# MEMORANDUM

**DATE:** 05/11/2004

**TO:** Board Of Directors

**FROM:** Elaine Farrell

**RE:** Application for an IPC licence from Donal Brady, for a pig rearing and

fattening unit at Ballyglassin, Edgeworthstown, Co. Longford.

Application Details	
Licence application received:	09/03/98
Notices under article 11(2)(b)(ii) issued:	07/05/98, 08/10/98, 01/02/99,26/02/99
Information under article 11(2)(b)(ii) received:	28/07/98, 14/09/98, 11/11/98, 12/11/98, 16/12/98,15/02/99, 01/04/99
Site visits:	5/6/98,1/9/98 (spreadlands), 18/9/98, 21/1/99, 22/4/99

# Class of Activity

# Intensive Agriculture:

6.2 The rearing of pigs in installations, whether within the same complex or within 100 metres of that complex, where the capacity exceeds 1,000 units on gley soils or 3,000 units on other soils and where units have the following equivalents-

1 pig = 1 unit 1 sow = 10 units

# The Activity

This application relates to an existing 1800 sow enterprise (18,000 units) which is being expanded to a 2000 sow enterprise (20,000 units) at Ballyglassin, Edgeworthstown, Co. Longford. The piggery has received planning permission for a number of developments as follows:

Date	Description	Authority
Granted 20/3/78	Planning Permission for erection of piggery at Ballyglassin, Carrickboy, Co. Longford.	Longford County Council (PL/5916)
Granted	Erection of pig fattening house at Ballyglassin,	Longford County
12/9/79	Carrickboy, Co. Longford.	Council ( 7114 )
Granted	Erection of two pig fattening units	Longford County
12/5/89		Council( 10967)
Decision	Following appeal by Ann and John Murray, c/o	An Bord
Upheld	Patrick J. Connellan and Company of 3 Church	Pleanala

8/2/90	Street, Longford against decision of 12/5/89	(10967)
Granted 22/4/94	Erection of pig breeding and finishing units, retention of farrowing house, weaning house and slurry tank with proposed fattening house over at Ballyglasson, Edgeworthstown, Co. Longford.	Longford County Council (12485)
Decision Upheld 14/10/94	Following appeal (and oral hearing) by Ballyglasson Environmental Action Group c/o the Murray Family, Ballyglasson, Edgeworthstown, Co. Longford.	
Granted 19/1/96	Replace prefabricated pig houses with permanent building at Ballyglasson, Edgeworthstown, Co. Longford.	Longford County Council (13275)

The piggery began these expansion works in 1998 and it had been expected that they would be completed by about April 1999. However in the light of the current economic pressures on the pig industry, one house remains unbuilt and is not expected to be completed until the situation improves.

The main activity is breeding, rearing and growing of pigs to a weight suitable for the pork and bacon industry.

The piggery is accredited to ISO 9002 and won pig producer of the year in 1993.

No single media licence was issued for the facility previously by Longford County Council, as none was required under the then legislation.

#### Waste

Operation of the pig unit in its extended form will result in the production of approximately 33,000 m³ of slurry annually (including wash water) based on the REPs guidelines 1996 for estimation of neat excreta produced by livestock. In 1998 the total slurry produced (1750 sows) was 26,250m³. Total slurry and wash water storage capacity on site is 36,552 m³ (this figure however does not include freeboard provided to allow for gas accumulation). This storage capacity is sufficient for 12 months. This storage capacity includes three overground tanks of capacity 1140m³ each. Minimum storage capacity has been conditioned in the proposed determination.

The annual quantity of P in slurry produced at the unit is estimated in the application as 38 tonnes at present and 44 tonnes per annum following the expansion (based on 1.42 kg/tonne P). The Agency calculates the phosphorus generated by a pig unit as follows (based on REPs 1996):- for a sow and progeny to finishing weights - 22 kg P. Therefore this pig unit would be expected to generate approximately 44 tonnes P per annum which tallies with the applicant's projections.

Most of the spreadland proposed is grassland in use either for the production of silage (2 cuts) or hay or for grazing. A small fraction is tillage land used for cereal production. In all cases the lands receive no stored animal manure/slurry from any other source.

