



MARSH INDUSTRIES >
Leaders in off-mains drainage

Odour Management Plan

Units 2-20

Addington park Industrial Estate

Little Addington

Kettering

Northamptonshire

NN14 4AS



Revision	Date	Author	Approved	Description
1	08.03.2023	Paul Sales	Blake Crocker	Initial draft
2	25.04.2023	Paul Sales	Paul Sales	Made various amendments

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1. Introduction

This Odour Management Plan (OMP) describes odour management procedures that will be undertaken by Marsh Industries Limited to minimise discharges to air from unsaturated hydrocarbons (Styrene) and any by products that are created during the manufacturing processes. It is important that these procedures are followed to prevent adverse environmental effects and ensure compliance with conditions of the environmental permit.

The plan (OMP) should be reviewed annually to incorporate any changes and improvements to the management system. This plan will also be reviewed if any process changes are made that may effect the way we manage our odours. Any changes will be recorded and a copy of the new OMP will be sent to North Northamptonshire council.

Marsh Industries General activities

We operate out of six industrial units on Addington Park Industrial Estate, Irthlingborough Road, Little Addington. The sites locality is in a rural area approximately 200m south of the village of Little Addington and is around 1130m away from a Site of Special Scientific Interest (SSSI) Stanwick Lakes.

We generally manufacture domestic-purpose tanks at this site; the largest building (approximately 700 m²)(units 3-8) starts the manufacturing of our domestic tanks. Fibre-glass, Catalyst and resin mixture (GRP) is applied to tank moulds using spray guns, (the 3 components are mixed within the nozzle of the spray guns) once the moulds are covered, small metal rollers are used to press down the fibres which adds strength to the tanks and removes pockets of air. This process is repeated until the correct thinness is achieved. Similar processes occur in two smaller units; one of these units (units 14-16) Sprays the internal components for the tanks (baffles and baskets), where they follow the same spraying process. In units 19-20 they use hand lay up techniques creating lids, boxes and whisspurs, this process is different from other two spray areas and the odours are far less in the unit than the other two. Once the new tanks/internal components have set/cured, a gel paint topcoat is applied and once this is dry they are removed from their moulds. They are then stored in the external yard prior to assembly. Tank assembly takes place in the units 9-13 opposite the storage area, Shells are grinded/cut to remove any irregularities or overspray in an external cutting bay outside the assembly building, the cut shells are then have silicone applied to the join and bolted together. Internal components are installed to the customers requirements. Once assembled these tanks are stored in the external concrete yard prior to shipment.

Marsh Industries General activities cont'd

Unit 2

Building septic tanks-

Small amount of bonding (hand lap up) applying silicone ,gluing, small amount of paint touch up, labelling via spray paint

Units 3-8

Spray shop-

Waxing moulds, spraying gel coat and top coat to moulds, spraying open moulds with GRP (Resin, Catalyst, Chopped Glass Roving)

Units 9-13

Tank Build-

Small amount of bonding (hand lap up) applying silicone ,gluing, small amount of paint touch up, labelling via spray paint

Units 14-16

Baffles Spraying room

Waxing moulds, spraying gel coat and top coat to moulds, spraying open moulds with GRP (Resin, Catalyst, Chopped Glass Roving)

