INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER: 124-1

Facility: Carbury Mushrooms Ltd., Carbury, Co. Kildare

Recommendation: The recommended Proposed Decision as submitted to the board is

approved.

(1) Introduction:

Carbury Mushrooms Ltd. produce compost for the mushroom industry at a facility close to the village of Derrinturn in County Kildare. There are four residences within 250m of the facility. **A facility location map is provided in Appendix 1.** The facility has been operating for over 35 years in its current location and it supplies compost to mushroom producers almost nationwide. The waste materials being accepted at the facility include horse manure (upto 41,600 tpa), poultry manure (c.15,000tpa). Approximately 2,600 tpa of gypsum is used in the process. As with all of the mushroom compost production facilities the production of the compost has been a "low-tech" process in the past and the operation has given rise to a number of complaints and submissions in relation to odours and emissions to water.

The site on which the compost processing activity is located also includes two other activities (contract mushroom growing and a mushroom processing area).

The production process for mushroom growing substrate is divided into three phases:

Phase 1 – Composting of the raw mix of bulk materials (horse manure, poultry manure, gyspum, straw, water)

Phase II – Pasteurisation and conditioning

Phase III – Spawning and bagging followed by the growing of the Agaricus bisporus mycelium (button mushroom).

The facility currently produces approximately 15,000 tonnes of Phase II compost per annum which goes directly to market. Approximately, 40,000 tonnes of Phase III compost per annum is produced at the facility.

There are a number of environmental issues pertaining to the operation of the facility including odour, discharges to surface water and groundwater, noise emissions, potential for the spread of disease and dust emissions from the facility. Each of these issues is addressed in the relevant sections below.

The facility is required to hold a waste licence as >1000m³ of material is being composted at the facility at any one time. The facility will be licensed for Class 2 of the Fourth Schedule of the Waste Management Act, 1996:

"Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)"

EIS Required	No
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Number of valid submissions received	Seven
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FACILITY VISITS:

DATE	PURPOSE	PERSONNEL
29/10/99	Site Notice Check	Brian Donlon
25/7/01	Site Familiarisation and Meet with Resident	Brian Donlon & Mick Henry
10/12/01	Odour & Site Assessment	Brian Donlon and OdourNet UK Ltd.
22/5/03	Site and Environs Assessment	Brian Donlon

(2) Facility Development

Infrastructure

The recommended Proposed Decision (PD) requires that a significant level of infrastructure be provided at the facility. The required infrastructure is primarily for the control of emissions to the atmosphere, to groundwater and to surface water. The applicant will be required to expand their existing telemetry system at the facility to provide for the process and water storage monitoring requirements as per Condition 3.11 of the recommended PD.

i) Control of Emissions to Air: Condition 3.11 of the recommended PD outlines the infrastructure required for the control of odours from the facility. The enclosure of the composting process is to be completed on a phased basis. Within twelve months of the date of grant of the licence the bale breaking line, blending line are to be enclosed. Within eighteen months the Phase I composting process is to be enclosed. Phase II is currently enclosed with the exception of the filling/unfilling area. Following the enclosure of the process the applicant will be required to provide an air collection system within the constructed buildings (24 months) and to treat the collected air emissions must be treated by an appropriate odour abatement system to be agreed with the Agency(36 months). All of the infrastructural works regarding the control of odour emissions from the facility are due to be completed with thirty-six months of the date of grant of the licence.

There are a number of additional infrastructural requirements included in the recommended PD that pertain to odour control. Condition 3.13.2 requires that all process/goodie water storage tanks be enclosed within twelve months of the date of grant of the licence and Condition 3.11.1 requires that an odour filtration system be installed at all of the outlet vents on the process water storage tanks. Condition 4 of the recommended PD sets out conditions to control the operation of the facility in such a manner that odour emissions shall be minimised.

ii) Control of Emissions to Surface Water:

Emissions from the facility are from sewage effluent and contaminated run-off. The practice of allowing contaminated run-off and foul water emissions to enter the stream at the back of the facility has ceased with the recent installation of a new 1500m³ open top metal cylindrical tank to store run-off water.

