Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2012

Application for a Permit

Example of Supporting Documentation - Broiler Chickens

Northern Ireland Environment Agency Northern Ireland

Version 3 May 2013







Guidance on preparing supporting documentation

This document is intended to act as an example supporting documentation for those applying for a PPC permit for a broiler installation. If you have downloaded this document from the NIEA website you will not be able to edit it. For your convenience If you require an editable version of this document please contact the NIEA. Not all of the information included in this document may be required for applications for all broiler installations. Conversely, there may be some additional information which may have to be submitted by others eg. nutrient management plan.

If you are editing this document you must ensure that all the information in the final document is relevant to your installation and that it forms a true representation of that installation and your management of it.

Items which are highlighted in yellow are site specific and are likely to require changing to be relevant to your site. However, great care should be taken with all parts of the document to ensure accuracy.

Items in blue are included to provide guidance and are not intended to form part of the final document. All items in blue should be removed once the guidance has been followed and understood.

Record of changes

Version	Date	Change
1	May 2006	Document created
2	November 2012	Review
3	May 2013	B1.4 added – baseline reporting

Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2012

This document is submitted in support of an application for a PPC permit for a broiler installation located at:

<Site Name> <address>

Submitted by :

< Your Name>

Date :

<mark>< dd/mm/yyyy></mark>

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A4.2 Non Technical Summary

The Farm

XYZ Poultry Farm will be constructed on a privately owned site of approximately 2 hectares. The site will contain 2 poultry sheds designed for rearing chickens for meat production, with a maximum stocking capacity of 58,000 birds. The farm, which will be located at grid reference 123456, 123456 is surrounded by pasture land.

Poultry housing

Broiler chickens will be kept in 2 sheds, each of steel construction with box profile green painted steel roofs and concrete bases. The working area where vehicles operate and the area surrounding the sheds will be laid with concrete, and the site will be screened with trees. < Number> underground tanks with a total capacity of <XXX> m³ will be installed to collect waste water. These are capable of holding the wash water from 3 crops. An electronic control system will regulate heating and ventilation within the sheds. Ventilation will be by means of roof-mounted fans that draw air into the sheds via openings in the side walls and blow the exhaust air out above the roof ridge. An interval timer will operate the fans to control the amount of fresh air entering the buildings in combination with adjustable inlets that allow further control of airflow. Maximum and minimum temperatures will be monitored and recorded daily and adjustments made as necessary to ensure that birds are in the optimum environment for their age and weight. Target levels for relative humidity are 50% - 70%. Nipple drinkers will be used to reduce wastage of water and to maintain dry litter, which is expected to have a dry matter content of 65% - 70%. Water consumption will be monitored and recorded daily.

Production cycle

At the start of the cycle wood shavings will be spread on the floor to a depth of 2 cm and the sheds will be pre-warmed to 31°C using LPG fuelled space heaters. Normally up to 24,000 day old birds will be placed in each shed at a stocking density of 18 birds per square metre (birds will be grown to a maximum stocking density of 30Kg/m²). However, if market conditions change the operator wishes to have the option of stocking each house with 29,000 birds (i.e. 21.5 birds/m², 38 Kg/m²). As birds grow, temperature will be gradually reduced and ventilation will be increased. Feed from a UKASTA accredited mill will be delivered in 28 tonne capacity covered lorries and stored on-site in galvanised steel bins. Three diets will be fed over the growing cycle with the protein content being reduced as the birds get older. The growing period will be 42 days. Once all the birds have been cleared the litter will be removed in covered trailers to premises for use as mushroom compost or incineration. A proportion of the litter produced (approximately 1 crop per year) will be spread on third party land in accordance with the nutrient management plan supplied with the application. The buildings will then be washed down and disinfected ready for the next crop. On average there will be 6.5 crops per annum with a turn around of one to two weeks between crops. Mortalities will be removed from the sheds daily and the numbers recorded. Carcasses will be kept on-site in covered vermin proof bins until they are collected under the National Fallen Stock Scheme [or incinerated in a DARD approved incinerator having a secondary combustion chamber but operating at less than 50 kg per hour - provide details of the method you use].

These measures are intended to reduce the production and emission of ammonia, odours and dust from the sheds, and prevent liquid washings escaping to the environment. This in turn should reduce the environmental impact of the farming activities.

Responsibility

Primary responsibility for running the site will rest with <<u>Insert name></u>. Additional technical support is available from <a processing company> as required.

B1.3 Site Report and Site Map

Site Description

Located in the County of *name*, the site lies adjacent to the A12 road between the villages of *Village 1* and *Village 2*. It comprises a rectangular shaped area of land of approximately 2 ha, 150 m above sea level. The majority of the site area will be occupied by the sheds and surrounding concrete hard standing. An outer vegetated strip of land will be planted with trees and shrubs to screen the sheds. At the north east side of the sheds, a vegetated bank will provide further screening. At the foot of this bank will be a swale that collects lightly contaminated run-off from the concrete hard standing surfaces. This swale will be heavily vegetated and will drain to a local ditch and eventually into the *Local River* catchment. The area surrounding the site is pasture land located in a typical undulating landform with gentle slopes. A plan of the proposed site is provided as part of the Accident Management Plan in Appendix 1.

Land use class

Soil Survey Code SWG1ST shows that the land surrounding the farm has a land classification value of 3A.

Soil type

Soil survey sheet nn shows that the dominant soil series in the area is a Surface Water Gley Class 1 on Shale Till.

Water courses and groundwater vulnerability

Approximately 200 m to the east of the site a small water course flows north and joins the *Local River*. Two other streams in the same catchment are located approximately 0.5 km to the east and 0.5 km to the west of the site. These also flow north into the *Local River*. Water from a swale, located along the east perimeter edge of the site, flow will flow through underground drains to the watercourse 200m east of the site. Groundwater vulnerability maps show land at the site and in the area surrounding the site as weakly permeable.

Site History

The site is currently pasture land. Construction of the poultry farm will involve the removal of topsoil, and levelling using virgin aggregates.

Operation of the site

The site will be operated solely for the production of poultry meat. Day old chicks will be introduced into poultry sheds bedded with wood shavings and grown until a maximum of 42 days old. The birds will then be removed for processing and the

shed is emptied of litter, washed and disinfected ready for the next crop. Carcasses will be kept on-site in covered vermin proof bins until they are collected under the National Fallen Stock Scheme [or incinerated in a DARD approved incinerator having a secondary combustion chamber but operating at less than 50 kg per hour – **provide details of the method you use.** Ash from the incinerator is collected and disposed of by land-spreading]. Litter will be removed immediately from the site in covered trailers to be utilised as mushroom compost or combustion in an authorised facility. A proportion of the litter produced (approximately 1 crop per year) will be spread on third party land in accordance with the nutrient management plan supplied with the application. Wash water will be collected in underground storage tanks (capacity <XXX> m³) and spread on land in accordance with the DARD code of good practice for prevention of pollution of water. A map showing the fields used for spreading wash water can be found in Appendix I.

Feed will be stored on-site in sealed steel bins.

Substances and emissions

Potentially polluting substances stored on site will include 200 litres of diesel stored in a bunded fuel tank, and quantities of disinfectant concentrate stored in sealed containers. The main emissions from the site will be ammonia, odours and dust. Dust deposited on hard standing within the site will be regularly swept up and disposed of in accordance with the DARD code of good practice for prevention of pollution of water.

Previous use or activity	Potentially polluting substance(s)	Location
Diesel tank area	200 litres of diesel fuel	Generator house
Disinfectant	25 litres of concentrate	Pesticide store

History of incidents

No pollution incidents are known to have occurred at the proposed site.

Potential pollution pathways

The site will be relatively compact and consist mostly of the sheds and associated hard standing areas, consequently the whole area has been considered as a single zone. Potential pollution pathways have been identified as:

- Waste water leakage from hard standing areas during cleaning, or storage tank overflow resulting in potential for contamination of land, watercourses and groundwater with nutrients, pesticides and disinfectants.
- Contaminated run-off from apron areas, particularly if dust has been allowed to build up, resulting in potential for contamination of land and groundwater with nutrients, disinfectants.
- Leakage from septic tanks that have not been well maintained.
- Spillage of diesel around the filling area of diesel tanks.
- Ammonia and dust emitted to the atmosphere being deposited on the site and having the potential to damage or cause changes to some vegetation.
- Potential soil contamination resulting from a build up of ash around the incinerator.