The applicant surveyed 2,818 ha and, following exclusions, found 2,380 ha of land to be acceptable. This assessment took account of current use, topography, drainage conditions, incidence of rock outcrop in the local

area and the owners knowledge or opinion regarding soil depth. A total of 2380 ha (108 farms- 91 farms in Longford and 17 farms in Westmeath) have been pledged to the unit (agreed in writing). The applicant owns 41 ha of this land. The spreadlands were inspected during the site visits and the landbank appeared to be suitable and adequate. In the IPC application it was calculated that these lands have the capacity to use 44,317 m³ of pig slurry (63 tonnes P approximately, based on Teagasc Recommendations 1997) per year. When the buildings permitted for the site are complete and fully occupied, animal slurry output will be equivalent to only 70% of this land (if it is all found to be suitable following the vulnerability assessment required within 4 months of the date of grant of this licence-see section on Water below).

A requirement to investigate alternative technologies for the treatment of slurry has been included as part of the Annual Environmental Report.

Other major wastes arising at this site include pig carcasses (estimated at 100 tonnes annually, stored in covered steel containers and sent weekly for rendering), and waste veterinary products and containers (returned to supplier). Both these wastes are classified as hazardous. Management of these wastes is controlled under Conditions 5.1 and 5.2.

#### Air

There are two aspects to the development relating to air quality: on-site issues and off-site landspreading.

The nearest occupied house to the unit is located approximately 400 m south of the unit. However there have been no complaints regarding odour received from this resident and no odours were detected in this area during site visits. The Murray family who have made a number of submissions regarding odour reside approximately 600m north of the unit. Condition 4.2 of the proposed determination regulates odour emissions and their potential impact beyond the site boundary, particularly at the four most sensitive locations (the two mentioned above and two other residences which are located some 650 m³ to the south of the pig unit). No odour complaints have been received from these two residences either.

In terms of landspreading activities associated with the proposed unit, the applicant has proposed spreading using the low trajectory splashplate method.

The applicant is also required to examine the feasibility of use of bandspreading and/or soil injection methods for landspreading within six months of the date of grant of the licence.

In order to comply with Schedule 3 (v) of the proposed determination no landspreading is allowed to take place within 200m of sensitive buildings and within 100m of dwelling houses.

## Water:

The only surface water emission from the site relates to clean rain water. There are four drains which collect this discharge. These drains ultimately discharge via a stream named in the application as Ballyglassin Stream into the River Inny (a tributary of the Shannon). However, this is in fact the Lenamore Stream. EPA monitoring 1992 classified the Lenamore

stream with a Q value of 4 (unpolluted) at Ballyglassin bridge (having received 3 of the four surface water outfalls at that stage) and a Q value of 3 (moderately polluted) at Legan Bridge (in the village of Legan) further downstream from the pig unit. The 1996 EPA Biological Quality Ratings showed an improvement in the water quality. At Ballyglassin Bridge the Q values remains at 4 (unpolluted) but at Lenamore Bridge( Legan village), the Q value has increased to 4 (unpolluted). Data gathered by the applicant from 1996 to 1998 have shown the stream to have low levels of phosphorus, ammonia and BOD. In fact there is little difference between the values obtained upstream and downstream from the piggery. Monitoring of these surface water outfalls is included in Schedule 4(i) Surface Water Discharge Monitoring and ambient monitoring of the Lenamore stream is required in Schedule 4 (ii) Ambient Surface Water Monitoring. Visual inspection of the discharges is required on a weekly basis with chemical analysis quarterly.

The site of the piggery is over a locally important aquifer. However the applicant has demonstrated that there is at least 1m of soil depth in this area. A groundwater well at the site which has been monitored from 1996 to 1998 has shown no signs of pollution. Levels of < 0.005 mg/l P, and 0.01 mg/m3 ammonia have been observed in recent times. On site groundwater monitoring is a requirement under Condition 8.1. Condition 7.2.1 requires that a groundwater monitoring programme for wells located in the spreadland areas is submitted to the Agency within 12 months of the date of grant of the licence.

Most of the spreadlands are located over aquifers classified as locally important. Seven of the land parcels are located over regionally important aquifer with the remainder located over poor bedrock aquifers. In some cases, the applicant has demonstrated (auger logs) that there is over 1 m of overburden in the area. Any areas where the soil depth does not appear to be adequate (from data provided) were excluded from the spreadlands.

However, for the rest (where there has been no data provided) it is stated that "based on owners knowledge or opinion regarding soil depth" that there is at least 2m over all the chosen spreadlands and probably not less than 1m over any section. However prior to landspreading on any of the land parcels requiring at least 1m of overburden Condition 5.5.7 requires that the Agency is satisfied (with measurement etc.) that this soil depth is present.

