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Ms. Sonja Smith,
Office of Climate, Licensing & Resource Use,
The EPA,
PO Box 3000,
Johnstown Castle Estate,
Co. Wexford.

**Date : 30th August, 2010.** **Reg. No.: PO 710-03**
**Re : Reply to request of 3/08/2010 for information under Article 17(3) of the EPA Licensing Regulations 1994 to 2008.**

Dear Ms. Smith,

This is the response to the Agency's request of 3/08/2010 for information under Article 17(3) of the EPA (Licensing) Regulations 1994 to 2008. I have been asked by the Applicant Mr. Paul Tully of Moate Pig Unit, Ballinakill, Portlaoise, Co. Laois to assist in drafting this response which is submitted on his behalf.

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In April 2004 PJ Cahill Farms Limited applied to the EPA for an IPC licence (application received by the Agency 28/4/2004). This application was accompanied by an EIS (15 hard copies) received by the Agency on 22/07/2004. An electronic copy of the original EIS is available on the EPA website (Reg. No. PO 710-01).

The EIS was submitted to Laois County Council (on 13/7/2004) in support of a planning application for the pig unit operated by PJ Cahill Farms Limited (Planning reference 04/886) and this planning permission was granted by Laois County Council on 1/09/2004. The details in the EIS should be read in this context (a list of the changes/amendments is attached). Subsequent planning permission has been sought and granted ( planning reference 06/918) by Laois County Council for this site and details of the alterations to the site have been updated in the IPPC licence documentation as submitted by the current owner/operator of the facility Mr. Paul Tully. **The details in the IPPC licence application and subsequent information submitted are the most up to date in relation to this pig rearing facility.**

The management of animal manure has been regulated subsequent to this EIS being submitted and accordingly sections of it have been amended to give proper regard to the provisions in S.I. 252 of 2008 and S.I. 253 of 2008 that classify manure as Category 2 by-product, authorise sale or supply and transfer of manure from producers for use as organic fertiliser or soil improver and the provisions in S.I. 101 of 2009 that assign responsibility for all aspects of the use of the manure/fertiliser to the occupier of the holding on which it is deposited on land.


EPA Export 26-07-2013:19:57:48

I attach copies (2 hard copies and 15 copies of it in electronic searchable PDF format on CD-ROM) of this correspondence as requested.

Yours Sincerely

Gerard McCutcheon

Gerard McCutcheon M.Agr.Sc., M.Sc.

See Notes attached.

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**Notes to explain main Amendments/Changes made to EIS :**
**Sections that have been inserted to replace obsolete sections are in Times New Roman font. The original document is in Tahoma font.**
**Non-technical Summary:**
Points 1.7 to 1.9 of the Non-Technical Summary in the original document have been deleted and replaced by reference to national regulations governing the use of animal manures on all holdings. Insert of new point 1.7 to reflect regulations.
Point 1.10 in the original document is now amended to point 1.8 with third column of the original Table removed.

Chapter 2 : Part of Section 2.5 has been deleted to comply with responsibilities as required by national legislation (as described in Section 3.8).

Chapter 3 : Title amended to ensure no responsibility assumed by the pig producer beyond his legal responsibility.
Bullet points in Section 3.1.1 amended to comply with responsibilities as required by national legislation.
Sections of 3.7 and all of 3.8, 3.8.1, 3.8.2, 3.8.3, 3.8.4 and 3.8.5 have been deleted and replaced by current rules and regulations as described in newly inserted Section 3.8.

Chapter 5 of the original EIS has been deleted because of legal conflicts as ascribed to responsibilities of "occupiers" of holdings in regulations referred to in newly inserted Section 3.8.

New chapter 5 was Chapter 6 in the original EIS.
Section 6.1 in the original document was "monitoring of manure spreading" is now 5.1 and entitled "Manure Register".
Section 6.2 in the original EIS is now deleted to comply with legislation as described in newly inserted Section 3.8.

Appendices B and D are deleted because they are not the responsibility of the "occupier" of the "holding" for which Planning permission was sought.

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# Environmental Impact Statement

## For

## Pig Unit of PJ Cahill Farms Ltd.,

## at Moate Townsland,

## Ballinakill,

## Portlaoise,

## Co. Laois.

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**Prepared by:**

**Gerard McCutcheon, M.Agr.Sc. , M.Sc.**

**Pig Enterprise Adviser, Teagasc,**

**Bagenalstown, Co. Carlow.**

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## Non Technical Summary

**1.1** An application is being made to Laois County Council for permission to retain a 620 integrated sow unit at Moate townsland, Ballinakill, Portlaoise, Co. Laois by PJ Cahill Farms Limited. This Environmental Impact Statement (EIS) has been prepared in connection with the application and in accordance with the Planning and Development Act, 2000 (Part X Sections 172-177) and the Planning and Development Regulations, 2001 (Part X Articles 92 – 132).

**1.2** The activity on the site is a licensable activity. An application has been made to the Environmental Protection Agency for an Integrated Pollution Prevention and Control Licence ( Reg No: 710).

**1.3** The site accommodates an integrated pig enterprise producing finisher pigs to a weight required by the pork and bacon processing industry. An "Integrated Unit" is a pig unit, which rears its pigs from birth to slaughter.

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**1.4** The structures for which permission is being sought incorporate modern concepts in animal welfare and in manure storage, aesthetic appearance, insulation, ventilation and environmental protection in both the design of the structures and in the operation of the pig unit.

**1.5** On the pig unit there is manure storage capacity for 27 weeks manure production from animals housed on the unit. This capacity will be increased further if planning permission is granted for a new dry sow house. This storage capacity ensures that manure is only spread during suitable conditions.



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**1.6** Manure that is produced by pigs on the site is used as a fertiliser by local farmers to maintain soil fertility on their agricultural lands.

1.7 Pig manure is classified as an animal by-product (Category 2) by reference to the Animal By-products Regulations (S.I. 252 of 2008 and Regulation EC/1774/2002) and is excluded from the scope of the Directive on Waste (2008/98/EC; Recitals 12 and 22 and Articles 2 and 5). The use of animal manures by depositing the by-product manure on land to supply fertiliser nutrients is provided for and controlled under the Animal By-products Regulations and the Nitrates Regulations (S.I. 101 of 2009 and Directive 91/676/EEC). The use of animal manure to fertilise land is lawful in the manner prescribed in legislation is lawful and is not a waste recovery activity.

The placing of manure of farmed animals on the market and its transfer for use as fertiliser as is provided for in the ABP Regulations, and the use of manure of farmed animals by deposition on farmland in accordance with terms and standards prescribed in S.I 253 of 2008 and S.I. 101 of 2009 are not subject to control under the Waste Management Acts.

Pig rearers are required to manage **manure** produced in their holdings (including manure produced in licensed installations in the manner prescribed in legislation separate from the IPPC system. Any claim in relation to **management of nutrients** by a pig producer on customers' holdings is exaggeration, if not false. It is the responsibility of the "occupier" of each "holding" in this state to comply with the regulations as described below.

The **system** for the management of **manure** in a pig rearing enterprise and the system for **the lawful transfer of pig manure to farmer customers** (occupiers of separate holdings) is as follows:

- Provide storage for six months production of pig manure, and provide storage capacity for 200mm freeboard in covered tanks and 300mm freeboard and prescribed rainfall amounts in open tanks,
- Collect all manure in the manner prescribed in S.I.101 of 2009, preventing leakage, spillage and discharge of any polluting material,
- Store all manure temporarily pending sale or supply and transfer to customers, in response to customer demand, as by-product fertiliser, as is provided for and authorised under S.I. 252 of 2008 and S.I. 253 of 2008, in the knowledge that use by customers is required to comply with standards prescribed in S.I. 253 of 2008 and S.I. 101 of 2009, and
- Record all transfers of manure from the installation as is required by Article 23(1)(g) in S.I. 101 of 2009 and maintain the records for inspectors.

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### 1.8 Summary of impacts of this development:

| | **Impact of the Fixed Development** |
|---|---|
| Human Beings | Positive and Negative |
| Flora | Not significant |
| Fauna | Not significant |
| Soil | Not significant |
| Water | Not significant |
| Air | Some |
| Climate | None |
| The Landscape | Some but positive action is being taken in this regard. |
| Interaction of above | Not significant |
| Material Assets | Not significant |
| Cultural Heritage | Not significant |

* An "Integrated Unit" is a pig unit in which breeding and rearing to finished market weight is integrated on the one site.