Site Reconnaissance

(The Example A below is more relevant for an existing site which is being expanded above the PPC threshold, Example B would be appropriate for a "green field" site.)

[Remove the Example which is <u>NOT</u> relevant to your installation]

Example A

An examination of the site was undertaken to establish whether pollution has occurred through any of the pathways above.

- Leakage from hard standing areas was assessed by visually examining vegetation and soil around the hard standing and searching for run-off channels or other evidence of leakage. Vegetation and bare ground did not show any obvious signs of pollution.
- A similar procedure was used to assess run-off from the apron area. There was some evidence of wet land as a result of rainwater run-off but no evidence of any contamination from, for example, dust or feed.
- The area around the septic tank showed no signs of leakage and evidence of previous leaks such as a build up of algae were not obvious.
- There was no evidence of diesel spillage around an area where vehicles had been fuelled in the past.
- Vegetation around the sheds was green and lush, probably as a result of ammonia deposition, but there was no evidence of damage or scorching to leaves on trees and shrubs.
- The area around the incinerator was inspected visually for potential contamination such as a build up of ash. There were areas of bare earth around the base of the unit due to activity from people and vehicles, but no evidence of ash or carcass remains.

Example B

An examination of the proposed site was undertaken to establish whether pollution has occurred

- The site consists of pasture land
- There is a septic tank, associated with the adjacent dwelling, in the north east corner of the site. This showed no signs of leakage and evidence of previous leaks such as a build up of algae were not obvious.
- There was no sign of any pollution in any part of the proposed site.

Statement of site condition

The area for the proposed site is considered to be in a condition commensurate with agricultural land. Given that this land is a green field area used for agricultural production, it is considered unlikely that contamination is present. The land surrounding the proposed poultry sheds is used for agricultural production and although a small amount of slurry spreading is undertaken on this land, the presence of contaminants is considered unlikely.

[Note: If there is a possibility of contamination on any area of the site, for example areas around old fuel tanks and incinerators, applicants are advised

to adopt a risk based approach to establish the level of contamination in defined zones of the site. In circumstances where pollution was suspected, monitoring requirements in addition to the inspection requirements set out in rules 2.1.1.1 to 2.1.1.3 of the Standard Farming Installation Rules may be included in the permit. See the Site Report Guidance¹ for more information on preparing a site report for your application]

B1.4 Use, Production, storage or release of relevant hazardous substances.

(The Example A or B below is more relevant for an existing site which is being expanded above the PPC threshold, Example C would be appropriate for a "green field" site.)

[Remove the Examples which are <u>NOT</u> relevant to your installation]

Example A

There has been a poultry unit on this site for approximately 10 years. Over this time the only hazardous substances stored on site have been fuel and disinfectant chemicals.

2000 litres of diesel has been stored for use in the generator and agricultural vehicles. This has been stored in a plastic tank, in a bunded area and there has been no spillage of fuel other than minor spillages resulting from filling vehicles. There is no evidence of spillage or contamination around the bund.

Chemicals such as disinfectants and herbicides have been stored in a bunded, fire proof and locked chemical store adjacent to the farm office. There have been no incidences involving spillage of chemicals and there is no evidence of spillage or contamination around the chemical store.

For the reasons highlighted above it is concluded that historically there has been no risk of spillage or contamination from hazardous substances and therefore a baseline report is not required.

Example B

There has been a poultry unit on this site for approximately 10 years. Over this time the only hazardous substances stored on site have been fuel and disinfectant chemicals.

2000 litres of diesel has been stored for use in the generator and agricultural vehicles. This had been stored in a plastic tank, without a bund, until 3 years ago when a major spillage of fuel from this tank occurred. After that incident all contaminated soil surrounding the tank was removed and disposed of by AN Other Environmental Services. A bund was then constructed around the tank to prevent any future incident. After the cleanup AN Other ES carried out analysis of the soils around the tank and produced a report demonstrating that the cleanup had returned the site to a satisfactory state. This report is enclosed with this application and will act as a baseline report.

Chemicals such as disinfectants and herbicides have been stored in a bunded, fire proof and locked chemical store adjacent to the farm office. There have been no incidences involving spillage of chemicals and there is no evidence of spillage or contamination around the chemical store.

¹ Preparing Site Reports for Pig and Poultry Farms: Supplementary Guidance for IPPC Applications.

Example C

The site of the proposed poultry unit is a green field site with no history of previous development. There has been no historical storage or use of hazardous substances on the site and therefore there is no risk of spillage or contamination having occurred. It is therefore considered that a baseline report is not required.

B2.1.1 Inspection and Maintenance

Demonstrate how you meet the requirements of Standard Farming Rules 2.1.1. to 2.1.1.3.

Scheduled inspections will be undertaken by the farm owner <your name> on a per crop basis. The findings are recorded using the form below and any defects noted and corrective action stated. In addition to the per crop schedule a number of daily checks are made as part of monitoring the production process.

Farm Name:.....

Month.....20.....

ltem	Points to check:	Satisfactory	Unsatisfactory (detail below)	Signed
Chemical/vet medicine stores	security, bunding, stock sheets correct, only essential items stored			
Drinking water	meter readings, leaks, valves, condition of pipework, frost protection, records properly made			
Litter storage in housing	wet litter areas, condition of effluent tanks, date last emptied			
Generator	fuel and oil leaks, exhaust leaks, condition of fuel lines and tanks, service records, records of weekly tests			
Feed bins	no spilled feed, impact damage, protective barriers, integrity of structures			
Disinfectant baths	leakage, spent disinfectant, integrity of containers			
Waste skips and bins	adequate facilities on site, secure covers in place, appropriate for nature of waste materials, leakage, containers clearly marked with type of waste			
Hard standing areas	clean and free from dust, surface deterioration, appropriate surface slopes for run-off, no ponding			
Storm drain manholes	evidence of discoloured water, flooding, integrity of covers, colour coding of covers			
Wash water tanks	overflow, leakage, date last emptied			
Swale(s)	free from contamination, waterlogging; good grass cover.			
Site perimeter/ ditches	free from slime or discolouration, adequate flow, not stagnant.			
Pest control	signs of rodent activity, records up to date, bait properly laid and protected, carcasses removed			
Trees and crops	signs of leaf damage, excessive dust deposits			
Buildings	loose or damaged panels, integrity of fan shrouds, dust deposits on roofs, rainwater collection - gutters & down pipes, security, water ingress etc., alarms tested and working			
House Floors	Evidence of crack, crevices on floor, holes			
Incinerator	Evidence of overloading, inadequate combustion, ash properly cleaned up, site clean and tidy, no carcass remains, monitoring equipment and data ok.			

If any item is marked unsatisfactory, please detail corrective action required below.

Remedial action required:

.....

Inspection conducted by:

Date:

B2.1.2 Details of Staff Training

Demonstrate how you meet the requirements of Standard Farming Rules 2.1.2.1. to 2.1.2.3.

The following staff will attend a recognised training course on prevention and control of pollution on pig and poultry farms.

Training Records

Name	Job Title	Details of course and course supplier	Date training completed
A N Other	Proprietor	Livestock SVQ III with prevention and control	
		of pollution on pig and poultry farms - National	
		Training Provider	
<mark>A N Other</mark>	Assistant	Prevention and control of pollution on pig and	
		poultry farms - ABC Agricultural College	
A N Other	Stockworker	Prevention and control of pollution on	
		Company broiler farms - in-house training	
		programme	
A N Other	Stockworker	Prevention and control of pollution on	
		Company broiler farms - in-house training	
		programme	
A N Other	Stockworker	Prevention and control of pollution on	
		Company broiler farms - in-house training	
		programme	

Note: When training has been completed evidence of training must be provided, you should submit a copy of the course certificate awarded to successful trainees. If trainees have attended an in-house course, please provide an outline of the course context.

