

From: [Ronan Behan](#)
To: [SIDS](#)
Cc: [Robbie Doyle](#); [Carmel Moran \(3\)](#)
Subject: FW: FW: EIAR Application for the Proposed Development of an Anaerobic Digestion Facility at Powerstown, Milford, Co. Carlow EH 6150
Date: Thursday 27 August 2026 14:40:13
Attachments: [Standard Planning Submission Report CWKK.pdf](#)
[Report Anaerobic Digester Carlow EH 6150.pdf](#)

You don't often get email from ronan.behan@hse.ie. [Learn why this is important](#)

Caution: This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

See attached National Environmental Health Submission for the Proposed Development of an Anaerobic Digestion Facility at Powerstown, Milford, Co. Carlow.

Regards
Ronan Behan
Environmental Health Officer
St Dympnas Hospital,
Athy Road,
Carlow Town

"Tá an fhaisnéis sa ríomhphost seo (ceangaltáin san áireamh) faoi rún. Baineann sé leis an té ar seoladh chuige amháin agus tá sé ar intinn go bhfaighfidh siadsan amháin é agus gurb iadsan amháin a dhéanfaidh breithniú air. Más rud é nach tusa an duine ar leis é, tá cosc iomlán ar aon fhaisnéis atá ann, a úsáid, a chraobhscaoileadh, a scaipeadh, a nochtadh, a fhoilsiú, ná a chóipeáil. Seans gurb iad tuairimí pearsanta an údar atá san ríomhphost agus nach tuairimí FSS iad.

Má fuair tú an ríomhphost seo trí dhearmad, bheadh muid buíoch dá gcuirfeá in iúl don Deasc Seirbhíse ECT ar an nguthán ag [+353 818 300300](tel:+353818300300) nó ar an ríomhphost chuig service.desk@hse.ie agus ansin glan an ríomhphost seo ded' chóras."

"Information in this email (including attachments) is confidential. It is intended for receipt and consideration only by the intended recipient. If you are not an addressee or intended recipient, any use, dissemination, distribution, disclosure, publication or copying of information contained in this email is strictly prohibited. Opinions expressed in this email may be personal to the author and are not necessarily the opinions of the HSE.

If this email has been received by you in error we would be grateful if you could immediately notify the ICT Service Desk by telephone at [+353 818 300300](tel:+353818300300) or by email to service.desk@hse.ie and thereafter delete this e-mail from your system"



Robbie Doyle | Principal Environmental Health Officer | Carlow-Kilkenny Environmental Health Service | HSE | St. Dymphna's Hospital | Athy Road | Co. Carlow | R93 DE62

Office: 059-9136574 | Mobile: 087-9580134 | E-Mail: Robbie.doyle@hse.ie

Seirbhís Sláinte Comhshaoil Náisiúnta FSS | National Environmental Health Service HSE

National Environmental Health Service Submission Report

(As a Statutory Consultee under Article 28 of the Planning and Development Act 2000
(as amended) & Regulations made thereunder)

EHIS reference: EH6150

Applicant: Greengate Biogas 001 Ltd

Location: Powerstown, Milford, Co. Carlow

Report to: An Coimisiún Pleanála (ACP)

Type of consultation: SID Application with an EIAR

Planning reference: EIAR Application 324426

Dear Sir/Madam

The National Environmental Health Service has reviewed the above planning application and have made the following observations regarding the proposed development. This report refers only to those sections of the planning documents which are relevant to the HSE and have an Environmental Health impact.

If you have any queries regarding this consultation report, please contact me.

Yours Sincerely,

Robert Doyle
Principal Environmental Health Officer
Date: 27th August 2026

National Environmental Health Service Submission Report

(as a Statutory Consultee under the Planning and Development Acts 2000 (as amended) & Regulations made thereunder)

Date:	27 th August 2026
Type of consultation:	Strategic Infrastructure Development (SID)
Planning Reference No.:	EIAR Application 324426
Our Reference No.	EHIS 6150
Applicant:	Greengate Biogas 001 Ltd
Description of Proposed Development:	10 year planning permission for the construction of an Anaerobic Digestive (AD) Facility and ancillary development

Dear Sir/Madam,

Please find below the HSE submission report in relation to the above proposal.

