28 October 2025

The Secretary
SIDS / LAPS Section
An Coimisiún Pleanála
64 Marlborough Street
Dublin 1

SLR Project No.: 501.065366.00001

Client Reference No.: ABP-321255-24

RE: Kilsaran Concrete Unlimited Company: Ballinclare Quarry, Co. Wicklow
Strategic infrastructure Development Application to An Bord Pleanála
Proposed Material Recovery / Recycling Facility and Inert Landfill
Response to Request for Further Information

Introduction

Further to your letter dated 9 October last, we have reviewed the submissions made by both the Environmental Protection Agency (EPA) and the Development Applications Unit (DAU) in respect of the proposed Strategic Infrastructure Development (SID) at Ballinclare Quarry and have addressed the issues raised in this letter response. The issues are addressed below in the same sequence and order as they are listed in your letter dated 9 October.

1. Mitigation of Risk to Surface Water and Groundwater

"In relation to the mitigation measures proposed by the applicant in relation to the risk to groundwater and surface water contamination, the EPA considers that the effectiveness of mitigation measures would best be demonstrated as a minimum through:

(a) Provision of monitoring results from the inlet and outlet points of the Siltbuster WWTP to demonstrate its effectiveness for reducing arsenic levels

Response

Monitoring of the WWTP discharge is undertaken in accordance with the existing discharge licence (WPL116), which requires (Section 5.1) sampling of the effluent (treated water) at the wastewater treatment plant and at the discharge location, and the receiving water upstream and downstream of the discharge. The sampling locations were agreed with Wicklow County Council in accordance with Section 5.2 of the Discharge Licence.

There is no requirement in the Discharge Licence to monitor inlet concentrations (to the WWTP), although over time data was gathered on concentrations of arsenic in the quarry sump, and these data facilitated the design and the WWTP.

In response to the data request outlined in Item 1(a), the following data are provided:

- Available data for quarry sump arsenic concentrations (i.e. equivalent to likely inlet arsenic concentrations to the WWTP). These data are presented in **Table A** below (n = 14, average = 488.03 μg/L); and,
- Outlet/effluent arsenic concentrations (n = 614, average = 2.02 μg/L). Data is plotted as a time series on Figure 1, and as a % exceedance plot as Figure 2. Only

two samples of the 614 samples were above the discharge limit of 7 µg/L (7.8 ug/l on 20/10/2022, and 9.429 ug/L on 31/01/2023).

Based on the available data the Siltbuster WWTP is assessed to be >99% effective at removing the arsenic load.

Table A
Available Quarry Sump Arsenic Concentrations

Data Source	Date	Arsenic (µg/L)
HES, 2017	10/11/2016	514.6
HES, 2017	06/12/2016	518.4
HES, 2017	28/03/2017	745.4
HES, 2017	28/03/2017	673.4
HES, 2017	28/03/2017	659.4
SLR, 2019	03/05/2019	591.1
SLR, 2019	26/03/2019	522.8
Kilsaran monitoring	24/08/2022	400
Kilsaran monitoring	16/09/2022	410
Kilsaran monitoring	07/02/2024	340.2
Kilsaran monitoring	12/03/2024	327.2
Kilsaran monitoring	11/07/2024	311.5
Kilsaran monitoring	17/07/2024	415.2
Kilsaran monitoring	24/07/2024	403.3
		n = 14, Average = 488.03 µg/L