Similarly no landspreading in the areas which are underlain with a regionally important aquifer (7 land parcels listed in Condition 5.5.6) can be carried out until such time as the Agency is satisfied that sufficient soil depth (2m) is present.

Notwithstanding this Condition 5.5.5 requires that a detailed groundwater vulnerability assessment of the spreadland areas is carried out within four months of the date of grant of the licence.

Until all this information is submitted the landbank available to the applicant will be considerably reduced (approximately 4 months is immediately available). However until such time as the information regarding soil depth is provided, landspreading in the remaining areas is not permitted.

It would appear from indications to date that there is more than sufficient land in the proposed landbank with adequate soil depth, however this must be confirmed to the Agency prior to landspreading on the specified lands. Having regard to the large amount of storage available on the site, it is believed that the applicant has adequate time to identify additional lands or cut back on production as necessary, after examining the results of the assessment.

A disposal site in the event of a Class A outbreak has been identified.

#### Noise:

Results of a noise survey carried out demonstrate that the pig unit does not give rise to levels above those specified in the proposed determination (55 dB(A) daytime, 45 dB(A) night-time) at noise sensitive locations. In fact, the main source of noise in the area is the traffic on the nearby N55.

## **Submissions:**

Eight submissions were received on the IPC application:

Date	Submissions
9/4/98	Anna Kavanagh(Farrell),Corracorkey, Edgeworthstown, Co. Longford
15/4/98	BEAG (Ballyglasson Environmental Action Group)-Joe Murray
29/5/98	Ballyglasson Environmental Action Group-Joe Murray
5/6/98	Frank and Pearl Greene, 5 Smithfield Crescent, Legan, Co. Longford
3/8/98	BEAG-Ballyglasson Environmental Action Group-Joe Murray
13/8/98	Teresa Murray, Ballyglassson, Edgeworthstown, Co. Longford
21/8/98	Pearl and Frank Greene, 5 Smithfield Crescent, Legan, Co. Longford
1/12/98	BEAG -Phil Murray, Ballyglasson, Edgeworthstown, Co. Longford

## Anna Kavanagh/Farrell (9/4/98)

Ms Kavanagh made a submission regarding the impact of Donal Brady's Piggery on air quality, river water quality and landspreading practices.

With regard to air quality, she complains that there is a foul odour at her house (0.25 miles from the piggery) whenever the wind blows in a westerly or south westerly direction. When this happens she has to keep windows and doors closed and clothes cannot be dried outdoors.

She also refers to the tributary of the Inny which passes through the piggery land and then through her farm. (This is identified as the Ballyglasson stream in the application). She claims that since the piggery commenced operation, there has been no fish life although this was once very rich in trout. She also felt that slurry was being discharged into the river because at the time of writing this letter she noticed it to be dark in colour and rather smelly. This is of particular concern to her as the River Inny is used as source of domestic water supply in the area.

She refers to an incident in March 1998 where it was observed that slurry which originated in Mr. Brady's Piggery was taken by large tanks and pumped into two large holes at Legan crossroads close to Legan village. This caused unpleasant odours in the village and especially affected children at the school who felt ill. She finishes by saying that the holes were covered up after a few days.

## Response

Condition 4.2 requires the licensee to carry out all operations in such a way as to minimise the effect of odour generated on site on the off-site environment. With regard to river quality, an ambient water monitoring programme is required and there also is an EPA monitoring station on this stream. As stated earlier the current biological monitoring (1996) of the Lenamore Stream by the EPA has shown an improvement in the quality rating since 1992. Both stations downstream of the piggery have a Q rating of 4 (unpolluted). Mrs. Farrell's land lies between these two monitoring points. All surface water originating from the pig unit and discharging to the stream will also be monitored by EPA personnel and by the company.

Temporary storage of slurry prior to landspreading has been addressed in Condition 5.5.10 which will not permit a recurrence of the incident described.

# Joe Murray (BEAG) -(15/4/98)

Joe Murray (Chairman of Ballyglasson Environmental Action Group) wrote on behalf of this group regarding this application. He states that the piggery has had devastating effects on the local community and the environment since it was built some twenty years ago. He says that they have witnessed substantial sections of the plant being constructed without planning permission and also non compliance with planning conditions laid down by An Bord Pleanala.