The following HSE departments were made aware of the consultation request for the proposed development on the 16th July 2026:

- HSE South Emergency Management
- National Capital Estates Office
- Director of National Health Protection
- Regional Executive Officer Dublin & South East

1. Introduction

The National Environmental Health Service (NEHS) submission report is based on an assessment of documentation submitted with the planning application, particularly the accompanying EIAR.

All commitments to future actions including mitigation and further testing have been taken as read and all data results have been accepted as accurate. No additional investigations/measurements were undertaken by the NEHS.

This report only comments on Environmental Health impacts of the proposed development as outlined in the EIAR and the adequacy of the EIAR from the Environmental Health viewpoint. The NEHS has made observations and submissions on the following specific environmental health areas.

- Public Consultation and the Non-Technical Summary (NTS)
- Population and Human Health
- Water (Hydrology and Hydrogeology)
- Air Quality and Odour
- Noise

- Lighting and Disturbance
- Cumulative Impacts
- Food Safety and Environmental Compliance

The comments below are not exhaustive but serve to capture key points of the proposed development.

2. Description of the Project and Physical Environment

The applicant has submitted an EIAR on the proposed development of an Anaerobic Digestion Facility (AD) at a site located in Powerstown, Milford, Co. Carlow. If approved the development will transform a former quarry into a modern facility that produces renewable energy and fertiliser products from agricultural materials.

The proposed facility aims to process up to 700,000 tonnes of agricultural residues annually, including cattle and pig slurry, farmyard straw manure, and poultry manure, to produce approximately 250 GWh of biomethane. This renewable gas will be injected into the local gas network, supplying energy equivalent to the heating demand of about 22,700 households. The development will also produce biogenic CO₂ and digestate – a nutrient rich fertiliser.

A new gas pipeline will connect the proposed development to the Gas Networks Ireland grid in Clogrennan, Co. Carlow. Gas Networks Ireland as a Statutory Undertaker will apply separately for consent for the pipeline. A statutory undertaker is any public utility body who performs obligations under statutory powers.

The proposed site is a partially restored sand and gravel quarry known as Mary Kelly's Pit. It is 9 hectares in size and is located in a rural area. The following features are located nearby: closed landfill and operational recycling centre, other quarries, a motorway and local roads, a railway line and the River Barrow Special Area of Conservation.

The site is enclosed by fencing, hedge lines and adjacent site fencing and has two access points from the local road L3045. The existing site is shown in Figure 3. 1 and Figure 3. 2. The site is just south of Junction 9 on the M9 motorway Dublin to Waterford, visible in the figures. Regional road R448 connects the M9 junction to the local road L3045.

The site is still used at a low level as a quarry. It supplies sand and gravel and accepts small amounts of soil for restoration. Activity levels are low, with around 1,000 tonnes of soil brought in each year. It is operated under its planning consent (planning reference PL13/187) and a waste facility permit, both from Carlow County Council

The project is considered Strategic Infrastructure Development (SID) under the Planning and Development Acts 2000–2025, meaning it must be assessed by An Coimisiún Pleanála.

It aims to produce grid-quality biomethane for direct injection into the Gas Network Ireland and produce nutrient-rich fertilisers for customer farms and CO₂ Liquefaction. The Irish Government is committed to supporting delivery of up to 5.7TWh of indigenously produced biomethane by 2030 and the applicant has referred to this goal in the introduction of the EIAR:

<https://www.gov.ie/en/department-of-climate-energy-and-the-environment/publications/national-biomethane-strategy/>

The Proposed Development will require an application for an Industrial Emissions (IE) licence to the EPA in accordance with Class 11.4 (b) of the First Schedule of the EPA Act 1992 as amended.

Required under the European Union (Animal By Products) Regulations 2014, an application for Stage 1 approval was submitted to the Department of Agriculture, Food and the Marine (DAFM) in March 2026. Stage 2 approval will be required at commissioning stage.

As this planning application requires EPA licence and approval from DAFM, the NEHS recommends that permission, if granted, is conditioned that operation of the facility cannot commence until EPA and DAFM approvals are in place.

Powerstown Biogas will return digestate to farmers, and in addition to the abovementioned approvals will install a solar PV (photovoltaic) system.