Figure 1
Ballinclare WWTP Arsenic Concentrations of Treated Discharge Water

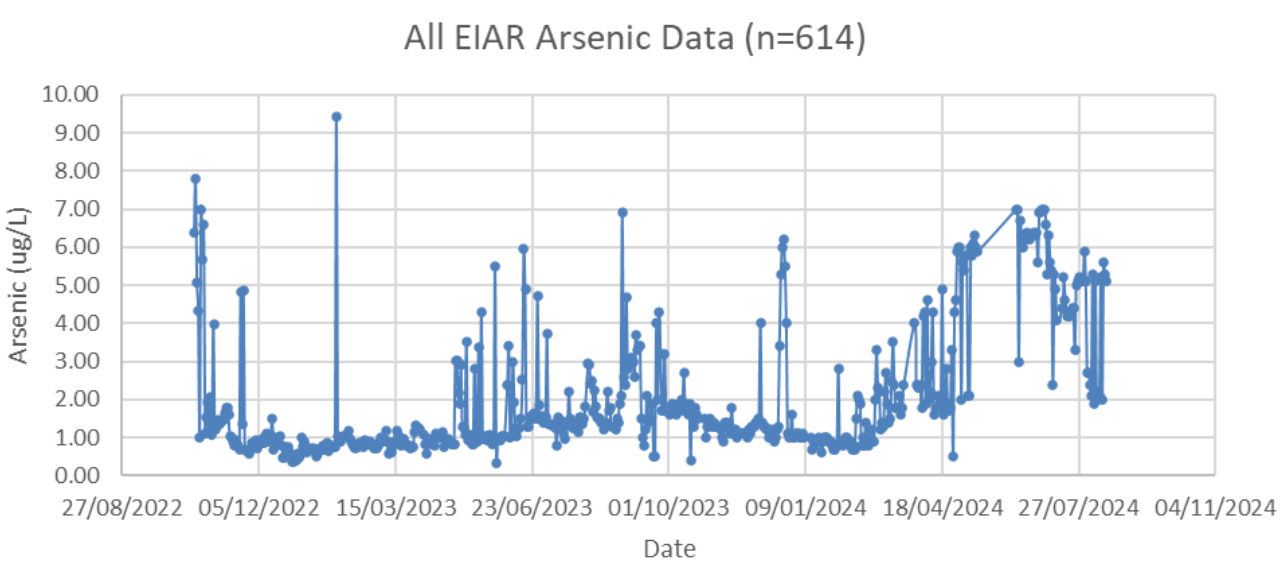
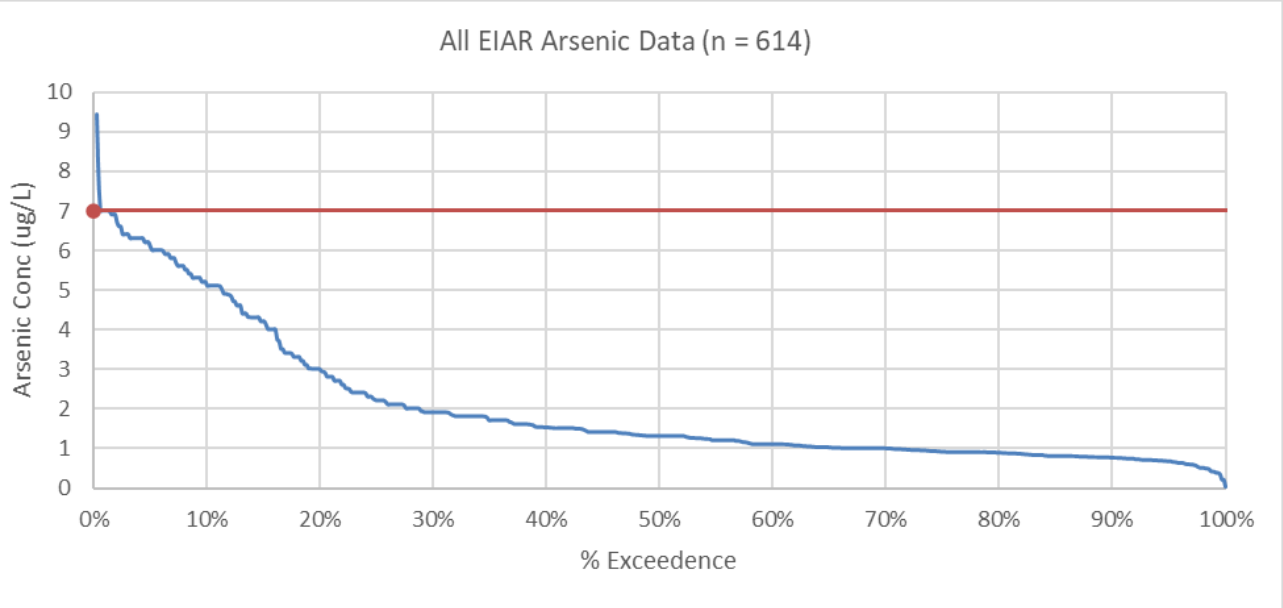


Figure 2
Ballinclare WWTP % Exceedance Plot
Arsenic Concentrations of Treated Discharge Water



(b) Provision of monitoring results on the discharge point to the Potters River post-settlement pond treatment and the provision of monitoring results on the upstream and downstream monitoring points on the Potters River. Monitoring results on the discharge point should be compared to the discharge limits of the associated authorisation and to the relevant environmental quality standards, as set out in the European Communities Objectives (Surface Water) Regulations 2009, as amended. A copy of the discharge licence should also be provided.

