



Map showing the Vulnerability Rating for the Aquifer. The Vulnerability Rating is shown as being High. Proposed customer farmlands

**Legend**

- Groundwater Vulnerability**
- X - Rock at or near surface or Karst
  - E - Extreme
  - H - High
  - M - Moderate
  - L - Low
- OSI Basemap



### **Proposed customer farmlands**

Because the customer farms are spread out over a larger area than the facility site area the topographical features and the overall geology will have a wider variety and will be deemed to be beyond the scope and requirement of this E.I.A.R.

Due to the nature of the activities to be carried out on these customer farms, i.e. the application of organic fertilisers (produced on farm, supplied from this pig farm and/or other sources of organic fertiliser) and inorganic fertilisers from the local co-op, these farms will be governed from the requirements of the Nitrates Directive, ie. the requirement not to spread on steep slopes where there is a potential increased risk of pollution, the requirement not to spread on steep slopes where there is a potential increased risk of pollution, the requirement not to spread on or within 15m of exposed bedrock and/or other vulnerable features, not to apply excess fertilisers etc.

### **Ground Water**

#### **Site and Surrounding Area**

Groundwater can be defined as water that is stored in, or moves through, pores, cracks and/or other fissures in the underlying soil/sub-soil material. These features also affect the potential water yield from an area. The bulk of the water supplies in Co. Waterford are derived from both Public and Group Water Schemes. Details of these schemes as detailed in the County Development Plan, the following map indicates known groundwater wells and springs in the area of the application site, there are not any located near to the site.

The main feature protecting the quality of groundwater is the overlying soil/sub-soil material. The groundwater adjacent to the site is overlain by a considerable depth of overburden. According to G.S.I. records, the aquifer classification of the site is referred to as Locally Important Aquifer. The aquifer vulnerability for the area of the farm is classed as High.

As can be seen from the soil profile for the area concerned, any groundwater sources in the area are afforded considerable protection due to the depth of overburden, nature of the soils and their associated characteristics. The applicant has not encountered rock as part of the site works associated with the existing development.

The proposed development site is also located outside of any designated source protection zones as detailed in G.S.I. maps.

#### **Proposed Customer Farmlands**

Soils are the basic resource for the production of commercial food crops and rearing of livestock. In order to achieve the required crop/animal yield from soils additional fertiliser from this farm is to be allocated for use in accordance with S.I. 31 of 2014, the groundwater resources in the relevant areas will be afforded the required protection.

## Surface Water

### **Site and Surrounding Area**

The pig farm site is located in mid Co. Waterford and the site is drained to Dungarvan Harbour. The position of the application site means there is no potential flood risk in this area.

The applicant implements a continuous surface water inspection programme in line with the E.P.A. License requirements. This includes regular monitoring and sampling of surface water discharge at the inspection points, as detailed hereafter.

### **Customer Farmlands**

Soils are the basic resource for the production of commercial food crops and rearing of livestock. In order to achieve the required crop/animal yield from soils additional fertiliser such as the organic fertiliser from this farm must be applied. This organic fertiliser will replace imported chemical fertiliser that would otherwise have to be used. As all fertiliser from this farm is to be allocated for use in accordance with S.I. 31 of 2014, the surface water resources in the relevant areas will be afforded the required protection.

## Air

Odour associated with pig farming enterprises may arise from two situations:

- The pig farm
- The manure spreading operation

The pig farm is located in an entirely agricultural area where typical levels of farm odour are to be found and expected. This odour arises from farmyards and lands during the day to day operations such as silage feeding, manure agitation and manure spreading. The existing farm, using the best available practices, is already operating without a significant effect on the environment, as detailed in the accompanying N.I.S., and will continue to strive to minimise all environmental impacts. Well maintained, properly ventilated, slatted floor, pig farms are practically odour free.

There are no residential locations closer than 200m from the farm enterprise. This pig farm is operating in a sparsely populated rural environment and hence the pig farm causes no nuisance. The existing hedgerows and landscaping help to screen the pig farm view.

Ballyharrahan Pig Farm advises all farmers receiving organic fertiliser from this farm that the low trajectory splash-plate method of spreading should be used and that adherence to the Teagasc Codes of Good Practice and S.I. 31 of 2014 will help them maintain a good working relationship with their neighbours. The application of organic fertiliser in accordance with S.I. 31 of 2014 will ensure that excessive application of manure, which may lead to extra odour from surface soil saturation, will be avoided.



### Climate

Climate information is useful for predicting the likely impacts that the farm operation and the application of manure in the area will have upon the residents. Rainfall in the area of the pig farm and customer farmlands averages annually c. 1,207mm, (30 year average for Cork Airport Weather Station)

### Visual Aspects and Landscape

The pig farm is located on C. 2.368 hectares of agricultural land in the town land of Ballyharrahan. This area is identified as an area of high sensitivity in the landscape classification contained in the Waterford County Development Plan 2011 - 2017.

### Noise Levels

Noise levels are measured in decibels and a weighting factor (A) is applied to approximate the frequency response of the human ear. This weighted decibel scale, Db (A), correlates well with human sensations of loudness, disturbance and annoyance. Background noise levels in rural areas of Ireland are in the 45-50 Db (A) range. The peak noise periods on pig farms are at feeding times, however, a large number of the animals are automatically fed thus minimising potential noise. This farm has a state of the art feeding system and buildings with a high level of insulation. Due to its remote location and low population density in the area, this pig farm does not create any disturbance or annoyance to anyone.

### Traffic

The farm is located on C. 2.368 Hectares in the townland of Ballyharrahan. The site is accessed from the public local road. The site is located, C. 4km's south of Dungarvan town and is accessed by C. 90m of internal laneway leading from the Local roadway terminating at the pig farm.

There is adequate on-site space provided to ensure that the turning movements of all vehicles associated with the farm can be facilitated. Sufficient parking has been afforded on-site for all vehicles associated with the farm.

Traffic associated with the farm is due to:

- Feed deliveries to the site (C. 4 loads per week)
- The transport of organic fertiliser/manure from the farm (c. 10 loads per week in the spreading season, i.e. 37 weeks) and,
- The transport of pigs from the farm (c. 2 loads per week) and materials to and from the farm.
- Ancillary traffic such as vets, advisors, staff, waste collection etc.



## **Biodiversity**

### **Site and Immediate Area**

As previously stated the farm exists at this location for over 50 years. The lands directly adjoining the site of the existing farm are open agricultural lands. The majority of the lands in the surrounding area are and have been used for agricultural production for a long number of years. The Biodiversity associated with this site has developed accordingly as the site has developed over the years from grassland to pig farm.