3. Public Consultation and Non-Technical Summary (NTS)

The EIAR should clearly demonstrate the link between public consultations and how those consultations have influenced the decision-making process in the EIA. It is the experience of the NEHS that early and meaningful public consultation minimises the risk of future complaints from the operation of a development, which is the subject of this application.

Chapter 5 of the EIAR, Scoping and Consultation advises that a public consultation event was held in April 2025. The purpose of this event was to inform the local community about the proposed development and to gather feedback.

A total of 74 people attended the event. Attendees were provided with information about the project and were given the opportunity to raise concerns and ask questions.

The main issues raised by members of the public included:

- Concerns about odour, noise and air quality
- Traffic impacts and road safety
- Potential effects on property values
- Risks associated with fire or explosion
- Impacts on biodiversity and human health

These concerns were carefully considered and have been addressed in the relevant technical chapters of the EIAR. In general, the assessments concluded that, with appropriate mitigation measures in place, no significant adverse effects are expected.

Chapter 7 of the EIAR, Population and Human Health, states that a Community Liaison Officer will be appointed to keep the local community informed of the various stages of the development. The NEHS recommends the dedicated community liaison officer remains in place throughout the construction, operations and decommissioning phases and that they act as a focal point for community feedback or complaints with regard to the proposed development. Issues of most relevance to population health include Noise, Air Quality including Dust and Odour, Traffic and Climate.

The NEHS is satisfied that the NTS provides an adequate description of the proposed project.

Population Health and Human Health

The NEHS has considered Chapter 7 of the EIAR which draws upon findings of other chapters notable:

- Chapter 8 – Air Quality
- Chapter 9 – Climate
- Chapter 10 - Noise and Vibration
- Chapter 6 – Traffic and Transportation

Consideration of Population and Human Health should be done in a proportionate manner that is specific to the proposed development and any likely significant effects the proposal might have on Population Health.

The main consideration for protection Population and Human Health within an Environmental and Public Health remit is a source – pathway- receptor with regard to emissions into the environment during construction and operation of the proposed development.

Particularly:

- Any likely significant effect from exposure to noise during construction and operation
- Any likely significant reduction in air quality during construction, particularly dust and odour emissions
- Protection of ground and surface water during construction activities from contamination with hydrocarbon spillages or sedimentary run off.

It is the opinion of the NEHS that the EIA has identified these areas for assessment, and they are reported in the EIAR.

The NEHS recommends the Planning Authority consider Chapter 7 in the context of recommendations in this submission, i.e. emissions into the environment and exposure of populations to the emissions and an evaluation against recognised health protection standards.

4. Hydrogeology and Hydrology

The impacts of the development during construction and operation on ground and surface water are addressed under Chapter 12 and 13 of the EIAR.

The site is located within the Athy-Bagenalstown Gravels groundwater body, classified as having good status, and within the River Barrow catchment, approximately 300 m from the river and close to several tributary streams. The River Barrow and River Nore SAC lies nearby, making the receiving environment sensitive to changes in water quality.

The site of the proposed development is a former quarry, forming a naturally enclosed basin where water tends to collect rather than flow off site.

The applicant has carried out an assessment of the potential impacts of the proposed development on surface water, hydrology and water quality. This is supported by a site-specific flood risk assessment, a hydraulic capacity assessment, and a Water Framework Directive (WFD) assessment.

The applicant states that storm or rainwater falling on site will be collected in a series of system with multi-stage controls and actively controlled design measures to provide a robust, fail-safe approach to surface water management and to prevent the likelihood of adverse impacts on surface water quality, hydrological regimes, and downstream receptors. It is stated that the site is not located within mapped flood zones and is considered at low risk of flooding from rivers or

the sea and that the drainage system, including a stormwater lagoon, will manage runoff and prevent flooding impacts.

The facility includes a fully segregated drainage system, reuse of water, and no routine discharge to surface waters. A groundwater well provides a source of water on site. Wastewater is collected in tanks and transported off site to a private wastewater treatment plant. A large sealed and covered stormwater lagoon stores rainwater.