B2.2.1 Selection and Use of Raw Materials

Demonstrate how you meet the requirements of Standard Farming Rules 2.2.1.1 and 2.2.1.2.

All chemicals and disinfectants used on site are listed in approved lists (MAFF/HSE Reference Book 500, National Office for Animal Health (NOAH) compendium, and DARD approved list of disinfectants). Details of the inventory are given in the Table in Section B.2.2.1 of the main application form.

B2.2.2 Selection and Use of Feedstuffs

Demonstrate how you meet the requirements of Standard Farming Rules 2.2.2.1. to 2.2.2.6.

All feed will be supplied from the company owned and operated UFAS accredited mill. Feed will be carefully formulated to provide the necessary balance of nutrients but minimise the amount of nitrogen and phosphorus excreted by optimising crude protein input and feed utilisation. Currently the plan is to feed 3 diets:

- starter crumb (Crude Protein = xx.x%; Phosphorus = xx.x%)
- grower pellet (Crude Protein = xx.x%; Phosphorus = xx.x%)
- finisher/finisher withdrawal pellet (Crude Protein = xx.x%; Phosphorus = xx.x%).

[Note: give details of the crude protein and phosphorus levels in diets.]

All diets will contain the digestive enzymes xylanase and beta-glucananase to improve the digestibility of feeds. Phytase will be used to permit a reduced phosphorus level in feed. Improved digestibility can prevent excess water consumption, thus helping to maintain dryer litter.

All feeds except finisher withdrawal pellets will contain an anti-coccidial to control coccidiosis. Anti-biotic growth promoters will not be used.

B2.2.3 Optimising Water Use

Demonstrate how you meet the requirements of Standard Farming Rules 2.2.3.1. to 2.2.3.3.

Water is from a mains supply on the site. Average consumption is expected to be 6.3 m^3 per 1000 birds per crop. The following practices will ensure that water use is optimised and waste is avoided:

- Nipple drinkers will be used to minimise losses and help maintain dry litter.
- Water consumption will be monitored and recorded daily from individual meters within each shed. Any variation from normal levels is investigated immediately.
- Daily checks will be made by staff to ensure that drinkers are at the correct height for the birds. Having drinkers at the correct height and adjusting pressure and flow to allow birds to utilise water efficiently minimises wastage and improves litter quality. These checks also allow staff to attend to problems at an early stage, e.g. leaks in drinking lines.
- Sheds will be fully insulated and provided with an efficient ventilation system to maintain an optimum environment for birds at all times including extremes of weather. Water consumption should not therefore increase significantly in hot weather.

A water audit will be undertaken within 3 years of the date of issue of the permit, using the pro-forma agricultural water audit is available from NIEA – "Guidance for operators on preparing an agricultural water audit for intensive livestock installations"

B2.3.1 Feed Delivery, Milling and Preparation

Demonstrate how you meet the requirements of Standard Farming Rules 2.3.1.1. to 2.3.1.5.

Most diets will be pelleted and this minimises dust during delivery. Feed will be delivered to the site by lorry in covered 28 tonne loads and blown directly into sealed storage bins that will be set back from high traffic areas to minimise risks from collision. Delivery times will be restricted to between the hours of 0700 and 2200, Monday to Saturday, to minimise disturbance from noise. Lorries will be modern and well maintained, and fitted with efficient silencers. All drivers will be equipped with empty bags shovels and brooms to clear up any spillage should this occur when attaching blower pipes etc. Spilled feed will be attended to immediately to discourage pests and prevent risks from polluted run-off. On rare occasions when feed has to be moved on site, this will be done in one of two ways; large quantities will be moved by using a sucker/blower lorry, while smaller quantities will be placed in sealed bags and moved by tractor trailer or barrow.

B2.3.2 Storage of Agricultural Fuel Oil, other Oils and Chemicals Demonstrate how you meet the requirements of Standard Farming Rules 2.3.2.1. to 2.3.2.4.

Product stored	Method of storage	Storage Capacity	Location (see also site map)
Liquid petroleum gas	1 LPG tank in purpose	n litres each	SW corner of site
	built secure compound		
Diesel	Bunded tank	200 litres	Inside generator house
Biocides and	Proprietary chemical safe	200 litre	Farm store No 1
pesticides			
Petrol	Proprietary fuel container	max 10 litres	Farm store No 2
Veterinary medicines	Refrigerator	35 litres	Farm store No.1

The following facilities will be used for storage of fuels and chemicals:

LPG will be stored in well maintained tanks in a secure fenced off area of the site and diesel for auxiliary generators will be stored in a bunded tank that meets the requirements of The Control of Pollution, (Silage, Slurry and Agricultural Fuel Oil) (Northern Ireland) Regulations 2003.

Note: only required where the tank capacity is greater than 1250 litres. Below 1250 litres suitable containment of any leakage is still required.

Biocides and small quantities of pesticides (e.g. rodenticides) will be kept in a proprietary leak proof, fire resistant chemical safe in a dry frost free location. No more than two gallons of petrol will be kept in a fuel container located in the farm store during the summer months for use in a lawnmower and strimmer. Veterinary medicines will not routinely be stored on site but small quantities of veterinary medicines will kept in a locked refrigerator when required. Records of raw materials held on site will be kept in the farm office.

B2.3.3 Minimising Emissions from Housing

Demonstrate how you meet the requirements of Standard Farming Rules 2.3.3.1. to 2.3.3.20.

The following measures will be adopted to prevent or minimise emissions to air, water and land.

Housing:

- Walls and roofs in sheds will be insulated with <u>150 mm</u> glass wool and lined with smooth boarding to allow easy washing with a minimum amount of water. Buildings are well maintained and watertight.
- Floors will be polished concrete for easy cleaning and run towards discharge pipes taking wash water to underground waste water tanks.
- Roof fans and side inlets operate via an electronically monitored system to ensure the internal environment is kept warm and dry to ensure dry litter. Fans will also run intermittently to save energy.
- Two gas heaters per shed will provide heating in the early stages of the production cycle.
- Nipple drinkers will be used to reduce wastage of water and maintain dry litter, thus reducing emissions of ammonia and odours.
- Pan feeders will supply ad-lib feed. Less feed is wasted and birds are less likely to push food out of feeders into litter.
- Low energy fluorescent lighting will be used;
- A review of existing housing and management practises will be undertaken within 12 months of the date of permit issue. Following the review an improvement plan shall be implemented.

Site drainage:

- Rain water will be kept separate from potentially contaminated wash-down water.
- The site will be concreted to allow a high standard of cleanliness and controlled drainage of clean water (including roof water).
- Lightly contaminated run-off from the entire site will be channelled to a vegetated ditch or 'swale' running along the north side of the site. This will then discharge to a field ditch.
- Contaminated wash down water will be contained within sheds and directed to underground wash water tanks.
- A yard diverter will be provided so that in the event of the hard-standing areas becoming contaminated, for example during cleaning out periods or when cleaning up dust, run-off from these areas can also be diverted to waste water tanks rather than the swale.
- Waste water tanks will be emptied and disposed of in accordance with the requirements of the DARD code of good practice for prevention of pollution of water. A map showing the fields used for spreading wash water can be found in Appendix I.
- Certification from a suitably qualified engineer will be supplied to demonstrate that the wash water tanks comply with The Control of Pollution (Silage Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003.

Any collection/storage tanks (eg. wash water) constructed, substantially reconstructed or substantially enlarged after 1 December 2003 are required to comply with The Control of Pollution (Silage Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003.

 There is an existing wash water tank on the site which was constructed prior to 1 December 2003 and is block built. This tank will be carefully monitored for signs of leakage. The water level will be checked by means of a dip stick on a regular basis, to check for a rise or fall in water level which would indicate that water is seeping into, or out of the tank.

This may be appropriate for an existing site which is expanding over the PPC threshold for the first time.

• A copy of the drainage plan for the proposed site can be found in Appendix 1 (Accident Management Plan). This plan will be reviewed once the site has been constructed using the NIEA guidance - "Guidance for Operators on undertaking a site drainage review for IPPC Farming installations"

Litter utilisation:

- Most litter will be utilised as material for mushroom compost or combustion.
- Litter spread on land will be applied in accordance with a nutrient management plan supplied with the application.