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# ENVIROMENTAL IMPACT STATEMENT

**Proposed 620 Sow Integrated Unit**

**At Moate, Ballinakill, Portlaoise, Co. Laois.**

**For**

**PJ Cahill Farms Ltd., Moate, Ballinakill, Portlaoise, Co. Laois.**

## 2. Introduction

### 2.1 General

This Environment Impact Statement (EIS) was prepared in support of a Planning Application to Laois County Council. An Integrated Pollution Prevention and Control Licence Application to the Environmental Protection Agency was submitted on behalf of PJ Cahill Farms Ltd., Moate, Ballinakill, Portlaoise, Co. Laois ( Reg. No. 710).

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PJ Cahill Farms Ltd is seeking planning permission for the retention of part of a 620 integrated sow unit at Moate, Ballinakill, Portlaoise, Co. Laois. He also seeks full planning permission for some new buildings/ structures at the same site. This EIS has been prepared in connection with European Communities Directive 85/337/EEC as implemented in Ireland by the Planning and Development Act, 2000 (Part X Sections 172-177) and the Planning and Development Regulations, 2001 (Part X Articles 92 – 132). Under these regulations it is required that an EIS be prepared for pig rearing installations where the capacity would exceed 200 sows on an integrated unit or where the Local Authorities deems fit to require one.

This Application for Planning Permission is made by PJ Cahill Farms Ltd. which is a company in which Mr PJ Cahill is the Managing Director.



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## 2.2 National and EU Policy:

The farm-gate value of pigs accounts for almost 10% of the output of all Irish livestock and livestock products. It was a growing sector of the Irish agriculture in the 1990s. The annual output increased from 2.1 million pigs in 1987 to 3.25 million pigs in 1996 (Teagasc, 1997). Pigs and pigmeat produced has to compete on the world markets with no EU supports. Consequently market economics has a large impact on the direction of the industry. The Irish pig industry has experienced radical changes over the past thirty years. The trend within the industry is of a continuing decrease in the number of smaller producers and an increase in the number of larger integrated units. Many of large finishing units have become integrated in recent years. The industry is now over 80% integrated and very efficient by European standards.

The densities of pigs on farmland is still one of the lowest in the EU. Nationally there is one sow per 26 ha. of farmland. Co. Laois is a little less densely populated than the average. It has one sow per 33 ha (this figure includes the development the subject of this EIS). The greatest concentration of sows is in Co. Cavan, one sow per 4 ha. (Tuite, 1997).

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In the pigmeat industry there were 43 curers in operation in the mid eighties. The Industrial Development Authority (I.D.A.) grant aided the rationalisation of the processing industry to ensure that it would be competitive in the international arena. This resulted in eight processing factories by the late eighties and a modern infrastructure. At European level, Irish pigmeat output is small relative to our competitors and comprises less than 2.0% of the total EU output (before EU enlargement in 2004).

## 2.3 County Development Plan:

The proposed development is in conformity with the County Laois Development Plan, (2002). Section 2.8 of the County Development Plan is



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reproduced on Page 7 of this document to state the Local Authorities views in this regard.

**Agriculture & Forestry:**

The council recognises the importance of agriculture and agriculture related development in the economy of County Laois and its significant contribution to the social and physical fabric of the environment. The promotion of self-sustaining rural communities is an integral component in the development of the County and can be assisted by diversification of farming activities, opportunities for off-farm employment agri-tourism projects and afforestation. The existence of an urban settlement structure facilities rural development by providing vibrant local service centres.

**It will be Council policy:**

- To encourage expansion and employment in the agricultural sector and the agriculture related industries such as forestry, peatlands, agri-tourism etc.
- To liase and work with other agencies such as Leader, County Enterprise Groups. Farming Organisations, Voluntary etc. to develop economic, social and physical benefits for the rural community and its service bases.
- To ensure that buildings in visually sensitive areas blend with their surroundings.
- To ensure that land-spreading of waste does not contaminate ground or surface waters.
- Intensive agricultural developments should be designed with due regard to environmental issues and Department of Agriculture guidelines.
- To maximise employment in local agriculture related industry such as forestry, wood processing or other value-added enterprises.
- To have regard to national policy guidelines for forestry development and to develop a county strategy for the development of the forestry sector including the designation of areas considered not suitable for this landuse.

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## 2.4 Reasons for the Development:

Mr. Cahill has over fifty years experience working with pigs. He used to look after the sows on his home farm. In 1965 he went to Cork to manage a pig unit. He spent four years in Cork and then returned to his native Laois and managed Muckalee Co-op pig unit for five years.

Mr. Cahill started with a 115 sow unit selling weaners (at 32 kg liveweight) in 1973 at the current site. The prospects of making a full–time living from such an operation were not great. Margins in pig production became very tight particularly in the 1970s and 1980s and Mr. Cahill was faced with the decision of either developing his unit further or having to get out of pigs' altogether because of economies of scale.

Mr. Cahill's ambition has always been to farm. Mr. Cahill has been able to carry on his pig production business on this site and live in harmony with his neighbours over the years. The development has been managed so that any nuisance is kept to a minimum and the good relations with the neighbouring community have continued.

No alternative site was considered by Mr. Cahill as he had not got the financial resources to develop elsewhere and the development is an extension of an existing serviced farmyard. The site chosen allows for the daily operation and management of the unit.

The health status is monitored on an on-going basis by veterinary inspections. The pig health status of the site is high. Mr Cahill does and must implement very strict management standards in order to maintain the high health status of the unit.

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## 2.5 Purpose of Assessment:

A pig rearing site of this size is included in the Intensive Agriculture class of activity listed in the Planning and Development Act, 2000 (Schedule 5). It is



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recognised that such activities have the potential to impact on the local population and environment. It is important when planning such units that the welfare of the animals, human beings and the environment be considered. The concentration of large numbers of animals in housing units requires efficient operations to ensure their welfare and the commercial success of the unit.

The area is unspoiled and it is important to keep it so. Local watercourses are clean and there is good wildlife in the area. The pig unit is an economic development, which is important to Mr. Cahill, his family and the locality. Mr. Cahill has been involved in pig rearing for over fifty years. He is experienced in his profession and a qualified person to operate the proposed unit. He wishes to run the unit in a sustainable manner and avoid any negative impacts. Implementation of the conclusions and recommendations from this assessment should ensure the integrity of the local environment and in the long term, the sustainability of the project.

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## 3. Description of Pig Buildings and Other Items

Please refer to Appendix A1 for key to Buildings on the site

**Building A:** Planning permission for retention of this building is sought. This building was erected in 1985 and comprises of 24 pens for second stage weaner pigs. Each pen is designed to accommodate 15 pigs. This house measures c14.9m long by c.10.9m wide.

**Building B:** Planning permission was granted for this building in 1973. It is a dry sow house which can accommodate 168 sows in stalls and 12 – 14 served gilts in loose pens. This house measures c.47.8m long, c12.4m wide. This is a timber framed house.

**Building C:** Planning permission for retention of their building is sought. This building was erected in 1993 on the site of a previous weaner house. This house comprises of 32 pens for second stage weaner pig. Each pen is designed to accommodate 15 pigs. This house measures c.26.9m long by c.7.4m wide and was erected in 1993.

**Building D:** Planning permission is sought for retention of this building. This building was erected in 1975. It is a dry sow house that can accommodate 108 dry sows in tethered stalls. This house measures c17.5m long by c12.4m wide and was erected in 1975.

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**Building E:** Planning permission is sought for retention of this building. This house consists of 4 rooms for first stage weaners (each room with 18 pens and 15 pigs/pen) and 4 rooms for second stage weaners (two rooms with 18 pens and two rooms with 10 pens each pen designed to accommodate 15 pigs). This house measures c.49.4m long by c.14.7m wide and was erected in 1998.

**Building F:** Planning permission was granted for this building in 1975. It is an old finishing house comprising of 36 pens for finishing pigs up to slaughter weight. This house measures c.47.4m long and c.8.9m wide.



