

ODOUR MANAGEMENT PLAN

Ryedale Poultry Farm

Ryedale Farm
Melbourne
York
YO42 4ST

Environmental Permit No.	EPR/ EP3736JQ
Grid Reference	476061, 443021

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INTRODUCTION

This bespoke Odour Management Plan (OMP) has been prepared to support the overall Environmental Management System in place at Ryedale Poultry Farm. The overriding principle of this OMP is to ensure the day to day activities are carried in accordance with this document to help minimise the overall environmental impact.

PROXIMITY to SENSITIVE RECEPTORS

There is one sensitive receptor within 400m of the installation boundary. This is the detached farm dwelling of Ryedale Farm which is approximately 138m south-east from the poultry farm boundary and is within the installation boundary of the adjacent Ryedale Farm Organics installation. The dwelling is owned and occupied by the owners of Ryedale Poultry Farm and owners and operators of the adjacent Ryedale Farm Organics Recycling Facility.

PURPOSE of ODOUR MANAGEMENT PLAN

- Establish the likely source of odours arising from the farm
- Set out procedures at the farm in order to mitigate or minimise the risk of odour
- Set out measures used to periodically monitor odour emissions at the farm
- Formalise an effect method of dealing with any odour complaints quickly and efficiently

POTENTIAL ODOUR SOURCES

The following sources have been identified as contributing to a potential medium - high risk odour source: -

- Odour emissions from compound feed selection
- Odour emissions from feed delivery and storage
- Odour emissions from ventilation techniques
- Odour emissions from litter conditions and management
- Odour emissions from carcass storage and disposal
- Odour emissions from fluctuations in bird stocking densities (growth curves)
- Odour emissions from drinking water systems
- Odour emissions from de-stocking (thinning and final depletion)

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- Odour emissions from cleanout (litter removal)
- Odour emissions from dirty water generation, storage & removal (washout)
- Odour emissions from litter/ manure
- Odour emissions from dust build up
- Odour emissions from use of diesel fired generator
- Odour from biomass boiler operation

PATHWAYS & RECEPTORS

The pathway for all of the above sources would be via the atmosphere, with the most sensitive receptors being inhabitants and users of nearby dwellings.

The wind direction will significantly influence how receptors are affected.

There is one sensitive receptor within 400m of the installation boundary and this is not in the direction of the prevailing wind.

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ODOUR MANAGEMENT & CONTROL MEASURES

Odour Related Issue	Assessment of Potential Risks & Problems	Actions Taken to Prevent & Minimise the Risk & Monitoring Carried Out
Manufacture and selection of compound foods	<ul style="list-style-type: none"> ▫ Milling and mixing of compound feeds. ▫ Poor quality and odorous ingredients. ▫ Feeds which are “unbalanced” in nutrients, leading to increased excretion, litter moisture and higher emissions of ammonia and other odorous compounds. 	<ul style="list-style-type: none"> ▫ No on-site milling or mixing. ▫ Feed specifications are prepared by the feed compounder’s nutrition specialist. ▫ The nutritionist ensures that protein and phosphorous content is reduced as the rations change throughout the flock cycle. ▫ Feed is only supplied by a UKASTA accredited feed mill, so that only approved raw materials are utilised in production. ▫ A feed sample for every load of feed delivered to the site is left and documented for both quality assessment and traceability. Samples of feed are kept on site for a minimum of three months.
Feed Delivery and storage	<ul style="list-style-type: none"> ▫ Spillages of feed during delivery and storage. ▫ Spillage of feed during on-farm movement from central bins to small silos at free-range houses. ▫ Creation of dust during delivery. 	<ul style="list-style-type: none"> ▫ Feed delivery systems are sealed to minimise atmospheric dust. ▫ Socks are fitted to bin outlets to catch spillage ▫ On-farm transport of feed is within a purpose built covered vehicle by trained personnel. ▫ Any and all spillages are cleaned up immediately. For major spillages over 500kg the feed mill would be notified and will be required to send a vehicle out to clear the feed up and move to another on-site silo. This process is carried out within a few hours if the food is still in a condition to be used and therefore fit for animal consumption. ▫ For any major spillage greater than 500kg that is unfit for animal consumption the spillage will be cleared up into skips and removed from site for disposal via the appointed waste contractor within 24 hours of the incident. ▫ For any minor spillage less than 500kg feed would be cleared up using bags and placed in the onsite general waste container for disposal. ▫ Annual condition checks of all feed silos and their surrounds are carried out and documented as detailed in the EMS.
Ventilation Techniques	<ul style="list-style-type: none"> ▫ Inadequate air movements within the buildings can lead to high humidity and subsequently high moisture levels within the litter. ▫ Inadequate control of inlet and ridge vents leads to poor dispersal of potential odours. ▫ Inadequate control of gable end fans leading to extraction of potential 	<ul style="list-style-type: none"> ▫ The ventilation system is regularly adjusted either automatically or manually to aid optimum internal environmental conditions, as explained in the EMS. ▫ The ventilation system is designed to efficiently control air quality and humidity within the buildings. ▫ In naturally ventilated houses vents are operated automatically to maintain optimum air-flow in response to air conditions within the buildings. ▫ Manual override can be implemented for vent