There are no specific unique habitats or biodiversity on this site that require specific protection. The accompanying N.I.S., deals with the designated sites within the proximity of the pig farm site. Any likely effects by the pig farm site are dealt with separately in the N.I.S.

### **Customer Farmlands**

The customer farmland is all agricultural land. As governed by the Nitrates Directive, organic fertiliser from this pig farm can only be applied to agricultural lands where a crop response, be it grassland / tillage / maize etc, is anticipated. The total land for receipt of organic fertiliser from this farm is used for grassland (grazing or cut for silage) and / or tillage production. Traditionally animal manure has been applied to these lands as a source of fertiliser and to replace energy inefficient inorganic fertiliser.

### **Special Policy Areas**

To provide protection to heritage items Special Policy Areas have been designated. These areas relate to areas of important heritage items worthy of protection and conservation. Within the special policy area it is the policy of the Planning Authorities to regulate and restrict any development that may threaten the value or integrity of the asset. Development proposals which would have an unacceptable impact on objects, items or sites included in the above lists will not be allowed. Where development is allowed, the Planning Authority may include conditions to reduce or ameliorate adverse impacts.

These special policy areas include:

- **Nationally Designated Environmental Areas**

Natural Heritage Areas (N.H.A.'s). The basic designation for wildlife is the Natural Heritage Area. This is an area considered important for the habitats present or which holds species of plants and animals whose habitats need protection.

The attached N.I.S., deals with any potential effects on N.H.A.'s local to the subject site.

- **Special Protection Areas (S.P.A.'s)**

The attached N.I.S., deals with any potential effects on S.P.A.'s local to the subject site.

- **Special Areas of Conservation (S.A.C's)**

Special areas of conservation are prime wildlife conservation areas considered to be important on a European level as well as an Irish level. The legal basis on which Special Areas of Conservation are selected and designated is the EU Habitats Directive (92/43/EEC) transposed into Irish Law in the European Union (Natural Habitats) Regulations 1997. These regulations have been amended twice with SI 233/1998 and SI 378/2005.

The attached N.I.S., deals with any potential effects on S.A.C's local to the subject site.

- **Amenity Areas**

The existing pig farm site is not located near any designated amenity areas.

- **Cultural Heritage (Architectural and Archaeological Features)**

There are no buildings or structures of archaeological significance located on or adjacent to the existing site or likely being impacted by the site. There is no evidence of any archaeological features on the site.

### Population

The population of County Waterford grew from 56,952 in 2002 to 62,213 people in 2006, representing a 9.2% increase in population. The population of Waterford City and Environs grew by 2,477 people within this period. However, while this rate of growth was less than the average for larger urban areas across the region, significant population increases were recorded in towns and rural areas surrounding Waterford City.

Dungarvan and Tramore experienced population increases during the last census period, up 8.2% and 13.3% respectively. Notably the environs of those settlements along with the environs of Clonmel and Waterford City have experienced the most significant population increases within the County. In general, there has been strong growth in the populations of Electoral Divisions (EDs) within easy commuting distance of the larger urban sectors.

Of the larger urban centers of the county, Dunmore East experienced a decline in population during the last census period. This represents a reduction from the 22.4% growth rate experienced in the 1996 – 2002 inter-censal period and can be attributed to the proliferation of holiday homes in the area that were vacant on the date of the 2006 census.

Parts of the county experiencing significant new development continue to increase their population, e.g. Portlawn, Lismore, Tallow and Ballinroad whilst several of the smaller settlements like Cappoquin, Ardmore, Lemybrien and Aglish experienced population decline. County Waterford is rural in character with almost 55% of the population living in the greater rural areas. The rural EDs in the northwest of the county experienced marginal population decrease although in most other cases the rural EDs experienced an increase in population.



The settlement strategy for the county has always been to encourage the growth of the county's towns and villages whilst catering for genuine housing needs in the rural countryside. The Waterford County Development Plan 1999 saw the identification of 34 No. settlements. This was expanded to 51 No. settlements in the 2005 County Development Plan to focus on developing the critical mass of the towns and villages and to optimise the investment in infrastructure and to alleviate the pressure for rural housing.

The development plan guidelines issued by the DoEHL in 2007 required that local authorities match the area of land zoned to the projected housing land requirement thereby avoiding the over provision of zoned lands and the resultant pressure on infrastructure, potential leap-frogging of undeveloped lands and pressure for development in un-serviced areas. The under provision of land was also to be avoided in un-serviced areas to discourage artificially inflated property prices. In addition, to setting population targets for the county, the regional planning guidelines 2010 also identified the principle settlement issues for the Waterford County sub-regional areas. The county settlement strategy as set out in the plan acknowledges Dungarvan as the County Town but supports the development of Tramore and strengthens other large towns and villages where there infrastructural capacities and social and community facilities.

Sustainable rural development and a maintenance of communities in the rural area is also support through a rural settlement strategy that focuses on meeting the housing needs of existing communities whilst protecting sensitive landscape areas.

### **Settlement Hierarchy**

The fundamental component of the county settlement strategy is to continue to encourage population growth in settlements throughout the county. This strategy helps to deliver a range of houses, facilities, infrastructure, amenities and helps to establish a transport system. This in turn, will facilitate linkages between settlements, support their expansion and consolidation and in so doing help to create high quality living environments and ultimately take pressure from the rural areas of otherwise needless housing. The strategy will provide for the creation of a settlement hierarchy reflecting the development role of each settlement type and assists the local authority in formulating realistic objectives that can be delivered through the policies of the plan.

In total, 39 No. settlements are identified in the Development Plan which have been or can be serviced and considered best positioned geographically and from a socially, economic and community perspective to ensure balanced county development.

Dungarvan is designated as the County Town in the National Spatial Strategy. The regional planning guidelines recognise the pivotal role that Dungarvan can play in the development of the Atlantic gateway corridor between Cork and Waterford. In terms of functions, Dungarvan has other service roles including education, tourism, financial and retail for a large hinterland that includes An Rinn Gealtacht and surrounds which includes the area of the facility site. Thus, reducing the pressure on the surrounding land areas for the provision of settlements. From an employment perspective, Dungarvan continues to be an important contributor to the county's economy of which the subject facility site makes its own contribution.

### **Material Assets**

Resources that are valued and that are intrinsic to specific places are called "material assets". They may be of either human or natural origin and the value may arise for either economic or cultural reasons.

The assessment objectives vary considerably according to the type of assets, those for economic assets being concerned primarily with ensuring equitable and sustainable use of resources. Assessments of cultural assets are more typically concerned with securing the integrity and continuity of both the asset and its necessary context.