Management practices

The principal emissions from the site will be ammonia, odours, dust, and at certain times noise. Good litter quality is a significant factor in minimising ammonia and odour emissions, and measures described above under housing all help reduce these emissions. Good management practice is also important. Causes of wet litter include sick animals, leaking equipment, poor ventilation, inadequate heating and high humidity within the shed. The following management checks will be made:

- daily checks of animal welfare;
- daily checks and records of water consumption and equipment;
- daily checks of temperature and ventilation;
- regular maintenance and cleaning of fans and other equipment e.g. feeding and drinking systems;
- site kept clean and tidy and free from sources of odour e.g. spilled feed, uncovered bins for mortalities.

The main causes of dust are birds, feed and litter. Dry litter is essential to reduce ammonia and odours, and a consequence of this is the potential for slightly higher dust levels. Excitable birds disturb litter and generate dust. Good husbandry practices lessen the likelihood of birds becoming stressed and thus help to reduce dust. Feed will be delivered in pellet form and this too helps to reduce dust levels in the shed. Landscaping with trees and shrubs also helps to minimise the impact of dust emissions from some types of housing.

Sources of noise on poultry farms include vehicle movements, feed deliveries (blowing into bins) and fan noise. Feed deliveries will only be permitted between the hours of 0700 and 2200 and fans will be fitted within cowls to reduce noise.

B2.3.4 Slurry, Litter and Manure Storage

Demonstrate how you meet the requirements of Standard Farming Rules 2.3.4.1. to 2.3.4.9.

Approximately <XXX> tonnes of litter at 65% - 70% dry matter per annum is produced as a by-product. (Note: accurate data regarding quantities of litter from your own farm must be provided if you are not using standard industry figures.) All litter will be contained within the sheds until the clean out period, when it will be loaded directly into trailers close to the door of each shed. Litter is removed for utilisation as mushroom compost or combustion (copies of consignment notes are held in the farm office). A proportion of the litter produced (approximately 1 crop per year) will be spread on third party land in accordance with the nutrient management plan supplied with the application.

B2.3.5 Control of Slurry, Litter and Manure Spreading Operations Demonstrate how you meet the requirements of Standard Farming Rules 2.3.5.1. to 2.3.5.20.

[Remove the Example which is <u>NOT</u> relevant to your installation]

Example A

None of the litter produced on the site will be spread to land on or off the farm.

Example B

Approximately <XXX> tonnes of litter at 65% - 70% dry matter is produced each year. Almost all this litter is utilised as mushroom compost or combustion, but 1 crop per year litter is spread off-site in accordance with the attached nutrient management plan. Occasionally short term field storage of manure is required (one or two weeks) to allow spreading during optimal weather conditions. Sites for field storage are selected in accordance with the standard farming installation rules. Litter is expected to have the following analysis:

Example nutrient analysis of broiler litter at 65% dry matter

	N	P ₂ O ₅	K ₂ O
Total nutrients, kg tonne ⁻¹	29	16	18

Run-off from shed floors and all hard-standing areas will be diverted to underground waste water tanks during litter removal. Full details of areas used for land spreading are provided in the attached nutrient management plan.

Note: Details of your arrangements for spreading litter, including a nutrient management plan must be appended to this application.

For further information on preparing a nutrient management plan see the NIEA "Guidance for operators on slurry and manure management planning for IPPC installations".

B2.3.6 Measures for Controlling Odour

Demonstrate how you meet the requirements of Standard Farming Rule 2.3.6.1.

Buildings, land spreading of litter, feed storage and preparation, incineration of carcasses, disinfectants, and dust can all be sources of odours. There are <X> local receptors (private dwellings) that could be affected by odours. These include private dwellings located at points 'A' 'B' and 'C' on the site map, most are around 1 km from the site. Measures for controlling odours from buildings are essentially the same as those for controlling ammonia and other emissions and are detailed in section B2.3.3 above. The following is a summary of measures adopted:

- Good litter quality is maintained, (i.e. dry friable litter) by ensuring optimum temperature and humidity conditions in the shed and no leaks from drinking systems
- A high standard of cleanliness is maintained around the site with dust deposits being regularly cleaned up.
- All feed storage bins are sealed and pelleted feed is used when possible.
- Disinfectant baths do not leak.
- Mortalities are regularly incinerated.
- During cleaning out litter is loaded close to shed doors, all loads are covered, and hard standing areas are swept clean after loading.
- Weather conditions and the location of sensitive receptors are considered when land spreading litter. The requirements of the DARD code of good practice for prevention of pollution of air and soil are adhered to.

Note: If you have sensitive receptors (private houses, schools etc.) within 400 metres or there is a history of odour complaints an Odour Management Plan must be included. (An example odour management plan template is contained in Appendix III of this document).

B2.4.1 Disposal or Discharge of Dangerous Substances to Land or Water Demonstrate how you meet the requirements of Standard Farming Rules 2.4.1 and 2.4.2.

There is no disposal or discharge of dangerous (List I or List II) substances to land or water. During routine disinfection of poultry sheds, all wash water and dilute disinfectant is collected in underground waste water tanks and disposed of by applying to land with slurry or manure in accordance with the manure management plan.

B2.5 Avoidance, Recovery and Disposal of Wastes (including carcass disposal)

Demonstrate how you meet the requirements of Standard Farming Rules 2.5.1. to 2.5.3.

The following waste types have been identified:

- paper from chick box liners upon delivery of day old chicks;
- plastic waste from wrapping used on wood shaving bales and from empty chemical and detergent containers;

- glass from vaccine bottles;
- mortalities.

With the exception of mortalities, wastes are stored in covered bins and removed to landfill. Where possible wastes are segregated for reuse or recycling. The quantity of waste is minimised by good management practices, for example maintaining good litter quality reduces or eliminates the need for top-up bales of shavings thus reducing the amount of plastic wrapping. Large empty plastic biocide containers can be 're-cycled' as foot dip containers or rubbish bins for store rooms. Mortalities are collected daily and stored in sealed bins for collection under the National Fallen Stock Scheme [or by burning in a small (less than 50 kg per hour) incinerator three or four times per week as required. Temperature in the combustion chamber of the incinerator is monitored to demonstrate that 850°C is achieved thus ensuring complete combustion. Manufacturers operating instructions are followed to avoid overloading and to ensure correct start-up and shut-down procedures.] Incinerator is type approved and the relevant DARD licence and approval will be obtained prior to first operating the equipment on the farm. Good husbandry practice minimises mortalities.

A waste audit will be undertaken using the NIEA guide 'Guidance for operators on carrying out a waste minimisation audit at intensive livestock installations' within 3 years of the date of issue of the permit. Following the audit measures will be implemented to prevent or reduce wastes generally, and specifically in any priority areas identified by the audit. Waste residues will not be stored on site.

Records of wastes produced by the activities on the site, and of wastes sent off-site, are maintained and kept in the farm office. A waste hierarchy is adopted so that where possible wastes are avoided, re-used or recycled with disposal as a last option. Where appropriate, waste management licences or licence exemptions required for on-site recovery or disposal of wastes from the installation, under the Waste Management Regulations (NI) 2006, will be obtained from NIEA.

B2.6 Energy Use

Demonstrate how you meet the requirements of Standard Farming Rule 2.6.1.

The farm has partial exemption from the Climate Change Levy Agreement and has subscribed to the British Poultry Meat Federation Climate Change Levy Discount Scheme since 1 April 2001. The document reference number for the agreement is BPMF*nn* nnnnnnn. [Enclose a copy of your agreement.]

Energy efficiency measures

The following design features are incorporated in the design of sheds to reduce energy consumption:

- A high level of insulation in walls and roofs.
- Efficient automatically controlled ventilation systems to maintain optimum internal temperature.
- Good airflow within sheds to minimise the amount of ventilation air and heating required.
- Intermittent or 'stepped' operation of fans to conserve energy.

