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## ATTACHMENT 5.2

# ODOUR MANAGEMENT PLAN

WOODVILLE BIG FARMS LIMITED  
BALLYMACKKEY  
NENAGH  
CO. TIPPERARY

**2019**

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<b>DATE</b>	27 <sup>th</sup> October 2019	<b>CHECKED BY:</b>	Mike Fraher, BSc. Martin O’Looney, BSc.

**ODOUR MANAGEMENT PLAN**  
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## **1.1 ODOUR MANAGEMENT**

### **1.1 GENERAL PRINCIPALS OF ODOUR MANAGEMENT IN THE AGRICULTURAL SECTOR**

A statutory odour nuisance is an odour that is so offensive and prolonged that it significantly interferes with the enjoyment and use of the affected property.

Many things can affect whether an odour would be considered a statutory nuisance: time of day the odour occurs; how long it is a problem for; the type of smell and its effects; the character of the area.

For example, in the countryside it is reasonable to expect odour from farming activities, however, activities being carried out without due regard for neighbours can cause odour nuisances.

Due to the complex nature of odour perception by the human olfactory system, levels of sensitivity to odour within a population will vary. Consequently, the perceived offensiveness of an odour will vary from person to person. In addition, the context in which the odour occurs will affect the nuisance value of an odour.

As odour accounts for a significant proportion of the complaints that local authorities receive about environmental pollution, it is important that farm managers are cognisant of odour issues in design and management of a facility.

#### **Documented Odour Management**

A written odour policy/management plan can be helpful in maintaining standards and demonstrating a commitment to good odour management. Such a plan/programme can also be an important tool in staff training.

All staff should be trained on the content of the OMP to ensure a commitment to good odour management. A record may be kept of the date and name of person trained and made available for inspection by the relevant authorities.

The odour management plan should be updated on an ongoing basis with site specific control measures which are developed following any complaints or odour issues identified by staff.

Methods for monitoring odour should be included in an odour policy i.e. perimeter checks and sniff testing by the staff.

A log book may be kept of any odour monitoring carried out, the findings and any remedial action taken. The log should indicate whether it was routine odour monitoring or the result of a complaint.

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## **1.2 ODOUR MANAGEMENT PROGRAMME**

The Odour Management Programme (OMP) is a core document that is intended to detail operational and control measures appropriate to the management and control of odour at the site. The format of the OMP should provide sufficient detail to allow operators and maintenance staff to clearly understand the operational procedures for both normal and abnormal conditions.

An Odour Management Programme (OMP) should be prepared for all processes. The OMP should also include sufficient feedback data to allow site management (and local authority inspectors) to audit site operations. An example of some of the issues to be considered is summarised as follows. More detailed guidance is provided with this document.

- A summary of the site, odour sources and the location of receptors.
- Details of the site management responsibilities and procedures for reporting faults, identifying maintenance needs and complaints procedure.
- Odour critical plant operation and management procedures if any (e.g. correct use of plant, process, materials, checks on plant performance, maintenance and inspection).
- Housekeeping.
- Maintenance and inspection of plant (both routine and emergency response).
- Spillage management procedures.
- Record keeping – format, responsibility for completion and location of records.
- Emergency breakdown and incident response planning including responsibilities and mechanisms for liaison with the local authority.

The Odour Management Plan is a living document and should be reviewed to account for changing equipment, management or implementation of site-specific mitigation measures.

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### ODOUR IMPACTS AND KEY ODOUR EMISSION CONTROL MEASURES FOR INTENSIVE AGRICULTURE – EPA

#### Good Operational Practice.

1. It is good operational practice to keep the animals and the surfaces in and around buildings clean.
2. Animals with manure on their skin/exterior will have an increased odour emission, as the body heat of the animal will accelerate the release of odours.
3. Every surface covered in fresh manure will initially be a source of odour. Reducing the exposed area of manure induces a direct reduction in odour emissions.
4. Keeping a clean operation is a matter of combining good design with good operational practice.
5. Sources of odour in and around buildings include:
  - i. Wet manure-covered floors,
  - ii. Dirty animals, with manure on their skin/exterior,
  - iii. Spilled feed,
  - iv. Improper storage and disposal of dead animals / carcasses,
  - v. Deep under-floor manure storage pits, with long residence time.
  - vi. Dusty surfaces that can capture and release odorants.
  - vii. Elevated temperatures in manure storage areas and in houses.

