Rowan



Environmental Impact Assessment Report November 2022 Vol 1 – Non-Technical Summary Silver Hill Foods

Non-Technical Summary

Preface

This document is the Non-Technical Summary (NTS) of the Environmental Impact Assessment Report (EIAR) associated with an application to operate Silver Hill Foods in Emyvale, and planning for the addition of a pet food product processing facility onsite. The EIAR considers the cessation of duck rearing at the facility.

In addition to the presentation of this EIAR under the under an Environmental Protection Agency (EPA) Industrial Emissions (IE) Activity Licence as per the EPA (Industrial Emissions) (Licensing) Regulations 2013, including the proposed developments at the Silver Hill Foods facility in Emyvale, County Monaghan. The EIAR was prepared by Rowan Engineering Consultants Ltd.

Silver Hill Foods

Founded in 1962 by the Steele Family, Silver Hill Foods is a fully integrated premium Duck Producer. All aspects of duck production are owned and controlled by Silver Hill Foods. Silver Hill Foods is located on the N2 Dublin – Derry road on the outskirts of Emyvale village in County Monaghan.

In March 2019 Fane Valley Group acquired Silver Hill Foods. Fane Valley is a progressive agrifood business, based in Northern Ireland and has been Silver Hill's feed nutrition partner for over 20 years. The announcement secured ongoing investment in the development of the existing production site at Emyvale.

The facility operates under an EPA licence, register number P0422-02. The application submitted to the EPA for an IE Activity Licence is due for review in order for the existing plant to comply with the EPA (Industrial Emissions) (Licensing) Regulations 2013 – specific to proposed changes in waste water disposal and site wide factory add-ons, improvements and redevelopment.

The site applied for and was granted planning for the addition of a pet food processing facility by Monaghan County Council in 2021 (Planning ref 21/03). However this decision was appealed to An Bord Pleanála. Since the appeal there have been several changes to the operations at the site and as a result this revised planning application and EIAR have been produced for submission.

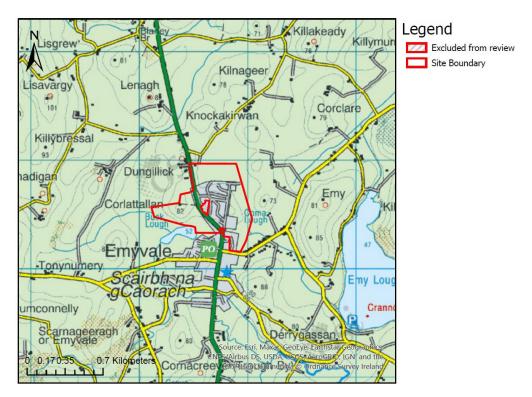


Figure 1. Site Location and Redline Boundary.

Facility Overview

The facility employs approximately 180 people with 130 involved in processing and the remainder involved in administration and services. Normal Operating hours are weekdays from 06:00hrs to 00:30hrs. The site is set over a number of levels with the main processing and facilities area on the higher part of the site.

The processes at Silver Hill Foods are as follows;

- Silver Hill Foods Farm in Emyvale previously raised ducks onsite. Due to changes in
 operations, the site has ceased rearing ducks onsite, has decommissioned the rearing
 facilities, and instead is increasing its capacity to process ducks from 80,000 to 120,000.
 Ducks are reared offsite and brought to the facility to be slaughtered and processed in the
 processing plant.
- Approximately 3.9 million ducks are processed per year, with kills occurring 5 days per week Mon-Fri.
- All parts of the duck are sold. All offal products sent worldwide are transported via transport companies sourced by the Agent involved in getting product to these regions.
- Silverhills wish to divert some of the current offal material to on onsite pet food production facility which this this EIAR assess.

- The feathers are washed at the onsite feather plant and are sorted according to their grade. The feathers are then sold in bulk or made into duvets, cushions, clothing and sold.
- Fats are process to product, and residues is removed by licensed hauliers to an offsite biofuel facility
- Silver Hill Foods have a Waste Water Treatment Plant (WWTP) on site to treat the process
 water liquid waste and process waste water is processed and any resulting sludge is then
 compressed and transported by licenced haulier to a Anaerobic Digestion (AD) facility as
 AD feed stock material for the production of biogas. After treatment the WWTP releases
 the final treated water to the unnamed stream running through the site in accordance with
 the sites IED Licence.
- Silverhill wish to reduce or discontinue from stream discharge and dispose of treated waste water via drip irrigation.

