



SITA UK Limited - Doncaster Waste Transfer Station Pest Management Plan



SITA UK Limited

Doncaster Waste Transfer Station

Sandall Stones Road
Kirk Sandall Industrial Estate
Doncaster
South Yorkshire
DN3 1QR

PEST MANAGEMENT PLAN

Issue 1.2

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1.0 INTRODUCTION

This Pest Management Plan (PMP) has been produced to support the Doncaster Waste Transfer Station (WTS) application for an Environmental Permit and has been produced in accordance with the EA Guidance documents, "How to Comply with your environmental permit", the "Fly management: how to comply with your environmental permit" and DEFRA guidance on Sections 101 to 103 of the Clean Neighbourhoods and Environment Act 2005 which provides a comprehensive overview of the requirements for pest prevention when storing biodegradable waste.

The Environment Agency guidance "Fly management: how to comply with your environmental permit" provides information on the management of fly pests at permitted waste facilities and includes the following:

- The regulations in relation to flies and how they are enforced;
- The main pest fly species, and how to monitor their numbers;
- The measures available to manage fly numbers; and
- How to produce a fly management plan.

This PMP is aimed at assisting the operator in effectively managing potential pest issues associated with the proposed operations at the Doncaster WTS.

1.1 Structure of Pest Management Plan

The PMP structure is as follows:

- Overview of site:
- Pest Impacts/Issues:
- Control measures and management techniques:
- Record Keeping; and
- Communication



2.0 PROCESS DESCRIPTION

The proposed facility is located within the Metropolitan Borough of Doncaster. The site is located on the south western edge of Kirk Sandall Industrial Estate in a commercial/industrial setting. The Environment Agency H4 guidance indicates that neighbouring commercial properties are considered to be of a lower sensitivity to odour emissions than would be the case were the adjoining properties of a residential nature.

The main WTS building will comprise a large clear span shed with roller shutter doors and will accept kerbside collected household residual, waste from household waste recycling centres, street cleansing, gully waste and dry recyclate waste streams. This in addition to residual and dry recyclate commercial wastes.

The household waste will be received into the WTS building and placed into specific segregated bays.

Green waste storage is provided within a separate "dutch barn" type storage area which is a covered three sided building that is open on the North West side. The green waste is derived from domestic collections and Household Waste Recycling Centres (HWRCs).

Additional waste streams to be accepted at the site include;

- bulky wastes;
- gas bottles;
- fly tipped material;
- street cleansing and gully waste;
- asbestos; and
- non-hazardous clinical waste.

Materials including gas bottles (approximately 2 tonnes per annum is collected, however on site tonnages are unlikely to exceed 0.5t). Non-hazardous clinical waste will be stored outside the Waste Transfer building in sealed containers.

There may be the potential for a small element of asbestos to be stored on site, in emergency situations, if the appropriate disposal facility is not available. This waste would remain undisturbed on the vehicle being used for transport and would be removed from site at the earliest available opportunity once the disposal site reopened.



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The wider site will also host an amenity block with offices and welfare facilities, a weighbridge, a fuelling and vehicle wash down area.

A site layout plan is given at Figure 1.

3.0 IMPACTS

3.1 General

This section provides an overview on the potential pest issues that may occur at the facility under normal operating conditions.

- **Rats/Mice** – rodents are attracted in particular by the putrescible waste element. The storage of waste in building will reduce the risk, however rodents may still access building areas. Good housekeeping and appropriate rodent control will be required to minimise potential nuisance.
- **Flies** – are likely to be attracted by the decaying waste element on site and the storage of waste within building will reduce the risk. However flies could also be present (particularly as larvae) within the waste brought into site. Increases in fly populations is the most likely cause of pest nuisance from the site on local neighbours and so will form the main focus of this document.
- **Birds** – as scavengers they are likely to be attracted by the putrescible waste element. The residual household and commercial waste will be stored within a building, minimising the risk.

3.2 Flies

There are over 7000 species of true flies (Diptera) which are known to occur in the United Kingdom (UK). Of these around six species have the potential to cause regular and significant problems on and around waste management facilities.

Fly larvae occur in damp, decaying organic waste. However, each species will have a preferred niche in terms of temperature, moisture levels and nature of the material.

There is an increased chance of fly problems occurring where waste is stored for a period of time

The most common species associated with waste management facilities and which generate complaints are outlined in Table 1.

Table 1 Main fly pest species.

Fly species	Typical pest status	Notes
Common housefly (<i>Musca domestica</i>)	Can cause widespread and severe problems	Larvae found in poultry, pig, and calf manure, and in refuse. Adult readily disperses and enters buildings.
Lesser housefly (<i>Fannia canicularis</i>)	Can cause widespread and severe problems	Larvae found in poultry manure, and in refuse. Adult readily disperses and enters buildings.
Blow flies: Bluebottles / Greenbottles (<i>Calliphora</i> / <i>Lucilia</i>)	Localised problems only	Larvae found in carrion and faecal material, commonly associated with putrescible waste. Adults tend not to disperse far.
Stable flies (<i>Stomoxys calcitrans</i>)	Localised problems only	Larvae found in manure of large animals, e.g. cattle and pigs. Adult is blood-feeding, and tends not to disperse far.
Fruit flies (<i>Drosophila</i> spp.)	Localised problems only	A small (2mm) fly. Larvae found in rotting vegetation or vegetable waste, e.g. green-waste composting. Tends not to disperse far.
Cluster flies (<i>Pollenia rudis</i> , <i>Eudasyphora cyanella</i> , <i>Musca autumnalis</i>)	Localised problems only	The larvae of these flies are not found in livestock or waste facilities, but the adults do enter buildings in the autumn, and may be confused with houseflies by complainants.

