

SUB ①



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9th July 2009

Ms Dorota Richards,
Office of Climate, Licensing & Resource Use,
Environmental Protection Agency,
Headquarters,
PO Box 3000,
Johnstown Castle Estate,
Co Wexford.

RE: Integrated Pollution Prevention Control License Application

Reference No: PO889-01

Applicant: Lisavaird Piggeries Limited

Location: Kippagh, Dunmanway, Co Cork

Nature of Activity: Rearing of pigs where capacity exceeds 285 places for sows.

Dear Ms Richards,

I attach herewith the comments of the Environmental Health Department in relation to the above.

Yours sincerely,

Martin Devine

Assistant National Director, Population Health- Environmental Health

Cc Mary Keane, Area Chief EHO, South

Background

The installation is owned by Lisavaird Piggeries Ltd. It is an integrated pig unit producing pigs to slaughter weight. The unit has been in existence since 1969 and is located in an isolated rural area (agricultural hinterland), upgradient from the village of Drinagh (population approx 230).

The unit maintains a herd of 560 sows and their progeny and output is estimated at 14,000/year or 269 per week. Planning permission was sought for retention of the installation in 2001 but Cork County Council planning department confirmed that it does not have the benefit of planning permission. Most of the installation is located within a walled area and surfaced with concrete. The houses are block built and are mechanically ventilated. The floors are slatted with concrete tanks underneath. Two slurry tanks, a soakaway, septic tank and skip are located outside the wall. This area is not finished with concrete surfaces.

There is 5 staff employed. The installation contains the following pig buildings: a farrowing house, three weaner houses, five finisher houses and one dry sow house. A wet and dry feed system is in operation

There are few dwellings nearby - the nearest dwelling is located downgradient of the piggery - a distance of 0.3 - 0.4km (by road - less as the crow flies) from the wall of the unit (see photos A + B attached). The distance between the dwelling and piggery may be less than the 400m distance recommended in the Batneec Guidance for the Pig Production Sector. Staff at the plant confirmed that the dwelling is occupied. The installation is upgradient from the Argideen river which is the source of drinking water supply to Clonakilty town. Curraghlicky lake is located 7.3km (by road) downgradient from the piggery from which drinking water is extracted to supply the needs of the nearby town of Drinagh. However the slope of the land on which the unit is located is away from this lake and towards the river.

This is the first application for a licence for this unit. Ms Liz Tobin EHO and I visited the unit on Friday June 19th but could only inspect the outside the walled area. We pre-arranged a visit on Tuesday June 30th (contact number cited on the application is incorrect) to obtain further information. The unit manager Mr Dick Kingston was not available on that date but another staff member facilitated our visit. The Environmental Health (EH) Department have the following comments to make.

SECTION E. EMISSIONS

ATMOSPHERE (Odour)

Section E1: During the two visits to the installation, odour was detected. On the first visit, there was a strong odour at the site boundary, downwind of the fattening units which might be detectable at the dwelling below the unit. As this is agricultural hinterland it is possible that the impact of odour on nearby dwellings might be less than the impact of odour on an urban area. Odour from yards and lands during day to day operations such as silage feeding, slurry agitation and land spreading might be accepted as normal in a rural area. No additional activity such as transfer of manure or agitation was being undertaken at the time of that visit.

On the date of the second visit, there was a faint detectable odour in the village of Drinagh which is located at a distance of 11.8km (via road) from the installation. At the installation there was a very strong (initially overwhelming) odour which was detectable at the nearby dwelling. EH have no evidence of association between the odour detected in Drinagh and this unit. EH recommend that odour mitigation measures are explored and implemented.

Areas within the walled section were maintained in a clean condition. The slurry tanks are not covered. "Odour Impacts and Odour Emission Control for Intensive agriculture; EPA & Odournet UK 2001 states - ammonia emissions from open slurry storage tanks can be reduced by 70 - 80% by covering open tanks Section 9.9). The V shaped tank had a crust formation on the surface (see photo G attached). The tanks under the slatted units are emptied once a month on rotation. During the visit the odour in the farrowing unit in particular was very strong.

No historical odour complaints have been recorded by the HSE, Local Authority Environment Unit Iniscarra or Dept of Agriculture veterinary unit at Darragh Clonakilty in connection with this installation.