Response

Data relating to this request item is presented in Table 7-4 and Table 7-5 of the EIAR.

Summary data (parameters and ranges of results) of upstream (MP1) and downstream (MP2) monitoring the Potters River are presented in Table 7-7 and Table 7-8 of the EIAR.

Discussion of data on surface water quality (including Q- index value data) is provided in Paragraphs 7.95 – 7.99 of the EIAR.

A copy of the Discharge Licence is presented at Appendix 7-B of the EIAR.

(c) An assessment on the potential impact to groundwater and down-gradient supply wells from the site, having regard to the Agency "Guidance on the Authorisation of Discharges to Groundwater" and provision of mitigation measures to address identified potential impacts.

Response

An assessment on local groundwater wells is addressed in the impact assessment presented in the EIAR (refer to Paragraph 7.301 – 7.311. Notwithstanding this, a qualitative assessment based on the information presented in the EIAR has been compiled in the format requested (in accordance with the "*Authorisation of Discharges to Groundwater*"). That report is attached as Attachment A of this RFI submission.

Please note that a detailed Quantitative Risk Assessment will be submitted to the EPA in support of a waste license application for the proposed facility once the planning process concludes. This report will model and quantitatively assess the potential developmental impacts on groundwater quality at the application site boundary and/or downstream groundwater receptors.

(d) Provision of relevant on-site and off-site groundwater monitoring results and comparison of the results to the relevant groundwater threshold values as set out in the European Communities Environmental Objectives (Groundwater) Regulations 2010, as amended, EPA Interim Guideline Values (IGV) and parametric values set out in the European Union (Drinking Water) Regulations 2023.

Response

Data relating to this request item is presented in Table 7-12 and Table 7-13 of the EIAR, with supporting copies of laboratory certificates provided in Appendix 7-F. Discussion of data on groundwater quality is provided in Paragraphs 7.160 – 7.163 of the EIAR.

Details with regards to proposed future surface water and groundwater quality monitoring are outlined in Paragraph 7.325 to 7.328 of the EIAR.

2 Asbestos

Detail as to how and where the returned asbestos materials are buried on site and provide details on the measures to be put in place for the management of these materials in the long-term.

Response

Following the discovery of Naturally Occurring Asbestos (NOA) at the application site in 2016, the Applicant, out of an abundance of caution, gave an undertaking that it would accept and manage any site-won aggregates returned to the quarry by its customers without any pre-conditions. As noted in responses to earlier submissions, all activities involving the return and handling of NOA were overseen by, and subject to detailed protocols agreed with, both the Health and Safety Authority (HSA) and EPA. The Applicant also engaged specialist independent consultants at that time to

- advise it on how to manage / handle the return of NOA materials to site, including preparation of risk assessments and identification of required control measures)
- advise it on measures required to protect the health and welfare of its staff, contractors, hauliers and the general public;
- prepare an asbestos management plan;
- sample and test materials in stockpiles around the quarry to establish whether or not they contain NOA (actinolite); and
- instigate regular (and ongoing) asbestos monitoring surveys in air and water.

Although NOA (actinolite) was detected in several stockpiles (of varying size) around the application site, it was absent or at / below the limit of detection at the majority (>65%) of them. These stockpile locations are known and mapped, are identified on-site by warning signage and have access to them restricted.

The impacted stockpiles have not been disturbed since the quarrying and production activities were suspended at the quarry in 2016. All returned NOA materials were placed above the quarry floor in the north-eastern corner of the quarry and capped with a layer of sand, geotextile, stone and topsoil. Traffic movements around the quarry were also re-routed to avoid stockpiles with detectable levels of NOA.