Units 19-20

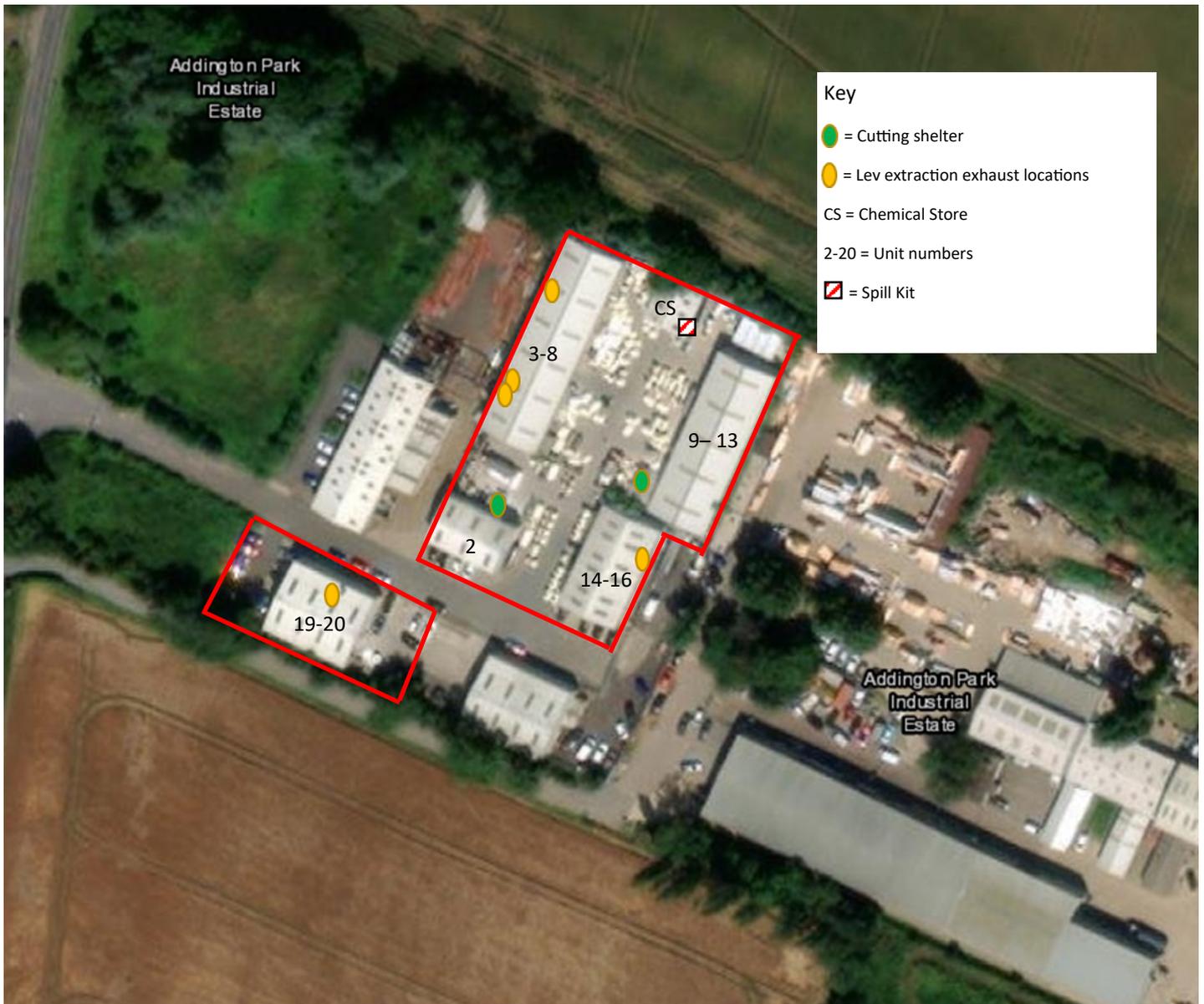
Making small components – whisspur's, lids and housings

Waxing moulds, spraying gel coat and top coat to moulds, hand laying grp to moulds (Resin, Catalyst, Chopped Glass Roving/ Glass matts)

Chemical Store

IBC's of resin and barrels of flow coat/topcoat are stored

2. Site Location



Site location map 01

Marsh industries boundaries have been marked with red lines on the above picture.

