agency records. Furthermore, the compliance monitoring is all up to date and is all compliant with the license requirements. All in all it is considered that Lennon Quarries Ltd. operate an extremely well run and well-monitored licensed soil recovery facility

Monitoring of Noise Levels will take place biannually at Three No. 'Noise Monitoring' locations located close to the boundary of the site and two No. 'Noise Monitoring' locations located at the Nearest Noise Sensitive Locations (i.e. the closest 2 no. residences). Noise measurements will be taken for L(A)eq, L(A)10 & L(A)90. Certificates of noise results will be maintained on-site as part of the on-going Environmental Management Program.

4.7 Hydrogeology – Geology, Groundwater and Soils

The land reclamation site is predominately made up of drained, cut-away peat land with the soil recorded as Blanket Peat -soil series Glenamoy Cutover on the soil maps for the area.

The cut-away peat land has been recolonised naturally with mosses, rushes, knot grass and other herbaceous weed species. The site has been used for land reclamation activity for the consequential benefit to agriculture since January 2006. A relatively small portion of the site



has been infilled satisfactorily to date as part of this process, and the remainder of the area is currently being used to graze a low number of sheep.

The subject lands have little or no agricultural benefit at present due to the poor nutritional value of the grass present on the site and the fact that historic peat extraction on the site has left the topography of the ground uneven and unsuitable for agricultural machinery.

Since the site is not currently used for intensive agriculture, there will be no negative agricultural impact of the land reclamation activity on the immediate site area. In fact, since the land reclamation activity involves land levelling, reinstatement of topsoil and reseeded with a good quality grass seed mixture, the end result will be beneficial to the area from an agronomy perspective.

From a groundwater protection perspective, the spreading of suitable soil and stones over the site will provide an additional ca. 1 metre of protective soil cover which will have a positive impact upon the protection of groundwater in the area.

The bedrock aquifer type at the site is given the code **PI** – Bedrock which is generally unproductive, except for local zones. The groundwater vulnerability rating for the Tallagh Site is moderate to high. The groundwater protection zone rating for the area of the site is **PI/H** (based on the precautionary principle). There are no source protection areas either at or near to the site. The soil recovery facility, licensed per licence W0256-01, does not have existing or proposed extraction wells from Groundwater. No groundwater wells were identified in close proximity to the site supplying water for domestic and animal needs.

Given that the materials to be deposited are non-leachate forming and given the mitigation measures proposed, the impact of groundwater contamination on farming in the area during operation and upon completion of the project will be negligible.

Fuel is not stored on site and there are no proposals to store fuel on site. A Fuel Tanker will visit the site on a weekly basis (or when required) to fill the onsite plant (Hitachi 200 excavator) and generator (for Portocabin). Refuelling takes place on the hardstanding area of the site access road, adjacent to the site office. Booms and spill kits are kept adjacent to this.

The inert nature of the soil material accepted at the facility would not contain any potential contaminants to groundwater. There will be no significant impacts upon the groundwater environment as identified in this section of the EIS as there will be no emissions to either the ground or groundwater.

All appropriate mitigation measures have been forward and are implemented for a soil recovery site of this nature. This site is a low risk activity which poses little or no threat to hydrogeology, groundwater, geology or soils. As a consequence it is not proposed to monitor groundwater.

4.8 Cultural Heritage

Two Sites and Monument Records (SMR) are located greater than 1km away to the north-west and to the south-east of the existing site but these are so far removed from the site that



there will be no possible impact whatsoever on these sites. To the south of the existing soil recovery site and to the west of the entrance road is a small disused Roman Catholic chapel but appears to be used for storage or agricultural purposes having long since ceased to be used as a place of worship. There are no other historical buildings of any note either close or within the existing soil recovery site.

As the development intends to reinstate the land for agricultural afteruse and will not stretch past its current limits there will be no disturbance to the townland boundary or loss of townland name. Therefore there are no limitations to the proposed development due to the cultural heritage record.

The landscape where the site is located does not have specific historical, cultural or archaeological significance.

There are no standing structures within the area of land interest and due to the nature of the existing soil and stone recovery activity it is envisaged that there will be no direct negative impacts on the architectural heritage or the local area. The emplacement of soil on the site will not destroy any unknown subsurface archaeological features as the site is not being excavated or cleared but rather a 1m layer of inert soil and stone will be placed upon the existing land surface.

4.9 Human Beings and Material Assets

The existing soil recovery facility is located in a sparsely populated rural area with surrounding land uses comprising of sheep farming; peat extraction; GAA pitches; former Mushroom Farm and dispersed one-off housing developments and old farmsteads. There nearest densely populated area close to the site is Belmullet some 2 ½ km to the south. The site is far removed from the public road from which the site is accessed.

