

GH By-Products (Derby) Ltd	Permitted Storage Odour Management Plan			
Environmental Management System				
Document Reference:	Issue No.	Issue Date:	Review Date:	Approved By:
EM 01-006	D	Draft	Draft	Alan Asker

Purpose / Objectives

The objectives for this Odour Management Plan (OMP) are:

- Identify all possible odour sources at the facility;
- Outline the odour prevention control and mitigation measures employed on site;
- Ensure all pertinent operating conditions (normal, abnormal and emergency) are considered in evaluating the risk of odour release;
- Minimise impact on receptors by a commitment to proactive monitoring of potentially odorous emissions;
- Reduce the risk of odour releasing incidents or accidents by appropriate risk identification and contingency planning;
- Describe the contingency arrangements in place to prevent or react effectively to odour releases.

Management Plan Format

The structure of this management plan is as follows:

Receptor Identification -Discussion and detail of sensitive receptors within 1 kilometre of the centre of the farm. Site Management will use the plan when reviewing odour source impact and responding to complaints.

Source Materials and Odour Release Inventories –

- Table 2 below Lists odour sources identified at the facility, together with descriptions, location and length of time on site under normal operations.
- Potential impacts from the Odour Sources listed in Table 2 have then been assessed and a record of the assessment detailed within the EM 03-012 Odour Impact Assessment. The EM 03-12 Odour Impact Assessment provides odour impact assessment for the facility by detailing:
 - The potential odour releases from site under normal operation;
 - The impact control measures employed by site to minimise the potential odours from identified release sources;
 - Abnormal scenarios leading to potential odour releases; and
 - Contingency plans in the event of the above abnormal scenarios occurring.

Overview of Odour Impact Controls - A listing of key control measures and procedures is provided (Table 3) justifying the controls in place to minimise the potential for odour generation and off-site impact from site.

Monitoring and Evaluation – This section of the management plan provides reference to the odour monitoring undertaken at site and complaint procedures in place in the event of an odour complaint being received on site.

Audit and Review

Site Management will ensure the effectiveness of this OMP and associated procedures is reviewed at least annually and in the event of one of the following:

- A series of sustained complaints that have been linked by Site Management or the Regulator to deficiencies in this OMP;
- Significant change to site infrastructure or operating techniques.

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Reviews of the OMP and associated procedures will be recorded on the EM 03-006 Audit and Document Review Form. Where any improvements are required to on-site odour control techniques, this will be dealt with through the Incident and Corrective Action reporting structure implemented at the facility.

Guidance

Table 1 outlines the sector guidance documents, and their relevant BAT requirements, that have been considered during the preparation of this Odour Management Plan. This Table will be updated as appropriate during every review to ensure the latest available Environment Agency guidance is consulted.

Table 1 – Guidance Documents		
Reference	Title	Document Issue Date / Version
EPR 1.00	Environment Agency guidance, “How to comply with your Environmental Permit”	V6 July 2013
-	EA risk assessment guidance: https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit	10 th January 2019
-	EA management system guidance https://www.gov.uk/guidance/develop-a-management-system-environmental-permits	3 rd April 2018
EPR 8.01	How to comply with your landspreading permit	V 2 February 2013
H4	Environment Agency Guidance H4 Odour Management	April 2011