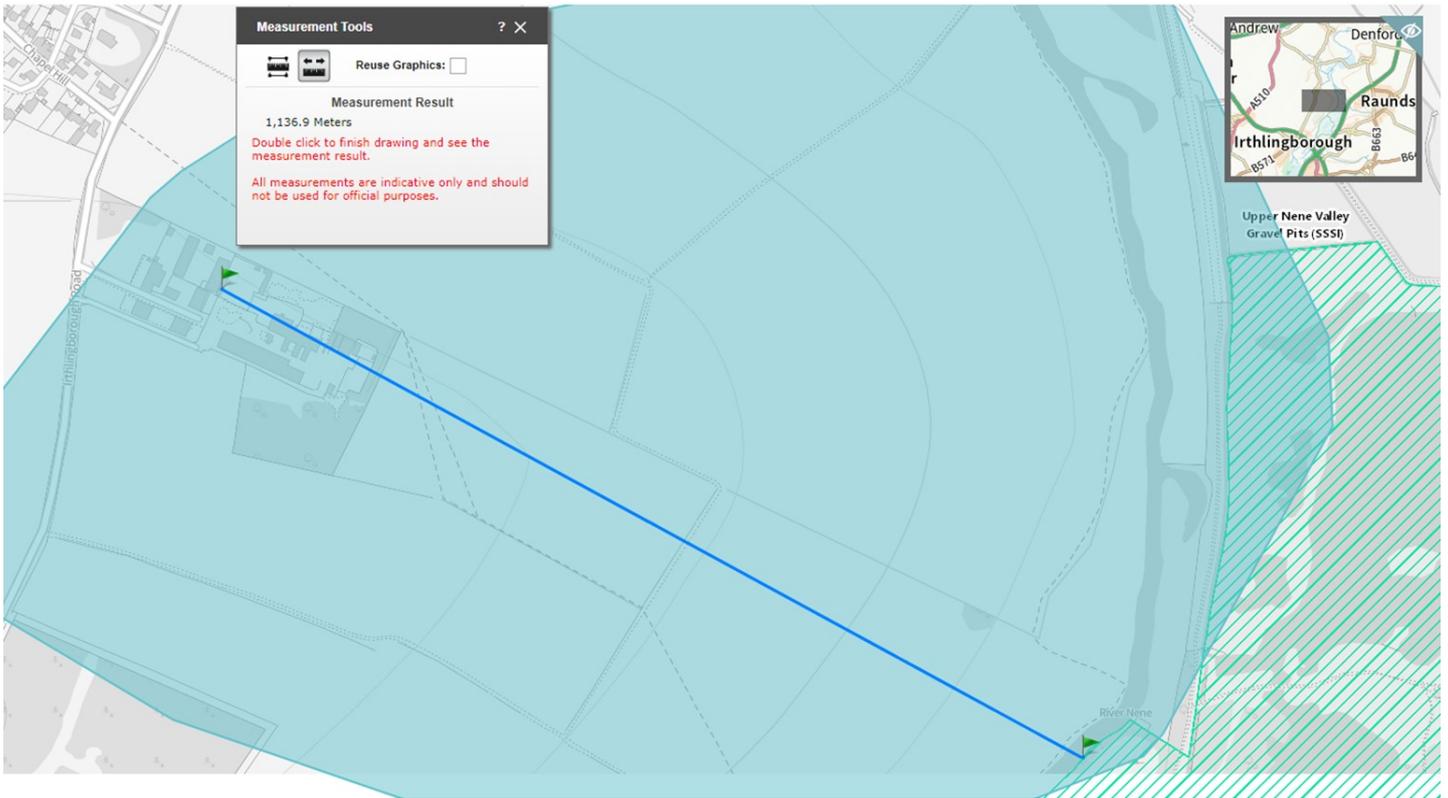
Units 2-20 ,Addington park Industrial Estate