Agriculture, particularly livestock grazing is a fundamental part of the economy and culture of the local community and this recovery project will further assist in providing productive agricultural land in the area for future generations without having any detrimental impact upon the local environment. In the general vicinity of the site at Tallagh there are many fields which have been reclaimed successfully for agriculture.

As waste activities have been established at the site for some considerable time, its continued operation will have little or no additional impact on human beings living in the immediate vicinity of the site. The impact of the proposed restoration scheme on human beings will arise mainly through environmental factors, most notably noise and air quality (including dust).

Baseline noise and dust studies and on-going monitoring has been carried out to assess the existing noise and dust levels associated with the operation of the soil recovery facility at Tallagh and how this might have an impact on potential sensitive receptors. These surveys demonstrate that the existing operation is not impacting upon Human Beings in a negative manner and therefore there is no impairment of their amenities or a reduction in property values as a consequence of the existing and proposed site activities.



All the occupants of the closest dwelling houses have been consulted with regards to the review of Waste Licence W0256-01 and all have provided letters of support for the review. Therefore, Lennon Quarries Ltd. have demonstrated that they have the support of the local community with regards to the review of their existing Waste Licence W0256-01.

The soil recovery facility, licensed per licence W0256-01, does not have existing or proposed extraction wells from Groundwater. No groundwater wells were identified in close proximity to the site supplying water for domestic and animal needs. There is therefore no likely impact upon drinking water for Human Beings.

Based on the proposed annual intake of a maximum of 90,000 Tonnes, it is expected that there will be approximately 4,500 truckloads of soil and stone delivered to the site on an annual basis (i.e. a maximum of 90 loads per week). This equates to a maximum of 18 no. truck loads per day. As discussed earlier in this EIS, based on the proposed annual intake of a maximum of 90,000 Tonnes, it is expected that there will be approximately 4,500 truckloads of soil and stone delivered to the site on an annual basis (i.e. a maximum of 90 truckloads per week). Such a small number of truck movements is not expected to have any effect on traffic in the area of the site.

Due to the inert nature of the soil and stone recovered & reclaimed at the site, vermin do not present an environmental nuisance and there will be no change in this regard in the application for a licence review. The existing authorised Hours of Operation during daylight hours only ensure that site operations and traffic do not cause nuisance to Human Beings.

Lennon Quarries Ltd., is a local County Mayo owned/operated company, which provides employment to ca. 25 no. people in the Belmullet area. The company is primarily a quarry/rock aggregate provider, with a large quarry located in Glencastle, Bunnahowen, Ballina, County Mayo but this facility maintains additional employment and brings additional money into this area of north-west County Mayo.

The existing soil recovery at Tallagh does not contain, nor is close to, nor abuts any protected archaeological site or monument. The activity will therefore have no impact upon archaeology.

The entrance road abuts a former disused and derelict Roman Catholic Chapel but as this is not in use as a place of worship and the activity does not impact directly upon this building, there will be no impact upon historical buildings. The landscape where the site is located does not have specific historical, cultural or archaeological significance and does not impact upon the Cultural Heritage of Human Beings.

The site has been up and running for the past ca. 2 years under a Waste Licence W0256-01 and since 2006 under a Waste Permit without any complaints or enforcement issues relating to nuisance to Human Beings or Material Assets as proven by Agency records. Furthermore, the compliance monitoring is all up to date and is all compliant with the license requirements. All in all it is considered that Lennon Quarries Ltd. operate an extremely well run and well-monitored licensed soil recovery facility.



it is concluded that there will be no direct or indirect negative impacts upon Human Beings or Material Assets of the area no mitigation measures outside those already set out in the EIS concerning the day to day operation of the site are required or are proposed.

Rather there will be positive impacts as a consequence of the Review of the existing Waste Licence W0256-01 such as continued employment; increased agricultural productivity; and increased land values. All of which is supported by the local community to the existing activity. Furthermore, the activity will occur as already licensed but over a much shorter time period which is a win-win scenario for the site operator; the local community; and the regulatory authorities (i.e. EPA)

4.10 Landscape and Visual Assessment

The existing soil recovery facility is located within a landscape setting consisting of a sparsely populated rural area with surrounding land uses comprising of sheep farming; peat extraction; GAA pitches; former Mushroom Farm and dispersed one-off housing developments and old farmsteads. The nearest densely populated area close to the site is Belmullet some 2 ½ km to the south. The site is far removed from the public road from which the site is accessed. There is evidence locally of peat cutting for domestic use for fuel. There is little if any forestry of tree cover in the area due to the exposed nature of this part of North Mayo.

Housing settlement is dispersed with only 1 dwelling within 500 metres of the site boundary, with three others outside 500 metres. All the occupants have been consulted with regards to the review of Waste Licence W0256-01 and all have provided letters of support for the review.