The processes at Silver Hill Foods are as follows;

- Silver Hill Foods employ a number of Contract Growers-and duck suppliers from across Ireland. Currently twenty one Contract Growers supply live ducks to the facility and manage their own duck rearing farms. The Contract Growers are incountry wide, with supply from counties Donegal, Down, Monaghan, Waterford, Cavan, Armagh, Fermanagh and Tyrone.
- Silver Hill Foods Farm in Emyvale had the capacity to rear 96,000 ducks. Currently there
 are no ducks reared on site due operational changes in 2020 from the impact of Covid19
 and risks associated with disease control. The rearing facilities are not in use, nor
 proposed to resume rearing and the buildings have been decommissioned,. The facilities
 are to be repurposed, or demolished.
- When the Ducks have reached an age of 42 days they are delivered to the site, where they may be held on lairage for a short period (0-4 hrs holding time).
- The ducks are then slaughtered in the processing plant and are produced into both cooked and raw duck products. Approximately 75,000 ducks a week or 3.9 million ducks are processed per year, with kills occurring 5 days per week Mon-Fri. Current kill pattern is 3 days a week to align production with sales however the EIAR considers a return to previous levels and a 5-day operation in the upcoming months.
- The feathers are washed at the onsite feather plant (Site 1) and are sorted according to their grade. The feathers are then sold in bulk or made into duvets, cushions, clothing and sold. All waste feathers are sent as Category 3 to Farragh Proteins, Crossdoney, Co. Cavan.
- Manure is no longer produced onsite by rearing sheds.

Proposed Developments

Silver Hill Foods have increased the potential capacity of the operations to increase handling from 75,000 ducks per week to 120,000 ducks per week. The change in operations to cease rearing onsite and focus the business on processing has been undertaken. Onsite decommissioning of duck rearing and associated infrastructure that handled duck slurry etc have already been undertaken. Silverhill have upgraded the WWTP and developed the pilot drip irrigation site under the authority of their EPA licence. In addition, the recommendations from the 2020 Ecological Impact Assessment undertaken for the previous planning application have been implemented onsite with the installation of interceptors at discharge points to the local Unnamed Stream.

This application is for Site Alterations inclusion of additional process; namely

- 1) Redevelopment onsite for the inclusion of an offal processing facility for pet food product production
- 2) Site alterations to include a chiller tunnel for improved efficiency
- 3) Installation of a drip irrigation system for the treated wastewater to phase out the discharge to stream
- 4) Installation of roof top solar panels for delivery of energy onsite as part of Silver Hill Foods sustainability programme.

The proposed site alterations will be phased over a period of 5-17 months. The proposed site alterations include:

- Construction of a part single storey/part two storey factory development incorporating chilling, plucking and processing areas, offices, plant rooms, Lairage and loading and unloading areas, canteen and hygiene facilities and single storey conveyor linkage to existing factory facility
- Single storey skip storage and Plant room
- Construction of 2 no. underground water storage tanks,
- a single storey extension to side of existing storage shed to incorporate an offal processing facility with permission being sought for the change of use of the existing storage shed for use as an offal processing facility,
- Provision of additional car parking facilities, security fencing and access roads,
- Connection to existing on-site mains foul sewer, water, and drainage services,
- Partial removal of existing concrete yard areas and associated structures,
- Installation of solar panels to roofs of structures
- construction of underground attenuation drainage system
- Completion of all associated site structures and ancillary site works including a treated effluent wastewater drip irrigation system encompassing 9 plots of land spread over c15 hectares with a total disposal volume of up to 480m³ per day.

The facility currently discharges treated wastewater from the WWTP into an unnamed stream at the north of the site and in turn into Corlattallan stream. There is a proposed project to install a drip irrigation system in the fields adjacent to the facility as an alternative for discharge of treated effluent. A trial has been successfully completed in one field and reported to the EPA and for approval..

The existing Wastewater Treatment Plant is licensed to discharge 480m³ /day with current flows in the region of 230 m³ /day.

It is anticipated that when the site processes c. 120,000 ducks a week the waste and wash water will increase to 480m³/day. The drip irrigation system is sized to accept current licence flow rates of 480m³/day.

In addition, the faciltiy has agreements in principle for the discharge to sewer of over 230m³/day (at off peak times) to sewer via Irish Water. In addition, there is agreement for 250 m3/ day to be tankered fro discharge to Monaghan County Council WWTP.

The proposed drip irrigation system has a 480 m³/day and can manage the full proposed future effluent volumes. These options gives the site full redundancy in terms of future effluent disposal.