Little Addington, Kettering, Northamptonshire, NN14 4AS

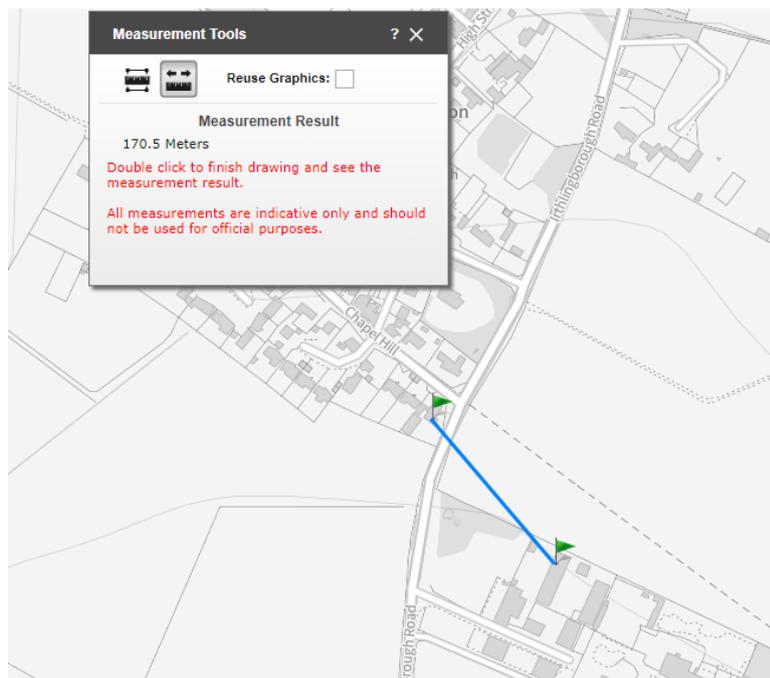
Site Location Cont'd

Site of Special Scientific Interest (SSSI)

Upper Nene Valley Gravel Pits (Stanwick Lakes) 1130m away



The closest residential property is around 170m away in Chapel Hill Road



3. Odour Risk Assessment

Methodology

This OMP has been completed to identify where the likely risks are in relation to surrounding land uses. This assessment has been used to inform section 6 of this OMP with regard to specific odour monitoring procedures

Odour Intensity

The table below highlights the intensity of the odour and provides a description by which to measure the intensity:

Odour Intensity	Criteria
Negligible (0 – 5) (Drager tube)	No detectable odour
Low (5 - 10) (Drager tube)	Faint odour(barely detectable)
Moderate (10 - 20) (Drager tube)	Moderate odour easily detected while walking (possible interference)
High (20- 25) (Drager tube)	Strong odour(bearable, not offensive)
Severe (25 +) (Drager tube)	Very strong odour(this is when you really wish you were somewhere else)