The site is currently licensed, per licence W0256-01, for soil recovery and deposition with a 1m Land Raise at the site. The Application for a Licence Review proposes no change to the final topographic level licensed under W0256-01; it is proposed that the same 1m Land Raise, as currently licensed, is maintained.

Following completion of the recovery activity in a particular section, topsoil will be spread evenly over the site to a minimum depth, after firming, of at least 300 mm. Any topsoil which is delivered to the site during the recovery activity will be stockpiled separately for this purpose. The site will then be prepared for seeding by raking or harrowing, and by rolling. The site will then be restored for agricultural purposes. All temporary fences will be removed. The land will be returned to productive agricultural land to be used for grazing probably for sheep or cattle and will be subject to standard agricultural practises.

Once the soil & stone recovery and land reclamation is complete, the site accommodation (Portocabin & Portoloo) will be removed from the site and the materials recovered. The site surface water drainage system (including 5 no. Settlement Ponds) will remain untouched, following facility closure. This will allow the surface water continue to be treated for suspended solids long after the facility has stopped accepting material for recovery/reclamation.

The existing land reclamation activity at Tallagh does not have a disproportionate effect on the existing or future character of a landscape in terms of location, design and visual prominence. Furthermore the activity subject to the review of the existing Waste Licence



W0256-01 does not adversely interfere with views and prospects worthy of preservation and protection as outlined on in the Mayo County Development Plan or on the views to and from places and features of natural beauty or interest (e.g. coastline, lakeshores, protected structures, important historic sites).

The existing soil recovery at Tallagh does not contain, nor is close to, nor abuts any protected archaeological site or monument. The activity will therefore have no impact upon archaeology. The entrance road abuts a former disused and derelict Roman Catholic Chapel but as this is not in use as a place of worship and the activity does not impact directly upon this building, there will be no impact upon historical buildings. The landscape where the site is located does not have specific historical, cultural or archaeological significance.

The Ecological Assessment Report carried out in January 2009 and included in the EIS, concluded that:

In conclusion the habitats on site are considered to be of low ecological value. Mitigation measures have been suggested to avoid impacts on the Broadhaven Bay complex (pNHA & SAC) which is the nearest designated site located at a distance of 0.2km from the site. Suggested mitigation measures will also minimise any impacts on local fauna, particularly as a number of Birds of Conservation Concern in Ireland including snipe, skylark and stonechat have been recorded utilising the site.

The proposal to increase the annual tonnage from 24,900 tonnes to 90,000 tonnes poses no change in the scope of the activity, the nature of the activity or potential emissions from the activity (as presently licensed). The proposal has therefore no potential negative impacts upon Landscape and Visual Assessment but rather the licensee has demonstrated to the Agency that the licence review is supported by the local community as being a positive and pro-active step with environmental gains and benefits.

As it is concluded that there will be no direct or indirect negative impacts upon landscape or Visual Assessment no mitigation measures outside those already set out in the EIS concerning the day to day operation of the site are required or are proposed.

Rather there will be positive impacts as a consequence of the Review of the existing Waste Licence W0256-01 such as provision of additional reclaimed and productive agricultural land; increased agricultural productivity; and increased land values. All of which is supported by the local community to the existing activity. Furthermore, the activity will occur as already licensed but over a much shorter time period which is a win-win scenario for the site operator; the local community; and the regulatory authorities (i.e. EPA)

Furthermore, the site has been up and running for the past ca. 2 years under a Waste Licence W0256-01 and since 2006 under a Waste Permit without any complaints or enforcement issues relating to landscape intrusion or impacts upon the landscape as proven by Agency records. Furthermore, the compliance monitoring is all up to date and is all compliant with the license requirements. All in all it is considered that Lennon Quarries Ltd. operate an extremely well run and well-monitored licensed soil recovery facility.



4.11 Interaction of the Foregoing

The interaction of the various environmental media and their potential impacts and mitigation measures have been covered within each of the sub-sections contained within Section 3 of the EIS. There are many interactions and in many cases information has had to be repeated in more than one section of this EIS.

The following table presents a matrix of interactions between the various environmental media. Where an interaction is likely to occur, then this is highlighted in green. Where the operation of the existing soil recovery facility at Tallagh does not have the potential to impact or affect the interaction then that interaction is not highlighted (i.e. Water and Noise).

Table showing Matrix of Interaction between Environmental Media

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

As an example the interaction of Air Quality and Dust and Human Beings has been discussed in Section 3.4 of the EIS, and Noise and Human Beings has been addressed in Section 3.5 of the EIS. The interaction of Flora and Fauna and Landscape and Visual Assessment has been addressed in Sections 3.2 and 3.9 of the EIS.