Appendix A outlines the key differences between the common and lesser houseflies.

3.3 Fly dispersal

Although most adult flies stay close to their breeding sites, a proportion will disperse away and may cause problems at receptors. Houseflies are capable of dispersing over distances of several kilometres, although problems seldom occur at distances greater than 2-3 km from the source. Significant problems, will generally occur within 500m of the source.

Dispersal factors can vary, but are mainly influenced by high levels of fly breeding at the source and weather conditions.

3.4 Problems caused by flies

Annoyance/Nuisance - The continued presence of numbers of flies in homes or a workplace are perceived as irritating and unpleasant, particularly when breeding sites are nearby. Where there are no breeding grounds nearby, one or two flies would be normal. The



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annoyance is often increased because houseflies are difficult to control with insecticides, and are particularly attracted to kitchens and humans.

Disease transmission - Adult flies are often active on putrescent and microbially contaminated substrates. As a result, their external surfaces and gut will become contaminated with a broad range of pathogens. If these contaminated flies subsequently come into contact with people, livestock or foodstuffs, there is the potential for disease transmission. However, in the UK the opportunities for contamination are typically low in transmission and so the risk is also low.



4.0 CONTROL MEASURES AND MANAGEMENT TECHNIQUES

SITA UK Limited has considerable operational experience and know-how in regard to the management of waste facilities. The following section identifies the principles for preventing, controlling and managing pest generation during normal operations at the facility. However, the principal control measure in operation is the efficient and effective management of wastes.

4.1 Waste Acceptance

All waste types will be subject to visual inspection upon arrival and where a waste load is not in line with accepted waste types under the environmental permit or is deemed too heavily infested with flies it will be rejected. A load rejection form will be completed and a copy of this form will be kept on site.

SITA will collect the waste from commercial premises and inspections will be made at both the collection point and end point in terms of delivery to the WTS, this responsibility will be given to the collection crews on the RCVs themselves.

A second inspection of material will take place within the tipping hall of the WTS. Where waste is noted to be heavily infested with flies it will be 'quarantined' and arrangements made for it to be immediately removed from site. Information regarding such loads will be recorded within the site diary.

Visual monitoring of wastes is likely to attract scavengers and other pests will be undertaken throughout the day by a person appointed by the site manager. Should monitoring reveal the presence of scavenging birds or animals, waste will be moved/turned over in order to disturb the scavengers. If necessary, elements of the waste will be moved to the quarantine area and secured against future foraging until they are removed from site as quickly as possible. All remedial measures taken will be recorded.

Should it become necessary, the Site Manager will arrange for the pest contractor to visit the site to carry out further control works.

4.2 Building Enclosure

The primary control of insects, pests and vermin on site will be that operations are to be conducted within buildings fitted with roller shutter doors. Waste will be discharged,



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processed (non-putrescible wastes only or dry recyclable only) and stored within buildings. A principal objective of waste management operations is to maximise the rate of turnaround and thus minimise the time waste is stored on site to a typical maximum of 48 hours thereby reducing the likelihood of scavenging or potential for infestations to develop. This 48 hour contingency will primarily be utilised during weekends, bank holidays and the Christmas period and where possible waste material will be removed daily in order to provide contingency, particularly over bank holiday periods.

There will be two zones (A and B) at the rear of the residual waste storage area which will be required for the separation of waste delivered on separate days (see Figure 34). For example on Day 1, Zone A will be filled with incoming residual waste, where reasons beyond control do not allow for this waste to be cleared out at the end of day, the incoming waste on Day 2, will be deposited into zone B. The two zones will enable the operator to keep waste delivered on the one day separate from incoming waste the following day and ensure that the older waste material is removed first, ensuring that the first in first out policy is adhered to. The aim is to ensure that a 24 hour contingency is applied, however as discussed above this is not always possible due to late deliveries to the WTS. Once a bay has been filled and emptied, it will be cleaned out as soon as appropriate specifically in terms of the safety within the area.

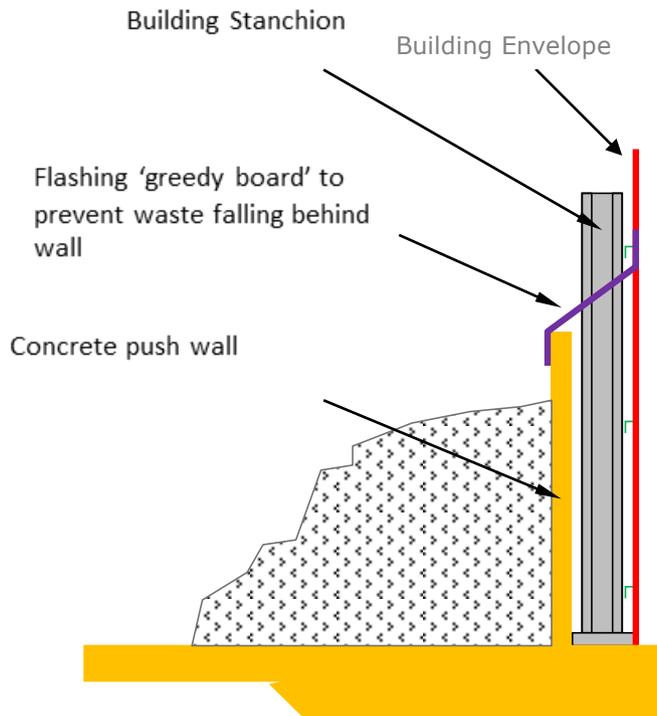
The waste will be brought to the WTS in RCVs appropriate vehicles and tipped onto the floor of the reception hall and then subsequently moved into the appropriate bay immediately, zones A or B depending on which bay is being used to store waste on that particular day. The monitoring of incoming waste will be recorded as vehicles weigh on and off at the weighbridge, this data will be stored for up to 5 years. The maximum tonnage of residual waste to be accepted will be 600 tonnes, with the data from the weighbridge tracking all inputs and outputs and a visual inspection of the tipping hall by the site manager to ensure that this tonnage is not exceeded.