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**Table 1.1:** Odour Management Action Plan (Draft)

Ref	Odour Source	Specific Source	Action Plan
1.a			All relevant staff to be trained on OMP measures.
1.b			Review and update OMP following any relevant changes at the site. This should be responsive to the results of any internal monitoring of the odour and any complaints of odour. Key Performance Indicators (KPI's): <ul style="list-style-type: none"> <li>- Number of Complaints,</li> <li>- Number of abnormal odour events (internal odour checks),</li> <li>- Results/recommendations of any surveys</li> </ul>
1.c			Carry out odour patrol checks in the event of an odour complaint and keep log of all findings, including weather conditions and wind direction. EPA “ <i>Odour Impact Assessment Guidance for EPA Licensed Sites (AG5)</i> ”  At times where a complaint has been received or issues identified during onsite checks, monitoring or during maintenance, daily monitoring should be carried out at times relevant to the complaint or identified issues until the investigation is complete.
1.d			Keep a log of environmental odour complaints, including description of the odour, details of investigation, any follow-up actions and outcomes.
1.e			Keep a log of any odour monitoring carried out, including reason for survey, main findings and remedial actions taken.
1.f			Inform neighbours of any abnormal planned operations/projects which may lead to significantly increased odours. Provide detail of timing and likely duration to minimise the perceived odour impact on neighbours. Provide neighbours with contact details of relevant members of staff for the receipt of environmental complaints.
2	Site-wide	Site-wide	Enforce strict hygiene / housekeeping standards throughout site.

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Ref	Odour Source	Specific Source	Action Plan
3	All Areas	All Areas	Ensure all staff and contractors are aware of odour concerns and notify any potential nuisance level odour sources to farm managers.
4	All Areas	All Areas	Ensure external areas, vehicles and personnel travel are limited and washed as required, including passageways and yards.
5	Buildings	Livestock area	Regularly wash down fresh manure in slatted sheds and on external concreted areas containing livestock to ensure minimum odour emissions.
6	Buildings	Livestock area	Optimise crude protein levels in feed, thus minimizing nitrogen excretion.
7	Pits	Silage/maize	Ensure silage and maize storage pits remain covered when not in use.
8	Vehicles	Transport of livestock	Wash down fresh manure / wet down vehicles prior to leaving the site.
9	Waste Containers	Waste	Ensure waste bins are covered and removed regularly. Ensure same for any other potentially odorous waste.
10	Buildings	General operations	Carry out potentially odorous activities (i.e. slurry agitation) outside of optimal weather conditions for odour dispersion wherever practicable – i.e. warm weather and light breeze.  Be cognisant of wind direction and sensitive receptor locations during such activities.
11	Buildings	Deep bedding / manure	Minimise the residence time and build-up of manure in storage areas and bedding.  Where straw bedding or similar is used, fresh bedding should be provided daily in order to ensure animals remain clean.

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<b>Ref</b>	<b>Odour Source</b>	<b>Specific Source</b>	<b>Action Plan</b>
12	Roads	Manure on roads	Ensure site roads are kept clear of odorous materials.
13	Public Roads	Manure on roads	Inspect surrounding public roads for manure following removal of livestock or slurry.

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**Figure B.1:** Odour Sensitive Receptor Map





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**Industrial Facility Guidance**

EPA Ireland (2010) “*Odour Impact Assessment Guidance for EPA Licensed Sites (AG5)*”

UKEA (2011) “*Additional Guidance for Odour Management*” H4, Environment Agency Horizontal Guidance

Relevant Best Available Techniques (BAT) Documents;

EPA BATNEEC Guidance Note Poultry Production Sector, Feb 1998

EC/EU Best Available Techniques (BAT) Reference Document for the Intensive Rearing of Poultry or Pigs, 2017

Commission Implementing Decision establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the intensive rearing of poultry or pigs, 15<sup>th</sup> February 2017

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