Material assets that may potentially be affected by the proposed development include:

#### **Material Assets: Agricultural Properties including all agricultural enterprises\_**

The existing pig farming site is in a predominantly agricultural area and this site has been in existence at this location for over 50 years and has planning permission from Waterford County Council. The site is surrounded by agricultural farmland and does not interact with any other farmland outside of the confines of the site except for the production of a valuable organic fertiliser which may be utilised by farmers as a replacement for chemical fertiliser.

#### **Material Assets: Non-agricultural Properties including residential, commercial, recreational and other lands.**

The existing farm has been established at this site for over 50 years and as such has a longstanding history and being surrounded by agricultural lands and is located well away from any built up areas and settlement nodes. There are no residential dwellings closer than 200m of the subject site.

#### **Material Assets: Natural or other resources including mineral resources, land and energy.**

The existing farm does not require any additional lands as it is an existing farm entity in its own right having its own site with its own existing structures.

The operation of the farm does not require any additional feed (classified as a renewable resource) energy or water over and above the established usage quantities. The applicant operates modern feeding, and ventilation systems to minimise same.

The farm does not require any modifications to the existing electricity supplies, water or road infrastructure in the area.

### **Tourism**

Ballyharrahan Pig Farm is very aware of the beneficial impact that tourism is having on the local economy of the County Waterford area, and indeed the consumption of the final product of their production.



Sustainable tourism provides for a high quality competitive tourism product based on an in harmony with a high quality natural environment. Many of the top visitor attractions in the county such as Mahon Falls, Nire Valley, the River Blackwater, the coastline and associated beaches owe their attraction to their spectacular beauty and setting. It is important to enhance these areas for their continued development in the tourism industry while at the same time protecting and conserving the qualities that make these areas attractive in the first instance. Waterford City and County Council promote a sustainable approach to the development of the tourism sector while protecting the built and cultural heritage which forms the resources of which the county's tourism industry is built upon.

Through proper managed and maintained operation, the subject site facility and use of it's by products can only enhance the surrounding areas through the use of its by products in lieu of imported chemicals.

Waterford City and County Council seek to ensure that most tourism development with associated accommodation facilities are located in or close to towns or villages or on tourism zoned lands thus ensuring that the development of tourism in the county will not interfere with the subject facility site or vice versa.

### **Cumulative Effects**

County Waterford does not have as intensive an agriculture sector as other counties such as Cork and farming in the county is based more around the traditional enterprises such as tillage, dairy and beef. Given the nature of the land in this area, a significant proportion of the land in Waterford is given over to forestry and mountain. The pig farming sector in Waterford is concentrated in a small number of specialised farms.

This pig farm is located in mid/west County Waterford. Reference to the National Pig Census 2013 indicated that there are only C. 14 pig farms with greater than 100 pigs in the county, out of a total of 383 for the country. Thus pig production in County Waterford represents C. 3.66% of the country's pig units.

It is anticipated that the proposed development at this site will not lead to a negative cumulative impact on the local environment due to:

- The low level of intensive farming in the country as a whole
- The mitigation measures proposed, and,
- The fact that there will be no intensification of activity and/or increase in the volume of organic fertiliser over and above that produced currently for this farm.

This farm is in keeping with the goals of the National Spacial Strategy which seeks to achieve more balanced regional development to optimise the potential of all regions to contribute to the continuing prosperity of the country.

This farm has been operating successfully for over 50 years and has a strong history of supplying local farmers with an important source of organic fertiliser.

There is a significant demand in the local area for organic fertiliser to replenish the nutrients and organic matter, which have been removed by the crops and grassland farming activities so as to ensure efficient, sustainable and environmentally friendly agriculture. As previously detailed all transfers of organic fertiliser to customer farmers are to be carefully controlled, recorded and documented and notified to the Department of Agriculture, Food and The Marine as the regulatory authority in line with the requirements of S.I. 31 of 2014.

### **The Site within the county**

The site of the existing pig farm development is located in rural County Waterford. Intensive agricultural enterprises have not developed in County Waterford to the same extent as other counties such as Cork, Cavan and Monaghan. The pig industry is a specialised farming activity with well established practices in place for the transport of pig manure to farmers in surrounding lands, and the extent of the requirement for the pig manure produced on the farm is be a significant competitive advantage to the enterprise.

Given the reduction in employment in other sectors of the economy, productive, efficient and sustainable agricultural activities, such as the existing facility and the jobs dependent thereon and such like enterprises are critical to the Irish economy.

### **The Site within the Local Area**

It has been demonstrated that the site has little or no adverse cumulative impact within the county.

The enterprise has established its use over time since its set up at the site in 1965. A number of measures have been provided for so as to mitigate against any adverse cumulative impact. This in conjunction with the experience gained to date in managing the farm along with any requirements placed on the site by the E.P.A. as a result of the E.P.A. License. Conditions will ensure that this enterprise has no adverse environmental impact on the immediate area.



## DESCRIPTION OF IMPACTS AND MITIGATION MEASURES

### Soil and Subsoil Geology

#### **Site and Immediate Area**

There is no proposed works as part of this application, all works are existing and as the farm has been established with so long it has no significant effect on the soil in the area, given the nature of the farm the activity has no adverse impact outside of the site boundary. Thus there are no specific mitigation measures that can be carried out or are deemed to be required. There are no habitats, biodiversity, protected sites or other notable sensitive features within the boundary of the site that are deemed to require special protection.

#### **Customer Farmlands**

The customer farmland areas are also established in their rural practices of grass and crop production. They are environmentally safe for the application of organic fertilisers at the levels permitted by and in accordance with the requirements of S.I. 31 of 2014.

All fertiliser from this pig farm is being allocated for use in accordance with S.I. 31 of 2014. All areas that are environmentally sensitive as detailed in S.I. 31 of 2014, will be removed or an adequate buffer zone applied to them. The principle impacts on the soil arise from:

- Hydraulic Loading
- Chemical Loading
- Soil Structure Damage

In relation to hydraulic loading, the maximum rate of application proposed at present is C.40m<sup>3</sup>/hectare. This rate is minimal in relation to the permeability and infiltration capacity of the soils, which is also more than adequate to percolate the most intensive rainfalls. It is anticipated that there will be no surface run-off due to the omission of steeply sloping lands and strict adherence to the spreading zones and application rates, ground and weather conditions at the times of application.

In relation to chemical loading of the soils, this farm is promoting nutrient substitution rather than addition. The organic fertiliser from this farm will satisfy the growth requirements of the grassland and other crops. It will also be advised that the application of organic fertiliser to farmland should not occur;

- In the period 15<sup>th</sup> Oct – 12<sup>th</sup> January (Waterford) or other such dates as specified in S.I. 31 of 2014.
- When soils are waterlogged and the ground conditions are unsuitable.