Condition 3.5.4 of the recommended PD requires the applicant to provide a 150mm high bund wall (of suitable construction) around the dirty yard area (yard used for the production of compost) (). This is required due to the ptentyial volume of water in the dirty yard area and the risk of contaminated water flowing into the nearby river. The recommended PD also requires the applicant to assess the integrity of all tanks and pipelines at the facility to ensure that there are no fugitive emissions to surface/ground water from the process. Condition 3.12 provides a system for the management of surface water at the facility and Condition 5.5 requires that all emissions to surface water from the facility flow through the surface water management system referred to above.

iii) Control of Emissions to Groundwater:

The composting process takes place on concrete yards; however during inspections of the facility it was noted that there was a number of cracks and faults in the concrete. The hydrogeological assessment submitted by the consultants noted that the drainage and containment system does not have 100% integrity. Leakage from the concrete floor into the underlying fill and into the stream at the northern side was highlighted in the report. On the basis of the site geology and the waste oil staining noted, they also recommend that an investigation be carried out in order to assess if soil and groundwater contamination has occurred in the vicinity of the waste oil store (This is provided for in Condition 3.17). In addition, Condition 3.5 of the recommended PD requires the licensee to assess the yard area with a view to ensuring that there is no movement of contaminated water into groundwater.

There were eight fuel storage locations listed in the application. The applicant has stated that a number of these may not be fully impermeable. No integrity tests have been performed to date on any of these locations. In addition, various drums (205L) and containers are stored unbunded in various on-site sheds. I have included the requirement for 110% bunding requirement and demonstration of integrity for all bunded areas within six months of the date of grant of licence (Condition 3.10.5).

(3) Odour Control

The primary source of odours in this process arises from the Phase I activities. There is minimal odour emissions from the Phase II and Phase III processes.

Odour Assessment Supplied by Applicant

The applicant submitted the results from their air quality dispersion model, which was based on three on-site specific odour sources (clamps and windrow samples). They concluded that odour concentrations of a magnitude likely to result in a community

nuisance are predicted to occur within the locality of the facility. They predicted that based on 99.5% ile odour isopleth that short-term odours of 100 ou/m³ would be predicted to occur about 0.5km from the facility boundary. They suggested that short-term_(15min) odour concentrations of 10-20 ou/m³ on a 98% ile and 50 ou/m³ on a 99.5% ile would be realistic. They indicated in general terms that improvements in aeration technique would reduce the formation of sulphur and nitrogen-containing compounds at the facility. Plans to upgrade the facility were later submitted by the CEO of Carbury(See Appendix 3).

Odour Assessment carried out on behalf of Agency

OdourNet UK Ltd. completed an assessment of the odour emissions from this facility (and a number of other facilities) on behalf of the Agency and a copy of this report is included in **Appendix 2**.

The study modelled the estimated odour emissions from the facility in its current state of operation and also modelled the odour emissions in the case where the process had been enclosed and abatement technologies had been installed and commissioned. The report estimates that 55% and 25% of total odour emissions from the facility are from the Phase I composting process and the process water storage tanks, respectively. The odour modelling completed by OdourNet UK Ltd. provided isopleth figures modelled on the basis of 98 percentile for a 1-hour average limit concentration of 6ou/m³. The contours therefore represent the area where the maximum hourly average ground level concentration will be greater than 6 ou/m³ for more than 2% of the hours in the year. On the information provided it is estimated that up to 500-600 private residences may currently be negatively impacted upon by odour emissions from the facility (Scenario 0 of the OdourNET report). The contours show that the enclosure and application of odour abatement to the air emissions from the composting process together with the control of emissions from the process water tanks will ensure that odour emissions from the facility will be significantly reduced.

Even with the installation of the infrastructure required by the recommended PD it is likely that there will still be one residence (owned by the company) adversely impacted upon. Having regard to this the applicant is required to assess the need (if any) for additional measures at the facility, following the enclosure of the process and the treatment of emissions, to further reduce odour impact beyond the boundary of the facility.

Boiler Emissions to Air

There are three on-site boilers (rated @ 2.8MW). The applicant stated that normally one boiler is operational at any one time (to provide steam for sterilisation). The modelled ground-level concentrations for NOx, SOx, CO are below the corresponding acceptable levels required in the EU Air Quality Directive. These are required to be tested on an annual basis.