Mechanical extract ventilation was operating in the unit at the time of our visit (as stated in the application). An Intake ventilation system via mechanically controlled louvers which is linked to a thermometer to increase or decrease air entering the unit is also provided.

No comment on dust emissions from the mechanical extract ventilation system, the potential impact of the dust on staff health or mitigation measures have been included in the application. No complaints have been recorded by the HSE in this regard.

EMMISSIONS TO SURFACE WATER

E2. The application states there are no process emissions to water.

EMMISSIONS TO GROUND

Section E 3 STORMWATER. The application states that storm water from roofs and clean concrete and gravel yards discharges via drains into a soakaway outside the site. Staff identified an inspection chamber installed just outside the wall for the stormwater system.

No details of monitoring or frequency of monitoring of storm water discharge appear to be included with the application. During the site visit in response to questions it was established that visual checks on the inspection chambers are undertaken but not recorded. Grid references for 6 discharge points are included in the application.

The application contains no information on baseline conditions of groundwater quality.

The third slurry tank (used in wintertime for excess storage) located outside the wall is surrounded by an earth bank (see photo C) which acts as a containment barrier in which some water was lodged. (see photos D + E + F attached).

There were historical (>20 years ago) problems with contamination of the Clonakilty town supply according to Cork County Council but no complaints since then.

E3 LANDSPREADING

The application states that "landspread is not relevant to this enterprise". It further states that the company supply manure to local farmers and that manure use by the farmers is conducted in compliance with SI 378 of 2006. Details of the townlands and volumes of manure/year provided with the application indicate that many of the locations are within the catchment areas for (a) the Argideen River supplying Clonakilty town and (b) the Bandon river supplying Bandon town.

The applicants have not indicated whether they maintain records of the destination, quantity of manure and delivery date in the application.

Table E.3(i) & Table I.2(i) Ground water Quality classifies the vulnerability of groundwater as Extreme to High Low but the application does not indicate that there are wells or surface water bodies at risk. No information has been included in the section on "assessment of impact of ground water" on protection measures for ground water. There is no historical evidence of contamination of ground water.

E3 SEPTIC TANK

Domestic sewage is directed to a septic tank and percolation area located on the north east side of the site.

NOISE EMISSIONS

E4 Section E5; Operating hours are stated as 6am to 8pm. The application states that no noise survey was conducted. In addressing impact – it states that "experience at other pig farms indicates that these values (above - 45 night & 55 daytime) are not exceeded in the vicinity of pig farms by sounds generated by pigs or pig farming activities".

Operations include care of the animal, maintenance work and transportation of the animals and feed deliveries. Moving, loading and feeding the animals normally results in an increase in noise levels. The major source of noise would be from vehicles loading and unloading on site. Traffic operating during the night time could be regarded as creating "unwanted noise" for dwellings on route. EH recommends that this activity should be avoided between the hours of 10pm and 8am. There have been no recorded complaints of noise nuisance to either the HSE or LA environment departments.

SECTION F CONTROL & MONITORING

In describing the controls for odour emissions, the application states the storage capacity specified in section F1 as 29 weeks. In attachment I.2(v) manure storage capacity is stated to be 6,284m³ = 31.6 weeks. Both figures are in compliance with the recommended 6 months storage (Batneec Guidance) but are conflicting

The staff member who facilitated the visit said he was not aware of any automatic leak detection systems in operation at the unit. EH recommend that consideration should be given to this protection measure.

No other information for monitoring emissions was included in the application.

SECTION G RESOURCE USE AND ENERGY EFFICIENCY

Energy usage stated in the application includes electricity, heating fuel and diesel oil. There are no proposals included in the application to utilise sustainable energies such as wind or solar energy. The unit is located immediately adjacent to a wind farm.

SECTION H MATERIALS HANDLING

Section H2: Waste Handling Reference is made to waste arising from a canteen (ref Waste Arising 1). There was no indication on the site layout plan that a canteen was available on site. It is poorly maintained with little facilities. Staff bring their own food and beverages.