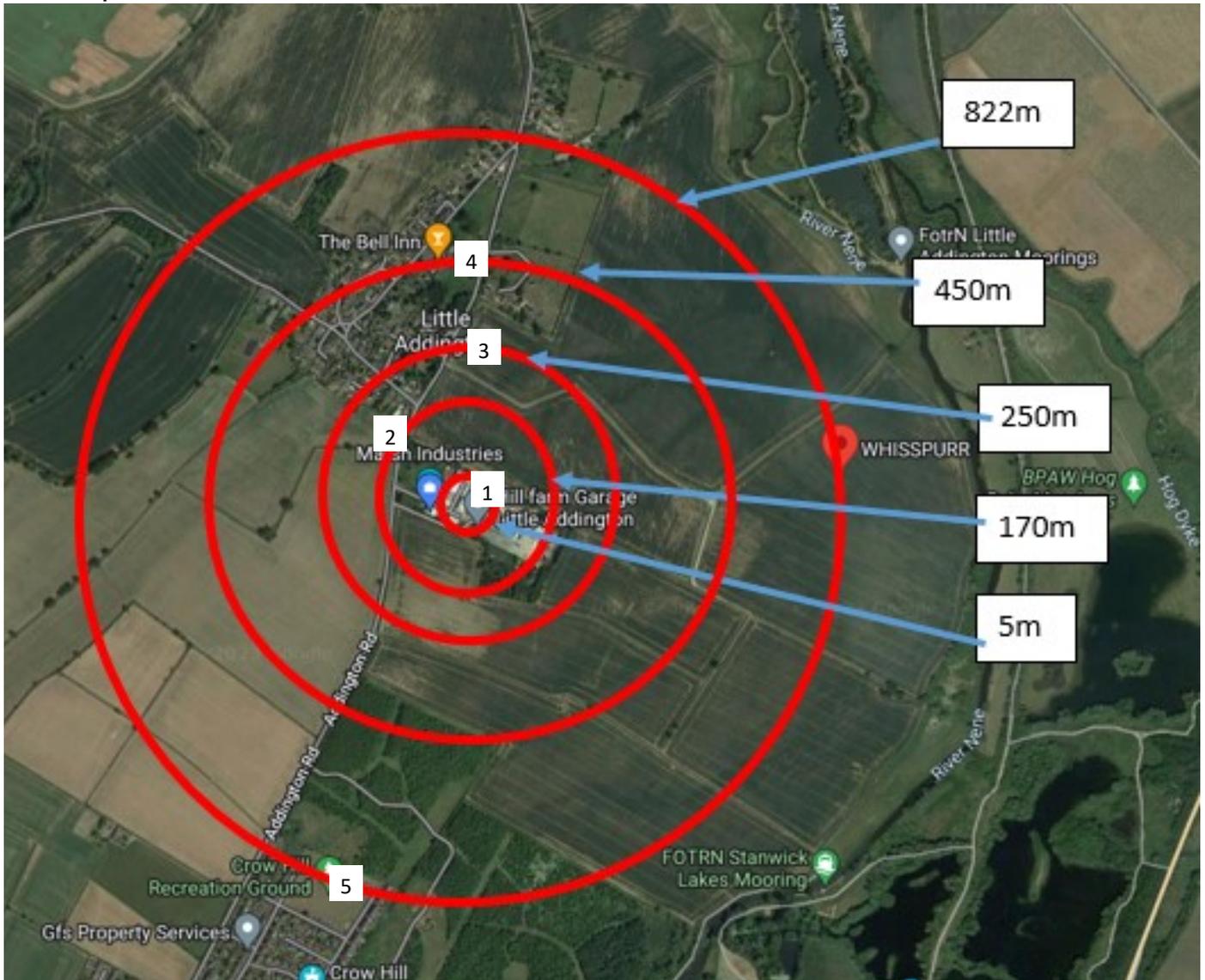
Sensitive Receptor Locations

In the picture on the next page (receptors01) , the receptors highlighted are those which are considered to be at risk by odours generated by the site.

Boundary	Receptor	Approximate distance from centre	Receptor No:
Surrounding	Commercial/Industrial premises	<10	1
North West	Residential	170	2
North west	Residential	250	3
North West	Residential /Commercial	450	4
S/south west	Residential	822	5

Odour Assessment Cont'd

Receptors01



Risk Matrix

The odour in any particular event can be established using the risk assessment matrix given below

		<i>Sensitivity</i>		
		Low	Medium	High
<i>Intensity</i>	Negligible	NEGLIGIBLE	LOW	LOW
	Low	LOW	LOW	MEDIUM
	Moderate	LOW	MEDIUM	MEDIUM
	High	MEDIUM	MEDIUM	HIGH
	Severe	MEDIUM	HIGH	VERY HIGH

4. Potential Sources of Odour

The sources of odour are listed below

Units 3-8

Tank mould spray shop

- Flow coat is sprayed onto open moulds via 1 spray gun (styrene)
- GRP is sprayed onto open moulds via 3 spray guns (styrene)
- Top Coat is sprayed onto open moulds via 1 spray gun (styrene)
- Two Airflow spray booth extractors are located in this building, extracting air through 3 exhaust stacks that go through the roof, going above the apex by around 1m (styrene)
- Two roller shutter doors give access to move mould in and out of the building (styrene)

Units 14-16

Baffle spray shop

- Flow coat is sprayed onto open moulds via 1 spray gun (styrene)
- GRP is sprayed onto open moulds via 1 spray gun (styrene)
- Top Coat is sprayed onto open moulds via 1 spray gun (same gun as flow coat) (styrene)
- One Airflow spray booth extractor is located in this building, extracting air through 1 exhaust stack that goes through the roof going above the gutter by around 50cm (styrene)
- One roller shutter doors give access to move mould in and out of the building (styrene)