(4) Nuisance & Noise Control

- i) Dust: The enclosure of the bale breaking and blending line is required as per Condition 3.11 of the recommended Proposed Decision. The enclosure of this part of the process should mitigate against any significant dust emissions from the facility. Condition 7.1 and Schedule E of the recommended Proposed Decision provides for dust deposition monitoring at and around the facility.
- *Vermin & Pests:* Condition 6.3 of the recommended Proposed Decision requires the applicant to implement a vermin control programme at the facility.
- *Noise:* The main noise sources are the aeration fans (8 hours per day), aerated pads, the bagging machine and the spawn filling area. Moving plant around the site also presents a noise source. The company have acknowledged that noise levels at a sensitive locations is in excess of recommended limits and that measures to improve the situation will be sought where practicable. The applicant will be required to reduce noise emissions from the facility by the attenuation/enclosure of the major noise sources (aeration pad fans and the bagging machine) (Condition 3.15).

(5) Waste Types and Facility Operation

Waste Types: The applicant will be restricted to the acceptance of 42,000 tonnes of horse manure, 11,750 tonnes of poultry manure. This is the upper-limits indicated in the application form.

Facility Operation: Condition 4 of the recommended PD provides for the day to day operation of the facility. Condition 4.1 requires the development of waste acceptance procedures at the facility and these will ensure that all wastes arriving at the facility are inspected prior to use and handled in an acceptable manner.

The hours that waste and raw materials can be accepted at the facility are as applied for by the applicant, 8am to 8pm.

(6) Emissions to Groundwater

The applicant described the underlying bedrock as consisting of Carboniferous aged "Walsortian Limestone" and the underlying subsoils greater than 3m deep. The applicant states that using GSI guidelines, that the well yield $(50\text{m}^3/\text{d})$ would be classified as moderate. The facility has four groundwater production wells located around the facility (one of which is unused). The hydrogeological report submitted with the application highlighted that the manholes for the three in-use wells are in a poor state of repair and recommends corrective measures and also suggests decommissioning and grouting of the fourth well. I have concerns that these wells may not be suitable as monitoring wells and have requested that they be upgraded/replaced within six months of the date of grant of licence. The limited groundwater analysis carried out, as part of the waste licence application did not show that the facility was having any significant impact on the local groundwater.

Condition 7.1 of the recommended PD requires the applicant to carry out monitoring of the groundwater as set out in Schedule E.

(7) Emissions to Surface Water

The Cushaling River (which ultimately feeds into the River Barrow) flows approx. 600m from the facility boundary. Emissions from this facility and the nearby WWTP for Derrinturn village are the primary discharges to the river.

7.1 Surface Water Run-Off

Where possible all rainwater falling on the facility and washdown water is stored in an on-site retention tank (1500m³) and/or reused in the process. Occasionally this will exceed requirements and the applicant discharges (under their existing Water Pollution Licence) to a piped stream at the Northern Boundary of the site. The piped stream discharges to the Cushaling River. There have been a small number of decreases in water quality between upstream and downstream samples (BOD, NH3, SS).

7.2 Foul Sewage Emissions

Foul sewage is collected from two locations on site and directed to an on-site Puraflo sewage treatment plant, which was installed in 2001. Last month, the company installed a chemical phosphorous removal system. Discharges from the sewage treatment plant are currently to a percolation area on-site.

7.3 Monitoring of Emissions to Water/ Labelling of Sampling Locations

- 1. I have proposed that the three locations on the Cushaling River specified in the existing Water Pollution licence should be monitored at the frequencies specified in Condition 7.1, Schedule E.
- 2. I recommend the continuous flow and regular water quality monitoring of the "surface water" discharges at two locations on the facility prior to its connection with the piped stream. (Condition 7.1, Schedule E).
- 3. Further, the licensee will be required to monitor emissions from the on-site WWTP at a location to be agreed with the Agency.
- 4. There are a number of inconsistencies identified in the drawings submitted relating to surface water drainage. I have required the provision and maintenance of labelling of on-site sampling/monitoring locations and the submission of an updated surface water drainage arrangements (Conditions 4.6.2 & 10.3).
- 5. Condition 7.8 of the recommended PD requires the applicant to carry out biological monitoring of the Cushaling River at locations to be agreed with the Agency every two years.

(8) Other Potential Environmental Impacts

Carbury Bog (1388) a few km north of the site is listed as an NHA in the Co. development plan. In addition, the Grand Canal which lies south-west of the facility is a proposed NHA. Activities from the facility are not likely to cause an impact on these areas.