## Ground Water

### Site and Immediate Area

As previously stated, groundwater at or adjacent to the site is overlain by a considerable depth of low permeability overburden. According to G.S.I. records the aquifer classification of the site is referred to as Locally Important Aquifer, (LI), with aquifer vulnerability for the area of the existing farm classed as High.

The main potential threat to ground water in the vicinity of the pig farm site is due to the storage of a relatively large volume of animal measures on the farm. In order to ensure that the proposed development does not impact on the groundwater adjacent to the pig farm site the following measures have been or will be implemented.

- The proposed structures have been constructed to either, Department of Agriculture, Food and The Marine standards, or best building standards for the construction of farm buildings.
- The provision of a substantial amount of excess slurry storage capacity. (36 weeks storage capacity) this is above the 6 month minimum requirement and will ensure that organic fertiliser is managed to the highest possible standard on the pig farm site.
- Collection of all soiled water in manure storage tanks.
- All buildings and storage facilities are constructed on a sloping site and thus well above and away from any potential risk of flooding.
- Movement of animals on slatted passageway with manure storage tank underneath.
- The provision of a collection tank and concrete area at the slurry fill points to collect any spill or leaks that may occur when manure is being collected for transport off site.
- The piping of all roof and storm waters to the existing land drainage system. .

### Customer Farmlands

All organic fertiliser from this farm is, and will be, allocated for use in accordance with the Nitrates Directive, S.I. 31 of 2014. The legislation which is applicable to all farmers in the country with regard to the application of fertilisers to farmland.

The measures referred to in this directive include, but are not limited to the following:

- Maximum limits with regard to the application of organic and inorganic fertilisers, thus ensuring that there is no leaching of nutrients through the soil.
- Organic fertiliser shall not be applied to land within 200m or such distance as may be specified by the local authority, of any borehole, spring or well used for the abstraction of water for human consumption in a scheme supplying 100m<sup>3</sup> or more of water per day serving 500 persons
- Organic fertiliser shall not be applied to land within 100m or such other distance as may be specified by the local authority, of any borehole, spring or well used for the abstraction of water for human consumption not referred to at b and c above.
- Organic fertiliser shall not be applied to land within 15m of exposed cavernous or karstified limestone features (such as swallow holes and collapse features)
- Organic fertiliser shall not be applied to land within the prohibited periods as applicable.



Proper manure management on the site and on the customer farmlands as planned will result in little or no impact on the ground water in this area. The farm manager will ensure that all potential customer farmers are aware of the requirements of the Nitrates Directive with regard to the application of organic fertiliser to their farmland.

## Surface Water

### **Site and Immediate Area**

The principle legislation governing water quality in Ireland is the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003) which transposed directive 2000/60/EC (the water framework directive, WFD) into Irish law.

As previously stated all surface water from this proposed development will discharge through a land drainage system through storm water discharge points, as indicated on the site plan contained. These points will be visually inspected on a regular basis for any signs of contamination i.e. visual and odour and sampled on a regular basis as required by any conditions of any EPA Licence that may be granted to this farm.

### **Customer Farmlands**

All organic fertiliser from this farm is, and will be, allocated for use in accordance with the Nitrates Directive, S.I. 31 of 2014. This legislation which is applicable to all farmers in the country with regard to the application of all organic and inorganic fertilisers places certain requirements on farmers with regard to the application of fertilisers to farmland. The measures referred to in this directive include, but are not limited to the following:

- Maximum limits with regard to the application of organic and inorganic fertilisers thus ensuring that there is no overload flow of nutrients.
- All fertiliser to be applied in a uniform manner ensuring an even spread.
- Organic fertiliser shall not be applied on land that is waterlogged, flooded or likely to flood, snow covered or frozen, when heavy rain is forecast within 48 hours, or, where ground slopes steeply and taking into account factors such as proximity to waters, soil condition, ground cover and rainfall, there is a significant risk of causing water pollution.
- Organic fertiliser shall not be applied by the use of an upward facing splash plate or a rain gun.
- Organic fertiliser shall not be applied within 20m of a lake shoreline
- Organic fertiliser shall not be applied within 5m of a surface watercourse
- Organic fertiliser shall not be applied to land within the prohibited periods as applicable.

Proper manure management on the site and on the customer farmlands as planned with result in little or no impact on the surface water in this area. The farm manager will ensure that all potential customer farmers are aware of the requirements of the nitrates directive with regard to the application of organic fertiliser to their farmland. Independent water monitoring in this catchment is conducted on an on-going basis by Waterford City and County Council, the E.P.A. and the Local Fisheries Board(s).

## Air

The existing customer farmlands and the pig farm are non urban based, the rural residents are accustomed to agricultural smells such as animal manure spreading, silage and silage effluent spreading. The farm has existed at this site for over 50 years.

The rural location of this farm, well isolated from neighbouring dwellings and potential odour sensitive locations and with a long history as a pig farm site makes this an ideal site for the purposes of the pig farm.

The present standard of management is high, the fattening houses are continuously washed, disinfected and rested between batches, and all houses are to be stocked at optimum levels and adequately ventilated, ensuring minimal odour emissions. Should technical advances be made in odour reduction the operator will adopt any economically viable practices.

Odours and emissions from modern well-managed pig farms are insignificant outside the confines of buildings and adjoining yards. Since manure will be removed only by vacuum there will be no odours created during manure withdrawal. A further means of mitigation against the possibility of malodour emanating from the site is the existing landscaping along the eastern boundary of the site. The screen of trees will prevent a breeze at or above, ground level from carrying gases to the surrounding area. This will help to ensure that there will be no significant impact on air quality in the local environment.

In addition to the mitigation measures already referred to, i.e. the use of low trajectory splash plates, and the proper and even allocation of organic fertilisers, Ballyharrahan Pig Farm will recommend to all customer farmers that organic fertiliser from this farm should not be applied to lands adjacent to neighbouring dwellings or potential odour sensitive locations. A recommended set back distance of 100 metres from an isolated dwelling and 200 meters from a potential odour sensitive location or group of dwellings will be recommended.

## Climate

There are no dwellings, and no other potentially sensitive receptors located close to (within c.200m) of the existing pig farm buildings. The wind direction is generally from the southwest. The rainfall levels are low, the annual rainfall for Cork Airport Station was an average 1,207mm. The adequacy of storage (c. 36 weeks) will ensure that organic fertiliser is allocated for use only at times that is acceptable to the inhabitants of the catchment and the regulatory authorities, i.e. Local Authority, E.P.A. and the Department of Agriculture, Food and The Marine.