Units 19-20

Lid, whisspur and basket workshop

- Flow coat is sprayed onto small open moulds via 1 spray gun (styrene)
- Hand lay up of glass fibre matting and resin onto small moulds (styrene)
- Top coat is sprayed onto open moulds via 1 spray gun (same gun as flow coat) (styrene)
- One Airflow spray booth extractor is located in this building, extracting air through 1 exhaust stack that goes through the roof going above the gutter by around 1m (styrene)
- One roller shutter doors give access to move mould in and out of the building (styrene)

Background odour sources in the area

Other potentially odour omitting operators, sites or areas are tabulated below

Company	Address	Type	Approximate distance/ Location from site boundary (M)
Lericoat Limited	Unit 18, Addington Park ind est, NN14 4AS	Commercial / Industrial	10
Datona Limited	Unit 1 Addington Park ind est, NN14 4AS	Commercial / Industrial	5
Various Companies on Hill Farm Est	Surrounding Commer- cial / industrial premises	Commercial / Industrial	10-20
N/A	Various surrounding farms	Farming/ agricultural land	Surrounding

5. Odour Control

Where possible Marsh Industries will use best available techniques to help control emissions by using operational controls as listed below

- Use low styrene emission resins (LSE) where possible
- Keep resin mixtures for hand layup to the minimum quantity and with lids on in-between use
- Spray booth extraction units to be switched on at all times
- Doors to be kept shut on spray units as much as possible to contain emissions
- Monitor emissions in each spray building daily and at boundary locations
- Staff trained on accidental odour release from spillages as detailed in the spill response procedure (SRP)
- Lev extraction units to be serviced at regular intervals (minimum every 14months)
- Wet on wet techniques are use to minimise emissions released
- High levels of housekeeping maintained at all times
- Waste to be stored and disposed of through licensed carriers only
- All empty vessels to have lids secured while awaiting disposal/collection to prevent emissions

Improvement opportunities

- All employees who are involved with potentially odorous materials and their handling will receive training in correct use, handling and storage

6. Monitoring

Marsh Industries will monitor each unit that sprays GRP on a daily basis using either a Drager accuro gas detection pump with a glass tube that detects styrene. Or a gas detection monitor calibrated to detect styrene.

These daily checks will be at random times throughout the working day and all monitoring will be recorded and kept

The site boundary will be sniff tested on a daily basis and if an odour is detected or when the days that the readings are high within the spray units the boundary will also be tested by either the drgaer hand pump or the gas monitor and again the results will be recorded

We will also have an independent survey carried out each year which will look styrene concentrations. The results will be fed back and any recommendations on how to improve/ reduce exposure levels will be reviewed and improvement suggestions acted on taking into account they must be reasonably and practicable.

7. Contingency Plans

The OMP contingency plans have been prepared to react to situations where monitoring indicates that potential odour source is not completely under control, meteorological conditions are unfavourable or that an adverse event had occurred

If excessive odour is detected during the daily sniff test at the boundary or other monitoring point or a complaint has been received then the following remedial procedures will be taken.

- Firstly using either a gas monitor or drager tube carry out a air test to confirm readings
- Once the odour has been confirmed identify the source of the odour
- Identify the point of release
- Identify the cause of the release(machine break down, leakage, open door etc)
- Identify a solution
- Carry out 2nd gas monitor test to check mitigation measures are working
- Record actions on relevant forms as required by this OMP

Actions that can be taken if odour exceeds expected levels

Normal Operations: The offending odour will be traced and reasons for the cause of the problem investigated. Once solutions are in place, gas monitoring will be carried out to ensure the solutions put in place are having the desired effect.

Abnormal Conditions: adverse weather conditions can promote odour and/or inhibit its effective dispersion e.g. Hot weather with little wind, resulting in increased risk of odour to receptor locations. if this happens odour causing operations will either be reduced or cease, production start and finish times maybe altered to take into account the hottest times of the day.