- Precise electronic control of the system maintains constant temperature conditions thus avoiding large variations and consequent increased demands on heating and ventilation systems.
- Low wattage fluorescent lighting used throughout.
- Well maintained ventilation and feeding systems to help reduce energy consumption (power consumption can increase as a result of increased friction in feeding systems, or dust laden fan blades reducing efficiency).

An energy audit will be undertaken using the NIEA guide 'Guidance for operators on carrying out an energy audit at IPPC farming Installations' within 3 years of the date of issue of the permit. Following the audit measures will be implemented to reduce energy use in areas identified by the audit.

B2.7 Accident Prevention and Management Demonstrate how you meet the requirements of Standard Farming Rule 2.7.1.

A copy of the accident management plan for the installation has been attached in Appendix I.

B2.8 Measures for Controlling Noise and Vibration

Demonstrate how you meet the requirements of Standard Farming Rule 2.8.1.

Noise at the site may be emitted by vehicles, machinery, fans, auxiliary generators, and birds during emptying of sheds. There are <insert number> sensitive receptors within a 400 metre radius of the site, and there is no history of complaints about noise.

The highest noise levels during the production cycle usually occur during feed deliveries when lorries blow feed into bins (typical sound pressure levels from this operation have been measured at 89 dB(A) at 3 m from the vehicle). To prevent nuisance at quiet times feed deliveries are restricted to between 0700 and 2200 hours, and all vehicles are well maintained and fitted with effective silencers.

Sheds are of steel construction and are well insulated. This provides an adequate barrier for poultry and machine noise from within the shed. Staff monitor noise and vibration from fans, augers and other machinery on a daily basis to ensure correct operation. Broken or badly maintained machinery can generate excess noise resulting in greater stress for birds as well as increased noise emissions.

Bird noise can increase during catching for crop depletion. To reduce this catchers try to minimise disturbance and crates into which birds are placed for transport are fitted with side shields to quieten them during travel. Lorries are scheduled for consecutive loading to ensure that the operation is conducted as quickly as possible.

During litter removal trailers removing litter are filled near to doors to reduce machinery noise and are filled to capacity to reduce the volume of traffic leaving the site.

Note: If you have sensitive receptors (private houses, schools etc.) within 400 m or there is a history of noise complaints a Noise Management Plan must be included with your application. (An example noise management plan template is contained in Appendix IV of this document).

B2.9 Measures for Monitoring Emissions

Demonstrate how you meet the requirements of Standard Farming Rules 2.9.1.1 to 2.9.2.2

Emissions to air

Emissions of ammonia and dust to air are monitored using standard factors provided in Section B3.1 of the IPPC application form. In addition to the factors in Section B3.1, a small (less than 50 kg per hour) incinerator is used for burning carcasses. Temperature in the combustion chamber of the incinerator is monitored to demonstrate that 850°C is achieved thus ensuring complete combustion. A monthly check is made of the incineration site (as per the inspection and maintenance schedule) to ensure that there is no build up of ash or other residues, and no potential for contaminated run-off from the area. [Note: if an incinerator is used the temperature must be monitored.]

Emissions to water

Emissions of contaminated run-off directly to water are prevented by diverting drainage from hard standing areas to under ground waste water tanks during cleaning out. Waste water tanks are emptied and disposed of in accordance with the requirements of the DARD code of good practice for prevention of pollution of water. A map showing the fields used for spreading wash water can be found in Appendix I. Records are kept of when tanks are checked (maintenance schedule) and when they are emptied.

Emissions to land

Emissions to land include deposition of ammonia and dust from air, and litter spread on land. Measures for monitoring ammonia and dust are described above under 'Emissions to air'. Land spreading of litter is undertaken according to the manure management plan and records of quantities and location of spreading are kept.

B2.10 Closure and decommissioning

Demonstrate how you meet the requirements of Standard Farming Rules 2.10.1 to 2.10.4

Buildings and equipment

After the last crop has been removed the buildings will be cleaned out and disinfected. Yard areas will also be thoroughly cleaned and disinfected. All salvageable equipment such as feeding, drinking, heating and ventilation systems will be removed from the sheds. Fan and ventilation apertures will be closed, covered and sealed to keep out pests.

Raw materials

All raw materials will be removed from the site. Feed will be transferred from bins to an operational farm, and the bins will be cleaned, disinfected and sealed. Fuel would be removed from tanks by the supplier and the tank then locked closed, or moved to another operational site. All other raw materials such as disinfectants and veterinary medicines would be removed from store rooms to other operational farms or returned to the suppliers.

Site facilities

All bins and receptacles (e.g. bins for mortalities, rubbish etc) would be cleaned and removed from site, either to be reused at other sites or disposed of by a licensed waste contractor. Any substance or article considered to have potential for environmental pollution will be removed from site. Dirty water tanks will be emptied and closed after all potential contaminants have been removed and the site cleaned. Water and electricity supplies will be shut off and all houses and store rooms locked to prevent unauthorised access.

Site inspection

A final site inspection would be conducted to ensure that all pollution risks had been removed and that there was no potential for pollution, flooding or other mishap due to vandalism, inclement weather or other unforeseen event. Keys for access and all records relating to the site will be stored for safe keeping.

B4.1 Identifying Significant Environmental Impacts

Provide an assessment of the potential significant environmental effects of the foreseeable emissions from your installation

Sensitive receptors around the farm are shown on the location map submitted with this application. In addition to the owners property there are <<u>insert number></u> private houses within 400 metres of the farm. There are no designated sites such as Special Areas of Conservation (SACs) within 10km or Areas of Special Scientific Interest (ASSIs) within 2 km of the farm.

[Note: Identify on a map all houses, schools, businesses, etc. within a 400 metre radius of the site boundary. Also where known, identify any ecologically sensitive sites with a statutory designation e.g. an ASSI, within a 2km radius of the site.]

The environmental impacts from the farm are assessed in the Table below.

For further information on carrying out an assessment of environmental impact from your poultry farm see NIEA Guidance "Assessing environmental impacts of poultry farms – supplementary guidance for IPPC application"

Source of Impact	Impact e.g. odour, noise, dust, ammonia, run-off, spillage	Receptor Air, water, land Humans, plants	Description of Negative Impact Nature of impact i.e. short term ST, medium MT or long term LT	Significance of negative impacts after mitigating measures applied: major +++ moderate ++ minor + nil 0	Mitigation / Management Measures e.g. site planning, technical measures
Livestock housing	Ammonia	Air Land Plants	Possible direct toxic effect on trees ST Increased acidification of soil close to housing MT Changes to sensitive ecosystems LT	0 + 0	 Dry litter maintained No sensitive woodland or other ecological receptors close to housing Appropriate soil pH maintained by liming
	Odour	Humans	Nuisance ST	++	 Dry litter maintained Hard standing areas kept clean and spillages prevented Emissions are discharged via high velocity roof vents
	Dust	Humans Plants Land Water Air	Nuisance ST Contributes to odours ST Health issues - inhalation LT Covers leaves stopping photosynthesis ST Nutrient enrichment of water courses MT Impacts on air quality ST	+ + 0 + + +	 Emissions are discharged via high velocity roof vents Regular clearing of dust to prevent build up on surfaces and around vents No sensitive vegetation around sheds Houses far enough away not to be affected Hard standing cleaned to prevent dust being washed into water courses Run-off treated by swale
	Noise	Humans	Nuisance ST	+	 Feed delivery times restricted, vehicles well silenced Doors in housing sited away from neighbours Stocking and destocking during daylight hours