Large livestock populations and nitrogen inputs to soil generate approximately one-third of all greenhouse gases in Ireland. The amount of methane emitted by livestock is a lot higher for ruminants such as cattle and sheep versus non-ruminants such as pigs. This is a result of the different digestive systems.

N<sub>2</sub>O emissions can be divided into three areas:

- Direct from agricultural soils and from agricultural production systems
- Indirect emissions which take place after nitrogen is lost from the field.
- Emissions resulting from agricultural burning.



The fact that farmers in the customer farmer list are allocating organic fertiliser in accordance with the provisions of S.I. 31 of 2014, particularly with regard to volumes applied, weather and ground conditions at the time of spreading, splashplate type, etc should ensure that emissions generated are kept to an absolute minimum. The provision of substantial manure storage facilities will facilitate the preference for spring application of organic fertiliser to minimise volatilisation. As a result this development will have no significant adverse effect on the climate in the area.

### Landscape and Visual Impacts

As previously indicated the pig farm is located on C. 2.368 Hectares of agricultural land in the town land of Ballyharrahan, Near Dungarvan, Co. Waterford. The general area and the area immediately adjacent to the existing site has a relatively flat or gently sloping topography similar to a significant area of this part of Co. Waterford and surrounding areas.

The existing site is located in an agricultural area away from the urban settlement and individual dwellings and farming activities have been carried out on this site for over 50 years. The site itself has been in existence since 1965 and uses its own sloping nature to help to hide the buildings with the use of earthen embankments on the southern and western sides of the buildings and tree planting on the eastern side of the site. The site is generally well screened from public views and since it has been in existence since 1965, it is considered that mitigation measures to reduce the impact would not be necessary. It is intended to retain and maintain all existing hedgerows and to re-inforce same where necessary. The finishes and colours of the finishes of the building structures are in keeping with all other agricultural buildings throughout the wider landscape of the county. This facility fits into the landscape similar to any other agricultural development throughout the county and therefore has no adverse impact on any area listed as a scenic amenity in the Waterford County Development Plan.

### Noise

Since the site has been established since 1965, it is not possible at this stage to determine whether setting up the proposed facility created any significant impact from a noise point of view on the local environment. The noise from the development is limited to that arising from the operation of ventilation equipment, blowers on feed delivery trucks and the noise generated by the pigs. It is not proposed to increase the development at this location as part of this proposal therefore there will be no increase in the noise level at the site in the short term or no significant increases in the long-term at the site boundary. Therefore, the site facility will not create a disturbance or annoyance to anybody, due to its rural location and relatively low population density in the area. All traffic movements into and out of the site will predominantly occur during normal working hours.

## Traffic

The farm is located on C. 2.368 Hectares in the townland of Ballyharrahan near Dungarvan, Co. Waterford. The site is accessed from the public local road. The site is located, C. 4km's south of Dungarvan town and is accessed by C. 90m of internal laneway leading from the Local roadway terminating at the pig farm.

There is adequate on-site space provided to ensure that the turning movements of all vehicles associated with the farm can be facilitated. Sufficient parking has been afforded on-site for all vehicles associated with the farm.

Traffic associated with the farm is due to:

- Feed deliveries to the site (C. 4 loads per week)
- The transport of organic fertiliser/manure from the farm (c. 10 loads per week in the spreading season, i.e. 37 weeks) and,
- The transport of pigs from the farm (c. 2 loads per week) and materials to and from the farm.
- Ancillary traffic such as vets, advisors, staff, waste collection etc.

There will be no increase in traffic from the established routine of traffic to and from the site. The existing farm has operated without any significant adverse impact on the local road network, and without complaint from the local residents and/or the Local Authority.

Transport of dead animals from the farm to a rendering plant occurs weekly/fortnightly. The remainder of the traffic will be associated with staff movement to and from the site.

This pig farm has existed for a long number of years and there has been no indication of an adverse environmental impact due to traffic flows. Traffic to and from the farm will generally be in a planned ordered manner and will often be off-peak or staggered throughout the working day.

## Biodiversity

### **Site and Immediate Area**

As previously described the site and adjoining area are agricultural lands that have been managed and developed as such over a long number of years. The area of the site is an existing pig farm with the lands directly adjoining the site having been intensively farmed. The majority of the land in the surrounding area is used for agricultural production. The Biodiversity associated with this site has developed accordingly as the site has developed and changed over the years from grassland to a pig farm site. As the only habitat(s) present on the site are improved grassland and field drains there are no specific unique habitats on this site that require specific protection.

Consideration has been given to the ecological value of any proposed planting and landscaping of the site. The use of non-native invasive exotic species such as Rhododendron, Cherry Laurel and Dogwood, will not be permitted in the landscaping and development of the site in general. Ecologically appropriate planting species lists in accordance with Department of Agriculture, Food and The Marine Specifications (S135) will be consulted regarding any additional landscaping to be completed.



### Customer Farmlands

The customer farmland is/will be agricultural land comprising improved grasslands swards and tillage crops as governed by the Nitrates Directive organic fertiliser from this pig farm can only be applied to agricultural lands where a crop response, be it grassland/tillage/maize etc., is anticipated.

The local land for receipt of organic fertiliser from this farm is used for grassland (grazing or cut for silage) or tillage production. Traditionally animal manure has been applied to these lands as a source of fertiliser and to replace imported energy inefficient inorganic fertiliser.

In order to prevent any adverse impact on Biodiversity in the area the following practices are to be implemented.

- Organic fertiliser from this farm is not to be allocated to areas of woodland/scrubland habitat.
- Organic fertiliser from this farm is not to be allocated within 10m of hedgerows.
- Organic fertiliser from this farm is not to be allocated within 5m of a watercourse or 20m of a lake shoreline.
- Organic fertiliser from this farm is not to be applied to areas where it is likely to adversely impact on a N.H.A., S.A.C. and/or S.P.A, or other such sensitive area.
- Organic fertiliser from this farm is not to be applied within 10m of an archaeological feature.

There should be no negative impact on the Biodiversity of the area from activities associated with this facility. It will be advised to the customer farmers that organic fertiliser spreading operations be carried out in accordance with Codes of Good Practice.

### Special Policy Areas

#### Nationally Designated Environmental Areas

As part of this application, a Natura Impact Statement was carried out which deals with the impact of the existing site on the local area. All customer farmland in receipt of slurry from this farm will allocate organic fertiliser in accordance with S.I. 31 of 2014 so as to ensure that there is no significant adverse impact on any of these areas.