Within the waste transfer station itself the storage of waste will be within designated bays. Good housekeeping will be maintained, to include the cleaning down, disinfecting and maintenance of drainage systems to prevent vermin being attracted unnecessarily.

The design of the facility has taken into account the potential presence for rats/mice through the sealing of all voids into WTS building, to reduce the opportunity for nesting vermin. The internal areas have been designed so as to reduce the amount of inaccessible areas for cleaning, the push walls will be sealed to prevent waste accumulation behind them. Any

internal surfaces e.g. ledges will be sloped to prevent the accumulation of waste material. Greedy boards/ flashing to be installed at top of push wall to prevent waste overflowing into void between push wall and building envelope (see insert 1 below).

Insert 1: Bay layout



The roadways and hardstanding within the planning application boundary will also utilise a high quality finish, to withstand the workings of the site and enable easier cleaning.

Daily checks will be undertaken for the presence of pests in the operational areas of the WTS including areas both inside and outside of the building.

External to the building, mitigation against pests, vermin and nesting opportunities has been considered through the provision of low lying vegetation planting and trees in the landscaping scheme for the site, which will enable the identification and treatment of nesting sites more accessible. This planting in the approved planting scheme has been chosen in order to deter the potential for vermin and facilitate pest control management by contractors.

4.3 Specialist Pest Contractor

A specialist contractor will be retained to inspect the facility for the presence and control of pests and vermin. The contractor will ensure that the appropriate controls are put in place to prevent problems occurring. A schedule of regular visits will be in place and in line with



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the Integrated Management System (IMS), the Site Manager must ensure that visits are carried out as agreed and visit records must be retained on site. Evidence of vermin activity and control methods used must be recorded on the contractor visit reports.

In the event that evidence of pests is found, appropriate measures shall be put in place to mitigate the nuisance and all remedial actions will be recorded.

In line with the IMS the following specific controls will be utilised;

- For control of rats, the pest control contractor must use rat bait boxes with rodenticides and/or traps as required. Any other method of control must be approved by Health and Safety and the National Environment Support Manager.
- For control of pigeons and gulls, the pest control contractor must use acoustic tools, falconry or netting as required. Any other method of control must be approved by Health and Safety and the National Environment Support Manager.

The contractor will also be obliged to attend to specified incidents of pests on request.

4.4 Litter

The control of litter is also important to reducing the potential for insects, pests and vermin. All vehicles delivering and removing waste at the WTS, will be required to be sheeted or enclosed. The WTS entrance, gates and perimeter fences will be inspected daily, by a member of staff for windblown litter. Where litter is blown outside of the boundaries, it will be collected as soon as possible.

4.5 Specific Fly Control Procedures

Even with the efficient use of management there is likely to still be some flies which still occur and need to be controlled. A range of both non-chemical and chemical fly control techniques will be put in place to control flies.

The EA guidance outlines fly management techniques, with particular attention brought to the use of non-chemical techniques as a first priority where appropriate. This is also imposed in the COSHH Regulations 2012, where the use of non-hazardous pest control techniques is identified as being favoured over those which could potentially be harmful, such as pesticides.

The WTS will be at a higher level of risk of fly infestation during periods of warm weather. It is critical for the control of flies, that controls methods are used regularly, with additional



treatments available for times of peak fly infestation periods (April to October). During this period, fly numbers will be monitored at least weekly; utilising an appropriate technique (e.g. resting counts in squares marked out on internal walls, adhesive fly catchers or larvae counts) to ensure that control measures are adequate, with additional treatments put in place if required.

The monitoring of adult flies specifically will be carried out using the Waste Transfer Station Fly Management Record (Appendix E). Monitoring will be conducted around the perimeter of the waste storage buildings, particularly around the access doors and within the buildings themselves.

The proposed odour neutraliser system (details of the Mist-Air Odour Neutralizer system are included within Appendix C) will also be used to disperse Agrocypa Insecticide within the building. This insecticide is HSE approved for use on waste management sites and can be used safely in the presence of site operatives (Agrocypa Insecticide COSHH Sheet is included at Appendix B).

The insecticide is extremely effective for the control of flies, mosquitoes, ticks, fleas, ants and cockroaches. Additional treatments such as the direct spray treatment of the waste, will be put in place should the current measures not fully address the problem.

Where additional control is required, in line with the IMS the pest control contractor will be required to use electrical fly control methods or spray the waste / building as necessary.

The proposed control mechanisms will be reviewed on an annual basis to assess their effectiveness. Any significant changes will be communicated to the Environment Agency in a format of their choosing.

4.6 *Cleaning and hygiene*

A comprehensive cleaning schedule will be adhered to for all areas of the plant. Waste feed areas and plant walkways will be cleaned daily. Sweeping and collection of waste arising will be undertaken with particular focus on high use areas such as the weighbridges and waste reception areas.

Details of cleaning and maintenance schedules are contained within our Integrated Management System (IMS Section 3.35).



In addition operating a first in and first out policy the covered green waste bay and residual waste bay will be regularly emptied to allow it to be cleaned thoroughly. Cleaning and disinfection procedures for the clinical waste storage area will be implemented as required by Environment Agency Guidance EPR 5.07.