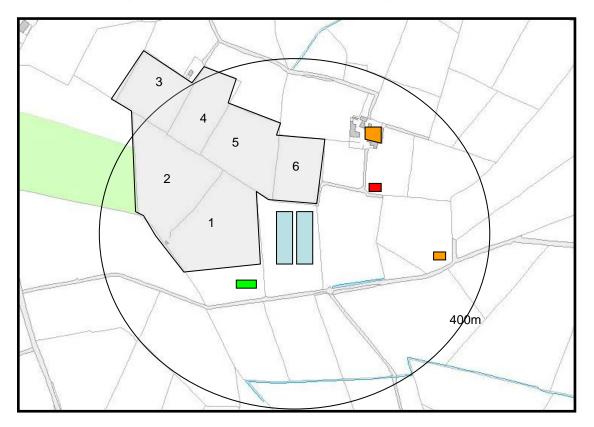
	Used disinfectants	Water	Possible toxic effects on wildlife ST Increased biochemical oxygen demand (BOD) of watercourses ST	+ +	 Spent disinfectant disposed of into dirty water tanks Use of Defra/NOAH approved disinfectants
Disposal of carcasses	Odour	Humans	Nuisance ST	0	 Good husbandry to minimise mortalities Use of covered/sealed skips to store carcasses Carcasses disposed of weekly
	Disease	Humans	Health risks ST	0	 Use of covered/sealed containers No contact with people
		Livestock	Biosecurity issues ST	+	 Use of covered containers Carcasses disposed of daily Bait traps used
	Incinerator stack emissions (if used)	Air	Odour nuisance ST Emission of acid gases contributing to acid deposition LT	+ +	 Incinerator fully complies with requirements of Animal By-Products Regulations Performance is monitored
Cleaning out	Contaminated run-off	Land Water	Increase in nitrogen and phosphorus levels in soil MT Potential for increased mineral or metal content of soils LT Increased biochemical oxygen demand (BOD) of watercourses ST Nutrient leaching from soil to surface waters and groundwater LT Nutrient enrichment (eutrophication) of	+ + + ++	 All run-off diverted to waste water tanks Hard standing has kerbing Waste water disposed of in line with DARD Water Code Dirty water tanks are emptied prior to clean out All lightly contaminated run-off treated by swales when not cleaning out
			waters and groundwater LT	++	

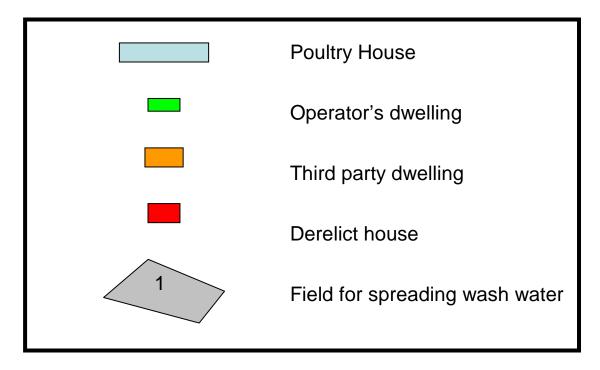
	Noise	Humans	Nuisance ST	++	 Machinery operated at reasonable times, wherever possible Equipment maintained to optimum standards Need for scraping minimised due to reduced yard area Machinery and equipment sited as far as possible from neighbours Idling of machines avoided Voices not raised unnecessarily Roads and tracks maintained to minimise noise produced
	Odour	Humans	Nuisance ST	++	 Cover loads Load close to the shed door or inside Avoid outdoor heaps Clean yard areas at the end of each day Cover dirty water collection systems Empty dirty water tanks promptly
Litter / manure /slurry spreading	Ammonia and major nutrients (N:P:K)	Air Land Plants	Contributes to climate change LT Contributes to odours LT Nutrient enrichment or 'fertilising' effect on crops, plants and water. LT Changes to sensitive ecosystems such as natural woodland, heathland or peatland. LT Nutrient enrichment of soils, particularly phosphorus LT Potential for increased mineral and metal content of soils Eutrophication caused by run-off MT Reduced biodiversity LT	+ ++ ++ 0 + ++ ++ + +	 Litter applied in accordance with manure management plan Balanced diets fed to reduce N & P in litter Litter incorporated within 24 hours Application in accordance with DARD codes of good practice Only temporary field heaps used No ecologically sensitive receptors near the site On cleanout all litter removed from site
	Odours	Humans	Nuisance ST	++	 No spreading in adverse weather conditions No spreading at weekends or on Bank Holidays No spreading close to neighbours' houses Litter incorporated within 24 hours Litter applied in accordance with manure management plan

Storage of fuel, chemicals etc.	Leakage	Water	Contamination of surface and groundwaters ST Killing of animals, plants and aquatic life ST	+ 0	 All tanks are bunded and compliant with legislation Use of chemicals least hazardous to the environment Spill kits available

APPENDIX I Site Location Map

A Farm ICAS map could be used as the basis for this map.





APPENDIX II

ACCIDENT MANAGEMENT PLAN

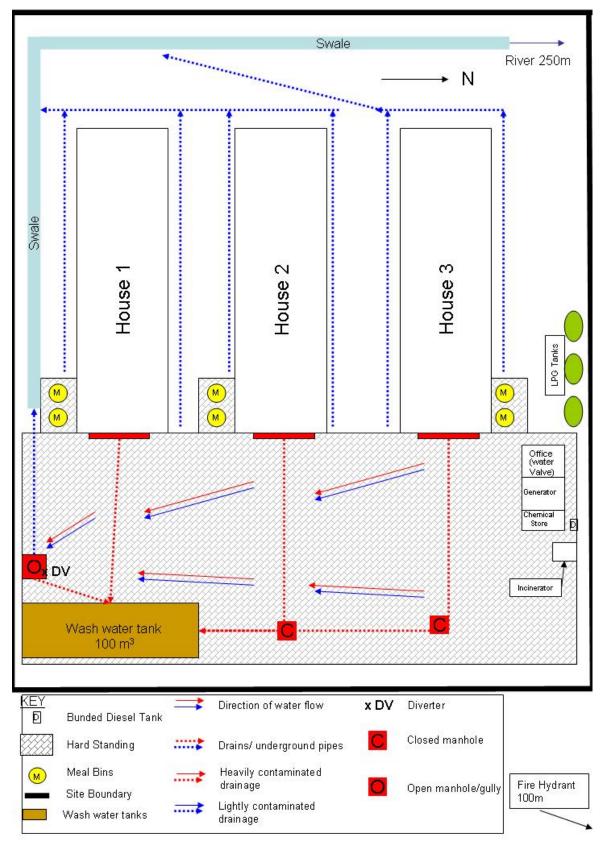
Address:	XYZ Poultry Farm
Date of Plan:	May 2012
Date for Review:	May 2015
Approved by:	
Distributed to:	

A copy of this document must be located in a prominent place near the telephone in the farm office.

EMERGENCY CONTACT DETAILS

Emergency Contacts	Office hours	Out of hours
Emergency services:		999
Local Police:		
Doctor:		
Northern Ireland		
Environment Agency		
(NIEA):		
Pollution hotline:		0800 80 70 60
District Councils:		
Water service:		
Gas supplier:		
Electricity supplier:		
Fuel oil supplier:		
Spreading contractor:		
Slurry tanker operator:		
Forklift operator:		
Maintenance contractor:		
Plumber:		
Electrician:		
Vet:		
Proprietor:		
Farm Manager:		
Shed staff:		
Processing company:		
Processing company		
manager:		
Transport manager:		

Example Site Drainage Plan (Plan produced using "Guidance for Operators on undertaking a site drainage review for IPPC Farming installations")



ACCIDENT MANAGEMENT PROCEDURES

The accident management procedures detailed in this document are designed to prevent or mitigate harmful environmental impacts arising from the following:

Event	Aspects to consider	
Fire:	buildings and feed storage fuel and chemical stores litter storage fire water run-off	
Spillage:	fuel and oil tanks chemical and disinfectant containers and stores wet litter (i.e. flooded shed) feed	
Unable to utilise litter:	restriction on land access i.e. bad weather, disease restriction (e.g. AI, FMD)	
Mechanical/electrical failure:	ventilation and feeding systems, incinerator	
Interruption to water supply:	buildings, drinking systems	
Storm damage:	buildings feed storage systems drainage system flooding	
Extraordinary mortalities:	carcass disposal quarantine	

Training and information

All staff and contractors working on site shall be made aware of the emergency plan, and must be familiar with the actions stated in it. The Operator shall be responsible for ensuring that staff are aware of their duties and the procedures to follow to prevent pollution in the event of unforeseen circumstances.