The applicant has stated in Article 16 response that solid waste was previously burned on-site. Condition 8.4 of the recommended PD prohibits the burning of waste within the boundaries of the facility and Condition 4.5 provides for the orderly conveying of waste by an agreed waste contractor.

(9) Air, Water and Waste Management Plans

There is no Air Quality Management Plan in place for the area in question.

The Barrow Water Quality Management Plan was adopted in 1988. Emissions from the facility in accordance with the conditions of a waste licence will not impact on the water quality in the River Barrow.

The Waste Management Plan for Kildare as adopted makes reference to a number of permittable/licensable facilities which includes this facility.

(10) Recommendation

The recommended Proposed Decision contains a number of conditions, which will significantly improve the environmental performance of this facility. In reaching a decision on the waste licence application for this facility, I have had regard to the following:

- The current state of the mushroom production process in operation at this facility which is, in principal, a 'low tech' operation with very limited controls on emissions to the environment.
- The current operation has given rise to a number of odour complaints at and in the vicinity of the facility and will continue to do so in its present state as is evident by the number of submissions received from local residents and as noted by Agency Inspectors on a number of occasions.
- The odour assessment report submitted by a consultant on behalf of the applicant noted that odours from the facility were likely to result in a nuisance to the community within the locality of the facility.
- The OdourNet UK report that was produced on behalf of the Agency to assess the most significant issue with the mushroom compost production sector i.e. odour. The findings of this report are incorporated into the recommended Proposed Decision.
- The response by the applicant to the OdourNet UK report (Refer to Appendix 3 of this report).
- The requirement that Best Available Technology be employed at the facility
- The technologies currently being used in other EU member states.

(11) Submissions/Complaints

There were seven valid submissions received in relation to this waste licence application. A summary of the issues raised in the submissions received is provided below. The contents of the submissions have been taken into account in drafting the recommended Proposed Decision.

Submissions 1& 2: Mr. Eddie McKeon, Carbury, Co. Kildare

(Submission dated 18/4/01)

The company has consistently discharged liquids (and sometimes solids) which have seriously polluted the Cushaling River (Tributary of the River Barrow) that flows through his land. This river is now devoid of fish life. He has informed the Fisheries Board who have been able to persuade the company to install a treatment system but the problem has resurfaced. His second concern related to the sickening odour in the vicinity of the facility.

(Submission dated 16/9/01)

The company has been in production for many years and each year has been a disaster as far as air pollution and pollution of the Cushaling River is concerned. It is not uncommon to wake up during the night to find the room full of smelling air and they need to keep windows and doors closed on certain days, as the stench is unbearable. The River has been turned into a slurry tank. He has found various matter in the river such as plastic compost bags, yard brush head, wellingtons. Diesel and heavy fuel oil can be found in the river. The river was once a trout river but all form of life has been killed for quiet a time and livestock refuse to drink the water. In summer downstream from the discharge pipe there is an amount of growth in the riverbed, which causes flooding problems in the winter. He thinks that it is fair to ask the company to take responsibility for the action and to put in place facilities to conduct their business without further pollution of the environment.

Inspectors Response

Emissions to water from the facility will greatly improve if the conditions of the waste licence are complied with. The infrastructure required and the monitoring that will be needed to be undertaken have been outlined in Sections 2 and 7 of this report.

The facility is currently giving rise to significant odours in its immediate vicinity and the recommended Proposed Decision provides for the control of emissions from the facility over a phased time period. The recommended PD provides for the enclosure of the composting process at the facility and the subsequent collection and treatment of air emissions from the facility (Condition 3.11). It is predicted that the current estimated zone of influence around the facility will greatly decrease following the enclosure of the process and the treatment of collected air emissions. The applicant is also required to submit a report to the Agency following the completion of the works as required by Condition 3.11 and this shall assess the need for additional measures to be taken.

3. Ciara Lennon, Southern Regional Fisheries Board (dated 5/6/01)

The facility located within the Barrow Catchment has a Section 4 Licence under Water Pollution Act (1977-1990). SRFB have serious concerns over the environmental management of the site and the quality of discharges to the Cushaling River. They sent warning letters on four occasions after site visits (1995-1999) and up to August 1999 the company was discharging domestic and trade effluent with a discharge licence.