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	odours.	<p>movements.</p> <ul style="list-style-type: none"> ▫ In fan ventilated houses fan efflux volumes are maintained at levels designed to maintain the air conditions within the buildings and to optimise dispersion of any odours. ▫ Maintenance schedules are in place and are carried out in line with manufactures recommendation and guidance as stated in the EMS. This is to minimise the risk of any breakdowns during the growing periods. ▫ Gable end fans are only manually operated and their primary function is to boost air inflow to the house as an emergency back-up at times of potential heat stress to stock.
Litter Selection, Conditions and Management	<ul style="list-style-type: none"> ▫ Incorrect choice of bedding material (litter). ▫ Insufficient bedding material to absorb normal excreta levels ▫ Odours arising from wet litter and poor management. ▫ Spillage of surplus water from drinker systems. ▫ Disease outbreaks leading to poorly conditioned birds – excessive droppings leading to higher moisture content within the litter. ▫ Overcrowding of available bird space. ▫ Poor ventilation design and techniques leading to poor dispersion of air and odour. ▫ Poor building design and quality leading to residual build-up of damp, materials rot, trapped organic materials and decay resulting in odours. ▫ Stock inspections can disturb livestock and lead to unnecessary odour and dust generation. 	<ul style="list-style-type: none"> ▫ Clean virgin wood shavings are used to provide an appropriate absorbent and low-odour litter, in-line with industry best practice. ▫ The fresh clean bedding material (baled wood shavings) is purchased from approved specialist suppliers of poultry litter. ▫ Re-bedding is carried out as-required throughout the growing period to ensure that there is always a sufficient depth of good quality litter in the house. Litter quality is checked at least 3 times per day within regular stock inspections (recorded). ▫ Fresh litter is stored wrapped and undercover prior to use – protected from the elements. ▫ Controls on feed supply and ventilation (see above) help maintain litter quality. ▫ Nipple drinkers and drip trays are installed to minimise spillage of drinking water. ▫ Drinker heights are checked daily as part of the daily stock inspection procedure. Stock and equipment are checked and recorded at least 3 times each day and drinker heights are always checked and adjusted as required at the first check. ▫ Water pressure is checked daily by reference to the water pressure gauges. This may be particularly important at the start of the crop cycle when additional small satellite drinkers may be utilised and a higher initial pressure is required. ▫ Checks ensure that birds have good access to water but that water is not being released onto the surrounding litter. ▫ Use of a veterinary health plan, with specialist veterinary inputs used as necessary to control health status of birds. ▫ Stocking densities are controlled to maintain optimum ventilation levels and to prevent overcrowding. At least twice weekly recording of weights takes place to monitor stocking density and ensure standards are being met (farm assurance schemes, breed standards & house