- The emergency plan is located in the farm office, next to the telephone.
- The inventory of chemicals, fuel and oil and raw materials is located in the farm office, next to the telephone.

Responding to accidents/emergencies

Fire

In the case of an accident/emergency, staff must immediately contact the fire service giving the location and nature of the fire. Where relevant, details of hazardous substances must be given to the fire service, and locations of fire hydrants pointed out.

Staff must be familiar with the location and operation of fire extinguishers. Staff should only attempt to fight fires where the risk to their own safety is low. The location of fire extinguishers is shown on the fire safety plan located in the office.

Staff will notify nearby residents/workers and ensure affected buildings are evacuated.

Provided personal safety is not compromised, staff shall try to ensure that run-off such as fire fighting water and any other polluting substance is prevented from entering drains or watercourse, by channelling to dirty water tanks; absorbing with straw, wood shavings, soil or other absorbent material. A tanker is available at

(name, address & tel.) and must be requested to empty tanks and prevent overflow.

Injured birds must be humanely slaughtered on-site according to the instructions of the attending veterinary officer. If numbers affected exceed the capacity of normal mortality disposal systems, skips must be requested for interim storage. Skips are available from:

(name & tel.). Unaffected birds if below marketable age must be re-housed on another site, or if at marketable age, sent for immediate processing.

Spillage

Minor liquid spillage, e.g. of disinfectant or fuel oil, may occur when tanks or containers are being filled. Staff must immediately clean up such spills using absorbent material such as granules, sawdust, wood shavings, straw or soil.

Absorbent materials and equipment for cleaning up spillage are stored at the following locations:

Material	Location
Absorbent granules:	Generator shed and chemical safe
Wood-shavings/sawdust:	General store
Straw/soil:	Main farm steading
Pollution spill kits:	South end of sheds No1 and No 3
Brushes/shovels	South end of all sheds
Fork lift	name, address, telephone
Slurry tanker	name, address, telephone

If small containers are found to be leaking the contents must be transferred to a sound empty container, preferably one of the same type. Spillage must be cleaned up as per minor spills above.

If a major liquid spillage occurs, such as may happen when a fuel tank is damaged, staff shall contact the Northern Ireland Environment Agency pollution hotline (0800 80 70 60). They must then try to prevent spillage entering drains or watercourses by using sawdust, wood shavings, straw, soil, pollution spill kits or other suitable material. The storm drainage system must be diverted to waste water tanks to try and contain spillage and drain blockers used where appropriate. Staff shall assist agency and emergency service personnel by making sure they are aware of the locations of drains and by identifying the potential routes pollutants may take. Care shall be taken when cleaning up and disposing of absorbent material that further pollution does not occur.

Spillage of feed, bedding material or litter shall be promptly swept up and removed.

Unable to utilise litter

If circumstances prevail where it is not possible to spread litter on land, or export it to a mushroom composter e.g. prolonged bad weather, access restrictions due to disease, or similar, the following contingency plan will be implemented. Arrangements have been made to store litter in a covered barn at xyz location. This is located away from field drains and watercourses.

If land spreading of dirty water is not possible arrangements must be made to have waste tanks emptied by:

[Note; Emergency storage sites for litter must be agreed with NIEA prior to use.]

Mechanical/electrical failures

If the power fails ensure that the emergency generators have started and that all systems are operating. Monitor fuel level, temperature and oil pressure of the generator. Avoid spillage when filling generator fuel tanks. Contact the electricity supply company to notify them of the fault.

If mechanical failures occur, establish what equipment or system has failed and call the maintenance engineers. Consider the risks of bird welfare and pollution that may arise from loss of the equipment. Arrange for appropriate repairs or alternative equipment to be provided.

Ensure system alarms are operating correctly and are set at appropriate levels (alarms must not disturb neighbours).

If the incinerator fails, and the repair is likely to take longer than the storage capacity of bins used to temporarily store mortalities, skips must be obtained and disposal arranged with:

.....

(name & tel.) licensed waste disposal contractor.

Interruption to water supply

Staff shall check immediately to ascertain the cause of interruption to the supply and undertake a thorough inspection of the system. They must pay particular attention to the possibility of frozen or burst pipes, and the consequences of flood damage and the pollution this may cause.

If flood damage does occur clean up activities shall be as described in the section on major spillage. Staff must be aware of the location of the main stopcock (shown on the site plan) in case the supply needs to be isolated.

Call the plumber if the fault is on site. If the fault is due to a failure of the mains supply contact the water services company, informing them that livestock are dependent on the water supply.

Storm damage

Ensure that staff are safe and if necessary evacuated from the buildings, and that bird welfare is maintained as far as is practicable. If welfare is compromised the company vet must be summoned.

Conduct an initial internal and external assessment of damage, paying attention to the overall integrity of the building, and services such as water, gas, electricity, and fuel oil.

Assess the risk of pollution from any disruption to these services, and where appropriate take action as described in the section on minor and major spillage. If the building has been damaged, or flooding has occurred, assess the likelihood of contaminated run-off from wet litter getting into watercourses.

Ensure that the drainage system is diverted to waste effluent tanks and that spillage is mitigated as described in the section on spillage. As far as practicable, try to keep buildings watertight.

If necessary arrange for birds to be re-housed or sent for processing.

Extraordinary mortalities

In the event of an outbreak of a notifiable disease requiring the slaughter of birds, carcasses must be disposed of in compliance with the requirements of the DARD Veterinary Service. Notwithstanding this, staff shall be aware of the pollution potential of having large numbers of carcasses on the premises.

Drainage systems must be protected and all run-off diverted to the waste tanks. Arrangements must be made for these to be emptied regularly with disposal of the effluent undertaken in accordance with veterinary advice. Skips must be used to contain carcasses if there is any delay in disposal.

Distribution and revision

All staff shall be provided with copies of the Accident Management plan and be trained in the procedures contained in it. A copy shall also be held in the farm office next to the telephone.

The accident management plan shall be reviewed at least every 3 years or as soon as is practicable after an accident (whichever is earlier). , or sooner if a change in circumstances or work practices identify a need for an earlier review.

APPENDIX III Odour Management Plan (Broilers)

Introduction

This Plan has been prepared as part of the IPPC permit application because there are sensitive receptors (neighbouring dwelling houses) within 400 metres of the installation.

The purpose of this Plan is to: -

- Establish the likely sources of odour arising from a typical broiler farm.
- Set out the procedures followed at <a href="mailto: Farm in order to prevent or minimise odour levels.
- Formalise the procedures for dealing with any odour complaints.

The table on pages 34 and 35 of this document sets out the likely sources of odour and the procedures that must be followed to minimise odour levels.

Odour Complaint Procedures

- Any odour complaint received will be dealt with by the operator <<u>Name</u>>...... of the farm.
- If a complaint is made, the form included on page 37 of this Plan will be completed and this will be available for inspection by the Northern Ireland Environment Agency.
- Information will normally be collected by visiting the complainant, although in some cases, contact may be made by telephone.
- After details of the complaint have been compiled, the cause(s) will be investigated, with reference to:
 - The activities taking place on the farm at the time.
 - The timing of the complaint and whether weekday, weekend etc.
 - The weather conditions at the time.
- The likely reasons for the complaint will be added to the form and the complainant will be contacted as appropriate.
- The feasibility of making changes to the activities responsible for the complaint will be considered. If changes are made, the Odour Management Plan will be amended accordingly.

Review Procedures

The plan shall be reviewed at least every three years or as soon as practicable after a complaint (whichever is the earlier) and changes recorded in the Table at the end of this document.