Bi-annual monitoring of ambient air and water since the discovery of asbestos in 2016 has not detected elevated asbestos levels in any air or water samples. Air testing results indicate that asbestos levels are well below 0.01 fibres/cm^3 (which is 10 times lower than the Exposure Limit Value of 0.1 fibres/cm^3 prescribed by the HSA in its publication *Asbestos-containing Materials (ACMs) in Workplaces (HSA0393)*. Inspections of NOA exposures and the buried asbestos area at annual intervals have not identified any evidence of deterioration which could give rise to any health or environmental concerns.

The Applicant also engaged further with the HSA prior to, and during, the installation of the wastewater treatment plant and HSA officials visited the application site to review and approve procedures prior to commencement of off-site discharge. The Applicant has shared the results of all asbestos related tests to date with both WCC and the HSA and will continue to do so (refer to Tables 7-4 to 7-8 of the EIAR). As will be noted no asbestos has been identified in any samples tested to date. Kilsaran has also committed itself to continued engagement with both the HSA and EPA on the future management / handling of NOA / ACM at the application site.

The Applicant is satisfied that at the present time, the potential presence of NOA in rock exposures, and its presence at a number of aggregate stockpiles and at the returns area, does not present any risk to site staff, contractors, hauliers or to the general public.

It is envisaged that aggregate stockpiles located across the quarry / landfill footprint will be disturbed to facilitate the proposed development at Ballinclare Quarry. The development proposal presented in Chapter 2 of the EIAR (specifically Para 2.104) left it open as to whether the existing lower-level bench / quarry sump below the landfill liner at 37mOD would be backfilled using site sourced / stockpiled aggregate or using imported by-product (non-waste) materials. However, in view of concerns raised in third party observations to ACP about the potential for asbestos fibres in stockpiled aggregates placed in the sump to become potentially mobile in groundwater and impact surrounding groundwater supply wells, the Applicant subsequently committed to placing stockpiled aggregate materials above / within the landfill liner to inhibit potential future mobility of any NOA / ACM fibres in groundwater.

Any aggregate stockpiles which are known to have NOA above detectable limits (currently identified by on-site signage) will be handled in line with detailed protocols and procedures when being relocated above / within the landfill liner. These protocols and procedures will be developed with the technical advice and support of an independent specialist consultant and subject to prior agreement, approval and oversight by both the HSA (as regulatory body for occupational health and safety) and the EPA (as part of the waste licensing process or in accordance with waste licence conditions).

It is expected that the agreed protocols will be broadly similar to those which were in place previously when the site-won aggregates were returned to the quarry. The protocols will comply with the above referenced HSA guidelines (HSA0393) and the UK Health and Safety Executive (HSE) publication *A Comprehensive Guide to Managing Asbestos in Premises (HSG0227)* and will include the following measures (and any others as may be directed by the HSA or EPA):

- an update to the existing Asbestos Management Plan to address requirements for regular air monitoring, liaison / engagement with the HSA, EPA and WCC, regular review of test results and control measures to prevent / reduce exposure to minimum levels possible;
- use of hardstanding materials sourced from other quarries to construct haul roads traversing NOA exposures or in-situ materials containing NOA / ACM;

- use of dust suppression (water bowsers / sprinkler systems or other approved methods) to prevent NOA / ACM becoming airborne;
- restricting traffic and personnel access to work areas;
- continuous monitoring of NOA / ACM levels in ambient air and water;
- contingency measures, including requirements for personal protection equipment (PPE) should air monitoring indicate increased / elevated asbestos levels; and
- reporting of test results to regulatory authorities

The NOA materials on the quarry floor in the north-eastern corner which are currently capped in-situ will not be moved or disturbed and will remain in place. The inert landfill liner (composing a minimum of 1m depth of low permeability soil) in this area will be placed and compacted over (and around) these materials.

The leadership team at Kilsaran has committed itself to achieving the highest standards of corporate and social governance and to upholding its responsibilities to ALL stakeholders. It is committed as an Employer to the Health, Safety and Welfare of its staff and contractors. As a leading and trusted supplier to Ireland's construction industry, it prides itself on meeting and exceeding its producer responsibilities. It also strives continually to be a considerate neighbour in the host communities where its quarries and production facilities are located. The company considers that the measures it has implemented to date around the handing and monitoring of NOA and ACMs at the application site are fully in line with, if not in excess of, established industrial best practice and commits itself to continued implementation of best practice in the future management of NOA / ACM at this location.