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		<p>design criteria).</p> <ul style="list-style-type: none"> ▫ Destocking of buildings will be assessed if any odour complaints are substantiated by the Environment Agency and stocking levels are defined to be the root cause. ▫ Walls and ceiling voids of building have been insulated to prevent condensation and cold bridging as detailed in the EMS. ▫ Continual Damp Proof Membrane (DPM) has been laid under all the concrete floors of all houses to prevent moisture being drawn up from the ground. Should any aspect of the building structure fail a full investigation will be carried, in conjunction with the supplier, to source and rectify any issues as they arise. ▫ Stock inspections are carried out 3 times per day. These are only carried out by trained and/or fully supervised staff. House walking is carried out in a calm manner and concentrates on perimeters. All stock inspections are recorded and action is taken immediately if any problems are identified in relation to welfare and environmental standards.
Carcass storage & disposal	<ul style="list-style-type: none"> ▫ Carcasses not removed to designated storage. ▫ Inadequate storage of carcasses on site. ▫ Carcasses stored on site for prolonged period of time. ▫ Carcasses exposed for excessive times at collection. ▫ Collection vehicles not suitably covered leading to excessive odour release during transport off site. 	<ul style="list-style-type: none"> ▫ Carcasses collected from sheds and ranges at each inspection (minimum 3 times per day) and immediately transferred to storage bins. ▫ Carcasses are stored in purpose built locked and lidded bins. ▫ Carcasses are collected twice weekly from the site by an EA approved and licensed ABP carrier using suitably designed, leak proof and covered vehicles. ▫ Bins are treated with an odour neutraliser. ▫ After each site depletion the carcass bins are washed and disinfected to avoid any build up. Washing water will be directed to underground holding tanks and removed along with the house wash waters. ▫ Carcass bins are to be located as far away as possible from any sensitive receptor and where possible stored in a cool, shaded areas. ▫ Carcase collection is monitored to ensure no spillages occur and that vehicles are suitable covered before leaving the site.
Fluctuations in stocking densities depending on growth curves – particularly following any increase from initial standards	<ul style="list-style-type: none"> ▫ Overcrowding of available bird space leading to poor air exchange due to inefficient dispersion ▫ Pressure on saturation point of litter resulting in greater levels in moisture. ▫ Increased levels in odour concentration and release than that of a lower growth curve and stocking density 	<ul style="list-style-type: none"> ▫ Stocking densities are to be controlled in accordance with pre-set standards (farm assurance schemes, breed standards & house design criteria) to maintain optimum ventilation levels and to prevent overcrowding. ▫ At least twice weekly recording of weights to monitor stocking density and ensure standards are being met. ▫ In the event of changes (increases) to standards then stocking density assessments, trials and data collection will to be carried out to re-evaluate the optimum stocking levels required to minimise

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		<p>the environmental impact of the site on nearby sensitive receptor.</p> <ul style="list-style-type: none"> ▫ Any assessment and monitoring plans to be reviewed and approved by the Environment Agency and a third-party monitoring company.
Management of drinking water systems	<ul style="list-style-type: none"> ▫ Spillages of surplus water from drinker systems. ▫ Poor quality drinking water. ▫ Poor cleanliness of drinking water systems. 	<ul style="list-style-type: none"> ▫ Use of nipple drinkers and drip trays to minimise the risk of spillages and water wastage. ▫ Only mains or quality checked bore water is used for drinking. Bore water quality checked at least every 6 months and in response to any concerns or unusual physical characteristics (odour, colour, particulates). All such results are recorded and held on file. ▫ Water lines and drinkers are washed and cleaned at each de-population following the documented wash down procedures and using DEFRA approved chemicals.
Destocking of houses – thinning and final depletion	<ul style="list-style-type: none"> ▫ Higher levels of odour release through increased bird activity. ▫ Turning over of any damp litter during machine access and in-house movements generating odours. ▫ Prolonged depletion schedules and numbers being removed at any one time increases opportunity for odour release. ▫ External areas becoming heavily contaminated during depletion. 	<ul style="list-style-type: none"> ▫ Ventilation control to be used to control the release of odours while still maintaining optimum temperature control throughout the depletion process. ▫ Machinery movements to be kept to a minimum to help avoid the churning up of damp / wet litter. ▫ If areas are excessively high in moisture then these are to be replenished with fresh bedding before depletion takes place. ▫ Multiple same house thinning will be kept to a minimum. Normal operations will programme a maximum of 33% thinning from indoor houses. ▫ Any abnormal operations will be documented and discussed with the factory planners to best minimise the impact both on the site and any surrounding receptors. If required the local EEA officer will be notified and consulted.
Clean out (Removal of litter from houses & removal from site) Wash down and disinfection.	<ul style="list-style-type: none"> ▫ Creation of dust during clean-down. ▫ Heaping up and removal of large quantities of dirty litter with potentially high levels of odorous material. ▫ Loading of lorries / trailers with dirty litter. ▫ Uses of odorous chemicals / products to disinfect buildings following wash down. 	<ul style="list-style-type: none"> ▫ All internal areas are blown down whilst doors are closed using high pressure air lances to remove areas of trapped dust which in turns help reduce the amount of dirty water generated. ▫ The clean out process is usually carried out within 12 hours of the birds being depleted to ensure rapid removal of odorous materials and limit time for biological activity. ▫ Litter is scraped into a large heap running the length of the centre of the buildings. This helps aid the drying process, minimises loading times and helps to make the process more efficient throughout. As this process carries hazards for operators working within the buildings, some ventilation is required to supplement the PPE worn by workers, in order to keep the environment clear of excessive dust and ammonia build up. During this time roof fans are run at minimum velocity and inlets and vents are kept partially open to ensure safety for the operators whilst preventing any large-scale odour