Environmental Impact Assessment

Environmental Impact Assessment (EIA) is the process for anticipating the effects on the environment caused by a proposed development or project at a particular site. The EIAR is the document which reports the results of the EIA work on the facility. This Non-Technical Summary (NTS) provides details on the facility and also summarises the findings of the EIAR.

In initial consultation following an EIAR Screening report submission in 2020, Monaghan County Council determined that an EIAR report was not required for this project. Following an appeal to An Bord Pleanála, their inspector determined that an EIAR was advised for the development. An EAIR was undertaken and submitted to the EPA for the licence reapplication in 2020. For this reapplication, an EIAR has been completed.

The EIAR documents have been divided into the following three volumes for ease:

- Volume 1: NTS;
- Volume 2: Main Report;
- · Volumes 3: Maps and Appendices.

Alternatives Considered

An assessment of alternatives was undertaken at the outset of the proposed Project and is detailed in the EIAR. This included reviewing alternative locations, layouts and processes.

The current proposals included as the proposed Project were deemed the preferred solution, allowing for increased capacity, maximising the use of existing infrastructure, whilst maintaining all plant operations during the construction phase.

Appropriate Assessment

An Appropriate Assessment Report (Stage 1 – AA Screening) as required under Article 6(3) of the EU Habitats Directive has been undertaken by the EPA in relation to this proposed application at Corlattallan – in September 2019 and they concluded the following;

'.......... in accordance with Regulation 42(8)(a) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, that the EPA has made a determination that an Appropriate Assessment is not required as the project, individually or in combination with other plans or projects, is not likely to have a significant effect on a European site. Notification of this determination is attached for your reference'.

The Screening document has been updated for this submission.

Traffic and Transport

This assessment considered the effects on local traffic and transport operations as a result of the proposed Project. A stand-alone Traffic Transport Assessment was undertaken to support the EIA. The has assessment has considered the current movement of vehicles at the site and evaluated a maximum future scenario of 100 HGV per day plus support vehicles to account for a future increase in production capacity.

Impacts during construction would be considered temporary in nature and with the implementation of the project Construction and Environmental Waste Management Plan, any impacts would be considered not significant.

During the continued operation of the facility, the main traffic will continue to be employees, deliveries and finished product loads accessing and egressing the facility. The traffic report concluded that the N2 is already currently operating well within capacity at this location and the impact of the facility continuing to operate, even at increased throughputs, is not considered significant.

No specific mitigation measures are required with respect to traffic and transport. However, this may not be a long-term consideration pending the progression of the N2 upgrade. The new road would ultimately reduce the passing traffic outside the facility and so the proportional contribution would likely increase from the site, but the capacity of the road has been modelled well into the future and is sufficient.

Noise and Vibration

This assessment considered the noise and vibration impacts associated with the construction and operation of the proposed Project. Noise limits to which the facility currently operates in line with are detailed in the EPA IE Licence.

There are 4 noise sensitive locations close to the Silver Hill Foods, the closest is a dwelling 130m northwest of the facility, the remaining three are 315m,430m and 320m away respectively.

The impact on the noise environment due to construction activities will be temporary and significant impacts at noise sensitive locations are not expected. Notwithstanding this, good

practise measures will be implemented to minimise any potential impacts from construction activities on the noise environment. The most likely potential vibration effects associated with the proposed Project would be associated with the construction phase hence, an allowable vibration limit has been recommended during the construction phase to minimise the risk of building damage.

The assessment concluded that during the operational phase additional buildings and plant which would be present as a result of the proposed Project would operate and be monitored in accordance with the current noise limits detailed in the EPA IE Licence. It is considered that the existing development and the proposed development combined will not give rise to any significant levels of vibration in the receiving environment. Best practice best practise measures shall continue to be implemented on site in relation to noise emissions. There is a very low likelihood of operational vibration impacts from the proposed Project on account of the nature of the proposed plant/equipment.

Traffic generated noise during both the construction and operational phases was also considered. The levels of additional traffic generated will be low and, on this basis, any impacts would be considered imperceptible. Traffic management measures will be implemented during the construction phases to mitigate for any impacts.

Soils and Geology

This assessment considered the potential impacts on soils and geology resulting from the proposed Project. The site is located within the north west drumlin belt and the soils in the area are classified as wet mineral and organic soils, the presoils are grey brown podzolics with parent material of limestone with a small proportion of granite whilst the dominant sediment type close to the site is glacial till derived from sandstones, siltstone and mudstones and the bedrock being described of mostly Carrickaness Sandstone Formation with a small southern section of the site consisting of Maydown Limestone. The subsoils are shown in the figure below.