4.7 Staff training

Site staff will undertake daily checks for the presence of pests in operational areas of the facility. All employees will be required to report any vermin/pest issues around the plant, yard or vehicles immediately to the Site Manager. Any incidents will be recorded in the Site Diary and Pest Management Plan Assessment Form (see Appendix D) and remedial action instigated as quickly as possible.

Site staff will be trained to identify potential pest problems and the required remedial action. A record of training will be maintained for all staff onsite.

In addition to general environmental awareness training, specific training will be provided to relevant staff, which will include:

- the regulatory requirements associated with the operating permit as they affect work activities and responsibilities;
- likely potential environmental impacts which may be caused by plant under their control during normal and abnormal circumstances;
- reporting procedures to inform supervisors or managers of deviations from permit conditions;
- procedures to be used by supervisors or managers for the reporting of deviations from permit conditions to the regulator;
- prevention of accidental emissions and action to be taken when accidental emissions occur.



5.0 RECORD KEEPING

Records will be kept in accordance with Environment Agency guidance, the onsite Pest Management Plan Assessment Form, Fly Monitoring Record Sheet and procedures in the IMS.

These records will contain information on:

- Incidents of any pest issues recorded on site; and
- An overview of any complaints received, what they relate to (source/operation) and any remedial action taken.

5.1 Site Diary

A record of site inspection will be recorded within the Site Diary. This will also include any reports of pests/vermin observed by site staff.

The information recorded will include:

- Date and time of day;
- Pest problem identified;
- Continuity of the presence of pests during the event;
- Potential site operations that may have resulted in pests;
- Weather conditions including wind direction and strength; and
- If appropriate, any reporting or dialogue with the complainant Local Authority Environmental Health Officer and the Environment Agency.

Records in the Site Diary will also include information as to how the issue has been investigated and resolved.

5.2 Management of Complaints

A complaints log will be maintained which will be available to the Environment Agency to be able to inspect these records on a regular basis.

There will be a robust complaint investigation procedure in place. Any complaints reported to the site or through the SITA UK Limited customer service team or via the Environment Agency or local authority will be logged and reviewed in line with SITA's procedure.

A change in the frequency of complaints will be used as an indicator of the potential pest nuisance level and the effectiveness (or otherwise) of control measures. Subsequent investigation of the complaints will either 'confirm', 'fail to confirm' or 'further characterise' the pest incident.



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Relevant staff (i.e. Site Manager and Site Supervisor) will receive the necessary training in order to ensure the necessary detail for the complaints log is being received and recorded where possible. In the first instance, the complaint will be “screened” taking into account the following information:

- The nature of the complainant (is it from an organised campaign group, local resident, etc.);
- The number of complaints against the alleged nuisance;
- The frequency of complaints, e.g. a single event or a regular occurrence;
- Knowledge of potential sources within the installation (cross referenced with details of any plant problems, the wind direction of the installation and where the complaint was received, distance of the complaint to the site); and
- Knowledge of potential sources other than the installation (cross referenced with the wind direction of installation and where the complaint was received, distance of the complaint to the site).

The last two factors are necessary to confirm whether the WTS is indeed the source of the pest, rather than other potential sources in the area.

In regard to complaints of fly infestations, it is critical that the correct species of fly found on the waste management site and the complainants` premises is identified, in order to establish:

- Whether the flies are the same in both cases;
- Establish appropriate monitoring techniques; and
- Establish appropriate prevention and control techniques.

With the appropriate training, the main fly species can be identified by the naked eye, using a x10 hand lens.

Detailed assessment may be necessary, either due to the level of complaints or the nature of the pest/vermin problems. In the event that numerous or repeated complaints are to be made, which are substantiated and do appear to indicate that there is a systematic fault with the site management system or the pest contractor.



6.0 COMMUNICATION

To make this an auditable process, a log of the daily pest assessments and the results of investigations of any complaints will be recorded and will include commentary regarding any unusual pests or vermin observed. Any action taken and the results of communication back to the complainant will also be recorded.

We will engage and communicate with the sites neighbours in order to improve understanding of possible pest and vermin issues. This will include communicating the efforts being undertaken to control pests; and importantly what actions are being taken in response to their complaint.

The Council will establish a Community Liaison Group (CLG), during the construction phase of the project. This Group will also continue through the operational phase and will allow local residents to regularly meet with the site operator to discuss any potential issues arising, thereby allowing issues to be dealt with in an expedient manner. (Further information on the CLG is provided in Appendix F).

Offering credible reassurance and taking complaints seriously are two potentially cost-effective means of mitigating pest issues.

Where appropriate, we will involve the Local Authority Environmental Health Officer and the Environment Agency in complaint investigations.