Subsequent inspections found that discharges appeared to be within their Section 4 licence. SRFB are concerned that good environmental practice be maintained on site. The EPA measured the receiving waters downstream of the discharge location in 2000. The biological quality at the location (0050) was rated as Q1-2 seriously polluted which is a slight improvement from 1997 (Q1/0). Although there are other discharges that contribute to the Q rating, the SRFB considers this level of pollution to be unacceptable. They have afforded the company every opportunity to remedy the serious environmental shortcomings but will initiate legal proceedings in the event of any further discharges of deleterious matter.

Inspectors Response

The applicant will be required to install infrastructure to provide for the protection of the receiving waters within specified timeframes. This will ensure delineation of contaminated and uncontaminated yard areas.

Monitoring of the emissions to surface water is required under Condition 8.1 and Schedule E. The biological quality of the River will be monitored by the Agency in 2003 as part of the National Biological Monitoring Programme. The Licensee is also required to undertake a biological assessment of the watercourse every two years. In the event of an incident relating to a discharge to waters, the Agency and the Fisheries Board would be notified in accordance with Condition 10.2. See Also response to Submission No. 1 above.

Submissions 4& 5. Oliver Kearney, Rathmoe, Carbury, Co. Kildare

(Submission dated 15/6/01)

The company have not done anything to improve the air and water quality in the locality. He described the discharges to the Cushaling River and the situation at his fields and that of Mr McKeons (see submission 1). The River is full of silt and the sides of the bank are full of mud with a strong oil colour and diesel smell.

Mr Kearney outlined a pollution incident over Easter (2001) whereby during maintenance works that a pipe was fractured allowing water from the manure yard and sewage to run directly unnoticed out to the river for a three-week period (13/4/01 to 3/5/01). He was unhappy with the company response. He was informed that there was a 400,000 gallon tank on-site collecting water over a 17acre site. He estimates that 1 inch of rain on this site equates to 200,000 gallons and if the tank was already full that this is washed to the river leaving it smelly, dirty and undrinkable for animals.

There is an on going over powering smell particularly on frosty nights and humid weather. He wants to know whether the current system will change, will air and water quality disimprove if they get a licence.

(Submission dated 9/9/02)

His concern relates to pollution into the river (at rear of his lands). Upstream of the Mushroom facility the river is clean and free of weeds and build-up and good quality clean water. A 2-ft concrete pipe runs from the Mushroom (factory) and discharges to the river and thereafter there are many weeds and scrub, muddy build-up of silt and algae. During wet weather and yard washing days the water be comes heavily contaminated (black straw floating, sometimes diesel) that he doesn't allow his dog to walk through it. He does not consider that this should be allowed or used as an emergency outlet. The tanks in place can only contain the day to day normal amount of water. The water is not fit for livestock to drink. The tanks they have cannot hold even a quarter of the amount that can fall (going by the company MDs calculations). The River should not be used as a percolation area and it is not fair to landowners, cattle owners or the well being of the aquatic environment.

Inspectors Response

The applicant responded (Article 16) that the design of the storage tank was not based on any particular retention period but it was a 10-fold increase in storage capacity over the previous storage tanks. The delineation of contaminated-uncontaminated yard areas, the revised drainage arrangements and the enclosure of compost operations will ensure that the area for potentially contaminated run-off will be greatly reduced.

Within six months of the date of the grant of a waste licence all fuel storage bunds will be essessed for integrity and repaired if necessary.

I am satisfied that emissions to air and water will be greatly improved if the licence is fully complied with. See also response to Submissions No 1 and 2.

Submission No. 6: T. Maddock, Senior Executive Officer, Kildare Co. Co.

The company has a Water pollution Licence which was enclosed. The licence includes for low phosphorous levels in the treated effluent prior to discharge to the Figile (Cushaling) River. The River is monitored as part of the Phosphorus Regulations at Br S of Ticknevin Br, 14F010050. KCC are working to achieve compliance with the requirement of the P-regulations and they request that the current emission limit values be considered by the Agency.

Inspectors Response

The provision of monitoring infrastructure to monitor the effluent treatment plant and to continuously monitor the quality of the surface run-off is required in Condition 3.18 of the recommended PD. Emission Limit Values and monitoring Submission No. 7: C. Buchanan, NPW, Duchas, 7 Ely Place, D2 (dated 23/9/02)

Duchas had no recommendations or objections to the application.