No contaminated land was previously identified at the site during previous construction works or operations.

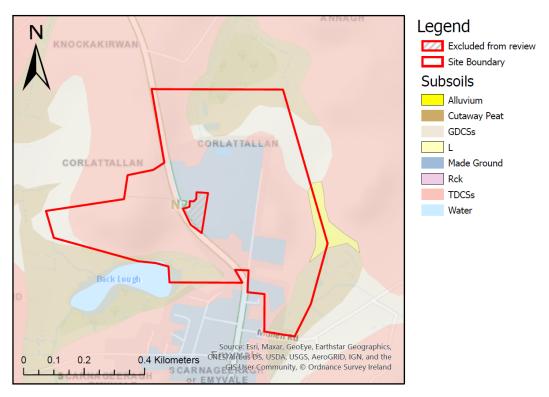


Figure 2 Subsoils at and in the vicinity of the facility from Geological Survey of Ireland.

Impacts to soils and geology during construction would relate to the loss of soil cover and potential contamination of soils due to spillages. With appropriate controls in place, impacts during the construction phase were considered to be temporary and not significant.

A drip irrigation system has been proposed under the licence review for dispersing treated effluent on c 10 plots on a total area of c16ha area around the facility. An initial assessment deemed the soils acceptable for such a system and a further hydrogeological survey by Geosyntec concluded it is expected that the indirect discharge of effluent from the proposed drip irrigation system will be compliant with the Groundwater Regulations. Monitoring of the groundwater quality, as per the current licence, will be necessary for monitoring the operation of the drip irrigation system.

The facility currently operates in adherence to an EPA IE Licence and appropriate Environmental Management principals are inherent in the operation of the site. With the current implementation of housekeeping measures and an Emergency Response Procedure, it was considered that any potential impact during the operational phase of the proposed Project from spills and/or leaks was not significant.

Hydrology (Flood Risk), Surface Water and Hydrogeology

This assessment considered impacts on the surface water and groundwater environment. The site has two drainage systems – surface water and foul sewer (as described in section above). The surface water system has a number of discharge locations; SW1 drains the main process area and SW2 drains the Pet Food Plant and Environmental Management area via interceptors

and attenuation tanks to the local unnamed stream, while SW3 drains the low grow houses area via a swale, attenuation tank, silt trap and the discharge to stream that links to Emy Lough. The EPA IE Licence outlines monitoring and management requirements, that the facility operates in line with for both of these waterbodies.

A Flood Risk Assessment (FRA) was undertaken in line with guidance and confirmed that the proposed Project does not fall within any flood extents for river and surface water flooding.

A Construction Environmental and Waste Management Plan (CEWMP) will be implemented during the construction phase of the proposed Project. This CEWMP will set out appropriate measures in relation to preventing the pollution of surface and groundwaters during construction. The measures will include preventing surface water run off to discharge into the Corlattalan stream, spill and leak procedures, appropriate storage of fuels and chemicals and managing the refuelling of plant and equipment. Any potential impacts were considered temporary and not significant.

The facility will be operated in compliance with any future EPA IE Licence conditions which may be imposed specially around the drip irrigation system. The proposed Project will operate in line with the EPA IE Licence, current housekeeping practises and appropriate environmental management principals. The facility will continue to adhere to emission limits and monitoring requirements set out in the EPA IE Licence for discharges to the Unnamed Stream and Corlattalan Stream and Emy lough. Any potential impacts during the operational phase of the proposed Project were considered not significant.

Air Quality and Climate

This assessment considered the potential air emissions including odours that are generated by the proposed Project and the impact that these would have on the surrounding environment.

The air quality in the area of the proposed Project is described by the EPA as Zone D, Rural Ireland. Taking into account the facility's predominantly rural location and being within a Zone D, the air quality would be expected to be good for all air quality related pollutants.

With the implementation of appropriate dust control measures, the construction phase of the proposed Project is not predicted to have any significant effects.

In addition to air emissions the EIAR also considers EPA's concerns related to potential odour emissions from the proposed Pet Food plant a preliminary odour dispersion modelling assessment was conducted. Cooking odours have distinct characteristics and so the dispersion modelling addressed the Pet Food plant and Duck meat cookers in isolation from the rest of the facility. The modelling showed these complied with the odour exposure criterion.