A monitoring programme in compliance with the Industrial Emissions licence from the EPA will ensure ongoing protection of water quality, including:

- Continuous water quality monitoring (e.g. pH, turbidity, nutrients)
- Inspection of drainage systems, lagoon and containment measures
- Automated controls to stop discharge if contamination is detected
- Reporting under EPA licence requirements

In addition, the design includes impermeable bunded storage and containment systems, firewater management, drainage isolation. Most mitigation is incorporated directly into the design. The surface water system is designed to prevent pollution pathways, control runoff rates and provide multiple treatment stages;

Key design features include:

- a sealed stormwater lagoon with settlement and storage capacity
- fully separated drainage systems for different water types
- hydrocarbon interceptors and containment systems
- continuous water quality monitoring and automatic controls
- storm water management system
- reuse of excavated materials to minimise waste

The NEHS recommends that the following measures should be undertaken during the construction phase:

- A temporary drainage system will be established complete with oil interceptors and settlement ponds to remove contaminants from run-off, prior to discharge off-site
- Stockpile areas for sands and gravel should be kept to minimum size, well away from storm water drains and gullies leading off-site
- Covers are to be provided over soil and demolition debris stockpiles when high wind and inclement weather are encountered if required
- Storage of harmful materials and stockpiles should not be in close proximity to the adjacent drainage ditch and/or the sinkhole present at the eastern boundary of the site
- Excavations to be backfilled as soon as possible to prevent any infiltration of contaminants to the subsurface and the aquifer/groundwater
- Landscaping should be carried out as soon as possible to minimize weathering and reduce the increased vulnerability in the area surrounding the sinkhole
- Harmful materials such as fuels, oils, greases, paints and hydraulic fluids must be stored in bunded compounds well away from storm water drains and gullies
- That all sewage infrastructure to be installed in accordance with the relevant industry standards and pressure tested/CCTV surveyed prior to commissioning to ensure absence of defects
- Programme of inspection and maintenance to ensure any defects are repaired

- Installation of Sustainable Urban Drainage Systems (SuDS) features such as Sumps in gullies and catchpits collect silts in run-off from roads, filter drains, discharge bypass separator.

If pollution prevention measures are carried out as described in the application, it is the opinion of the NEHS, that this will be adequate protection of surface and ground water.

5. Air Quality and Odour

The impacts of the development during construction and operation, in relation to air quality and odour are addressed under Chapter 8 of the EIAR. The applicant states that an air quality assessment was carried out to determine how the proposed development may affect air quality during construction, operation and decommissioning.

At the time of writing this report, data reviewed on <https://airquality.ie/> shows air quality at the nearby ambient air quality station in Carlow Town is rated as 2 (good) on the Air Quality Index for Health.

A range of standard mitigation measures will be implemented to control dust emissions. These measures are commonly used and proven to be effective.

Construction:

- Regular dampening of surfaces to suppress dust
- Covering of materials during transport
- Use of wheel-washing facilities
- Management of vehicle speeds on-site

Operational:

- Odour Control System (OCS)
- Stack heights which ensure adequate atmospheric dispersion of pollutants from all major emission sources
- Continuous monitoring and compliance with future Industrial Emissions licence conditions (regulated by the EPA)
- Enclosed processing systems

The NEHS recommends if consent for the development is given then the main protection of population and human health during the construction phase is the mitigation measures detailed in the CEMP for Dust should be adhered to in full.

Further examples of good practice to protect public health during the construction phase are:

- Water spraying of exposed earthworks and site haul road during dry weather using mobile bowser units
- Provision of a power washing at the site access road to remove dirt from vehicles prior to exiting the site
- Material drop heights from stockpiles should be minimised
- Control of vehicle speeds
- Fixing potholes and maintaining the roads used for construction within a timely manner
- Vehicles delivering material with dust potential (soil, aggregates) shall be enclosed or covered with tarpaulin at all times to restrict the escape of dust

The most likely impact on air quality is from dust arising during the construction of the proposed development and emissions associated with construction vehicles. The greatest potential effect on air quality during the operational phase of the proposed development is from traffic related air emissions. In order to minimise dust emissions during construction, a series of mitigation measures have been prepared. These follow recommendations and guidance from the EPA (IN2, AG4, AG9), Transport Infrastructure Ireland (TII) (PE-ENV-01106) and Institute of Air Quality Management (IAQM)

Odour

With regard to odour, the applicant states that buildings contain equipment for handling and preparing materials and an odour control system. This operates like a vacuum pulling air out of the buildings all of the time. The doors to the buildings open and close quickly to maintain the vacuum in the buildings. The air sucked out of the buildings is cleaned before being emitted via a chimney stack.