The proposed developments will not adversely impact on the surrounding environment for the following reasons:

- The facility site is in existence at this location for over 50 years.
- Significant mitigation measures including surface and ground water monitoring, excess manure storage capacity etc., have been provided for to minimise any potential adverse impact.
- The pig farm is located a reasonable distance away from any such areas, as identified in the County Development Plan.

- The facility site is being maintained in a manner in compliance with animal welfare and environmental legislation and Waterford Co. Co. requirements and will operate under a licence from the E.P.A.
- All organic fertiliser arising from this farm is to be allocated in accordance with S.I. 31 of 2014.

### Screening Report Best Practice Measures

Whilst the proposed development will have no impacts upon the integrity of any area that has been designated as a Natura 2000 site, it is usually best practice to undertake certain best practice measures during the operation of any development. These measures will help to protect the local biodiversity of the surrounding area and ensure the protection of local water quality and wildlife.

Therefore the following measures have been recommended:

- The storage and handling of all wastes and fertilisers on site is in accordance with S.I. 31 of 2014.
- The existing concrete tanks on site are serviced regularly and emptied annually by a registered contractor.
- Details of the storage and management of any feed stuffs on site is being provided. They are being stored away from any drains and watercourses and handling takes into account their potential to act as a pollutant in any watercourses.
- All employees of the facility are aware of the sensitivity of the drains and streams in the locality.

### Customer Farmers

In order to avoid any reductions in water quality in the area as a whole, all organic fertiliser will be allocated for use in accordance with S.I. 31 of 2014 European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2014). The following measures may be considered and should be advised to the customer farmers.

- Slurry should only be applied to fields with an N and P requirement.
- Fields within any area that has been designated as an SAC, SPA or NHA should be excluded from land-spreading.
- A minimum buffer zone of 20m should be put in place and adhered to for areas which are adjacent to any area that has been designated as an SAC, SPA or NHA. These buffer zones should be increased depending on the gradient of the land.
- To avoid contamination of the local watercourses in areas identified for land-spreading, a minimum buffer zone of 10m for any main river channels and 5m for smaller watercourses should be adhered to at all times during the application of effluent. Buffer zones should be increased depending on the gradient of the land. In addition, when the waterbody is with 1km upstream of water dependent designated site the buffer for a river should be increased with 20m while a stream should be increased to 10m.



- Effluent should not be applied within 3m of open field drains or ditches in accordance with Good Agricultural Practice for Protection of Water 2014 S.I. 31 of 2014.
- Land spreading should only take place when suitable climatic and environmental conditions exist. Spreading must be avoided on wet or waterlogged soils, land sloping steeply towards watercourses, frozen or snow covered soils
- Effluent should not be applied in proximity of hedgerows and field margins. This will maintain the biodiversity of these areas and allow for a more natural ecological corridor.
- New technologies for spreading slurry that improve efficiency and minimise emissions should be considered e.g. bandspreader, trailing shoe and the shallow injection technique.
- All spreading of organic fertiliser arising from the development must be in accordance with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014.

### **Amenity Areas**

This existing farm is not located near to any Areas of High Amenity, Protected Views and/or Scenic Amenity Routes, etc as listed in the Waterford County Development Plan. All farmers will be informed that spreading of manure from this farm should not occur near such areas, especially at weekends or holiday periods.

### **Cultural Heritage (Architectural and Archaeological Features)**

There are no buildings/structures of architectural significance located on or adjacent to the proposed site or likely to be impacted by the development.

There is no evidence of any archaeological features at the site, and the existing pig farm is not located near, or likely to impact on any monuments or sites of archaeological interest as identified in the online database of the National Monuments Service. While there is no evidence of existing archaeological features on the subject site, consideration will be given to any potential archaeological features that may exist but have not yet been discovered

### **Population / Employment**

The existing facility employs the applicants in this area. Indirect employment will also be created through outside service employment for the repair and maintenance of the buildings and structures, nutritionists, veterinarians, pork processors, hauliers and sales personnel and a spin-off of this development.

As previously stated agriculture is important to the economy of County Waterford. It is anticipated that employment in the traditional agriculture sectors will continue to decline, resulting in opportunities in farm diversification and off farm employment becoming critical to the survival of many rural communities. The existing farm secures agricultural employment on the farm while at the same time improving the economics of the customer farmers existing farming activities.

The existing pig farm site is located well away from any of the larger settlement areas in the county as detailed in the County Waterford Settlement Hierarchy. Therefore the existing site does not impact on the

residential amenity of any urban area. The well being of the agricultural / pig industry (and the industries dependent thereon) in the county and specifically in this area, is essential in halting the decline in rural employment. This activity contributes to the employment in rural communities and therefore helps stabilise the rural population. The farmers utilising organic fertiliser from this farm also benefit from low cost fertiliser as a result of the Fertiliser Management Programme. The existing facility and existing activities have been planned and are operated to the benefit of the applicant, the local community in terms of direct and indirect employment and agricultural economy.

The Waterford County Development Plan encourages the development of appropriate agricultural enterprises. It is felt by the applicant that the existing farm satisfies the requirements of Waterford County Council as per the policies on Agriculture as outlined in the Waterford County Development Plan.

The development plan policies recognise the important and varied roles of agriculture within the economy of Co. Waterford. These policies serve to recognise and support the existing farm to become more competitive, sustainable, environmentally and welfare friendly; adapt to new and changing markets, diversify into new agricultural opportunities and broaden their operations to "add value" to their primary produce, while protecting the environmental and cultural heritage of the county.

In regard to the site design and location of this farm in addition to any requirements of the EPA as detailed in any conditions which may be attached to a license that may issue will ensure that this farm operates with no negative impact on the landscape and on the physical environment.

### Interaction of Effects

#### **Population & Human Health, Biodiversity, Soils, Water, Air, Climatic Factors, Landscape, Material Assets & Cultural Heritage**

##### Inter-relationships

As a requirement of the European Communities (Environmental Impact Assessment) Amendment Regulations, 1999 (S.I. No.93 of 1999) not only are the individual significant impacts required to be considered, but so must the inter-relationship between these factors be identified and assessed. Part II (Second Schedule) of the Regulations requires that the interactions between human beings, flora and fauna, soil, water, air and climatic factors, landscape, material assets and cultural heritage (incl. Architectural and archaeological) be assessed.

The aspects of the environment likely to be significantly affected by this farm have been considered in detail in the relevant chapters of the EIAR. In order to demonstrate the areas in which significant interactions occur, a matrix has been prepared, see figure below.