Environmental and site maintenance programmes will continue to be implemented to assist in minimising/avoiding any odour emissions from the facility. Specifically, an Odour Management Plan is maintained as pre EPA licence requirements and regular inspections will continue to be undertaken to monitor and control against any impact from odour.

The facility will continue to generate air emissions and there is an associated impact on climate. However, whilst this is a long-term impact, it is considered not significant- in the overall scale of Ireland's annual emissions.

Landscape and Visual

The assessment consisted of 2 main parts:

- · Impacts on the landscape surrounding the facility; and
- · Assessment of specific views and visual amenity.

Generally the sensitivity of the landscape area around the facility is considered low, given that no structures, ruins, protected views or tourist sites are present in the vicinity. On this basis, the landscape has the capacity for change from development.

The landcover and land use that the facility is situated within is largely agricultural land, there are sensitive land uses with conservation associated value at the stand of forestry north of the slurry lagoon.

The Monaghan County Development Plan 2019-2025 indicates that the facility location on the outskirts of Emyvale is in lands not zoned for specific uses within the village plans in order to provide for a less restrictive approach to the suitable expansion and growth of the villages.

There were no high amenity area, protected views, tree preservations orders or designated walkways or cycleways in the immediate vicinity of the proposed Project.

Overall, the impacts of the construction phase on both the landscape and surrounding views were considered to be temporary and not significant. Mitigation measures that are to be considered include finish and cladding on proposed site expansion to be consistent with current buildings as per council requirements, any lost tree screening to be replaced after construction and lighting to be minimised during darkness.

Once operational, the overall changes from the proposed Project would not result in significant changes to the landscape.

In terms of views, for many of the surrounding residences, taking into account the distance from the facility, the established nature of the facility in the environment and the limited views due to existing screening, the significance of any impact would be considered imperceptible (not significant). given the distance to and limited scale of the proposed Project and that existing views are already limited due to vegetation and topography, the impacts were considered not significant.

Biodiversity

This assessment considered habitats and species and the likely impacts that would arise from the operation of the facility on these.

An Appropriate Assessment Report (Stage 1 – AA Screening) as required under Article 6(3) of the EU Habitats Directive has been undertaken by the EPA in relation to this proposed application at Corlattallan – in September 2019 and they concluded the following;

'.......... in accordance with Regulation 42(8)(a) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, that the EPA has made a determination that an Appropriate Assessment is not required as the project, individually or in combination with other plans or projects, is not likely to have a significant effect on a European site. Notification of this determination is attached for your reference'.

There is a limited range of habitats within the application site where buildings works will occur and most of these are highly modified and are of low biodiversity value. The proposed location of the drip irrigation system will be confined to improved agricultural grassland.

The site was inspected and an Ecological Impact Assessment was undertaken by an ecologist in 2020. A further site walkover and confirmation of the habitats and species was undertaken in 2022

With the recommended mitigation measures during site preparation and construction, it can be concluded that the proposed development at Silver Hills Foods in Corlattallan, Emyvale, Co. Monaghan will have a neutral impact upon locally areas of biodiversity value. Signficvantly reducing the WWTP discharge into the Corlattallan Stream and the recent provision of silt and oil interceptors for surface water run-off into the stream will have a positive effect. With the continued operation of the facility, discharges to the Corlattalan Stream from the WWTP and surface water runoff will continue and will be undertaken and monitored in adherence to a future EPA IE Licence.

The discontinuation of duck rearing onsite means that no slurry is produced at the facility. The dewatering of sludge generated at the site from the WWTP and removal to an Anaerobic Digestor facility or the production of biogas will also have a net positive impact, in comparison to the previous landspread and Nutrient Management Plan (NMP).

Population and Human Health

This assessment considered the effects on human beings in relation to population, economic and human health impacts.

The closest significant settlement to the facility is Emyvale, c. 0.75km to the south. The site encompasses approximately 4.9 hectares and is accessed by the N2 national secondary road between Dublin and Derry.

With the implementation of appropriate controls measures during the construction phase, dust, construction traffic and noise were not predicted to have significant effects on the local populations. Some benefits to the local economy can be expected with increased spend by construction staff on the likes of food and fuel in the local area.

With its continued operation, it was considered that the facility is supportive of the local economy, allowing the facility to utilise available capacity, with continued operation using established infrastructure and within an existing and developed site boundary. It provides continued opportunity and security to service the local agriculture and food sectors.

Cultural Heritage

This assessment considered the potential effects on archaeological, architectural and cultural heritage.