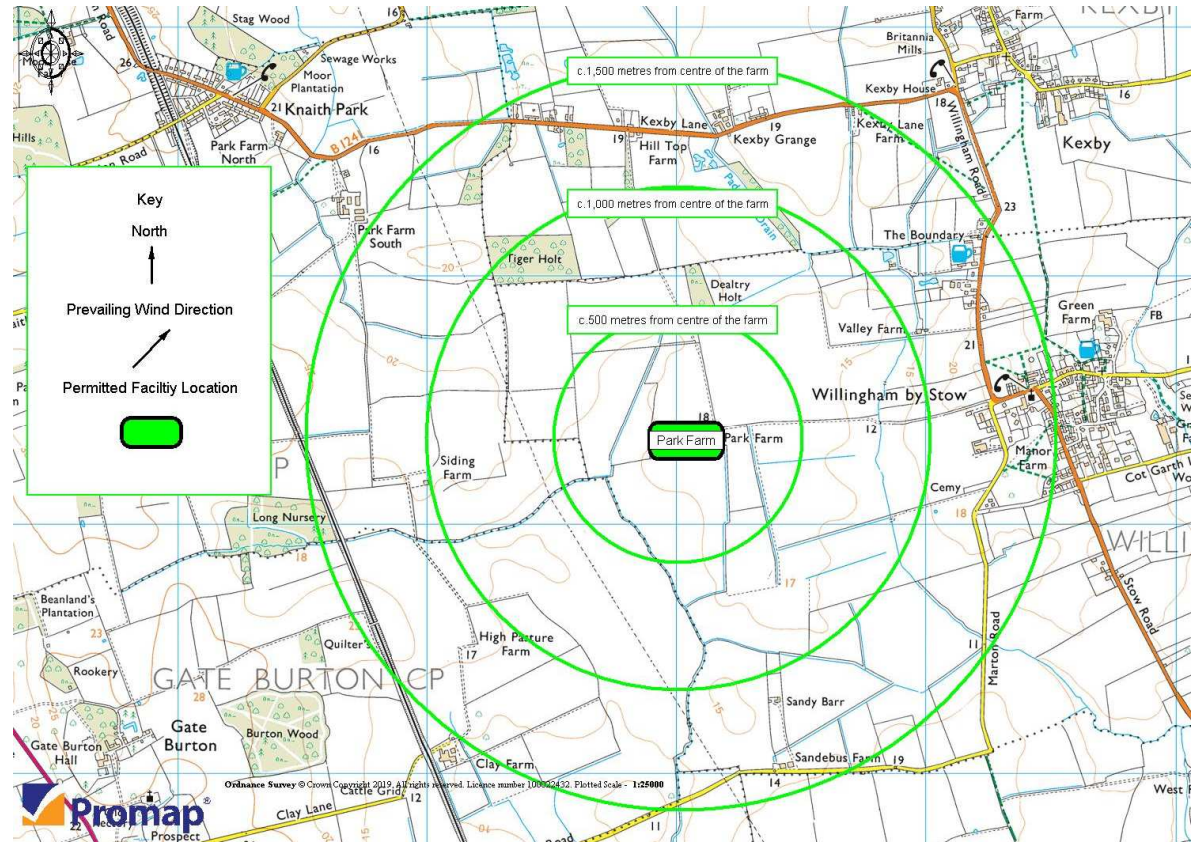
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Receptor Identification

Using the adjacent plan, Odour Sensitive Receptors and their location and proximity to the Facility location can be described as follows. Distances stated are from the centre of the farm:

- Agricultural land to the North, with the closest residential receptors a row of houses located on Kelby Lane over 1 km from site.
- Agricultural land to the East. Excluding the farmhouse associated with the farm, the closest residential receptors are over 1 km from site, including the village of Willingham by Stow.
- Agricultural land to the South, with the closest residential receptor farmhouses located over 1 km from site.
- Agricultural land to the West, with the closest residential receptor farmhouses located just over 1 km from site.

Whilst EA guidance differentiates receptor sensitivity for odours in terms of residential/commercial/industrial, Site will treat all human receptors as equally sensitive in terms of developing this Odour Management Plan. Odour sensitivity is highly subjective and therefore impacts can be highly variable dependent on individuals, irrespective of length of time of exposure and home or work or leisure environments.



Do Not Scale

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Source Materials

Table 2 – Source Materials Inventory					
Source	Description / Scope	Nature of odours – fresh material	Nature of odours – degraded material	Quantity of Material	Length of Time on Site ^{1/2}
Waste Materials -	Deliveries of waste to site, including discharge of waste materials to the storage tank / lagoon.	The nature of the odours is dependent on the wastes delivered to and stored at site. The EM 03 -011 Deployment Schedule provides a detailed description of the waste streams that have passed site's pre-waste acceptance procedures and therefore, can be stored at site. The Store Inventory provides the 'live' detail as to the wastes currently stored.		<30 tonne per tanker.	< 1 hour per delivery. Deliveries accepted on site 24 hours a day, 7 days a week.
	Storage of waste materials within the storage tank / lagoon.			<ul style="list-style-type: none"> • c. 4500 m³ within covered lagoon; • c.3800 m³ within covered farm store. 	Wastes will be stored no longer than 18 months prior to spreading.
	Collection and removal of waste materials from the storage tank / lagoon.			<15 tonne per tanker.	Collections undertaken when spreading activities require. <1 hour per collection.
<ol style="list-style-type: none"> 1. See Emergency Contact List for details of removal contractors for all of the above source materials. 2. Length of time on site is the expected norm and variation may occur under fault conditions. All reasonably foreseeable fault conditions have been dealt within the EM 03-012 Odour Impact Risk Assessment. 					