Appendices



Appendix A Key differences between the common and lesser houseflies

Stage	Feature	Common housefly (<i>Musca domestica</i>)	Lesser housefly (<i>Fannia canicularis</i>)
Size:	Size:	Typically 6-7mm long, but does vary.	Typically 4-6 mm long, but does vary.
Adult	Pattern on dorsal surface of thorax:	Four distinct longitudinal dark lines.	Three indistinct longitudinal dark lines.
	Abdomen colour	Fourth longitudinal vein bends forwards (see below).	Fourth longitudinal vein straight (see below).
	Wing venation:	Fourth longitudinal vein bends forwards (see below).	Fourth longitudinal vein straight (see below).
	Position of wings when at rest:	Projecting out from the sides of the abdomen, giving a delta-shaped outline.	Folded one over the other, directly over the abdomen, giving a more parallel sided outline.
	Adult resting behaviour:	Typically resting in numbers on a range of surfaces within the building, e.g. walls, posts, ceiling etc. Sometimes in large clusters in preferred places.	Even when abundant, tends not to rest in numbers on walls or ceilings. More often resting on the waste materials itself.
	Flight behaviour at source:	Flies very readily and in numbers. Often alighting on or colliding with people within the building.	Males flight is typically jerky circling high up within the building. Very seldom alighting on people.
	Flight behaviour at complainants' premises:	CHF will continually alight on work surfaces, food, walls, cupboards and people.	LHF normally flies in jerky circles within the room, often high up and around hanging objects occasionally alighting on light shades or pelmets etc. It seldom alights on people or food.
Larva	Appearance:	White-ish, smooth, maggot appearance. Active wriggling behaviour, often in clumps, just beneath manure surface. Normally in wetter manure. Easy to see when manure disturbed.	Dull grey-brown, spiky exterior. Inactive, and seldom clumped. Normally in wetter manure. Needs careful and close examination of the manure to find them.
Pupa	Appearance:	Smooth, barrel shaped, from tan, through chestnut-brown to almost black in colour, depending on maturity. Normally in drier manure. Easy to find.	Dull grey-brown, spiky exterior. Normally in drier manure. Needs careful and close examination of the manure to find them.

Stage	Feature	Common housefly (<i>Musca domestica</i>)	Lesser housefly (<i>Fannia canicularis</i>)
Overwintering behaviour	Behaviour	<p>This species cannot hibernate. It can only overwinter in warm locations, e.g. in pig farrowing units, or intensive poultry layer sites, where it continues breeding.</p> <p>Flies at cooler sites, e.g. free-range poultry units, will die out each winter, and so have to be re-colonised each spring, hence CHF problems in such sites, if they occur, are often later in the summer.</p>	<p>At the onset of winter, LHF will hibernate at the pupal stage. These pupae will hatch the following spring, with the onset of warmer weather.</p>
Dispersal behaviour	Behaviour	<p>Some adult flies will leave the source, and may cause nuisance in buildings up to two or more km away.</p> <p>Dispersing flies are not obvious in intervening areas.</p>	<p>Some adult flies will leave the source, and may cause nuisance in buildings up to two or more km away. Dispersing flies are not obvious in intervening areas.</p>
Typical breeding sites	Behaviour	<ul style="list-style-type: none"> - Waste bins. - Waste transfer stations. - Landfill sites. 	<ul style="list-style-type: none"> - Waste bins. - Waste transfer stations. - Landfill sites.



Appendix B Agrocypa Insecticide COSHH Sheet

Agrocypa Insecticide COSH SHEET

PRODUCT NAME	Agrocypa
PRODUCT No.	FP396
Supplier	Mist-Air Environmental
Emergency telephone	Hillcrest. Penybont. Oswestry. Shropshire. SY10 9JF +44 (0) 18691 828 487

Product Description

Insecticide Micro emulsion Concentrate. 10%

Agrocypa is HSE approved for use on Waste management sites and recycling sites.

Designed for long residual activity, it has no smell, no fire risk, no solvent pollution, no headaches after use. Can be used in the presence of man and animals.

Suitable for homes, schools, offices, and food preparation premises where safety, lack of smell, and efficacy are required. The diluted Insecticide mist is totally harmless to people who come into contact with it, provided the instructions below are adhered to.

Contains 100g of cypermethrin per litre and is one of the most cost effective and stable pyrethroids available, providing a long residual effect when applied to surfaces

Extremely effective for the control of :
Flies, mosquitoes, fleas, wasps, ants, beetles, cockroaches, ticks, and moths.

Instructions for use

- To be used through any suitable spray equipment
- If equipped with dosing pump set dilution at 2% with water.
- Application time 4 minutes

Physical and chemical properties.

- Appearance Clear yellowish liquid
- Odour Mild
- SG: 1.020-1.04
- pH 7.4 diluted 1:100 tap water
- pH value conc. solution 3.0-4.5
- Solubility in water Soluble.

Hazard Identification

Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long term effects in the aquatic environment.

Classification: Xi.R41 N;R51/53

<u>Hazardous Ingredients</u>	<u>EC No.</u>	<u>CAS No.</u>	<u>Content</u>	<u>Classification</u>
• Cypermethrin	257-842-9	52315-07-8	10-30%	Xn.R20/22.Xi.R37. N;R50/53
• Alcohol Ethoxylate		68439-45-2	30-60%	Xi.R41

Instructions for handling the concentrate.

Protective equipment



Read and follow the manufacturer's recommendations.

Wear rubber gloves and suitable protective clothing

If splashing is likely to occur, wear eye protection. Eye wash facilities and shower must be available when handling the product.

Keep out of the reach of children.

Do not eat, drink or smoke when using the product.

Wash contaminated clothing before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet.

First Aid Measures for the concentrate

- Inhalation: Remove to open air. Seek medical attention if symptoms persist.
- Eye contact: Flush well with water. Seek medical attention if symptoms persist.
- Skin contact: Flush well with water. Seek medical attention if symptoms persist.
- Ingestion: Do not induce vomiting. Give small amount of water or milk. and seek medical attention.

Stability and Relativities.

Product is stable under normal conditions. Avoid mixing with other chemicals: strong acids/alkalis and oxidizing agents

Storage precautions

Keep separate from feedstuffs, fertilisers and other sensitive material. Store in tightly closed original container in a dry cool and well ventilated place.

Ecological Information

This product must not enter water discharge system. Inform appropriate authority if large spillage enters drains

May cause long term adverse effects in the aquatic environment

LC 50,96 Hrs FISH mg/l (Cypermethrin) Brown trout: 0.002

Acute fish toxicity. Very toxic to aquatic organisms.