Mr. Murray claims that in a townsland of 7 households, four families have left the area since the piggery was built and he suggests that this was due to the disruptiveness and repugnance of the industry. They also draw attention to a major fish kill in the local river for which Donal Brady was found guilty in Court and points out that there is a situation now where all fish life is virtually extinct in the local river which was once renowned for fishing. He describes the "regular occurrence" of storing slurry in open unlined pits in road-side fields. He refers to a recent incident in March 1998. He also claims that at least half of the planning conditions laid down by An Bord Pleanala have been breached by the applicant. He refers to the "appalling" condition of the Ballyglasson roadway due to the volume of

piggery traffic. Finally he mentions the smell of slurry as "pervading the area" and the health risk to local people. He suggests that a significant reduction in the pig population and the installation of an aerobic digester is the only way to achieve a reduction in slurry volume.

In this submission is also enclosed a copy of a newspaper report of the Bord Pleanala oral hearing in 1994, a newspaper report about a Westmeath environmental officers concerns about the effect of Slurry spreading on Ballynacaragy water supply and an extract from the newspapers regarding a fish kill arising due to silage effluent run-off from Mr. Brady's farm in the past.

#### Response

Mr. Murray initial points relate to planning issues and as such these were passed on the Planning Office at Longford County Council for their information.

He also refers to the open pit as referred to above (which will be addressed by Condition 5.5.10). With regard to his suggestion of an aerobic digester to reduce slurry volumes, it should be noted that a requirement to investigate alternative technologies for the treatment of slurry has been included as part of the Annual Environmental Report.

The fish kill referred to was due to silage run-off from the site a number of years ago (1986). The matter of adequate containment of this effluent has now been addressed and there has been no reoccurrence. Condition 7 prohibits the discharge of any contaminated water to the surface water discharge system. Regular visual checks and monitoring of surface water outfalls from the site as required by the proposed determination should prevent this reoccurring.

The newspaper report enclosed dates from 1994 and refers to concern about slurry spreading on two farms. One belonging to Mr. Tom Eivers which is adjacent to the mill river and the other Mr. Frank Eivers. In the IPC application, it is only proposed to spread slurry on Mr. Frank Eivers land and the maps provided show quite a zone of approximately 200m between the area in which spreading is to be carried out and the watercourse. All lands are subject to the code of practice for landspreading organic wastes for the protection of surface and groundwater as specified in Schedule 3(v) of the proposed determination.

# BEAG (29/5/98)

This submission included a study of the geology and groundwater in the area carried out by Stephen Peel and commissioned by BEAG. The report raises the following concerns:-

1. This refers to an EIS prepared by the applicant as part of the planning application in 1994. Mr. Peel states that he finds it inadequate because of the lack of information contained regarding geology and groundwater. He also states that compliance with the Teagasc Code of Good Practice for Slurry Spreading alone "can give no confidence that groundwaters would not be polluted in the areas under consideration"

- 2. Mr. Peel report states that there is no detail of the overburden geology given and that there has been no attempt to determine the variations in the type and thickness of the overburden across the various spreadlands. From his observations (he mentions John Coyles land, Curry, and the disused quarry in Carrickboy) he states that it is clear that there is no overburden overlying the limestone bedrock and that the limestone is fractured. He states that "this would allow contaminants entering the rock to pollute groundwater because the rock has little or no filtration or attenuation capacity".
- 3. Mr. Peel's report states that while it is accepted in the EIS that the limestone underlying the spreadlands "constitute a significant aquifer", that very few water quality data has been determined and there is no specific data relating to seasonal fluctuation of groundwater levels or variations in groundwater quality with time.
- 4. Mr. Peel states that although the GSI discussion documents on the subjects indicate that the proposed spreadlands may be in areas of high vulnerability, there is no reference in the proposers submissions to groundwater protection nor the vulnerability of groundwater to pollution.

#### Response

This submission while referring to the information contained in the EIS of 1994, is concerned with the lack of information regarding the vulnerability of some of the spreadlands. I believe that this issue is now addressed by Condition 5.5.5, 5.5.6 and 5.5.7 which will not permit landspreading in certain areas until the Agency is satisfied that there is adequate soil depth for the protection of groundwater. The land specifically mentioned by Mr. Peel (i.e. John Coyle's land) has been excluded as the information provided indicated that there may not be adequate soil depth and because observations by EPA personnel on inspection of this land also raised this concern. The groundwater monitoring programme required by the proposed determination also will provide more information as requested by this submission.

## Frank & Pearl Greene (5/6/98)

In their submission, Mr. and Mrs. Greene and nine other family signatories state that they live in Legan where a lot of the slurry from the piggery is spread. They say that this makes life miserable for them and it is difficult to breath at times because the smell is so strong.