Odour Related Issue	Potential Risks and Problems	Actions taken to minimise odour and odour risks at < <i>name</i> > Farm
Manufacture and selection of feed	 Milling and mixing of compound feeds. The use of poor quality and odourous ingredients. Feeds which are 'unbalanced' in nutrients, leading to increased excretion and litter moisture and emissions of ammonia and other odorous compounds to air. 	 No on-site milling and mixing. Feed specifications are prepared by the feed compounder's nutrition specialist Feed is supplied only from UFAS accredited feed mills, so that only approved raw materials are used.
Feed delivery and storage	 Spillage of feed during delivery and storage. Creation of dust during feed delivery. 	 Feed delivery systems are sealed to minimise atmospheric dust. Any spillage of feed around the bin is immediately swept up. The condition of feed bins is checked frequently so that any damage or leaks can be identified.
Ventilation system	 Inadequate air movement in the house, leading to high humidity and wet litter. Inadequate system design, causing poor dispersal of odours. 	requirements of the birds.
Litter/manure management	 Odours arising from wet litter. The use of insufficient or poor quality litter. Spillage of water from drinking systems. Disease outbreaks, leading to wet litter. 	 Controls on feed and ventilation (see above) help to maintain litter quality. Additional controls include:- Use of nipple drinking systems which minimise spillage. Insulated walls and ceilings to prevent condensation. Concrete floors to prevent water ingress. Stocking density at optimal levels to prevent overcrowding. Use of a health plan, with specialist veterinary input used as necessary.
Carcass disposal	 Inadequate storage of carcasses on site On-site disposal of carcasses by incineration. 	 Carcasses are placed in sealed containers immediately after they are removed form the house. Use of a purpose-designed incinerator which is approved by DARD.

• Typical Odour Sources and Actions Taken to Minimise Odours

Northern Ireland example application – Example of supporting documentation for Broiler Chickens. May 2013.

Odour Related Issue	Potential Risks and Problems	Actions taken to reduce odours and risks at this installation	
House Clean Out	 Creation of dust associated with litter removal from houses. Use of odorous products to clean houses. 	 Litter is carefully placed into trailers positioned at the entrance to each house. When full, the trailer is covered. Only approved and suitable products are used. 	
Used litter	 Storage of used litter/manure on site. Transport of litter and applications to land. 	 There is no storage of used litter outside the houses at any time Litter is transported in covered trailers. Most of the litter is used for mushroom compost, a small quantity is land spread on third party farms in accordance with a nutrient management plan and DARD codes of good practice. 	
Dirty water management	 'Standing' dirty water during the production cycle or at clean out. Applications of dirty water to land. 	 Areas around the house are concreted and remain clean during the production cycle. At clean-out, dirty water is directed to underground tanks for storage. It is then spread onto land in accordance with the DARD code of good practice. 	

Odour problem	Remedial action needed to reduce odour	Completion date	Ref: Farming rule (if applicable)
Odour from carcass skip during hot weather	Improve sealing of cover on skip, increase frequency of carcass collection to twice weekly during summer months.	May 2012	<mark>2.3.6</mark>
Odour from washings tank.	Install a new cover over the tank.	October 2012	<mark>2.3.6</mark>
Odour from caped fans in 'old shed'	Change capped roof fans to modern 'chimney' type fans.	November 2013	<mark>2.3.6</mark>

• Improvement programme to reduce odours - examples

Note: The above are examples of improvements that may be required in some circumstances. If they are not relevant to your situation they can be deleted. If you have identified improvements that are required to reduce odours on your farm, please detail them using the table above.

Northern Ireland example application – Example of supporting documentation for Broiler Chickens. May 2013.

• Odour Complaint Report Form

Installation to which complaint relates	Date rec	corded	Reference number
Name and address of caller (complainant)			
Telephone number			
	Details of	complaint	
Date, time and duration of offending odour			
Odour description e.g. comparison with other odours, strong / weak, continuous, fluctuating			
Any other comments from complainant			
Weather conditions (e.g. dry, rain, fog, snow)			
Wind strength and direction (e.g. light, steady, strong, gusting) or use Beaufort scale			
Any previous complaints relating to this odour?	Yes / No)	
Any other relevant information			
Potential odour sources that could give rise to the complaint			
Operating conditions at the time offending odour occurred e.g. removing birds, clean-out etc.			
Date and time caller contacted	• Fo	llow-up	
Action taken			
Amendment required to the odour management plan?	Yes / No	0	
Form completed by	<u> </u>	Signed	

Date of review	Summary of changes made	Signature

Review of Odour Management Plan - Record

APPENDIX IV Noise Management Plan (Broilers) Introduction

This Plan has been prepared as part of the IPPC permit application because there are sensitive receptors (neighbouring dwelling houses) within 400 metres of the installation.

The purpose of this Plan is to: -

- Establish the likely sources of noise arising from a typical broiler farm.
- Set out the procedures followed at Farm in order to prevent or minimise noise levels.
- Formalise the procedures for dealing with any noise complaints.

The table on pages 40 of this document sets out the likely sources of odour and the procedures that must be followed to minimise noise levels.

Noise Complaint Procedures

- Any noise complaint received will be dealt with by the operator
- If a complaint is made, the form included on page 42 of this Plan will be completed and this will be available for inspection by the Northern Ireland Environment Agency.
- Information will normally be collected by visiting the complainant, although in some cases, contact may be made by telephone.
- After details of the complaint have been compiled, the cause(s) will be investigated, with reference to:
 - The activities taking place on the farm at the time.
 - The timing of the complaint and whether weekday, weekend etc.
 - The weather conditions at the time.
- The likely reasons for the complaint will be added to the form and the complainant will be contacted as appropriate.
- The feasibility of making changes to the activities responsible for the complaint will be considered. If changes are made, the Noise Management Plan will be amended accordingly.

Review Procedures

The plan shall be reviewed at least every three years or as soon as practicable after a complaint (whichever is the earlier) and changes recorded in the Table at the end of this document.

No ref	Noise problem	Actions you will take to prevent or minimise the noise	Completion date
1	Rattling and clanking from operation of conveyor	Regular maintenance and proper lubrication. Minimise empty conveyor running.	
2	Rearing of broiler chickens in ventilated houses	Fans maintained and inspected to manufacturers instructions. Inspect roof on House No.5 and fasten down metal sheeting. Review once completed.	
3	Early morning loading of pigs for transport	Load animals behind machinery store to act as a barrier between animals and New Village Cottages. Instruct contractors not to whistle and shout.	
4	Bird catching	All handlers trained to Assured Chicken Production standards to minimise bird stress and noise.	
5	Cleaning of animal housing	In reasonable time only. Notice of manure movements given to neighbours 1 week in advance. Litter is moved from housing direct to trailers in the doorways of the buildings and removed immediately from site, to minimise vehicle movements.	
6	Emergency generator	Test time Tuesday 11am. Timing agreed with neighbours. If emergency generation is required, Neighbours will be notified within x hours.	
7	Bird feeding	The existing conveyor system to be replaced by auger system by MM/YYYY.	
8	Delivery of feed	No deliveries outside 07:00 to 22:00 Feed company X has fitted silencers to all vehicles for transfer to feed bins.	
9	Delivery of fuel	No deliveries outside 6pm.	
10	Other (specify) Advice for staff, contractors and visitors	Advice notices in the site office covering the points above. Instruction not to shout unnecessarily. Instruction to turn off engines while not in use.	

Northern Ireland example application – Example of supporting documentation for Broiler Chickens. May 2013.

Noise Management Plan Template

No ref	Noise problem	Actions you will take to prevent or minimise the noise	Completion date

Typical form for the recording of a noise complaint

Noise Complaint Report Form					
Installation to which complaint relation	tes:	Dat	e recorded:		Reference number:
Name and address of caller:					
T b c b					
Tel no. of caller:					
Location of caller in relation to installation:					
Time and date of complaint:					
Date, time and duration of offending noise:					
Caller's description of noise (e.g., hiss, hum, rumble, continuous, intermittent, vehicle noise, machinery):					
Has the caller any other comments about the offending noise?					
Weather conditions (e.g. dry, rain, fog, snow):					
Wind strength and direction (e.g. light, steady, strong, gusting) or use Beaufort scale (see Table 2.1):					
Any other previous complaints relating to this noise?					
Any other relevant information:					
Potential noise sources that could give rise to the complaint:					
Operating conditions at the time Offending noise occurred – e.g. deliveries, feeding, use of machinery etc:					
Follow-up Date and time caller contacted:					
Action taken:					
Amendment requirement to noise management plan:					
Form completed by:	1		Signed:		

Date of review	Summary of changes made	Signature

Review of Noise Management Plan - Record