Section H & D1 of the application references the collection and storage of manure onsite until it is collected by farmers (confidential information supplied to the EPA) as required for use on their land. There are 3 slurry tanks on site. No description of the construction of the tanks has been provided in the application. Staff in response to questions stated that the large and V-shaped tanks are constructed of concrete and that the third circular tank is a glass lined metal tank. Attachment I.2 estimates manure production at 10,338m³ /year

Section H2 & D1; (Carcass removal) The application states that "all dead animals will be kept in a covered skip and collected on a fortnightly basis for delivery to National Byproducts, Rosegreen, Cashel, Co Tipperary", where the animals are rendered. Further information in D1 states "The carcasses of dead animals are accumulated in a closed metal container and are dispatched from the site regularly". On June 19th, there was a skip located on the left side of the entrance to the farm outside the wall. The cover was part open - not in accordance with Batneec Guidance (see photo I attached) so one could easily see dead animals lying in a pool of offensive smelling liquid (see photo L). There were flying insects crawling & swarming on the carcasses and entrails (see photos K + M). The cover on the skip consisted of a frame to which a sheet of thick PVC had been affixed. This skip was fully covered on the date of our second (pre-arranged) visit. The Dept of Agriculture may have concerns re bio-security / the potential impact should diseases be carried and transmitted by birds or pests who access the skip and its contents. Summary Table H1 estimates that 50 tonnes/year dead animal waste is produced by the unit.

Hazardous Waste Materials on site include fluorescent tubes which are stored in a container and brought to a nearby centre. Sharps are removed by a licensed operator. We did not examine records at the time of inspection due to the absence of the site manager.

Staff involved with the handling of hazardous waste should ensure that health and safety precautions as recommended by the Health and Safety Authority and others are practiced. A copy of the Health & Safety statement (referenced) was not included with the application.

SECTION I EXISTING ENVIRONMENT & IMPACT OF ACTIVITY

Details regarding odour are discussed previously in this response. No details of residential dwelling houses and sensitive locations within specified distances of the unit or the impact of odour on those dwellings/locations appear to have been included in the application.

Attachment I.2 - Results from a microbiological well water sample serving the unit taken in May 2008 were attached to the application. No chemical analysis results were attached. The sample was taken over one year before the date of lodging this licence application. EH recommend that more recent

results should be submitted with the application to demonstrate the suitability of the water for use by staff working on site and for animal use. EH recommend that a sentinel well be provided downgradient of the unit and that the sampling frequency be increased to at minimum twice yearly preferably after heavy rain to ensure the supply is potable and as an indicator in the event of contamination which might affect nearby wells.

Attachment I.5 discusses BATs and a statement on minimising manure dilution is included but no description as to how this is currently being undertaken at the unit is included.

One slurry tank is located inside the walled area. Two other slurry tanks are located outside the wall. One is surrounded by a fence. The circular tank is surrounded by an earth bank which is 8 ft deep. The application states there have been no accidental spillages onsite since the 1960's.

Storm waters discharge through a soakaway located outside the wall and upgradient from the nearest dwelling house, to groundwater.

Table E.3(i) & Table I.2(i) Ground water Quality classifies the vulnerability of groundwater as Extreme to High Low, does not indicate that there are wells or surface water bodies at risk and has not described the impacts..

No impacts have been identified for the water supply provided to the nearby dwelling if it is served by a well (if a well supplies the dwelling - it may be within 200m of the unit - Batneec Guide). No information have been provided re whether protection measures have been put in place to prevent contamination of that well or to prevent contamination of groundwater. The well serving the installation is uphill from the buildings and slurry tanks.

The application states that a noise survey was not undertaken & predicted impacts are based on experiences at other farms. It states "typical Leq 30 minute noise levels at boundaries... 55 day 45 night" - but does not reference the source of the statement.

No information was provided on the application re the provision of a Pest Control Plan. It was established during our visit that a programme is in operation on site and regular checks are carried out by Rentokil.

EH recommend that suitable closed containers must be provided for the storage of waste and pig feed to ensure there is no harbourage or attraction for pests.

At the time of inspection, there was a severe infestation of flies in one of the houses. This was not evident in other houses on the site. The cause of the infestation should be investigated and remedial action taken to prevent a recurrence.

IMPACT ON HUMAN BEINGS

There is no information on the impact of traffic on human beings living on the route to the piggery. Traffic levels on the route to the piggery may be above normal for a remote rural hinterland due to staff vehicles, regulatory inspectors visiting, deliveries, collection, farmers etc.

Suitable personal protective equipment should be worn by staff and visitors to minimise the risk of injury or ill health.