Staff shortages/ Human Error

In the event of unforeseen staff storages arising from illness, suspension or no shows, the production manager will make a judgement call whether to reduce production which will in turn result in producing less odorous emissions. Production will be resumed to normal capacity asap.

All staff are trained and will under go various annual H&S/ production training (or sooner if operations change) to reduce the impact of human error. In instances where human error has caused an odour issue(spillage , accidental release etc) the site may suspend operations until the issue has been resolved, The member of staff maybe warned and re-trained accordingly

7. Complaints

An open door policy is encouraged to enable any complaints from neighbouring premises (if received) to be dealt with immediately . The complainant will then be supplied with remedial actions taken and any procedures or measures put in place by Marsh Industries to reduce the likelihood of a subsequent complaint

If any odour complaints are received, the complaint will be assigned to an operative familiar with the sites operations who will complete a complaints form, details that need completing are dates, nature of complaint, weather conditions at the time of complaint, investigation details, any actions taken and a signature as a minimum.

Odour complaints will be investigated and responded to within 24hours and suitably reviewed by the health and Safety Manager who is ultimately responsible for this procedure

The team would also be required to make a note of any unavoidable events plant/equipment malfunctions in the site diary (email health and safety manager who will log) rather than record just complaints received, this will ensure that if complaints are received retrospectively from anyone, any circumstances which led to that complaint as a result of elements outside of Marsh Industries control would be able to be attributed to the cause of the complaint

8. Training

All employees of Marsh Industries Limited involved with potentially odorous processes or materials and their handling will receive training COSHH Awareness training as a minimum (where odour management will be covered)

Training will be given to all relevant persons to make sure they are competent in completing styrene monitoring and recording, odour complaint forms to ensure sufficient monitoring and reporting of odours



 MARSH INDUSTRIES > Leaders in off-mains drainage	1.Document Title:	2. Document No: 4 J 02
	Complaints Form	3. Page: 1 of 2
4. Prepared: Paul Sales	Reviewed by: Blake Crocker	5. Approved By: Paul Sales



Dated Recorded:	Reference Number:
Name and address of complainant	
Telephone number of complainant	
Nature of complaint (Noise, odour, dust, other) (Date, time, duration)	
Weather at the time of complaint (Rain, snow, fog, sunny, Hot, etc.)	
Wind (Strength, direction)	
Any other complaints relating to this report	
Any other relevant information (anything recorded on the site diary ?)	
Potential reasons for complaint	
The operations being carried out on the site at the time of the complaint	
Follow up	
Actions Taken	
Date of call back/feedback to complainant	
Summary of call back conversation	
Recommendations	
Change in process	
Changes in management systems	
Date changes implemented	
Form completed by (Print)	
Signed	
Date completed	





COMPLAINT RECORDING PROCEDURE:

Any complaints received will be recorded on form 4J02. This form will normally be completed, signed and dated by the Production Manager or the Health & Safety Manager; if they are not available the Office Manager will complete the form.

- 1) The name, address and telephone number of the caller will be requested.
- 2) Each complaint will be given a reference number.
- 3) The caller will be asked to give details of:
 - a) the nature of the complaint;
 - b) the time;
 - c) how long it lasted;
 - d) how often it occurs;
 - e) Is this the first time the problem has been noticed; and
 - f) what prompted them to complain.
- 4) The person completing the form will then, if possible, make a note of:
 - a) the weather conditions at the time of the problem (rain, snow, fog etc.);
 - b) strength and direction of the wind; and
 - c) the activity or activities taken place on the site at the time the noise was detected, particularly anything unusual.
- 5) The reason for the complaint will be investigated and a note of the findings added to the report.
- 6) The caller will then be contacted with an explanation of the source of the complaint if identified and the action taken to prevent a recurrence of the problem in future.
- 7) If the caller/complainant is unhappy about the outcome or unwilling to identify themselves the caller will be invited to contact the Local Authority.

Note: Following any complaint the relevant management plan(s) will be reviewed to ensure appropriate actions are in place to counter any problems.