Where any environmental element in the top row of the matrix (the receptor) is likely to be affected in any way by any element in the left most column (the impactor), which contains the list of aspects of the environment likely to be significantly affected by the existing farm, these have been indicated. A distinction has been made between positive, negative and neutral impacts in this matrix.



Figure 8.1 Matrix Indication Inter-relationships between E.I.A. Factors

	Soil	Water	Air & Climate	Landscape & Visual	Noise	Traffic	Biodiversity	Population & Human Health	Cultural Heritage	Material Assets
Soil		N	N/A	N	N/A	N/A	N	POS	N/A	N/A
Water	N/A		N/A	N/A	N/A	N/A	N	N/A	N/A	N/A
Air & Climate	N/A	N/A		N/A	N/A	N/A	N	N	N/A	N/A
Landscape & Visual	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A
Noise	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A
Traffic	N/A	N/A	N	N/A	N		N/A	N	N/A	N/A
Biodiversity	N/A	N/A	N/A	N	N/A	N/A		N/A	N/A	N/A
Population & Human Health	POS	POS	POS	POS	N/A	N	POS		POS	POS
Cultural Heritage	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		POS
Material Assets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Nuetral	N
Postive	POS
Negative	NEG
Not Applicable	N/A

### Discussion – Positive Impacts

The following details the rationale for concluding that there is a net positive impact as a result of the inter-relationship between the factors listed below:

- **Impacts of Soil on Population & Human Health** – The existing farm provides for a pig fattening farm wholly contained within the existing site. This site provides a supply of pig manure which is a valuable fertiliser used by customer farmers to offset the cost of purchasing chemical fertiliser. The supply of organic manure will result in a financial gain to the recipient farmers and therefore a net positive impact of the facility.
- **Impacts of Population & Human Health on Other Factors** – The existing farm has been in existence for over 50 years and as a result of people having grown up with the farm in this location the farm has an negligible impact on any human endeavour in factors of soil, water, air and climate, landscape & visual, biodiversity and cultural heritage.

### Discussion – Neutral Impacts

The following details the rationale for concluding that there is a neutral impact as a result of the inter-relationship between the factors listed below:

- **Impacts of Soil on Water, Landscape and Visual and Biodiversity** – The organic fertiliser will have a positive overall impact on soil adding additional nutrients. However there is potential for leaching of these nutrients to water. This threat has been mitigated as all organic manure is to be allocated to customer farmers for use in accordance with S.I. 31 of 2014 and excessive application of this organic fertiliser will not occur. The positive impact on soils will potentially see a change in landscape through the improvement in field pastures, this may be viewed as a slightly positive impact overall and any changes will be minimal through compliance with S.I. 31 of 2014 and excessive application of this organic fertiliser will not occur. The changes in soil may result in a reduction in diversity of biodiversity in receiving spread lands. However all lands proposed for receipt of organic fertiliser will comprise productive agricultural lands for the production of crops or improved grassland and organic manure will not be applied to areas of scrub or other habitats.
- **Impacts of Water on Biodiversity** – The organic manure generated together with any soiled water on site has the potential to negatively impact on water. A reduction in water quality in the area would have an effect on both local biodiversity and biodiversity in the wider catchment area. This potential threat has been mitigated through the proposal to allocate all organic fertiliser for use in accordance with S.I. 31 of 2014. This is further mitigated through the provision of appropriate on site storm water drainage system and the provision of sufficient organic manure storage. These mitigating measures are sufficient to ensure that there is no negative impact on biodiversity as a result of its relationship with water.
- **Impacts of Air and Climate on Biodiversity and Population & Human Health** – There is a potential threat to biodiversity and population & human health as a result of any impact on air due to the existing pig farm. The generation of mal-odour on site may have a slight negative impact on biodiversity and in particular on human beings, however this is mitigated by the fact that the existing pig farm is in its existence since 1965. Adequate mitigating measures have been described in this E.I.A.R to ensure that this threat does not materialise and thereby ensuring the potential impact is neutral.
- **Impacts on Traffic on Air & Climate, Noise and Population & Human Health** – The traffic generated at this farm will have some impact on air and climate, noise and population and human health. However there is no change in the traffic and it is not anticipated that this would adversely impact on the environment and therefore the impact is considered neutral.
- **Impacts of Biodiversity on Landscape and Visual** – A reduction in Flora & Fauna as a result of the existing farm could impact on Landscape and Visual. Many habitat areas such as strands of trees, scrub or hedgerow are critical to retain the unique characteristics of the Waterford landscape. The mitigating measures provided for in this E.I.A.R. will ensure that no such landscape features will be altered or removed as a result of this farm, indeed any additional landscaping/tree planting etc to be completed may actually provide additional habitat areas.



- **Impacts of Population & Human Health on Traffic** – It is not proposed that there will be any increase in traffic as the existing farm is not being altered in any fashion so the overall impact of population & human health on traffic is considered neutral.

### Potential Impacts and Mitigation Measures

This section presents the significance of potential impacts following the implementation of mitigation measures. The E.P.A. classify impacts as follows:

Impact	Description
Negative	A change which reduces the quality of the environment
Positive	A change which improves the quality of the environment
Neutral	A change which does not affect the quality of the environment
Temporary	Impact lasting for 1 year or less
Short-Term	Impact lasting from 1 – 7 years
Medium Term	Impact lasting for 7 – 20 years
Long- Term	Impact lasting for 10 – 50 years
Permanent	Impact lasting for 10 – 50 years
Slight	An impact which causes changes in the character of the environment which are not significant or profound
Significant	An impact which by its magnitude, duration or intensity alters an important aspect of the environment.

Interactions between the above environmental factors show the potential effect of the pig farm on the community and its environs. Population & human health are the main impact receptor, biodiversity being the other. The pig farm and its production processes, have been in existence at this location since 1965 and as shown elsewhere in this document will minimally impact upon the landscape, archaeology, terrestrial, water quality and climate described under the heading natural environment.

Traffic, air quality, noise, tourism and material assets are the factors that affect the community directly. This pig farm with its planned fertiliser substitution programme and its daytime work operation will have no significant impact on the rural community. There are a number of positive features associated with this pig farm:

- Employment in a rural area.
- Encourages customer farmers to utilise a locally produced source of organic fertiliser as opposed to energy inefficient chemical fertiliser.
- Cheap fertiliser for these farmers.