Staff Facilities: Very basic facilities are provided on site including a poor unhygienic canteen, and shower rooms. The staff member on site advised us that staff bring their own food for consumption onsite. No hand drying facilities, or soap were available at wash hand basins at the time of inspection. A supply of instantaneous hot water, soap and drying facilities should be available for use by the staff at all times.

Accident & Emergency

Section J states that in the event of accidental spillage "the incident would be reported to the EPA and the appropriate Local Authority (South Tipperary County Council). This error is again repeated in Attachment no J "EMERGENCY RESPONSE PROCEDURE".

Section B2 The telephone number quoted should be amended to include the prefix "88" after "023"

Section B7 The telephone number for the HSE offices in Skibbereen is incorrect. The current contact number is 028- 40400 or 028 – 40490.

Section C1 No details have been attached to this section of the application re “on-going assessments of environmental performance” as required on the license application form.

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Appendix of Photos Taken 19 06 2009

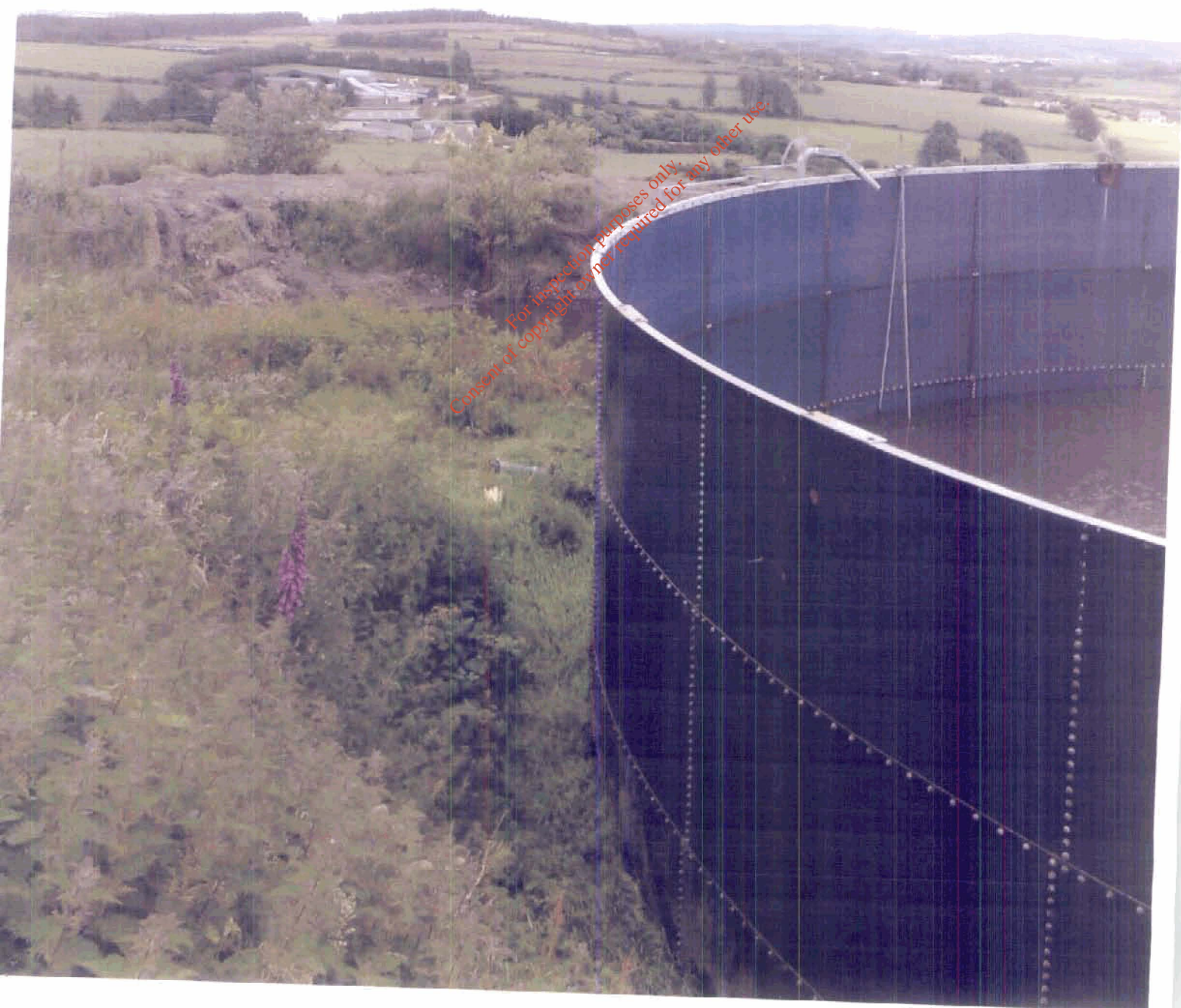
A	Nearest Dwelling
B	Proximity of tank to nearest dwelling
C	Earth Containment Bank around Tank
D	View of containment area on other side of tank
E	Tank for excess storage
F	Water Containment around tank
G	Crust on Slurry Tank
H + O	Open shed & area outside fencing
I	Open Skip
J	Entrails & carcasses in skip
K	Flies on carcasses in skip
L	Pigs & entrails 19 06 2009
M	Flies on Entrails in liquid
N	
O	
P	