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**Building G:** This house is a farrowing house, which comprises of nine farrowing rooms each with sixteen farrowing pens. This house measures c.52.3m long by c.13.9m wide. It is heated by an oil fired heating system. Planning permission for retention of this house is sought.

**Buildings H & I:** These houses are for bringing pigs up to slaughter weight (i.e. 94kg Liveweight). Each house contains 36 pens with each pen providing accommodation for 15 pigs. House H was erected in 1988 and House I was erected in 1991. Each house measures c.34.8m long by c.11.1m wide. Permission is sought for retention of each of these buildings.

**Building J:** Planning permission is sought for the retention of this building. This house measures c.13.5m long by c.7.1m wide and comprises of five gilt pens. It was constructed in 1995 to allow for a place to allow breeding females to develop slowly before entering the breeding herd.

**Building K:** Planning permission is sought for retention of this building. This building is a dry sow house providing accommodation for up to 110 sows (Section K) and a finishing house (Section L) with 20 finisher pens (15 pigs/pen). This house measures c.37.8m long by 11.3m wide and was erected in 1992.

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**Building M:** Planning permission is sought for the retention of this building. It is a service house with 71 tethered stalls 24 boar pens and a 5 gilt pens. This house measures c.59.5m long and c.7.4m wide and was constructed in 1985.

**Building N:** Planning permission is also sought to retain this house. It is a finishing house comprising of 88 finisher pens (15 pigs/pen) and was erected in 1996. This building measures c.87.6m long by c11.6m wide.



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**Building O:** This house is a storage area for straw, which is used to bed gilts and boars in House M. This building measures c.9.9m long by c.6.2m wide. This house requires planning permission for retention.

**Buildings P & Q:** These houses have been de-commissioned and are no longer present on the site.

**Overground Storage Tank**

The letter R on the site plan marks the overground storage tank, which has a diameter of 15.2m and a height of 3.65m. This storage tank allows Mr. Cahill great flexibility in managing the manure on-site and provides nearly four weeks manure storage on this site. Planning permission is sought for retention of this storage tank.

**House T:** This house is a proposed new loose sow house which requires full planning permission and is required to allow this unit to comply with the welfare regulations with regard to loose sow housing. The erection of this building will not lead to an increase in the herd size of this pig unit. This building will measure c. 62.9m long by c. 18.9m wide. It is proposed to have a 2.4m manure storage tank underneath this building which will increase the manure storage on-site to over 40 weeks (ie. This building will provide over 14 weeks additional manure storage on the site).

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**House U:** This building is a new proposed building to be constructed on-site to provide a canteen/shower facilities/ office area. This building will measure c. 12.8m long by c.6.7m wide. Permission is also sought for a septic tank and percolation area to serve this building (See Appendix F).

### 3.1.1 Alternative sites considered:

No alternative site was considered as the site in Moate is the only site available to the operator. Reasons why this site is suitable for the proposed development include:



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- ❖ The land is owned by Mr. Cahill and the development is an extension of an existing farmyard.
- ❖ The site is located in an entirely agricultural area remote from population centres.
- ❖ The site is serviced by a good quality minor link road.
- ❖ The site has water, communication and electrical services.
- ❖ The site is surrounded by farmland and farmers who acquire manure from the site to fertilise their farmlands.
- ❖ Pig manure acquired by farmers from this site has to be handled and used by those farmers in the same way they use fertiliser from any other source including the manure from other farm animals--- that is in accordance with national regulations.

### 3.1.2 Alternative site layout and designs:

The layout and design incorporate the most up to date concepts in modern pig husbandry in relation to human and animal welfare including automatic computer controlled feeding and environmental control. The house design lends itself readily to the under-floor storage of animal manures in reinforced concrete leakproof tanks. Interior surfaces are smooth to facilitate thorough and rapid washing. The layout and design of the houses facilitate the desired orderly movement of pigs within the site.

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### 3.1.3 Alternative processes considered:

No satisfactory alternative process for pig production is known to the developer. Use as a fertiliser on farmland is the only available ultimate destination for pig manure. Use of the manure by farmers farming near the site is a rational and environmentally friendly use of a locally available resource. Such use of the nutrients in pig manure is in harmony with current thinking on by-product use.



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### 3.1.4 Maintaining the high health status of the site:

The economic viability of a pig production unit depends primarily on high sow output feed conversion ratio and low mortality. High standards of hygiene will ensure that disease is prevented. Access to the unit is strictly restricted to maintain the high health status of this pig herd. The procedures for dealing with dead animals, as set down in section 3.4 are standard for the industry.

The routine for washing on this site is discussed below (please refer to Appendix E).

## 3.2 Manure Storage Capacity Provided:

The existing manure storage on the development has been calculated to be 4469 $m^3$. This capacity provides for over 27 weeks storage when the unit is stocked at 620 sows. (Please refer to Appendix A2). It is proposed to have a 2.4m manure storage tank underneath the proposed new loose sow house (Building T) which will provide over 14 weeks additional manure storage on the site.

The Applicant has provided extra manure storage because of normal farming practices in the locality. The extra manure storage allows great flexibility in managing pig manure particularly in a wet winter.

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## 3.3 Inputs and Services:

Inputs include meal and water to the pigs. About 63 tonnes of meal/week is delivered and blown dust free into the meal bins (see site plan to see location of the meal bins) when the unit is stocked at its full compliment of 620 sows. Electricity is available on site and additional service is not required. All clean roof water is diverted away from the unit through two existing 150 mm pipes to two soak-holes (see site plan).

The farrowing house and one weaner house (house C on site plan) are heated by oil-fired burners. The fuel storage tanks will be bunded to the required standard as a precaution against an accidental spillage.



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**3.4 Disposal of Dead Animals:**

The matter of disposal of pig carcases is attended to by means of a sealed trailer skip. Arrangements have been made with a rendering plant at which carcases are ultimately disposed of. The following numbers and categories of carcases are disposed of in this manner per annum :

| | | | | kg |
|---|---|---|---|---|
| 31 Sows | x | 180kg | = | 5,580 |
| 1,457 Piglets | x | 1.7kg | = | 1,856 |
| 218 Weaner | x | 18kg | = | 3,924 |
| 146 Finishers | x | 60kg | = | 8,760 |
| | | | | -------- |
| | | | | 20,020kg |

College Proteins Ltd (Approved No. L911) transports the dead pigs for Mr. Cahill on a contract basis to their rendering plant at Nobber, Co. Meath. An average of 400kg of dead carcase is produced at this site each week. Appendix C contains details of arrangements with the waste contractors for the disposal of dead pigs and other wastes that are generated at this site.

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**3.5 Construction of Buildings:**

All of the existing buildings have been constructed on site. Below slat level the walls and floors of all tanks for the storage of manure were constructed with re-inforced concrete to a standard that complies with S123 Dept. of Agriculture & Food. Roof-cladding is corrugated asbestos sheeting. The colour scheme currently being adopted on the unit appears to improve the visual impact of the buildings. This colour scheme can be easily changed if the Planning Authority so desires as asbestos sheeting and wall surfaces readily accept colour treatments.

**3.6 Capacity of the Unit:**

Whenever the site is fully stocked the "normal" number of animals in different classes should be:

| | |
|---|---|
| Suckling sows | 118 |



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| | |
|---|---|
| Dry sow | 502 |
| Boars | 24 |
| Maiden gilts | 72 |
| Weaners | 2,660 |
| Finisher pigs. | 2,550 |

These figures are approximate figures as there may be some fluctuations as a result of natural variation in herd performance parameters. At present the site operation involves 620 sows plus their progeny reared to slaughter.

## 3.7 Manure Production:

The annual quantity of pig manure to be produced when the unit is stocked at 620 sows has been calculated as shown in Appendix A2. The quantity of manure produced is 162m$^3$ per week. This is discussed below in the context of the Management of Pig Manure for this farm.