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		<p>releases. Emergency gable fans will not be used at all during this process which in turn helps to minimise air flow through the building and odour release.</p> <ul style="list-style-type: none"> ▫ Once all the litter is removed and the floors mechanically swept the ventilation system closed down. The process takes approximately 2 hours per building to complete and is usually completed within 2 full days. ▫ Trailers are loaded inside sheds and once trailers are loaded they are sheeted down ready to leave site and removed as soon as possible. ▫ Dirty litter is not stored on site and contingency plans are in place if the primary disposal route is compromised. ▫ Yard area swept during and after manure removal, to avoid build up. ▫ Quantities, times and destinations of litter removed from site are recorded onto transfer notes. ▫ Wash down of sheds takes place immediately after the removal of litter. This is usually therefore the day following the completion of litter removal. Litter removal and washing are both contracted operations and contractor attendance is planned so that tasks are immediately consecutive. ▫ Only DEFRA approved disinfectant and detergents are used on site and are applied by trained personnel. ▫ Dilution is carried out in accordance with the manufacturer's instructions. ▫ The clean out and wash down process is monitored and recorded
Dirty Water Management	<ul style="list-style-type: none"> ▫ Standing or open stored dirty water during the production cycle or clean-out leading to odours. ▫ Removal of dirty water form storage tanks producing odours. 	<ul style="list-style-type: none"> ▫ Areas around the main access point for all houses are concreted and kept clean at all times throughout the flock cycle. ▫ All clean-out dirty water is stored in sealed underground containment tanks compliant with SSAFO regulations. ▫ Dirty water is removed from site using vacuum tankers. ▫ Containment tanks are checked fortnightly, before and after wash down or following any prolonged rainfall. ▫ All removals are documented through transfer notes. ▫ Contingency plans are in place if the primary disposal route is compromised.
Diesel Generator	<ul style="list-style-type: none"> ▫ Poor quality fuels. ▫ Incorrect choice of fuel leading to odour and particulates. ▫ Incorrect or inefficient operation of boilers leading to partial combustion of 	<ul style="list-style-type: none"> ▫ Generator is provided as back-up in the event of power failure (restricted use) ▫ Only use the specified fuel from approve and reputable supply. ▫ Generator is operated and maintained in accordance with manufacturer's instructions. Records of all inspections and maintenance work

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	fuels and generation of odours.	are maintained. All non-routine events are recorded. Testing is carried out on a weekly basis and full services is carried out annually.
Biomass Boilers	<ul style="list-style-type: none"> ▫ Poor design of boilers and chimneys. ▫ Poor quality fuels. ▫ Incorrect choice of fuel leading to odour and particulates. ▫ Incorrect or inefficient operation of boilers leading to partial combustion of fuels and generation of odours. 	<ul style="list-style-type: none"> ▫ The boiler flue emission is 5m above ground level. ▫ The boiler meets the technical criteria to be eligible for the Renewable Heat Incentive (RHI). ▫ Fuel for the bio-mass boilers is only be derived from virgin timber, clean non-virgin timber, straw or Miscanthus. The preferred fuel is wood pellets derived from virgin timber. ▫ Fuel is stored in a purpose-built metal silo that is fully covered. ▫ Boilers are operated and maintained in accordance with manufacturer’s instructions. Records of all servicing and maintenance work are retained. All non-routine events are recorded. Full services are carried by the suppliers at regular intervals.

ON FARM MONITORING

In accordance with **BAT Conclusions BAT 26** odour emissions to air are periodically monitored in the following manner: -

- Internal relative humidity and temperature are measured and recorded daily. This is captured automatically but is also recorded manually as a back-up.
- Litter quality is assessed for moisture level and recorded daily
- Daily stockman checks are made to detect abnormally high housekeeping odours
- Additional daily checks are made in the event of a disease situation to monitor for the possibility of increased odour as a result.
- Checks of the surrounding areas and perimeters are made by staff who do not work regularly on the farm (typically the area/business manager). These checks are made at least monthly, increasing to twice per month during the summer months. Checks include sniff tests as well as visual inspection to look for anything that could lead to a potential odour problem.
- Weather conditions are monitored and recorded daily.
- Any complaints and any subsequent actions are logged using the complaint report format.
- Staff are to receive annual training regarding Environmental Permitting Regulations – which will include odour management and any new company procedures.