Fire fighting

This product is not flammable. However irritation fumes may be evolved in the event of fire.

Extinguishing media Extinguish with foam, carbon dioxide, and dry powder

Self contained breathing apparatus and full protective clothing must be worn in case of fire

Hazardous decomposition products during fire, toxic gases CO, CO₂

Disposal information

Dispose of empty container by landfill, operated by licensed waste disposal contractor.

Accidental release measures

Personal protection

Wear protective clothing as described in Section 8 of this data safety sheet. Avoid contact with eyes.

Environmental precautions

Product should not enter drainage system, water courses or onto the ground.

Spill cleanup methods

Clean up spillage's with absorbent material and place in a secure container.

Dispose of waste material / containers etc. via an appropriate licensed waste disposal operator.

TOXICOLOGICAL INFORMATION

Toxic dose 1-LD50

Alcohol Ethoxylate >2000 mg/kg (oral rat)

Toxic dose 2-LD50

Cypermethrin > 250 mg/kg (oral rat)

INHALATION

May cause irritation to the respiratory system

INGESTION

May cause stomach pain or vomiting

SKIN CONTACT

Acts as a defatting agent on skin. May cause cracking of skin and eczema.

Prolonged or repeated exposure may cause severe irritation.

EYE CONTACT

Risk of serious injury to eyes.

ROUTE OF ENTRY

Inhalation. Ingestion. Skin absorption.

TARGET ORGANS

Eyes. Respiratory system. Lungs. Skin.

TRANSPORT INFORMATION



UK ROAD CLASS	9	
PROPER SHIPPING NAME	Environmentally hazardous substance, liquid, N.O.S. (Cypermethrin)	
UN NO ROAD	3082	
UK ROAD PACK GR.	III	
ADR CLASS NO	9	
ADR CLASS	9	Miscellaneous dangerous substances and articles
ADR PACK GROUP	III	
HAZARD NO. (ADR)	60	Toxic or slightly toxic substance. 90
ADR LABEL NO.	9	
HAZCHEM CODE	3Z	
CEPIC TEC® NO.	90GM6-III	
RID CLASS NO.	9	
RID PACK GROUP	III	
UN NO. SEA	3082	
IMDG CLASS	9	
IMDG PACK GR.	III	
EMS	F-A, S-F	
MARINE POLLUTANT	No	
UN NO. AIR	3082	
AIR CLASS	9	
AIR PACK GR	III	

REGULATORY INFORMATION

LABELLING



Irritant



Dangerous to the environment

RISK PHRASES

R41 risk of serious damage to the eyes

R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

SAFETY PHRASES

S2 keep out of the reach of children

S26 In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice

S28 After contact with the skin, wash immediately with plenty of water

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately.

Show label where possible.

S57 Use appropriate containment to avoid environmental contamination.

UK REGULATORY REFERENCES

HSE No. 7508

OTHER INFORMATION

The information contained in this Safety Data Sheet is believed to be true and correct as of the date of issue. The accuracy and completeness of this information and any recommendations, or suggestions, are made without warranty or guarantee. Since the conditions of use are beyond the control of our Company, it is the responsibility of the user to determine the conditions of safe use for this product.

Issued by. M Carter
Revision date 27/06/2012

RISK PHRASES IN FULL

R20/22 Harmful by inhalation and ingestion

R37 Irritation to respiratory system

R41 Risk of serious damage to eyes.

R50/53 Toxic to aquatic organisms, may cause long term effects in the aquatic environment

Disclaimer

This information relates only to the specific material designated and may not be valid for such materials used in combination with any other materials or in any process. Such information is, to the best of the Company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use



Appendix C Mist-Air Odour Neutralizer system

MIST-AIR ODOUR NEUTRALIZER

Manufactured by Mist-Air and used extensively throughout Europe for curing odour issues in waste recycling sites, storage bunkers, landfill sites, etc.

Aqueous fog on its own, absorbs many odorous gases and alcohols.

The water particles absorb airborne gas into a solute, which then sinks to the ground to naturally biodegrade. Once the gas is in a solute it is no longer available to be detected by the olfactory nerves in the nose.

The addition of a 0.25% solution of Mist-Air Odour Neutraliser to the fog reduces the surface tension of each water particle, and increases the natural absorbency by approx 400,000 times.

So adding Mist-Air Odour Neutraliser to the water before it is turned into fine fog, is all that is required to solve 90% of all odour problems .

Completely miscible in water, and guaranteed not to separate and block jets, circulation pipes or filters, preventing sludge in pipelines, water tanks and fittings, a problem which is associated with many essential oil based products.

Because there is such a diverse mixture of odorous gases present in the air it is inevitable that a few gases do not readily mix with water, so a masking agent is added to nullify the effects of these gases to the olfactory nerves.

Unfortunately many products on the market use such powerful masking agents that they cause more complaints than the odours they are trying to mask.

Mist-Air Odour Neutraliser is available with many trace scents including Eucalyptus, Apple, Cherry, Cut Grass, etc.

These are not overpowering, but a delicate blend of trace elements that cause no offence and simply distract the olfactory nerves

There are no COSHH implications with Mist-Air Odour Neutraliser, and it is harmless to animals, insects, humans, plant life, and aquatic life.

Neither does it cause sore eyes and burning throats associated with many deodorants and essential oil based products.

Supplied in 25 , or 1000 litre containers. Shelf life approx. 24 months.