## 3.8. Management of Pig Manure

Pig manure is a rich source of plant nutrients and is a valuable fertiliser for farmland. It is collected and stored in tanks until some local farmers acquire it for use on their farmland. Pig manure is classified as an animal by-product (Category 2) by reference to the Animal By-products Regulations (S.I. 252 of 2008 and Regulation EC/1774/2002) and is excluded from the scope of the Directive on Waste (2008/98/EC; Recitals 12 and 22 and Articles 2 and 5). The use of animal manures by depositing the by-product manure on land to supply fertiliser nutrients is provided for and controlled under the Animal By-products Regulations and the Nitrates Regulations (S.I. 101 of 2009 and Directive 91/676/EEC). The use of animal manure to fertilise land is lawful in the manner prescribed in legislation is lawful and is not a waste recovery activity.

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The placing of manure of farmed animals on the market and its transfer for use as fertiliser as is provided for in the ABP Regulations, and the use of manure of farmed animals by deposition on farmland in accordance with terms and standards prescribed in S.I 253 of 2008 and S.I. 101 of 2009 are not subject to control under the Waste Management Acts.

Pig rearers are required to manage **manure** produced in their holdings (including manure produced in licensed installations in the manner prescribed in legislation separate from the IPPC system. Any claim in relation to **management of nutrients** by a pig producer on customers' holdings is exaggeration, if not false. It is the responsibility of the “occupier” of each “holding” in this state to comply with regulations governing the management of pig manure as described below.



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The **system** for the management of **manure** in a pig rearing enterprise and the system for **the lawful transfer of pig manure to farmer customers** (occupiers of separate holdings) is as follows:

- Provide storage for six months production of pig manure, and provide storage capacity for 200mm freeboard in covered tanks and 300mm freeboard and prescribed rainfall amounts in open tanks,
- Collect all manure in the manner prescribed in S.I.101 of 2009, preventing leakage, spillage and discharge of any polluting material,
- Store all manure temporarily pending sale or supply and transfer to customers, in response to customer demand, as by-product fertiliser, as is provided for and authorised under S.I. 252 of 2008 and S.I. 253 of 2008, in the knowledge that use by customers is required to comply with standards prescribed in S.I. 253 of 2008 and S.I. 101 of 2009, and
- Record all transfers of manure from the installation as is required by Article 23(1)(g) in S.I. 101 of 2009 and maintain the records for inspectors.

A 27 week storage capacity (existing) allows for good management of manure. Manure is utilised by local farmers who apply it in controlled quantities to their farmlands using a low-trajectory splash plate. With over 27 weeks storage, (which will be increased further if the loose dry sow house is granted permission) manure-application can be delayed into the spring whenever unsuitable weather conditions delay farmer demand for manure.

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## 4. Impact of the Fixed Development

### 4.1 Human Beings:

The pig unit employs six operative staff and a trained Manager. It is estimated that the product from the site supports a further eleven jobs in the pigmeat processing, feed compounding/handling and the services sectors. These jobs are skilled, well paid and permanent. The jobs are usually based in rural areas and thereby make a positive contribution to the economy. They do not displace jobs elsewhere in the economy.

The pig unit is designed to operate with the best available technology under the supervision of a trained Manager. The farm has a Safety Statement prepared to comply with the Safety, Health and Welfare at Work Act, 1989 and safety procedures are reviewed and updated regularly.

The pig manure produced in the development is used by farmers as a fertiliser. The rate used is calculated to satisfy soil/crop requirements for fertiliser phosphorus(P). As P is the most expensive mineral nutrient to purchase (approximately €1.00/kg) it is prudent to limit P use to the quantity required for optimum crop productivity. On the basis that the available N and K are each valued at €0.30/kg the total value of each m³ of pig manure from the proposed development is €2.97. This amounts to a fertiliser value of €25,019 from the development on an annual basis. Therefore, the development has a positive impact. It is important in relation to the local economy and the national economy that this resource be managed and used to best advantage.

There may also be some adverse effects on humans. These are discussed in Section 4.5.1 below.

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### 4.2 Flora:

The site of this development is on an area of improved grassland. In total the existing development occupies an area of approximately 0.95 hectares. The



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new proposed buildings will increase this area to approximately 1.15 hectares. The general use of the farmyard area over the years has had no effect on local flora. It is fair to say that the fixed development has no effect and will have no effect on local flora.

### 4.3 Fauna:

The site of this development is on an area of improved grassland. The proposed fixed development will not interfere with the fauna that are of significance to this area.

Intensive animal farms have historically been associated with rodent infestations. This is no longer the case because of:

i. More effective rodenticide
ii. Better quality buildings
iii. Better feed storage
iv. Less wasteful dispensing of feed

Rodents are not a feature of the existing enterprise and are strictly controlled in the development. Therefore the development will not have any impact on the fauna of the area.

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### 4.4 Soil:

The fixed development will not have any impact on soil quality. The soils are more than adequate to bear the loads imposed on them by the proposed pig buildings.

### 4.5 Water:

An agricultural development of this nature could have a adverse effect on local groundwater and surface waters if the animal manures produced there were not stored and managed in a proper manner. The fixed development has not had and will not have any effect on water quality. All clean roof



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water is channelled away from the unit and allowed to enter the groundwater by means of two 150mm pipes (see site plan).
Manure storage is mostly underneath buildings in re-inforced concrete tanks. There is one overground storage tank which stores manure from buildings C, D, E, F and G. All soiled water is diverted to an adjacent manure tank, although it should be mentioned that the quantity of soiled water produced is negligible. It is expected that the site and structures on the site will have no impact on water quality.

A well on the site supplies approximately 10% of the water requirement. The other 90% of the water is from the Ballypickas Water Scheme. This source is also used by the Cahill household and there has never been any problem with the water quality from this source. Water meters are being installed to monitor water usage rates.

**4.6 Air:**

**4.6.1 Odours:**

The proposed development will take place in an entirely agricultural area where typical farm odours are to be found and expected. These odours arise from farmyards and lands during the day to day operations such as silage feeding, manure agitation and spreading. The existing unit, using best available practices, is already operating without a significant effect on the environment and will continue to strive to minimise all environmental impacts. This is in full conformity with its status as a high health herd.

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Emissions to atmosphere is a normal feature of pig production. It is a feature of the production process, which involves a population of live animals. Emissions to atmosphere are almost entirely in the air exhausts from houses and tanks. That air does carry some odour.

It is believed that there is no significant impairment of amenity outside the boundary of this site. Pigs have been produced on this site for over thirty



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years. There has not been one complaint regarding odour from the site during that time.

A high standard of hygiene is maintained on-site. While this may primarily to support and, to maintain the High Health Status of the herd it also serves to control odour. The washing routine for this development is attached as Appendix G.

Pig diets are now formulated to ensure that protein levels and more specifically the amino-acid levels match the pigs nutritional requirement. This results in less nutrients being excreted by the pigs – thereby reducing the substrate for the production of odorous compounds in the manure store.

The following measures will be taken to reduce odour from the development:

a) Insulation in houses will be maintained to ensure that natural ventilation allows any malodours disperse quickly into the ambient atmosphere.
b) Strict hygiene and cleanliness is and will be observed at and around the unit ( See Appendix E).
c) The skip for collecting dead animals will be covered at all times. It is and will be removed regularly to an approved destination to ensure no odour from this source at the site.

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### 4.6.2 Noise:

The pig unit is insulated with 50mm extruded polystyrene in walls and 50 to 80mm extruded polystyrene in ceilings. As well as providing heat insulation it also minimises the sound from within the unit . Noise has not been a nuisance at the site. There have been no complaints in this regard in over 30 years of pig production on this site.



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A simple definition of noise is "unwanted sound". The major noise sources associated with a pig unit are animals at feeding time, ventilation fans, feed unloading and tractors loading pig effluent.

Typically noise is a problem of pig units when animals are hungry. The weaners and finisher pigs (which comprise 90% of the pig herd) are fed on an ad-libitum basis and therefore there is no extra noise as a result of feeding these animals.

The sound level from the sows and boars in anticipation of their feed is increased for c. 10 to 15 minutes per day. These noise levels may reach 80dB at these times, while typical levels of feed delivery vehicles and tractors with slurry tanks may range form 70dB to 85dB. In the current proposal these noise levels occur during the working day and do not constitute a nuisance given that the nearest dwelling house (apart from Mr. Cahill's own house) is more than 100 metres away from the edge of the pig development.

**4.7 Climate:**

The site and structures have no measurable potential for any impact on the climate.