They say that they used to fish in the local river some years ago but that now the rivers are dead. They say that there was a big kill of fish a few years before caused by the piggery.

They suggest a reduction in the size of the piggery which would reduce the amount of slurry and cause less problems for the river and for people affected by odours.

#### Response

These issues have been raised in other submissions discussed above.

# Beag 18/8/98

This submission refers to the crisis in the pig sector and suggests that a solution would be the reduction in numbers produced. The submission describes Donal Brady's Piggery in Ballyglasson as a "major player in the pig production sector" and urges that a reduction in the size of this piggery should be a condition in the licence for this industry. Mr. Murray claims that this will both ease the over-supply and "contribute significantly to protecting our rural environment".

#### Response

The applicant is an existing industry and must be considered as such by the Agency. Any increased activity on site would be treated on the basis of a new activity and reviewed against this criteria. In the case of an existing activity the Agency may only grant a licence for the entirety of the activity to which the application relates or refuse a licence in its entirety. It is a matter for the applicant to apply for a licence in relation to the capacity of the existing facility.

# Teresa Murray (13/8/98)

Teresa Murray states that Ballyglasson lane which runs past the piggery is in a "deplorable state" and urges the making of a separate roadway into the piggery a condition of any proposed licence.

#### Response

This issue is relevant to the planning authority rather than the Agency. Therefore this submission was forwarded to the Planning Office at Longford County Council for their information. Condition 5.3.2 of the IPC licence requires that the transport of slurry/manure via the public road shall be carried out in sealed containers such that no spillage can occur.

# Pearl & Frank Greene

This submission repeats the earlier submission by Mr. and Mrs. Greene that the piggery is too big and that it has a terrible effect on the environment "contaminating water, killing fish, polluting the air etc." It is urged to reduce the size of the piggery.

#### Response

These points have been dealt with in earlier responses.

# Phil Murray (1/12/98)-BEAG

This submission states that living as they do in the shadow of the piggery means that the Murray Family have to live with the "inevitable stench of the piggery". She complains of the odour which attaches itself to the curtains and furnishings.

She states that water pollution could be minimised by "a strict compliance strictly policed and observed, of the regulations regarding the volume of production per acre for the spreading of slurry".

She states that in the past the piggery used crude pits to store raw slurry, "the latest recording in April this year in an open pit in Lenamore Village".

She mentions that the Ballyglasson roadway is a semi-private access road in a residential area and that this is continually used by heavy duty tractors, spreaders and lorries that services the piggery . She claims that as a result the residential road is ploughed up, full of potholes and mud from the fields. She asks that the pig producer make good all drainage to the road surface and maintain the road at a standard that is acceptable to those who use the road for driving, cycling and recreational walking.

# Response

The issue of odour, protection of surface water and the open pits have been addressed above. The issue of the condition of the road was passed on to Longford County Council for their information and is also dealt with by Condition 5.3.2.

# Complaints:-

There were 3 complaints received regarding this facility. Two of these were received on 20/1/99 from Ms Phil Murray and Mrs. Anna Farrell regarding an alleged incident in which slurry was observed in the Lenamore stream. A sample was taken on the following day from the stream but there was no visible sign of contamination although the COD result appeared elevated. The pig unit was also visited at this time and it was established that there had been no spillages from there. There was more than adequate slurry storage capacity when all tanks were examined. Samples taken of the surface water outfall from the pig unit showed no signs of contamination. The third communication received in 2/4/99 was a similar complaint regarding pollution in the Lenamore stream from Mrs. Anna Farrell. A sample taken at the time the alleged pollution was noticed did not indicate any organic contamination and the ammonia and phosphorous levels were quite low. No unusual occurrence was reported from the pig unit on that day. From the results of the sample obtained, it appears that the discolouration of the stream observed was perhaps due to soil being washed into the stream or some other source which contributed to COD while the ammonia, phosphate and nitrate results indicate that contamination due to pig effluent did not occur. These results are being forwarded to Longford County Council for their information. As discussed earlier the downstream EPA monitoring stations on the Lenamore Stream have showed an improvement in Biological Water Quality Ratings in the period 1992 to 1996 and is now classified as Q4 (unpolluted).

The Proposed determination requires substantial monitoring of surface water run-off and ambient monitoring of the stream as well as EPA monitoring of both also.

# Recommendations: That the Board approve the Proposed Determination as submitted. Signed \_\_\_\_\_\_ Elaine Farrell