	Category	Potential Significant Impacts	Potential Impacts ~ Site	Potential Impact ~ Customer Farmlands	Duration	Mitigation	Residual Impact
Natural Environment	Terrestrial						
	Biodiversity	Destruction/Loss of Habitats	Neutral	Neutral	Long Term	Existing site of no significant ecological importance. Organic fertiliser on recipient farms to replace chemical fertiliser in accordance with S.I. No. 31 of 2014, no increase in production over that previously approved.	None
		Eutrophication	Neutral	Neutral	Long Term	High quality of manure storage and storm water discharge systems. Nutrient balance /organic fertiliser substitution. Organic fertiliser to replace chemical fertiliser in accordance with S.I. 31 of 2014, no significant increase production over that previously approved.	None
	Fresh Water / Groundwater	Risk of Contamination	Neutral	Neutral	Long Term	Adequate storage and routine monitoring (site) fertiliser planning / buffer zones / codes of good practice applied (S.I. 31 of 2014) Customer Farmlands	None
	Landscape	Visual Impact	Negative	Neutral	Long Term	Existing pig farm site screened by existing hedgerows. Landscaping to compliment existing hedgerows where required.	None
	Archaeology	Disturbance of Archaeological Finds	Neutral	Neutral	Long Term	No archaeological finds in previous site works carried out. Site not located near to any archaeological sites.	Neutral
	Climate	Contribution of Greenhouse Gases	Neutral	Neutral	Long Term	Pig meat production is less harmful than ruminant production in terms of methane. Organic manure will replace inorganic fertilisers eliminating manufacturing / transport energy use.	None



	Category	Potential Significant Impacts	Potential Impacts ~ Site	Potential Impact ~ Customer Farmlands	Duration	Mitigation	Residual Impact
Natural Environment	Terrestrial						
	Biodiversity	Destruction/Loss of Habitats	Neutral	Neutral	Long Term	Existing site of no significant ecological importance. Organic fertiliser on recipient farms to replace chemical fertiliser in accordance with S.I. No. 31 of 2014, no increase in production over that previously approved.	None
		Eutrophication	Neutral	Neutral	Long Term	High quality of manure storage and storm water discharge systems. Nutrient balance /organic fertiliser substitution. Organic fertiliser to replace chemical fertiliser in accordance with S.I. 31 of 2014, no significant increase production over that previously approved.	None
	Fresh Water / Groundwater	Risk of Contamination	Neutral	Neutral	Long Term	Adequate storage and routine monitoring (site) fertiliser planning / buffer zones / codes of good practice applied (S.I. 31 of 2014) Customer Farmlands	None
	Landscape	Visual Impact	Negative	Neutral	Long Term	Existing pig farm site screened by existing hedgerows. Landscaping to compliment existing hedgerows where required.	None
	Archaeology	Disturbance of Archaeological Finds	Neutral	Neutral	Long Term	No archaeological finds in previous site works carried out. Site not located near to any archaeological sites.	Neutral
	Climate	Contribution of Greenhouse Gases	Neutral	Neutral	Long Term	Pig meat production is less harmful than ruminant production in terms of methane. Organic manure will replace inorganic fertilisers eliminating manufacturing / transport energy use.	None

Population & Human Health	<b>Agriculture &amp; Land Use</b>	Fertiliser Substitution	Neutral	Positive	Long Term	Improves profitability by reducing costs and improving output.	Slight
	<b>Community</b>	Application of Manure	Neutral	Neutral	Long Term	Significant requirement for additional organic fertiliser. Manure allocated for use in accordance with S.I. 31 of 2014.	None
		Vermin & Pest Infestation	Neutral	Neutral	Long Term	Control programme practiced on farm	None
		Fire Hazards	Negative	Neutral	Long Term	Fire Points / Extinguishers / Staff Training	None
	<b>Traffic</b>	Long Term Increase in Traffic	Neutral	Neutral	Short Term	Inward / outward traffic during working hours. Minimise traffic volume by optimising load sizes.	None
	<b>Noise</b>	Stock Noise at feeding/ moving, feed deliveries, slurry removal	Neutral	Neutral	Short Term	Stock movement, feed deliveries and slurry extraction only during working hours. Remote location	None
	<b>Air</b>	Generation of odours	Neutral	Neutral	Short Term	Adherence to Code of Good Practice to Reduce Odour Emissions at Spreading. Provision of slatted accommodation and washing between batches. Buffer zones from sensitive dwellings / areas. No increase in manure volume produced.	None
	<b>Tourism / Amenities</b>	Landscape	Neutral	Neutral	Long Term	Site location will result in no adverse impact on the environment	None
	<b>Material Assets</b>	Reduction in material / residential quality	Neutral	N/A	Long/Short Term	Site Location will ensure that there is no negative impact on the material assets of the area	None



## **ENVIRONMENTAL MANAGEMENT PROGRAMME**

### **Introduction**

The applicant will implement and maintain a comprehensive monitoring programme on site to provide maximum protection for the environment. This plan will involve maintaining an organic fertiliser register and visual inspection of all storm water outlets.

Implementing this programme will ensure that there are no negative environmental impacts from the activities associated with the operation of the pig farm. Any recommendations of the EPA will be complied with in relation to this Environment Management Programme.

### **Slurry Management Programme**

The applicant will implement and manage a programme for the allocation of organic fertiliser in each particular year. The main aspects of the Organic Fertiliser Management Programme are to ensure that the requirements of S.I. 31 of 2014 are met in full by the applicant. The provision of excess manure storage will facilitate the preference for spring time allocation of organic fertiliser to maximise crop nutrient uptake.

### **Environmental Monitoring Programme**

#### **Work schedule for current fixed structures:**

- Pig walkways are slatted and / or concreted ensuring that there is a separate clean and soiled water system
- Existing storm water drainage ensures that all storm water is directed to adjoining land drainage system.

#### **Monitoring fixed structures for the following:**

- Checking slurry storage facilities where possible for leaks, cracks etc
- Checking soiled water and clean water drainage systems for deterioration, leaks and blockages.

#### **Monitoring and analysis:**

- Storm water emission points to be visually inspected on a regular basis.

## SUMMARY

### Summary

Since the facility has been established with so long the existing Pig Farm as outlined has no negative impact on the rural economy of County Waterford and will serve to secure employment for the applicants on the existing farm.

The Farm is of benefit to the local farming community in rural County Waterford as the manure produced by the pigs housed on the existing farm is used to fertilise the local farmland and to replace the imported chemical fertiliser which would otherwise be used.

The granting of a license to the facility would agree with the already granted planning permission for the regularisation of the structures and ancillary works and will ensure the continued employment of the applicants and provide a significant boost to the economy of County Waterford. The facility will operate under the conditions imposed as part of any grant of EPA License for this farm and the requirements as stipulated in animal welfare and nitrates regulations.

Signed: \_\_\_\_\_

**LIAM BUCK**  
**MCIAT, MSCSI, C. Build. E, FCABE.**

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