**4.8 Landscape:**

There is no negative impact of site and structures on the site on the landscape when viewed from the south ( See Figures 1 to 3 on next page) north and/or east because it is hidden from view. While it is visible when viewed from the west the impact is minimal as the unit is set into the immediate topography, and an existing hedgerow greatly obscures its visual impact.

The setting and the compact lay-out of the buildings contribute to control the visual impact of this development.

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**Figure 1:** View South of this pig unit (From Public Road).

**Figure 2:** View from the West Side of the Development.

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**Figure 3:** View from North side of the Site.

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### 4.9 Interactions:

The Average Daily Traffic (AADT) generated by the pig unit in full production is 10 vehicles. This consists of staff cars, feed delivery vehicles, pig sales, manure transport from the site and service personnel. AADT figures include out and return journeys. The impact of this increased traffic is insignificant. The entrance to the site complies with the NRA visibility guidelines. Entry to and exit from this development to the public roadway can be regarded as safe.

### 4.10 Material Assets:

Material assets in the form of roads, buildings and infra-structure should not be affected by the fixed development, in that the nearest house is over 100 metres away from the the pig buildings.

### 4.11 Cultural Heritage:

The development does not and will not impact on the cultural heritage of the holding.

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# 5 Monitoring and Management

The facility is managed by the Applicant. There is normally six other full-time staff employed in the pig production enterprise.

The management of the enterprise involves a disciplined approach to work routines. This is necessary for both commercial and animal welfare reasons. There is some delegation by the Applicant of responsibilities for daily routines, but there is frequent (daily to weekly) appraisal of progress and achievements undertaken by the manager and the stock persons. The assessment criteria include input/output data such as weight of feed used, weight of pigs sold, number and class of pigs dead, number of pigs born, number of sows bred, health of stock. Other criteria include operation of automatic feeding equipment, ventilation control equipment, health management, washing and hygiene programme, the pig manure management within the holding and the vermin control programme.

A log is maintained in which all movements off the site of pigs, pig manure and waste products are recorded.

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## 5.1 Manure Register.

The Applicant will maintain a manure register at the site. This will be a record of all manure distribution from the site and will include the volumes and destinations. This register will be available for inspection by inspectors from relevant authorities.

**Prepared by; Gerard McCutcheon,**
**Teagasc Pig Enterprise Adviser,**
**Teagasc, Oak Park, Carlow, Co. Carlow**.
**e-mail: gerard.mccutcheon@.teagasc.ie**



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Published jointly by the Department of Agriculture, Food & Forestry and the Department of the Environment.



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# Appendix A

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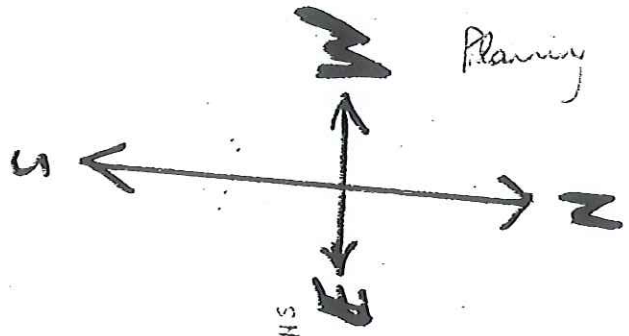
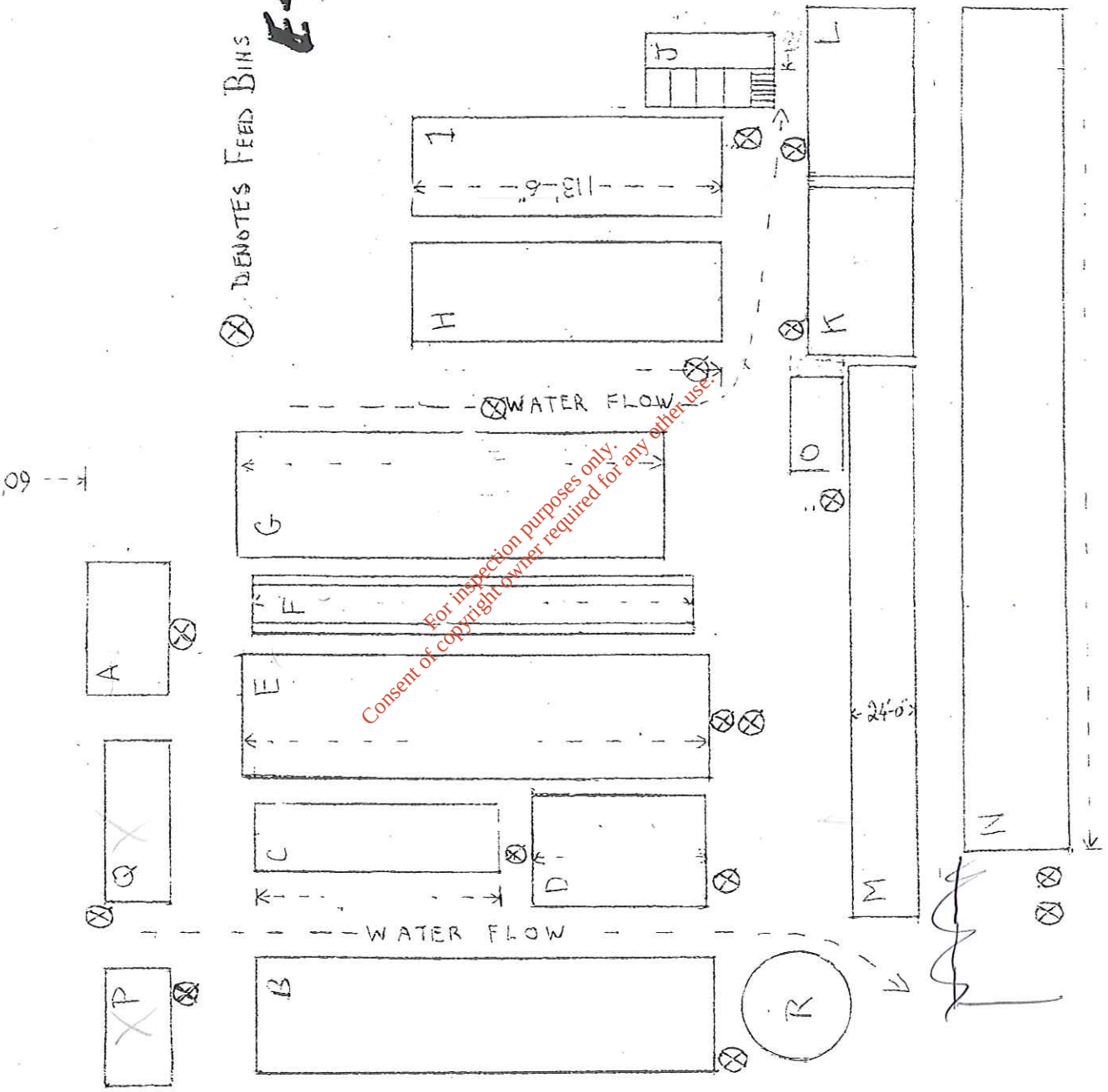
APPENDIX A1.

**Note** This is the existing site layout – plan

Planning Permission will be sought for amendments to comply with latest new housing requirements. These drawings will be available soon.

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A SECOND STAGE
B DRY SOW HOUSE
SECOND STAGE
C ~~FIRST~~ STAGE
D DRY SOW HOUSE
E FIRST & SECOND STAGE
F FATTENING HOUSE
G FARROWING HOUSE
H FATTENING HOUSE
I FATTENING HOUSE
J GILT PENS
K DRY SOW HOUSE
L FATTENING HOUSE
M SERVICE HOUSE
N FATTENING HOUSE
O STRAW SHED
P OBSOLETE
Q OBSOLETE
R SLURRY TANK 140,000 GLS.

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Teagasc

11/3/2004.
Eamon McCabe

APPENDIX A2.