GASES ABSORBED BY MIST-AIR ODOUR NEUTRALISER

1,4,-Diaminobutane	$NH_2(CH_2)_4NH_2$	Crotyl Mercaptan	CH_3CHCH_2SH	Methane	CH_4
1-Propanethiol	$CH_3CH_2CH_2SH$	Dibutylamine	$(C_4H_9)_2NH$	Methylmine	CH_3NH_2
2-Methyl-2-Butanethiol	$(CH_3)_3CSH$	Diisopropylamine	$(C_3H_7)_2NH$	Nitrogen	N_2
Acetaldehyde	CH_3CHO	Dimethylamine	$(CH_3)_2NH$	Nitrogen Dioxide	NO_2 NOX
Allyl Thiol	CH_2CHCH_2SH	Dimethyl Sulphide	$(CH_3)_2S$	Pentanethiol	$CH_3(CH_2)_3CH_2SH$
Ammonia	NH_3	Diphenyl Sulphide	$(C_6H_5)_2S$	Pyridine	C_5H_5N
Ammonium Hydroxide	NH_3	Ethane	C_2H_6	Skatole	C_9H_9N
Argon	Ar	Ethanethiol	C_2H_5SH	Sodium Hydroxide	NaOH
Benzyl Thiol	$C_6H_5CH_2SH$	Ethylamine	$C_2H_5NH_2$	Sulphur Dioxide	SO_2
Butyl amine	$C_4H_9CHNH_2CH_3$	Ethylene	C_2H_4	Thiocresol	$CH_3C_6H_4SH$
Cadaverine	$H_2N(CH_2)_5NH_2$	Helium	He	Thiocresol	$CH_3C_6H_4SH$
Carbon Dioxide	CO_2	Hydrogen	H_2	Thiophenol	C_6H_5SH
Carbon monoxide	CO	Hydrogen Chloride	HCL	Toluene	$C_6H_5CH_3$
Chlorine	Cl_2	Hydrogen Fluoride	HF	Triethylamine	$(C_2H_5)_3N$
Chloro Phenol	C_6H_4OHCL	Hydrogen Sulphide	H_2S		
Chlorophenol	C_6H_5O	Indole	C_8H_7NH		



Safety Data Sheet

To requirements of directive 91/155/EEC

Product Name	Mist-Air Odour Neutraliser	Exposure controls & personal protection	
Supply Company	Mist-Air Environmental. PO Box 10, Oswestry, Shropshire SY10 9JF Tel : 01691 828 991/828487 Fax: 01691 828 499 Email: Info@Mist-Air.Co.Uk	Respiratory protection	Not necessary
Emergency	01691 828 487	Eye protection	Wear goggles
Composition	Sophisticated blend of surfactants CAS. No./N/A UN. No N/A	Hand protection	Wear gloves when handling concentrate
Hazards	Adverse health effects: Category H Innocuous	Industrial hygiene	No special precautions
Risk phrases	R22 Harmful if swallowed	Physical & Chemical properties	
Safety phrases	S37/39 Wear suitable gloves and eye/face protection for handling the concentrate	Form	Liquid
First Aid Measures for Concentrates		Colour	Light straw
Inhalation	None	Change in physical state	None
Eye contact	Irrigate eyes with copious amounts of clean water. Seek medical advise is symptoms persist	Odour	Neutral or apple as requested.
Ingestion	Drink plenty of fresh water. Seek medical advise if symptoms persist.	Density/ bulk density	1.04 (H O=1)
Further information	Mist Air odour neutraliser is classed as innocuous, see attached Ref 1: Toxicology	Viscosity	N/A ²
Fire fighting measures	Non flammable	Solubility	Complete in water
Accidental spillage	Hose down with copious amounts of water. No further action necessary.	pH value	6-8
Handling	Normal industrial standards	Flash point	None
Storage	Ambient temperatures	Ignition temperature	N/A
		Explosion limits	N/A
		Stability & reactivity	
		Thermal decomposition	N/A
		Hazardous thermal	N/A
		Decomposition products	N/A
		Hazardous reactions	N/A
		Toxicology information	See Ref 1 Toxicology. Non carcinogenic
		Ecological effects	
		Fish toxicity	N/A
		Invertebrate toxicity	N/A
		Biodegradation	Fully biodegradable
		Bioaccumulation potential	N/A
		Transport	Not listed as hazardous
		Disposal considerations	Do not put concentrate direct into water courses
		Regulatory information	Classification and labeling based on Directive 91/155/ECC
		Air contamination limits	None specified by UK Health & Safety Executive
		Other information	This product is intended for use in atmospheric odour removal.

Toxicology Information

The product has full E.P.A. U.S.D.A. and U.S. Federal Hazardous Substances Act clearance to be used as an atmospherically dispersed Odour Control Agent. The product is currently being used in the following States: Miami, California, Washington State, Boston Penn., Texas, Tennessee, New York State, Oregon, Michigan, New Jersey. Widely used throughout Europe and UK, specifically for control of airborne odours from landfill, composting, and waste recycling activities.

This product is NOT acutely toxic in all of the areas examined, and no hazard labeling is required.

More specifically we have the following information for you:

In the area of primary **skin irritation** when tested as specified and at the concentrate supplied, this product induced a primary irritation score of 0.25 out of a possible score of 8. Operationally we define this product as having a potential to be slightly skin irritant but would rarely be irritating to people. No labeling is thus required.

In the area of **eye irritation** when tested specified and at the concentrate supplied, this product induced slight eye irritation in two of the six test animals with complete recovery within 48 hours. The irritations were not considered significant (positive) to require labeling.

In the area of **ingestion hazard**, when administered at 15g / kg which is 3 times the dose level as required by the US Federal Hazardous Substances Act, the submitted concentrate did not induce any acute toxicity in the test animals, your product therefore is considered essentially non toxic and no labeling is required.