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A



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B



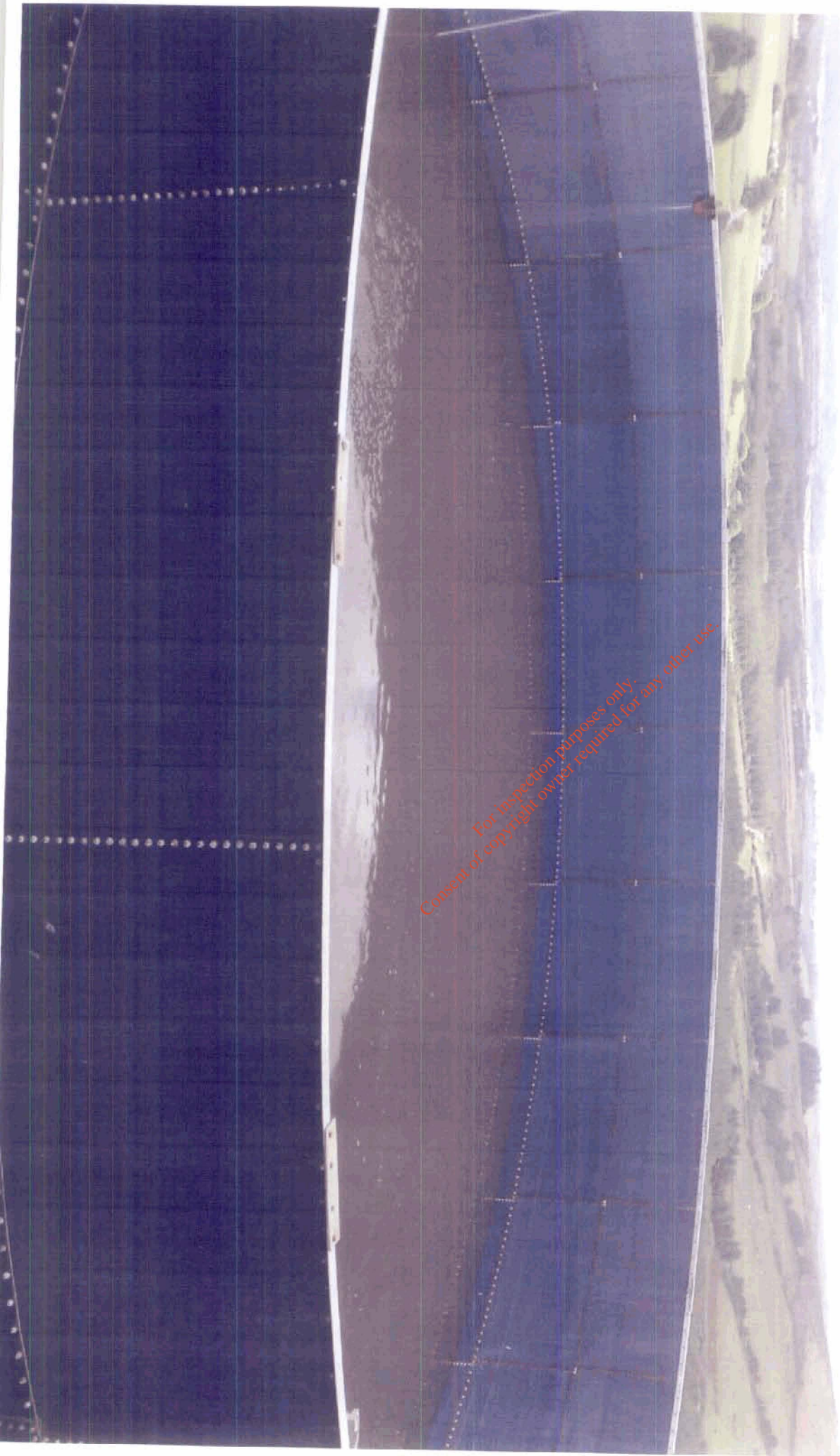
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C