# WORKSHEET FOR CALCULATING SLURRY STORAGE REQUIREMENTS ON PIG UNITS

**Client's Name:** Mr PJ Cahill Moate, Ballinalsill Co. Laois.

## (A) NEAT SLURRY PRODUCTION (litres/week)

| Number & type of pigs | Neat excreta per week per pig (l) | Total neat excreta per week |
|---|---|---|
| 118 Suckling sows (3.0:1) | 97 | 11446 |
| ____ Suckling sows (3.5:1) | 115 | ____ |
| ____ Suckling sows (4.0:1) | 135 | ____ |
| 502 Dry Sows/Boars (2.5:1) + 24 | 35 | ____ |
| 526 Dry Sows/Boars (3.0:1) | 44 | 23144 |
| ____ Dry Sows/Boars (3.5:1) | 53 | ____ |
| ____ Dry Sows/Boars (4.0:1) | 62 | ____ |
| ____ Dry Sows/Boars (4.5:1) | 70 | ____ |
| 72 Maiden Gilts (2.5:1) | 35 | 2520 |
| ____ Maiden Gilts (3.0:1) | 44 | ____ |
| ____ Weaners (2.5:1) 1080 x 0.9 | 12 | ____ |
| 2658 Weaners (3.0:1) 1680 x 0.95 | 15 | 39870 |
| ____ Finishers (2.0:1) | 20 | ____ |
| 2540 Finishers (2.5:1) | 27 | 68580 |
| ____ Finishers (3.0:1) | 34 | ____ |
| ____ Finishers (3.5:1) | 41 | ____ |
| Total weekly production of neat excreta | | 145,560 |
| Extraneous water: Add 5% weekly excreta for finishers<br>Add 10% weekly excreta for other stock | | 3429<br>7698 |
| TOTAL WEEKLY PRODUCTION OF NEAT SLURRY (a) | | 156,687 |

$\frac{a}{1000}$ = 156.77 m³ A

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## (B) RAINFALL ALLOWANCE

| | | |
|---|---|---|
| Local 30-year average weekly winter rainfall (Oct-Mar) | 22 | mm (a) |
| Surface area of uncovered slurry storage tank(s) | 100 | m² (b) |
| Surface area of open dirty yards | 100 | m² (c) |
| Total dirty area exposed to rainfall (b + c) | 200 | m² (d) |

TOTAL AVERAGE WEEKLY SLURRY VOLUME FROM RAINFALL $\frac{(a \times d)}{(1{,}000)}$ = 4.4

4.4 m³ B

Total Used = 162 m³.

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(C) GRAND TOTAL SLURRY OUTPUT/WEEK

Neat Slurry (A) _____ $m^3$ + Rainfall (B) _____ $m^3$ = [ $m^3$ ] C

(D) REQUIRED SLURRY STORAGE CAPACITY

Length of slurry storage period _____ weeks (a)

SLURRY STORAGE CAPACITY REQUIRED (C X (a)) = [ $m^3$ ] D

(E) SLURRY STORAGE PROVISION

(a) Under slats (discount top 225mm)

| | | |
|---|---|---|
| Dry Sow House | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| Farrowing Hse. | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| Stage I Weaner Hse | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| Stage II Weaner Hse | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| Finisher Hse. I | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| Finisher Hse. II | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| _____ House | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| _____ House | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| _____ House | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| _____ House | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| _____ House | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |
| _____ House | (_____m long x _____m wide x _____m deep) = | _____$m^3$ |

TOTAL UNDER-SLAT STORAGE = [ $m^3$ ] E

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(b) Slurry storage tank(s)

Capacity of Existing storage tank (if any) = [ $m^3$ ] F

REQUIRED CAPACITY IN NEW STORAGE TANK (D-E-F) = [ $m^3$ ]

Recommended dimensions of new storage tank _____m x _____m x _____m

If new storage tank is uncovered add (storage period x average weekly rainfall) mm or _____m to depth of storage tank.

Signed: _____

TEAGASC Pig Adviser.

Date: _____

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APPENDIX A2.

## Prediction of manure composition and nutrient output from feed composition - Integrated unit

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pig Unit Name | PJ Cahill | | | | | Clients copy | |
| Pig Unit Address | Moate | | | | | | |
| | Ballinakill | | | | | | |
| | Co Laois | | | | | | |
| | | | | | | | |
| Planning data | | | | | | | |
| Herd size (sows) | | 620 | | | | | |
| Pigs produced/sow/year | | 23.5 | | | | | |
| | | | | | | | |
| Weaner transfer weight kg | | 34 | | | | | |
| Sale liveweight kg | | 94 | | | | | |
| Sale carcass wt kg | | 71.4 | | Feed nutrient content | | | |
| | | | | | | | P |
| | | | | Pregnant sow | | | 0.68 |
| Sow feed usage t/sow | | 1.29 | | Lactating sow | | | 0.57 |
| Sow feed usage tonnes | | 800 | | Starter | | | 0.66 |
| | | | | Link | | | 0.66 |
| Weaner FCE | | 1.72 | | Weaner | | | 0.50 |
| Weaner feed usage t/sow | | 1.09 | | Finisher 1 | | | 0.51 |
| Weaner feed usage tonnes | | 676 | | Finisher 2 | | | 0.51 |
| | | | | Finisher 3 | | | 0.51 |
| Finisher FCE | | 2.55 | | | | | |
| Finisher feed usage t/sow | | 3.6 | | | | | |
| Finisher feed usage tonnes | | 2232 | | | | | |
| | | | | | | | |
| Total feed usage t/sow | | 5.98 | | | | | |
| Total feed usage tonnes | | 3707.6 | | | | | |
| | | | | | | | |
| Overall unit FCE (live) | | 2.65 | | | | | |
| Overall unit FCE (carcass) | | 3.49 | | | | | |
| | | | | | | | |
| | | | Nutrient excretion | | | | |
| | | | | | | | Phos |
| | | | Per sow per year kg | | | | 19.7 |
| | | | | | | | |
| | | | Unit total tonnes/year | | | | 12.2 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Based on the best scientific data available to Teagasc, the above is the | | | | | | | |
| estimated nutrient output from the named unit using the pig production and | | | | | | | |
| feed composition data shown. | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Prepared by: | Adviser name | | Gerard McCutcheon | | | | |
| | | | | | | | |
| Address: | Teagasc | | Teagasc, Barrett Street, Bagenalstown, Co. Carlow. | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Signed: | Gerard McCutch | | | | | | |
| | | | | | | | |
| Date prepared: | 11/3/2004. | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Worksheet last modified June 23, 2000 | | | | | | | |

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## Appendix A2

## SCHEDULE OF MANURE TANKS.

| Tank No | House No | Length, m | Width, m | Depth, m | Capacity, $m^3$ Gross | Capacity, $m^3$ Adjusted |
|---|---|---|---|---|---|---|
| 1 | A | 14.3 | 9.9 | 0.76 | 108 | 93 |
| 2 | B | CROSS | CHANNELS | 0.92 | 383 | 280 |
| 3 | C | 26.5 | 6.9 | 0.92 | 167 | 149 |
| 4 | D | CROSS | CHANNELS | 0.92 | 66 | 49 |
| 5 | E | 48.8 | 14.1 | 0.61 | 420 | 351 |
| 6 | F | CROSS | CHANNELS | 1.07 | 100 | 80 |
| 7 | G | 45.4 | 12.2 | 0.61 | 338 | 282 |
| 8 | H | 34.1 | 10.6 | 1.20 | 434 | 398 |
| 9 | I | 34.1 | 10.6 | 1.20 | 434 | 398 |
| 10 | J | 13.1 | 3.0 | 2.40 | 94 | 90 |
| 11 | K and L | 37.3 | 10.8 | 1.37 | 552 | 512 |
| 12 | M | 43.0 | 1.4 | 1.07 | 63 | 57 |
| 13 | N | 86.8 | 10.9 | 1.20 | 1,135 | 1,041 |
| 14 | | CIRCULAR TANK | | | 636 | 636 |
| 15 | T* | 60.0 | 16.5 | 2.40 | 2,376 | 2,277 |
| TOTAL, $m^3$ | | | | | 7,306 | **6,693** |

Note: All tanks are underground, reinforced concrete.
Adjusted capacity allows for 100mm "freeboard".
T*= The proposed new loose dry sow house

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**Appendix A2:**

620 Sows x 19.7kg P = 12,338kg of P

620 Sows x 67kg Organic N. = 41,540kg of Organic N.

Analysis Approximately 1.4575kg of P/$m^3$

Approximately 4.957kg of N/$m^3$

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# Appendix C

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TALLOWS PROTEINS MEALS

# COLLEGE PROTEINS

COLLEGE ROAD, NOBBER, CO. MEATH, IRELAND.