In accordance with **BAT Conclusions BAT 26**, in cases where odour nuisance at sensitive receptors is expected and/or has been substantiated, then additional odour monitoring will be introduced.

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- Specific odour monitoring at the site boundary or other relevant locations in response to the potential nuisance using EN standard methods (e.g. by using dynamic olfactometry to EN 13725 to determine odour concentrations).
- The use of a mobile monitoring station to include weather conditions and other environmental parameters would be introduced should any continual problems or complaints arise to provide detailed local climactic information.
- Monitoring would normally involve the commissioning of an independent specialist to undertake any such work. In the first instance sniff -testing at boundaries may be implemented using company staff other than those regularly employed at the farm. A protocol will be developed as required.
- Specialist odour monitoring can be carried out during the flock cycle if it is deemed necessary to help gauge and further understand odour levels beyond the farm perimeter.
- Ammonia monitoring equipment would be introduced inside houses to further understand ammonia levels and odour in houses and on farm.

ODOUR COMPLAINTS PROCEDURE

- Any odour complaints received in direct relation to the installation shall be recorded on an odour complaints form (**Document Ref. No. RPF 005.1**).
- Odour complaints shall be fully investigated and the reports will be available at future inspections. Complaints received directly from the public will be notified to the Environment Agency within 7 days.
- Investigations shall take into account: -
 - The activities taking place at the time of the complaint
 - The timing of the complaint
 - The weather conditions at the time of the complaint
 - The possibility of any abnormal operations either on site or nearby
 - Any changes that may have been made to a standard operational procedure
 - The receptor and the impact that may have been caused
- Following investigation into a complaint, if the issue is caused by an operation at the site this will be discussed and reviewed with the Environment Agency. Any practical and proactive measures which can be agreed in response to a complaint will be implemented to help minimise the impact. Possible sources and actions that may be taken are set out in the following section of the OMP (**Odour Contingency**).
- The complainant will also be contacted following the investigation into the complaint and kept up to date with progress and any remedial action being taken.

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CONTINGENCY MEASURES

Various contingency measures have been drawn up to address possible situations where odour releases cannot necessarily be controlled by normal operations.

Possible source specific actions are set out in the following table (**Part 1- Source Specific Actions**).

In the event that there have been repeated and substantiated complaints relating to odour a number of possible site-specific actions are also set out (**Part 2 – Site Specific Actions**).

Where any remedial actions have been taken to address identified odour problems then appropriate checks will be carried out to ensure that these have been completed successfully. Checks will be in the form of visual inspection and testing of equipment and/or odour perimeter site tours as is relevant to the action point. Independent testing or monitoring may also be instructed if deemed necessary. The details of all checks on the efficacy of actions will be recorded.

ODOUR CONTINGENCY		
PART 1 – Possible Source Specific Causes & Actions		
Source	Potential Cause	Mitigation
Feed Quality	Poor quality / condition of feed at delivery (e.g. excessive fines/dust or damp) creating blockages that could result in feed spoiling and creating odour from silos or feeders.	<ul style="list-style-type: none"> ▪ Isolate system and notify feed mill to make immediate collection and replacement from silo if appropriate. ▪ Temporarily use bagged feed transferred from another silo if this is needed for stock. ▪ Dismantle and clear any part of the feed system at risk of block. Bag any feed to be disposed of in sealed plastic bags.
Feed Delivery	Failure of pipe coupling to tanker or feed bin creating leak and spillage.	<ul style="list-style-type: none"> ▪ Any spillages are cleaned up immediately. ▪ If a spillage is inside a house the spill is isolated from stock and bagged for use. Bags are retained inside the shed and away from stock. ▪ If a spillage is outside the shed the spill is covered with plastic / tarpaulin sheeting if immediate collection is not possible and/or it is raining. This increases the possibility of salvage and ensures no run-off. ▪ For major spillages (over 500kg) the feed mill would be notified and be required to send a vehicle out to clear the feed up and move to another on-site silo. This process is carried out within a few hours if the food is still in a condition to be used and therefore fit for animal consumption. ▪ For any major spillage (over 500kg) that