Inspectors Response

Comments noted.

Signed ______ Dated:

Brian Donlon
Senior Inspector

Environmental Management and Planning

requirements are set in Schedule D and Schedule E of the recommended PD,

APPENDIX 1

Site Plan

APPENDIX 2

OdourNet UK Ltd. Report

APPENDIX 3

RESPONSE BY APPLICANT TO ODOURNET UK Ltd. Report

<u>Cathal MacCanna CEO of Carbury Mushrooms submitted his comments in relation to the OdourNet UK report as part of the Article 16 information (rec'd 9/10/02).</u>

He has 37 years experience in the industry, 23 of which were with Teagasc on mushroom research. This time with Teagasc covered the move by the Dutch Compost industry from its vast plant in Ottersum to the Rotterdam area. He states that it is likely that the information used by OdourNET is essentially based on the Ottersum situation.

He is unaware of any technology or human experience that can identify the source of a smell 10km beyond its release point. He considers that the odour footprint" from their facility much smaller than the 1-3.5km due to their daily observations. He states that only on rare occasions (still, fog, inversion-type conditions) can odour be detected greater than 500m from the site. In ten years, he states that there has only been one person complaining from Derrinturn village approximately 1 km distant. He considers that the maximum odour footprint is c. 500 m and encompasses 5 houses only and these houses are not in line with the prevailing wind.

He disagrees with the emissions quoted for the flat pile and phase 1 windrows which should be at least reversed. He states that the total amount of compost manufactured on one site in Ottersum, the Netherlands (in the 1980's) is similar to that produced in Ireland in twelve yards at present. Their facility is uniquely situated in that it is in a sparsely populated area with no housing whatsoever in the direction of the prevailing wind however he recognises that odour nuisance of the five residences should be eliminated. Aeration of the entire pre-wet and phase 1 area would accomplish this. Currently around 20% is aerated. A shift of activity approximately 100m southwards from the affected dwellings will also contribute to a significant amelioration of the problem.

Summary of Odour Control Measures Proposed

- 1. Extend the aerated pad at the front of the compost facility
- 2. Relocate conveyor for straw/manure bale blender (50m towards the front of the site)
- 3. Relocate clamps (50m towards the front of the site)
- 4. "The final move will be c. 20m to the aerated pad at the front of the site" moving the main odour 120m further away from the nearest sensitive locations. The use of the aerated pad and the entire production process will cease at the back of the site.
- 5. Aerate the sump at the back of the site reduce amount of stagnant process water in the yard area Timeframe for this work 24 months by the end of October 2004.
- 6. All stacks and windrows for the final stage of Phase 1 composting will be aerated by the end of October 2007

This would represent BAT for this facility. The installation of bio-filters recommended by OdourNet UK would result in the industry becoming uncompetitive at EU level. This is an extremely expensive step considering that their ability to reduce odours is not proven for the mushroom composting industry.

Inspectors Response:

The odour impact assessment of the bale-blending operations represents 3% of the total emissions from the facility at present. Relocation of these operations would provide a modest decrease in emissions from the facility. The storage of percolate represents 13% of the existing odour emission estimate from the facility. Aeration of the percolate storage tank and better "goodie water" management would result in an improvement. In relation to the comment that only 5 houses would be effected I note that the consultant for the applicant had earlier provided "odour isopleths" and indicated that (99.5%ile) short-term odours of 100ou/m3 would be predicted about 0.5km from the site.

The applicant noted that approx. 20% of the compost is aerated at the facility at present and commits to 100% aeration by 2007. Relocation of the clamps and the aerated compost would result in a shift in the odour isopleth contours. However, if aeration is the sole approach used to reduce emissions without installing odour control, the available research indicates that this approach is unlikely to result in an acceptable odour impact from this facility.

OdourNET UK themselves has described the factors used in the models as conservative.

There was no reference to the enclosure of the horse manure (currently an area of c.1615m²) and poultry manure (c. 292m²) in Mr McCanna's response. These alone represent 25% of the existing total emissions as noted in the OdourNet UK Ltd. report. These are required (Condition 3.7) to be enclosed along with a range of odour control measures as outlined in Condition 3.11.