Tanks and pipework used to break down and move organic manures and slurries as part of the anaerobic digestion process are fitted with odour control systems.

All handling of materials takes place inside buildings. Air from these buildings is treated before being released to prevent smells. The discharge of exhaust air will be in compliance with the EPA Industrial Emissions licence.

A photo-oxidation system been determined as the most suitable odour control method for the site, according to the applicant. It uses UV light and controlled oxidation to break down odorous compounds more efficiently.

The NEHS recommends if consent for the development is given that the main protection of population and human health during the operational phase is the mitigation measures detailed in the CEMP for Odour should be adhered to in full.

6. Noise and Vibration

The impacts of the development during construction and operation are addressed under Chapter 10 of the EIAR. An assessment carried out by the applicant, to determine the impacts of noise and vibration from the proposed development, considered nearby noise-sensitive locations, including residential dwellings and commercial properties.

The applicant found that the existing noise environment is dominated by road traffic, with additional contributions from nearby quarry activities, landfill operations and rail traffic.

The applicant states that the construction stage will follow a planned programme and will take place over 24 months. It has further being stated that, during construction, noise will arise from machinery, site activities and construction traffic. General construction works will result in negative, slight and short-term impacts at nearby receptors. Noise levels are predicted to remain below applicable limits for most activities. Localised works associated with the gas connection may temporarily exceed limits at nearby properties. These effects are negative, moderate to significant, but short-term and temporary, typically lasting 1–2 days at any location.

In order to minimise impacts from construction traffic, under the Construction Environmental Management Plan (CEMP), standard best practice mitigation measures will be implemented, including:

- Restriction of working hours
- Use of appropriate and well-maintained plant
- Traffic management measures
- Good site management practices

The NEHS recommend that operating times during the construction phase are limited as follows in order to minimise the impact of noise on residents. It is advised that the applicant should not operate outside these time limits unless absolutely necessary and with prior approval from the Planning Authority:

- Monday to Friday 08:00 – 18:00
- Saturday 09:00 – 13:00
- Sundays and Public Holidays - No noisy operations on site.

Regarding the Construction and Environmental Management Plan (CEMP) (Appendix 3.1), the NEHS is of the opinion that there will be adequate protection of Public and Environmental Health during the construction phase provided that:

- The mitigation and controls are implemented in full
- There is a dedicated person to deal with complaints and liaise with members of the public
- The effectiveness of environmental controls are monitored and reviewed and increased mitigation/corrective action is taken where required.

For the operational phase, noise control through the site layout and building design, including insulation and screening will keep impact from noise emissions to a minimum.

7. Lighting and Disturbance

The NEHS makes no note of reference to artificial lighting in the EIAR but would make the following recommendation in relation to Artificial Lighting.

NEHS would recommend that the applicant should have reference to the Institution of Lighting Professionals, Guidance Note 01/21. The Reduction of Obtrusive Light, in the fitting and operation of any external lighting, to ensure amenity is not adversely impacted at neighbouring dwellings by artificial light. This guidance is available at:

<https://theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2021/>

8. Cumulative Impacts

The applicant advises that surrounding area includes agriculture, quarrying and a closed landfill. However, due to the contained drainage design and controlled discharge, the development will not significantly add to existing pressures.

The NEHS recommends that cumulative risks associated with the managing of local slurry stockpiles should be examined as a potential negative and unintended impact of the facility. In addition, the decommissioning of the facility at the end of its working life should include mitigation measures to protect public health, in particular protection of ground and surface water, air quality and any other emissions to air and soil.

9. Recommendations

The NEHS recommends that if consent for the development is given, the protection of population and human health during the construction and operational phases should be prioritised, with all mitigation measures detailed throughout the EIAR implemented in full.

If you have any queries regarding this submission, the initial contact is Robbie Doyle, Principal Environmental Health Officer who will refer your query to the appropriate person.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'C Moran', is positioned above a horizontal line.

Carmel Moran,
Senior Environmental Health Officer,
Environment Network Support Unit