Telephone: (046) 9052466 Fax: (046) 9052062 e-mail: cpi@collegeproteins.ie

NATIONAL AWARD WINNER eta ENERGY AWARD WINNER 1993

05th April 2004

**To Whom It May Concern:**

**Re:P.J.Cahill,Farms Ltd.,Moate,Ballinakill,Portlaois,Co.Laois.**

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Dear Sir/ Madam.

We wish to confirm that we do collect and dispose of dead pig's from the above named company on a regular basis. Our plant at Nobber, which was custom built on a green field site in 1989 is fully equipped with a modern effluent system, which regularly monitored by the E.P.A. under licence no. 597. We pride ourselves on having a good reputation in the Rendering Industry, and we have been certified under EU Directive 1774/2002, which governs the industry.

If you require any further assistance, please do not hesitate to contact me.

Yours faithfully,

Pat Farrelly.

Pat Farrelly,
Transport Manager

COLLEGE PROTEINS LTD.

Directors:- Mr. J. Gilroy (Managing Director), Mr. M. Gilroy, (Company Secretary)

Company Registration Number: 136971

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ADVANCED ENVIRONMENTAL SOLUTIONS (IRELAND) LTD.

15 LOWER BRIDGE STREET,
PORTLAOISE, CO. LAOIS.
PHONE: 0502-65065 FAX: 0502-64881
EMAIL: info@aesirl.ie

PJ. Cahill
Moate,
Ballinakil,
Co Laois.

24th June, 2004.

Dear PJ,

This is to certify that AES is collecting Waste Material, General Domestic Waste and other Non-Contaminated Waste Material from your site in Ballinakil.

Any further enquiries please do not hesitate to contact me.

Yours sincerely,

Seamus Meehan
General Manager

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**Transafe Limited**

1a Renmore Business Complex,
Kilcoole Industrial Estate,
Kilcoole, County Wicklow.
Tel 01 201 6060 Fax 01 201 6061

Hickey Group Warehousing Centre,
Ballysimon Road, Limerick.
Tel 061 400 788

info@transafe.ie
www.transafe.ie

FAO: P.J. Cahill
PJ Cahill Farms Ltd
Moate
Ballinakill
Portlaois
Co Laois

20th April 2004

Dear Mr Cahill,

Further to your recent request for confirmation of the disposal route for waste materials collected from the above premises, we enclose a process flow for your information. Please note the following

- All materials collected from your premises undergo treatment and disposal within the State..
- Materials are collected from your premises on a regular basis, at a minimum frequency of two collections per annum.

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All materials collected from your premises is transported to Eco-Safe Systems Ltd., Unit 1A, Allied Industrial Estate, Kylemore Road, Dublin 10.

Eco-Safe Systems is an EPA Licensed Waste Treatment facility, Licence No. 54-2, in accordance with *The Waste Management (Licensing) Regulations 2000 (S.I. No. 185)*. The following is the waste flow from the point of origin, through the Eco-Safe Systems treatment facility and for final disposal at EPA Licensed, KTK Landfill, Kilcullen, Co. Kildare, Licence No. 81-2.

1. Waste is collected from your premises by Transafe Limited in Eco-Safe Systems bins.
2. The waste is transported to the facility on the Kylemore Road in accordance with the *Carriage of Dangerous Goods by Road Regulations 2001.* and each movement is accompanied by a C1 document as required by the *Waste Management (Movement of Hazardous Waste) Regulations 1998*
3. Each bin is bar-coded with a unique customer ID number allowing the full traceability of the bin and its contents throughout the operation.
4. When the bins arrive, they are unloaded and held prior to being weighed and scanned onto the system so there's a record of arrival, amount of bins and weight.
5. The operatives then cut the outer tie of the bins and push the bins forward into a batching area awaiting sterilisation.
6. Any bins that contain non-conformance waste i.e. cannot be treated at the Eco-Safe Systems facility in accordance with the EPA Licence are held in a quarantine area awaiting



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repackaging prior to export to a licensed incinerator facility in Belgium in accordance with the Company Export Licence. *The types of material that would be identified as non-conformance material are cytotoxic or pharmaceutical waste, these can be easily identified by their purple and blue lids, respectively, and require higher temperatures for safe disposal.*

7. Approximately 12 bins are put together in a group for the Rotoclave. This is a similar treatment to an autoclave, the difference being that an internal blade rotates splitting open all the bags and boxes allowing the steam to penetrate all the material.
8. Prior to loading into the Rotoclave, each bin is then scanned recording the exact bin numbers that go into either Rotoclave No. 1 or 2, hence allowing traceability of each bin throughout the treatment.
9. The bins are then automatically hoisted into the Rotoclave and the operating parameters are run at minimum of 134°C for 15 minutes dwell time at 45 psi.. The entire sterilisation process takes approximately 30/40 minutes. These parameters have been set to achieve sterilisation and if for some technical reason they are not met, then the Rotoclave door will not open and the treatment will begin again until such time as all parameters are reached.
10. A 3M Attest vial of *Bacillus Stearothermophilus* is included in each Rotoclave cycle and then incubated in the company laboratory for 48 hrs to confirm sterility.
11. Random grab samples are taken as a secondary analysis for sterility.
12. No waste leaves the facility before the results of points 10 & 11 are confirmed.
13. After leaving the Rotoclave, the waste is taken along a conveyor and through a shredder. This ensures that the waste is unrecognisable.
14. The shredded waste is then filled into a 1000 kg jute bag and awaits disposal at KTK Landfill.
15. This system ensures the traceability of the waste from leaving the point of origin (signing of C1 form) – to arrival at Eco-Safe (initial barcode scan) – to sterility of batch (secondary barcode and scientific tests) – to landfill (record on acceptance of material at Landfill)
16. Certification of acceptance and disposal is then provided to the client, usually in the form of a copy of the completed C1 document.

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Should you have any technical queries regarding the treatment and disposal of your materials please contact Ms. Ailish Fitzgerald, Systems Manager at Ecosafe Systems on 01 623 9135.

We trust the enclosed is satisfactory and we look forward to continuing our provision of a safe, legal, and cost-effective solution to your environmental requirements.

Yours Sincerely
For **Transafe Limited**

Tina Keogh
General Manager
Sales & Operations

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Number: 107718

# TRANSAFE LTD
# SOUTH EAST HEALTH CARE

## WASTE TRANSFER NOTE

A/C ☒ Cash ☐

## PART A

**Name**
**Address**

**Tel:**

**Delivery to** Ecosafe Systems Ltd

| Waste Type | Container Size | Weight | Bin Number |
|---|---|---|---|
| Delivered | | | |

*I hereby declare that the waste described above was collected from the above premises on* 22/04/04
*at* 12.15 *by* Robert Ross *(Name)* *(Drivers Signature)* *for and on behalf of Transafe Ltd.*

*Signature* *Name* Date 22/04/04

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## PART B

**Delivered to:** Ecosafe Systems Ltd
**Address**
Unit 1A
Allied Industrial Park
Kylemore Road
Dublin 12

*I hereby certify that the waste material described in Part A above was safely delivered to the address named above, for safe disposal via the appropriate approved technology.*

*Signature* _____ *Name* _____ *Date* _____



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**Form C.1.** Consignment Note for consignments of hazardous waste transported within the State (NOT to be used for transhipment into or out of the State) B 0152415

**PART A (to be completed by the consignor)**

1. Name and address of consignor[1]: ..... Tel: ..... Fax: .....
2. Name and chemical composition of waste* 3291, Clinical Waste, unspecified N.O.S. 6.2, 4 II ADR
3. European Waste Catalogue/Hazardous Waste List Description(s) and Code(s)[2]: Waste from Healthcare
4. Origin of waste (name and address of producer, if different from 1.) As Above
5. Process(es) that waste originates from: Laois County Council
6. Quantity (indicate kg or litres): .....
7. Size, type[3] and number of containers: .....
8. Physical characteristics[4]: Solid
9. Components which are hazardous (giving concentrations in each case): Potential Biohazard - Unquantified
10. Hazardous properties[5] and special handling instruction (if any): Infectious Substance - Handle in accordance with Driver's instruction card.
11. Name and address of consignee[6]: Ecosafe Systems Ltd., Unit 1a, Allied Industrial Estate, Kylemore Road, Dublin 10.
12. I, the consignor, certify that the information given in Part A above is complete and correct to the best of my knowledge.