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Overview of Odour Impact Controls

Table 3 - Listing of Odour Controls		
Control Measure / Procedures / Policies Identified in OMP	Potential Odour Release Area Covered	Justification for Use in Potential Odour Impact Area
Housekeeping and Cleaning Procedures	<ul style="list-style-type: none"> All areas identified within the OMP. 	Housekeeping and Cleaning procedures are in place to ensure that the facility is kept to a high standard which minimises the potential for odours. This includes the cleaning of the storage tank and delivery points to minimise potential for odorous materials to impact on offsite receptors.
Daily Site Inspections		Daily Site Inspection ensures key odour source locations are inspected and measures taken to ensure they are kept clean and activities being undertaken correctly, minimising the potential for odours from these areas.
Odour Monitoring Procedures		Odour monitoring is undertaken to assess the level of odour generation on site and the potential for off-site impacts so that pro-active mitigation can be undertaken.
Communication and Complaints Procedures		Communication with regulatory authorities and environmental complaints from third parties is covered by this procedure so that the relevant corrective action can be undertaken in the event of a complaint.
Staff Training		<p>Training of all relevant staff is undertaken on a routine basis as the facility. This ensures staff are aware of their environmental roles and responsibilities including those related to odour management on site. Training relevant to odour control includes:</p> <ul style="list-style-type: none"> housekeeping measures, cleaning practices, waste acceptance and collection; reporting non-conformances; odour awareness and monitoring, record keeping.

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Control Measure / Procedures / Policies Identified in OMP	Potential Odour Release Area Covered	Justification for Use in Potential Odour Impact Area
Scheduling of Deliveries and Collections /	<ul style="list-style-type: none"> Waste deliveries and collections. 	Scheduling of deliveries and collections of prevents backlogs of vehicles which may contain potentially odorous materials and enables collections of odorous materials to be completed at times where any potential odour release has reduced potential to impact on sensitive receptors.
Waste Acceptance and Collection Procedures		Control of deliveries and collections of potentially odorous waste materials at site ensures that they are supervised. E.g. if an environmental incident such as a spill occurs it is cleaned up appropriately and not left to become potential odour sources.
Spill Control Procedure		Control, mitigate, clean-up of spills and / or leaks of potentially odorous materials on site to ensure they are not left to become potential odour sources.
Infrastructure Monitoring Programme Inspections.	<ul style="list-style-type: none"> Waste storage. 	The site's infrastructure monitoring programme provides a robust mechanism including inspection of site stores and associated covers, to confirm vessels are sound and covers in place. This ensures fugitive emissions of materials, including those that are potentially odorous are kept to a minimum.

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Monitoring / Corrective Action and Response

Sniff Test Odour Monitoring – Monitoring of site odours is to be undertaken following the EM 02-010 Odour Assessment Procedure. The procedure is based on a sniff test methodology that has been designed to assess the level of odour generation on site and the potential for off-site impacts so that pro-active mitigation can be undertaken. Odour Monitoring will be undertaken as follows:

- Once per week where wastes are held in site stores;
- At least daily when deliveries occur - If there are more than 4 deliveries in a day a second odour monitoring check will be carried out.
- Immediately following an Odour Complaint or notification from farm operative that operations are causing an odour nuisance.
- Immediately following an on-site incident that could lead to odour emissions - e.g. major spillage during delivery / storage vessel failure.

Odour Monitoring is recorded on the EM 03-005 Odour Monitoring Form.

Incident and Corrective Action - Any faults or deficiencies encountered on-site with regards to infrastructure and where procedures could not be carried out are detailed using an incident and corrective action reporting structure. This will instigate appropriate level of management commitment to ensure corrective action is undertaken. A review of the corrective action will be included to ensure satisfactory completion and senior management sign-off.

Complaints – Odour complaints are dealt with by the EM 02-007 Communication & Complaints Procedure and EM 03-003 – Complaints Form. The procedure deals with how to manage complaints and ensures that all relevant communications can be dealt with appropriately. The procedure outlines the requirements to communicate effectively with Regulators and any other interested parties and also internal staff.

Interpretation of Monitoring Results and Complaint Records – Site Management will review all odour monitoring records to ensure good evidence is provided that emissions are well managed and that any control measures in place are working as intended.