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D



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III





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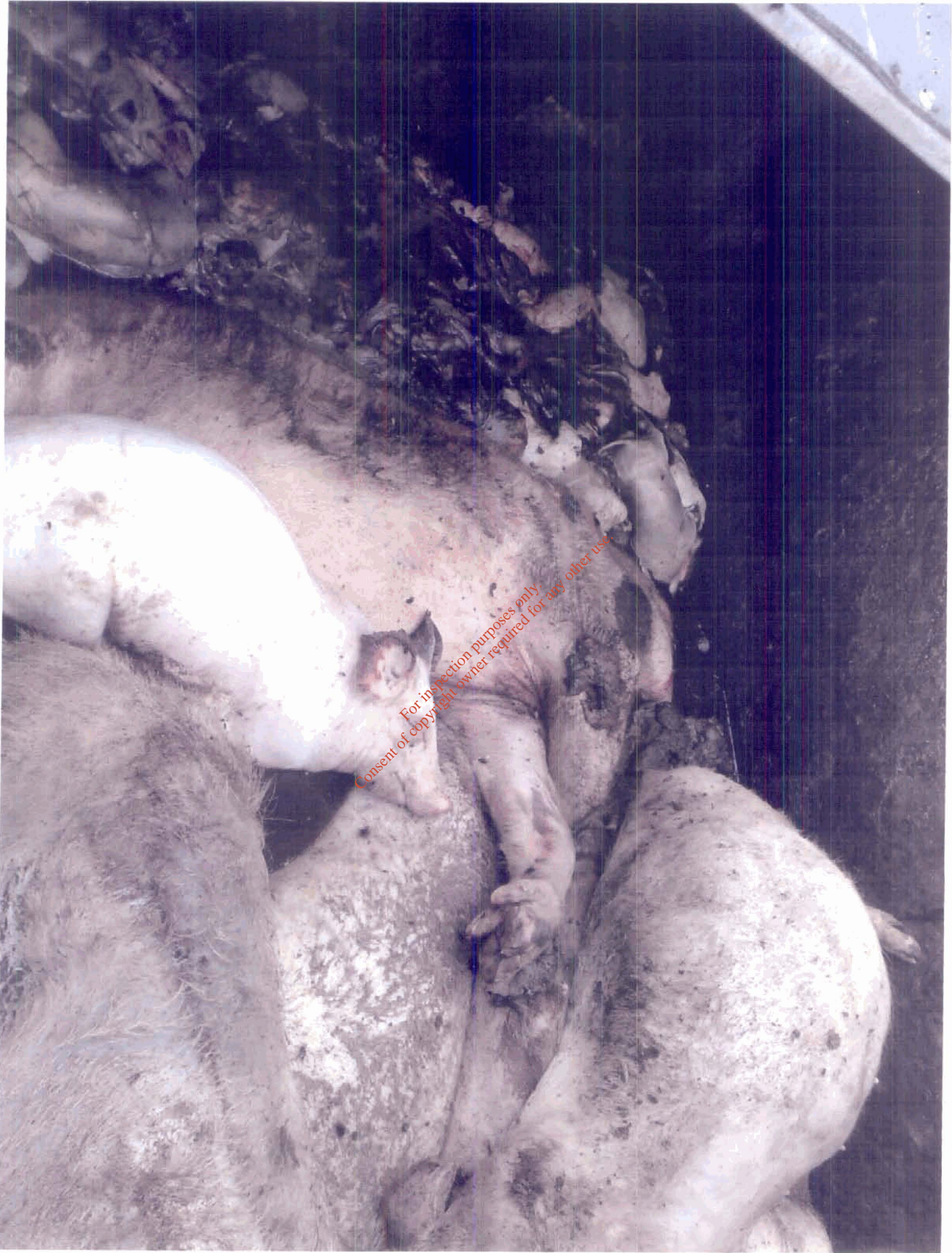
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