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		<p>is unfit for animal consumption the spillage will be cleared up into skips and removed from site for disposal via the appointed waste contractor within 24 hours of the incident. Skips are covered to prevent water ingress and further deterioration.</p> <ul style="list-style-type: none"> ▪ For any minor spillage (less than 500kg) the feed would be cleared up into sealed bags which can be placed in the onsite general waste container for disposal.
Ventilation Techniques	<p>Flock health / growth status generating higher odour / dust levels.</p> <p>Abnormal climatic conditions impacting on sensitive receptors.</p>	<ul style="list-style-type: none"> ▪ Raise velocity / balance extraction profile from ridge fans. ▪ Adjust / increased fan velocities at selected points to address specific conditions in relation to sensitive receptors ▪ Temporary manual operation / override of natural ventilation systems to address specific conditions in relation to sensitive receptors
Drinker Systems	<p>Failure of water pipe or drinker creating spillage of water and leading to poor quality wet and odorous litter.</p>	<ul style="list-style-type: none"> ▪ Immediately isolate the pipe or drinker to prevent any further leakage of water. ▪ Segregate the area of spillage from the stock with barriers. ▪ Create a channel in the wet litter to allow any free water to drain to the shed drainage outlet. ▪ Collect up wet litter in bags, bins or small trailer as necessary depending on quantity. ▪ Keep bags/containers covered and remove from site as quickly as possible through designated contractor.
Litter Condition – Stock Health	<p>Significant disease situation leading to excess of dead birds and/or very heavily soiled and odorous litter.</p>	<ul style="list-style-type: none"> ▪ If the quantity of deadstock is beyond the available bin storage capacity then an area of the shed is fenced off from the stock and dead birds are left in the shed awaiting collection by ABP contractor. ▪ Birds are left spaced out to reduce heat and slow any decomposition. Ventilation is open at all times. ▪ Excessively soiled litter to be dug out and collected from fenced off areas if soiling is extreme. Collection is into containers or trailers that are covered within the shed and then immediately removed from site.
Litter Condition – Stocking Density	<p>Overstocked house due to failed collection for thinning / killing leading to heavily soiled and odorous litter.</p>	<ul style="list-style-type: none"> ▪ Excessively soiled litter to be dug out and collected from fenced off areas if soiling is extreme. ▪ Collection is into containers or trailers that are covered within the shed and then immediately removed from site.

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		<ul style="list-style-type: none"> ▪ Depletion arranged as soon as possible.
Carcase (deadstock) collection	Dead birds being left in sheds / shed lobbies for excessive periods of time leading to deterioration outside storage bins and odour.	<ul style="list-style-type: none"> ▪ Immediately collect dead birds into plastic bags which can be sealed before removing to covered storage bins. ▪ Consider moving bins to be held inside an empty house if available ▪ Re-training of staff must follow asap.
Carcase (deadstock) storage	Delayed collection of carcasses resulting in excessive deterioration and odour.	<ul style="list-style-type: none"> ▪ Consider moving bins to an empty house if available and/or to a point that is furthest from any sensitive receptors. ▪ Small quantities of disinfectant liquid may also be added to suppress maggot activity / putrefaction.
Carcase (deadstock) storage	Carcase bins being left open leading to ingress of water and pests and resulting in excessive deterioration and escape of odour.	<ul style="list-style-type: none"> ▪ Bins must be immediately closed and urgent collection requested from ABP contractor. ▪ Some shavings may be added to absorb liquid and temporarily help suppress odour release. Small quantities of disinfectant liquid may also be added to suppress maggot activity / putrefaction. ▪ Consider moving bins into an empty house if available. ▪ Re-training of staff must follow asap.
Clean Out & Washing Operations	Dirty litter left in houses after de-stocking due to failure of contract arrangements or problems with access to site (weather restrictions).	<ul style="list-style-type: none"> ▪ Keep the litter inside the shed ▪ Keep the ventilation system running at minimum to restrict build up but reduce release of excessive odours to the airstream. ▪ Do not disturb the litter prior to the collection commencing to minimise release of odour and dust.
Clean Out & Washing Operations	Blocked drain leading to spillage of dirty water from shed onto surrounding yard and odour from evaporation.	<ul style="list-style-type: none"> ▪ Cease cleaning activity until the blockage can be removed. ▪ Immediately bund any escape using bales of shavings and use shavings to soak up any water and prevent run-off to surrounding water courses. ▪ Collect soiled shavings into bags/containers/trailers. Ensure that they are covered and arrange for immediate removal from site by contractor. ▪ Dirty water tanker with pump can be utilised if dirty water is backed up and contained within the shed.
Clean Out & Washing Operations	Spillage of dirty water or soiled litter in the yard from transport trailers and tankers creating odour from release and evaporation.	<ul style="list-style-type: none"> ▪ As above immediately bund any liquid spillage using bales of shavings and use shavings to soak up any water and prevent run-off to surrounding water courses. ▪ Collect soiled shavings or spilt litter into bags/containers/trailers. Ensure that they are covered and arrange for immediate removal from site by contractor.