In the area of **acute inhalation hazard**, the product diluted 1:32 with de ionised water did not induce any acute inhalation toxicity in the exposed test animals after 1 hour dynamic exposure at the maximum achievable concentration of **14.2 mg/l**.

This product was not acutely toxic in the area of acute inhalation hazard at the dilution tested. **No labeling is required for your product at that dilution.**

Based on the ingredients in this composition and their concentrations, this product is according to the conventional method of EEC directive 1999/45/EC classified as: Safe when used as directed.

Ecological Information:

General: This material is unlikely to accumulate in the environment and environmental problems under normal use conditions are unexpected.

This information is to the best of our current knowledge correct and is intended to describe the product only in terms of health & safety and environmental requirements. Since the conditions of use are outside our control, any recommendations or suggestions are made without guarantee and Mist-Air disclaims any liability for loss or damage suffered from use of this information. Customers must satisfy themselves that the product is suitable for a particular purpose. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents.





Appendix D Pest Management Plan Assessment Form



SITA UK Limited - Doncaster Waste Transfer Station Pest Management Plan

Source	Method	On site check	FMP check	Comment
FMP	Manage site activities in accordance to the PMP			
Fly Monitoring	Follow routine monitoring for flies using: monitoring squares and resting counts; <ul style="list-style-type: none"> • Adhesive paper fly catches • Grid counts • Larvae counts 			Specify which monitoring method was used, if applicable.
	Fly species identified.			
	Trigger levels established and followed for the relevant monitoring method/s to initiate insecticide control.			Specify the trigger level for each monitoring method used, if applicable.
Infrastructure	Buildings are in good condition and kept well maintained			
	Windows and doors are proofed as much as possible to prevent escape of flies.			
	Containers used are covered, locked, and leak proof.			
Waste Management	Pre Acceptance Check - including checks with previous waste holders that fly management techniques are in place there.			To include waste stream assessment.
	Waste rejection – Waste visually checked by the weigh clerk on arrival and where waste load is not in line with accepted waste types under the environmental permit or is deemed heavily infested with flies, it will be rejected. Rejection load form to complete, make note of the load rejection will be made in the site diary.			
	Vehicles carrying wastes to and from the site can be carrying fly infestation with them. Vehicles to be			



SITA UK Limited - Doncaster Waste Transfer Station Pest Management Plan

Source	Method	On site check	FMP check	Comment
	cleaned and disinfected on a regular basis or as required.			
	Waste Retention times should be minimised and tipping areas alternated to ensure all waste is removed.			
	Waste is checked on-site for fly larvae before transporting it off-site.			
	If waste is infested ensure it is treated and checked on-site for fly larvae before transporting it off-site.			
	Vehicles bringing waste to and from the site are covered.			
Housekeeping	Spillages and accumulations of waste are cleaned up as soon as possible, including in hard-to-reach areas. Records - (action taken, site diary, fly contaminated load log sheet, treatments applied)			
Chemical control options	Insecticide baits are used.			
	Insecticide space treatments are used.			
	Residual insecticide surface treatments are used.			
	Larvicides are applied to waste where appropriate.			
	Larvicide applications are targeted to infested areas.			
	Insecticide products are rotated to reduce risk of resistance.			
Incident response	Procedures are in place to deal with complaints from the public or neighbouring properties			



SITA UK Limited - Doncaster Waste Transfer Station Pest Management Plan

Source	Method	On site check	FMP check	Comment
Communication	Should problems be noted on site and are likely to impact on local residents, a note informing local neighbours should be issued.			



Appendix E Waste Transfer Station Fly Monitoring Record



SITA UK Limited - Doncaster Waste Transfer Station Pest Management Plan

Location of monitoring points:

Adults

Larvae

- | | |
|--------|--------|
| 1..... | 1..... |
| 2..... | 2..... |
| 3..... | 3..... |
| 4..... | 4..... |
| 5..... | 5..... |
| 6..... | 6..... |

Name of person responsible for fly monitoring:

Date:



Appendix F CLG Information

Community Engagement

A community engagement plan has been developed. The following sections summarise the principles of the plan.

Best Practice

Wherever possible and appropriate, the communication plan will take into consideration all existing advice which has been made available to local authorities, follow all relevant guidelines, adhere to the same terminology and key messages and take heed of lessons learned.

Key Stakeholder Identification

Identifying the target audience through key stakeholder identification will assist the success of the communication plan and the communication tools to be utilised. To be successful, a wide range of stakeholders will be identified and engaged. It will not be assumed that all stakeholders will be reached through the same communication channels with appropriate channels developed for all stakeholders.

Communication tools

Communication tools are important to the success of the communications plan and a variety of communication tools will be utilised to ensure that coherent communication is achieved with the targeted audience. The following are some of the communication tools which may be utilised to involve and inform the community: communication meetings and liaison panels, hosting school and other community group visits; production and promotion of information leaflets; providing community support and funding; and working in partnership to promote ideas like waste minimisation.

Communication Plan

The communication plan will cover the three stages of the proposal, preconstruction, construction and operation the objective of each phase are summarised below.

Pre-Construction

- Ensure the communities affected by the construction have a proper and appropriate forum to express their views and keep the community informed on construction progress.
- To ensure smooth handover between the planning and construction phases.
- To provide an on going mechanism for two-way communication.
- Create awareness involving community and schools.
- To cultivate positive open relationships with key stakeholder groups.
- To promote the work of the sites and role within the local community.

Construction

- Ensure the communities affected by the construction have a proper and appropriate forum to express their views
- Keep the community informed on construction progress

Operation

- Maintain Commitments and Standards

- Maintain Inclusion and Access
- Provision of Information
- Dealing with enquiries and complaints
- Dealing with information arising from any occasions that may have an element of publicity