Signed ..... Date .....

Name (block letters) ..... on behalf of .....

Position held by person signing .....

**PART B (to be completed by the carrier)**

13. I, the carrier,[7] certify that I collected the waste described in Part A in vehicle (reg. no.) ..... at (time) ..... on (date) ..... and that I have been informed of the hazardous nature of the waste, as set out in that Part.

Signed ..... on behalf of Transafe Limited

Name (Block Letters ..... Signature of consignor as witness .....

**PART C (to be completed by the consignee)**

14. Name and address of consignee: Ecosafe Systems Ltd., Unit 1a, Allied Industrial Estate, Kylemore Road, Dublin 10.

Tel.: 01-623 9135 Fax: 01-623 9136

15. Waste licence number (if applicable)[8] 54-2 Waste permit number (if applicable)[9] .....

Certificate of registration (if applicable)[10] ..... in vehicle (reg.no.) .....

16. The waste described in Part A was delivered to me by (carrier) .....

at (time) ..... on (date) ..... on behalf of (consignor) .....

17. (a) The consignment was accepted: ..... (b) The consignment was rejected: .....

18. If the consignment of waste was rejected, state the reason(s): .....

19. If the consignment of waste was accepted, state the recovery/disposal activity(ies) to which it will be subject and provide code number and description of the technology involved[11]

20. I, the consignee, certify that the information given in Part C above is complete and correct to the best of my knowledge.

Signed ..... Date .....

Name (block letters) ..... on behalf of Ecosafe Systems Ltd.,

Position held by person signing .....

* full description may be attached on separate page

Footnotes [1] to [11] see relevant definitions and lists in the "Instructions for completion of Consignment notes for Hazardous Waste".

CONSIGNOR'S COPY - to be retained by the consignor of the waste

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## Hazardous Waste Disposal

| Waste material | European Waste Catalogue Code | Main source[1] | Quantity | | Further treatment (Method, Location & Undertaker) | Waste Management Option | Waste Contractor(s) (Where Used) |
|---|---|---|---|---|---|---|---|
| | | | Tonnes / month | $m^3$ / month | | | |
| Sharps (needles) | 020105 | Medical treatment of pigs. | 1kg/month | | None | Disposal contractor is Trans- Safe Ltd. | Collected by Trans-Saf Ltd. and delivered to Trans-Safe Ltd for disposal. |
| Empty veterinary Medicine containers | 020105 | Healthcare Products | 10 kg/month | | Triple rinse on site | Rinsate discharged to manure tank | None |
| Fluorescent tubes | 020121 | Pig houses | 10 kg/ month | | None | Deposit in local Bring Centre | None |

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## - Non-Hazardous Waste Disposal

| Waste material | European Waste Catalogue Code | Main source[1] | Quantity | | Further treatment (Method, Location & Undertaker) | Waste Management Option (Landspreading, Landfilling, Other) | Waste Contractor(s) (Where Used) |
|---|---|---|---|---|---|---|---|
| | | | Tonnes / month | $m^3$ / month | | | |
| Domestic refuse | 020101 | Canteen, office & packaging | c. 87kg | | None | Collected and disposed in a landfill site. | AES Ltd. Waste Company |
| Vet Medicine containers | 020105 | Healthcare products for pigs | 10 kg | | Emptied / Rinsed on site | Glass to recycling centre Plastic to domestic refuse | |
| Dead Pigs | 020102 | Pig Stock | 1734kg | | None | Rendering Plant Rendered to Meat and Bonemeal. | Collected by College Proteins Ltd. Transported to College Proteins Ltd., Nobber, Meath. |

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# Appendix E

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# Appendix E

## Washing Routine on PJ Cahills Unit

Farrowing Houses washed after each weaning on average every four weeks.

First stage weaners washed after each batch on average every four weeks.

Second stage weaners & finisher pens washed three times a year (March/April), (June/July) & (September/October).

Loading yard and walkways washed each week after pigs are sold and moved around.

All rooms are disinfected after washing.

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# Appendix F

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# Laois County Council

## Application for a Percolation Test

**Name:** P.J. Cahill

**Address:** Moate, Ballinakill Co. Laois

**Ref No.:** SR 230/04

**Address for Correspondence** Moate, Ballinakill, Co. Laois

**Date:** 24.6.04

Dear Sir/Madam,

I refer to your application for a percolation test with Laois County Council.

I now enclose a copy of your results for your information.

Note:
When making your application for planning permission, please note that in the event of a percolation test failure the minimum site size of 2 acres is required and the applicant must be the owner of the site. Revised proposals should be submitted on plan from scale 1:500 in accordance with the site separation requirements of SR6, 1991 of the National Standards Authority of Ireland.

In the event of a failed percolation test, the applicant shall submit details of the proposed sewerage treatment system including a Site specific report, sections through the site showing percolation pipes and maintenance contracts from the supplier.

Yours sincerely,

Alice Brennan

**Antoinette Brennan**
**Ex Technician**
**Planning**

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*Comhairle Chontae Laoise*
ARAS AN CHONTAE,
PORTLAOISE.
Guthan: (0502) 22044

*Laois County Council*
COUNTY HALL,
PORTLAOISE.
Tel: (0502) 22044

[redacted]

## 1.0 GENERAL DETAILS

Percolation Test Application Ref No. SP 230604

Planning Application Ref. No:

Name and Address of Applicant: P. J. CAHILL, MOATE, BALLINAKILL

Name and Address for correspondance: AS ABOVE

Telephone: Fax No:

Location of Development: MOATE BALLINAKILL

Number of Bedrooms in House: NONE - OFFICES + TOILETS + SHOWR

Proposed Water Supply: Mains ☑ Well ☐ Borehole ☐
Other Specify: GROUP WATER

Aquifer Protection Zone: Yes ☐ No ☐

Site Area (Acres/Hectacres): 6 ACRES

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## 1.1 CHARACTERISATION

**Visual Assessment**

Date of Test: 15-6-2004

Weather Conditions (current and recent): DRY

Landuse: YARD OF PIG FARM

Site Drainage: NONE

Topography: LEVEL

Proximity of adjacent; Septic tanks NONE

Dwellings NONE

Historical/archaeological sites NONE



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## 1.2 SOIL PROFILE DESCRIPTION

Bedrock type: _____

Depth to bedrock: _____

| | Horizon 1 | Horizon 2 | Horizon 3 | Horizon 4 |
|---|---|---|---|---|
| Depth | 0m - 200 mm | 200mm - 1m | | |
| Soil Texture | GRAVEL | SUB-SOIL | | |
| Soil Structure | | | | |
| Soil Colour/Mottling | | | | |
| Iron Pan | | | | |
| Rock Present | | | | |

Previous Experience in the area: NONE

## 1.3 TRIAL HOLE TESTS

Depth in compliance with S.R.6 Standards?

Trial Hole Depth (m): 1m

Water Level Depth (m): No WATER

Comments: _____

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## 1.4 PERCOLATION TEST RESULTS

**Test Hole No. 1**

| Saturated: Time taken for 100mm Drop | |
|---|---|
| Time (minutes) | Level (mm) |
| 0 mins | 400 mm |
| 30 mins | 300 mm |
| | |
| | |
| | |
| | |
| | |
| Percolation t Value | 7.5 |

**Test Hole No. 2**

| Saturated: Time taken for 100mm Drop | |
|---|---|
| Time (minutes) | Level (mm) |
| 0 mins | 400 mm |
| 45 mins | 300 mm |
| | |
| | |
| | |
| | |
| | |
| Percolation t Value | 11.25 |

**RESULT: T = 9.375** PASS/FAIL

Length of percolation piping required: 30m

I certify that the above tests have been carried out in accordance with S.R.6 of 1991 and that the above results were recorded by me on site.

**SIGNED:** _____ **DATE:** 15-6-04

Antoinette Brennan
*Executive Technician*



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