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Clean Out & Washing Operations	Blocked or foul drains causing releases of odours.	<ul style="list-style-type: none"> ▪ Drains can be covered with bales of shavings as an immediate means of suppressing release of odorous gasses and helping to reverse odour into ventilated shed space. ▪ Immediate action is taken to prevent any spillage to clean water courses and to resolve the problem if any drainage malfunction is identified. ▪ If a drain is blocked in a house then washing is suspended until the blockage is removed (usually by multi-jetting). In extreme circumstances a drain pipe would be excavated to clear and/or replace. ▪ If any water has escaped or is escaping out of the house then this is bunded using bales of shavings, loose shavings may be used to soak up any water and prevent run-off to surrounding water courses. Any soiled shavings are then collected into suitable containers for immediate removal from site. ▪ A dirty water tanker with pump would be introduced if water has backed-up into the house to prevent any dirty water spilling into the yard. ▪ If a tank freeboard is breached then a dirty water tanker with pump would be introduced to empty the tank and prevent overspill to clean water courses. ▪ Temporary bunding would be introduced at any point of overspill to water-courses using shavings or plastic sheeting as is appropriate. ▪ Washing would be suspended until the tank emptying is completed.
Diesel Generator	<p>Generator fault or malfunction leading to partial combustion of fuel and excessive generation of smoke (odour / dust).</p> <p>Incorrect / poor quality fuel supplied leading to poor combustion and excessive generation of smoke (odour / dust).</p>	<ul style="list-style-type: none"> ▪ Stop using generator. Use portable generator if required until repair is completed. ▪ Immediately instruct suppliers to collect and replace fuel. Clean out and service generator before restarting.
Biomass Boiler Fuel Quality	Incorrect fuel type could lead to production of odours and noxious gasses from the combustion of wood treatment chemicals.	<ul style="list-style-type: none"> ▪ Do not use incorrect fuel types. Immediately stop biomass boiler operation and use the LPG back-up heating system until correct fuel is available.

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	Very wet or poor-quality fuel could lead to odours from inefficient burning or fuel.	<ul style="list-style-type: none"> ▪ Do not accept deliveries of wet fuel. ▪ Ensure that any rain water leakage to the fuel storage silo are immediately repaired. ▪ Do not burn very wet fuel. If necessary, have it removed for drying and replaced.
Biomass Boiler Malfunction	Faulty operation or highly inefficient operation of boiler may lead to excessive production of combustion gasses and odours.	<ul style="list-style-type: none"> ▪ Do not use boiler if operation is faulty or becoming inefficient. Use back-up LPG heating system until problems have been resolved. ▪ Immediately take action to have boiler serviced / repaired to return it to normal / efficient operation.

PART 2 – Possible Site-Specific Actions

In the event of repeat and substantiated complaints from any source then an independent odour assessment shall be carried out in conjunction with the Environment Agency and an appropriate third-party monitoring company. Monitoring will be undertaken in line with current guidance to identify the root cause of the odour and whether odours from the site correlate with specific times within the flock cycle. If normal operations are deemed to be the root cause then any of the following site-specific actions relating to stocking densities, feed formulae and litter use may be put in place to help reduce the levels of odour to an acceptable level which is assessed by the EA as being below that deemed to cause pollution outside the permitted boundary. Operations will then be maintained at that level until such time as furthers measures can be put in place to reduce odour levels to an acceptable level and to allow normal operations to resume. Other options may be identified in addition to those included in the list below.