No records were found for heritage assets within the boundary of the facility. or in the direct vicinity. The closest records are for three raths (ringforts) located within c. 1000m of the plant. These are described as complete circular enclosures defined by field banks and circular grass and scrub covered areas.

The proposed Project is being developed within the existing facility boundary, in an area that has been previously constructed on and developed. Any potential to encounter archaeology during excavation works at the facility was considered to be low. In the event of coming upon anything, appropriate controls will be implemented including stopping the works and liaising with an archaeologist.

Once the proposed Project is operational, there will be no impacts on archaeological, architectural and cultural heritage assets.

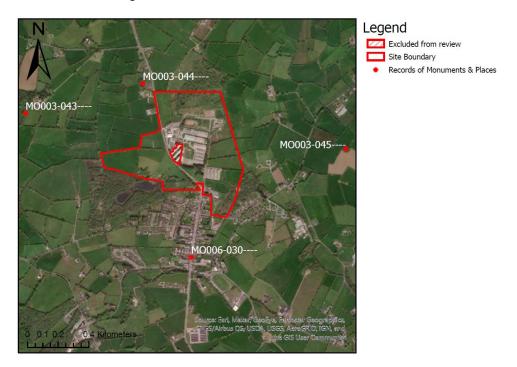


Figure 3. Location of raths within 1000m of the site.

Waste Management

This assessment considered the impact of waste generation and management resulting from the construction of the proposed Project and ongoing operation of the facility.



Figure 1: Waste Management Hierarchy, (EPA website, November 2018)

Currently waste at Silver Hill Foods is being proactively managed.

Silver Hill Foods are committed to continuous environmental improvement which in relation to waste management, means a clean as you go policy, implementation of the waste management hierarchy and segregation of resulting waste streams for disposal, recycling or recovery.

The Waste Management Hierarchy is followed as far as is practicable. All waste streams are managed in accordance with relevant waste management legislation and waste management documentation retained on site and managed by the Environmental Manager at the facility.

The facility is focused on reduction and reuse. The addition of a pet food raw product production facility onsite is proposed to reduce the amount of offal and carcass waste that was previously processed elsewhere. The additional unit within the existing site will reduce outgoing waste.

Processes which give rise to waste are examined with a view to preventing or eliminating wastes where possible. Where this is not possible, the possibility of re-use is investigated and after that the waste is sent for treatment by recycling or recovery. Only minimal volumes of waste which cannot be prevented, or for which recovery or recycling is not feasible, are disposed of to landfill.

The process reuses much of the duck product. Feathers are reprocessed offsite, fats are sent to a processing facility for conversion of biofuel. The WWTP sludge is now sent to an anaerobic digestor facility (via registered haulier) for feed stock material for biogas production. The addition of pet food product production facilities further reduces waste from the site as a new product.

In relation to the operation of the facility, all waste management procedures, including the drip irrigation and waste reduction, will continue to be implemented. Any impacts were therefore, considered not significant.

Material Assets

This assessment considered the potential effects of the facility on relevant material assets. The material assets considered as part of the assessment were the major utilities associated with the facility. These are surface water, effluent, electricity, potable water, gas and telecommunications.

No operational changes are proposed in relation to electricity, mains water, telecommunications and the effluent line and on this basis, there are no associated impacts.

There is potential for temporary impacts to some of the utilities during the construction phase. This impact may occur if there is a need to temporarily shut off a utility to facilitate a connection during the construction work. During the operational phase there would be no impact on utilities.

Cumulative Impacts and Interactions

This assessment consisted of 2 main parts:

- Considering the interaction between environmental aspects i.e. how an increase in traffic may impact on air quality; and
- Assessment of the potential for a cumulative impact arising from the facility in association with another project.
- Assessment of the associated facilities and potential cumulative impacts on environmental aspects.

In terms of considering the interactions between the environmental aspects, potential interactions were identified and each of these was assessed within the respective environmental chapters.

In relation to the cumulative assessment, the potential impact from works associated with the planned works on the N2 which will bypass Emyvale and reduce the traffic passing the site were considered.

No additional measures to those that are currently implemented at the facility and identified in the EIAR were found to be necessary.

The An Bord Pleanála Inspector on the previous application raised concern of potential cumulative impacts from associated facilities. Associated facilities are not part of the facility in the EIAR but are existing and required for the facility to operate. In this case the associated facilities include the contract duck growers that supply the facility from across the country. An assessment of the potential cumulative impacts of the supply farms showed no significant clusters of supplies in any area and non within protected areas

As a results no cumulative impacts were identified and no further mitigation measures were required.