3 Sludge Disposal

Details on the disposal of the sludge and any other waste from the Siltbuster WWTP

Response

At the outset, the Applicant wishes to highlight that it is inaccurate to label the solid waste generated by the on-site treatment plant as 'sludge', a term which suggests it has high water content and potential leachability. At the end of the treatment process, precipitated / particulate waste from the plant is compacted by a filter press to produce a semi-solid material which typically comprises 70% to 80% dried solids and is more is accurately described as 'filter cake'.

The principal wastes generated by the Siltbuster WWTP are as follows

- precipitated material from treatment process (filter cake)
- empty IBCs
- empty drums
- consumables (disposable containers, refuse etc')

The Applicant has tested the filter cake material and is satisfied that it will meet the waste acceptance criteria for intake and acceptance at the proposed Ballinclare inert engineered landfill which will require to be licenced by the EPA in due course. As and when sufficient filter cake material has accumulated to constitute an off-site consignment, it will be collected by an authorised Waste Collector and removed off-site to an appropriately licensed waste recovery or disposal facility.

Similarly, as sufficient quantities / volume of other waste materials (ie. empty IBCs, drums etc.) accumulate to warrant consignment off-site, they will also be collected by an authorised Waste Collector and transferred off-site to an appropriately licensed waste recovery or disposal facility.

4 Deer Fence

The Department notes that the deer exclusion fence illustrated on the proposed Landscape and Restoration Plan Drawing does not extend past the area designated for Restoration Phase 1 and Phase 2, which could allow deer entry into the site. The Department recommends that the deer fence is extended so that it will ensure that deer are fully excluded from the site, with mammal gates for badger, otter and fox access installed along active paths, preferably using a Clipex deer fencing system. Long-term monitoring should include for the management of any deer that may enter the site and for fence monitoring and maintenance.

Response

We confirm that the proposed perimeter deer fence will fully enclose the application site. It is envisaged that along a section of the northern boundary, the proposed fence will tie into an existing fence, previously installed by an adjoining property owner.

The commitment to fully enclose the application site is flagged as Biodiversity Enhancement Measure No. 5 on the Landscape and Restoration Plan previously submitted with the planning application (as Planning Drawing PL21 and EIAR Figure 2-4). The Coimisiún and DAU will note that this measure also included a commitment to install ~~stall~~ standard mammal gates and openings, at intervals no greater than 150m apart.

Both drawings referenced above have been slightly amended and updated to more clearly show the fence line surrounding the application site, and specifically around the south-eastern corner (where the Phase 3 landfilling will take place). These amended drawings are forwarded (as Revision 1) in Attachment B of this RFI submission.

The DAU recommendation that such gates be located along active paths and its preference for a Clipex deer fencing system is duly noted. The Applicant will retain the services of a professional ecologist at the time of the fence installation to ensure that the deer fencing and mammal gate both meet specification requirements and are fully compliant with both product and installation standards.

Separately, it will be noted that Planning Drawing PL21, the north-eastern corner of the site is now shown in a ‘window’ to the left of the legend. This area of the site was not shown previously as the site was oversize for the drawing size at the scale provided. The entire site perimeter is shown on EIAR Figure 2-4, although at a much smaller scale.

Closure

It is considered that the information provided in response to the Request for Further Information (RFI) above largely comprises clarification and elaboration on issues and topics which have previously been flagged or addressed by documentation submitted in support of the planning application or in earlier submissions in respect of third-party observations (including State Agencies). The Applicant considers that nothing presented herein is new or of such import or significance as to warrant amendment or update of the Environmental Impact Assessment Report (EIAR).

If you have any further queries in respect of the planning application and/or the additional information provided above, please contact the undersigned.

Yours faithfully,
SLR Environmental Consulting (Ireland) Ltd

Derek Luby
Technical Director

cc Eftim Ivanoff / Liam Murphy (Kilsaran Concrete)

Attachments Attachment A : Assessment of Groundwater Impact
Attachment B : Amended Landscape and Restoration Drawings

ATTACHMENT A
Assessment of Groundwater Impact

ATTACHMENT B
Amended Landscape and Restoration Drawings