Site specific “low tech” options	<ul style="list-style-type: none"> ▪ Stagger the production cycle across the houses to reduce the maximum number of birds / weight of birds present on site at any point in time to avoid peak odours. ▪ Grow the birds (or some of the birds) to a lower finishing weight to reduce the maximum weight and odour outputs. ▪ Reduce the total number of cycles. In particular consider less cycles during the times (season) where odour has been at peak if relevant. ▪ Changing the feed ration (lower protein level). Review options with company nutritionist and farm veterinarians. Action with feed supplier. ▪ Use specific feed additives to assist with odour reduction. Review options with company nutritionist and farm veterinarians. Action with feed supplier. ▪ Increased use of litter at peak odour points in flock cycles. ▪ Use of litter additives. Consult with farm veterinarians to ensure welfare status and legality of any proposed chemical additive. ▪ Use masking / neutralising agents on the litter. As above consult with farm veterinarians to ensure welfare status and legality of any proposed chemical additive
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Addition higher tech options will be considered where lower tech solutions are not sufficient to control odour, specific aspects of the normal operation are identified as the cause and financially viable techniques (BAT) are available and/or as the means to bring stocking densities and site output back to the original full capacity. Potential options, including those listed below, will be investigated with appropriate specialist suppliers, company technical experts and farm veterinarians. Other options may be identified in addition to those included in the list below.

Site specific higher tech options	<ul style="list-style-type: none"> ▪ House water misters to minimise evaporation and reduce dust levels. ▪ Installation of elevated stacks for roof fan ducts (if relevant). ▪ Installation of scrubber systems into extraction fan systems (if relevant) ▪ Introduction of bio-filters ▪ Forced air drying ▪ Under floor heating systems
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	▪ Heat exchangers
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COMMUNITY ENGAGEMENT

Contact will be made with the local Parish Council to open up lines of communication between the Parish Council and the operator. Updates regarding the site will be provided to the Parish Council as and when required.

REVIEW

The effectiveness of our odour control measures, as set out in this OMP, will be reviewed at least once per year. This review period will shorter if there have been any complaints or relevant changes to our operations or infrastructure.

Any actions or requirements identified as a result of such reviews will be incorporated into a new and updated version of the OMP.

KEY RESPONSIBILITIES

Task	Staff Position Responsible	Notes
Olfactory checks/monitoring	<ul style="list-style-type: none"> ▪ Farm Manager ▪ Area Supervisor 	<ul style="list-style-type: none"> ▪ <i>Ongoing daily monitoring</i> ▪ <i>Monthly / bi-monthly checks at perimeters</i>
Overseeing/monitoring feed deliveries, feed storage, spillages	<ul style="list-style-type: none"> ▪ Farm Manager 	
Ventilation and heating system	<ul style="list-style-type: none"> ▪ Site Stockmen ▪ UK Broiler Manager 	<ul style="list-style-type: none"> ▪ <i>Responsible for day to day adjustment and monitoring</i> ▪ <i>Responsible for design, selection and upgrade of system as required.</i>
Stock inspections	<ul style="list-style-type: none"> ▪ Site Stockmen 	<ul style="list-style-type: none"> ▪ <i>Inspection at least 3 times per day. All inspections are recorded.</i>
Drinking water system	<ul style="list-style-type: none"> ▪ Site Stockmen ▪ UK Broiler Manager 	<ul style="list-style-type: none"> ▪ <i>Responsible for day to day adjustment and monitoring</i> ▪ <i>Responsible for design, selection and upgrade of system as required.</i>
House clean out/washing operations	<ul style="list-style-type: none"> ▪ Farm Manager 	<ul style="list-style-type: none"> ▪ <i>Activity is contracted. Contract Manger oversees the task</i>
Carcase disposal/bins	<ul style="list-style-type: none"> ▪ Farm Manager 	<ul style="list-style-type: none"> ▪ <i>Contractors collect deadstock. Farm Manager is responsible for planning and overseeing collections and on-site storage arrangements.</i>
Drainage system	<ul style="list-style-type: none"> ▪ Farm Manager ▪ UK Broiler Manager 	<ul style="list-style-type: none"> ▪ <i>Responsible for day to day performance and status of system.</i> ▪ <i>Responsible for design and upgrade of system as required.</i>
Biomass Boiler	<ul style="list-style-type: none"> ▪ Farm Manager 	<ul style="list-style-type: none"> ▪ <i>Responsible for day to day operation of the boiler, monitoring, servicing programme and overseeing removal of waste ash from the site.</i>
Documenting/reviewing abnormal events	<ul style="list-style-type: none"> ▪ Area Supervisor 	
Reviewing annual plans	<ul style="list-style-type: none"> ▪ UK Broiler Manager 	

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Complaints log	▪ Farm Manager	

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