AF Pinkerton & Partners
Blackbirds Farm
Aldenham
Watford
WD25 8BS

# **Environment Management System For Composting Operations**

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# 1 GENERAL DESCRIPTION OF FACILITY AND PROCESS

# 1.1 SPECIFIED WASTE MANAGEMENT OPERATIONS

# **Revision History**

Issue Date	Author	Summary of Changes
Ver 2	AP	Update and review

#### 1 GENERAL DESCRIPTION OF FACILITY AND PROCESS

The process is slightly unusual in that it operates under an exemption and 2 SR2011No1 permits.

All compost produced is used on the farm. The process is certified to PAS100QP and therefore compost is applied as a product. This EMS should be read in conjunction with the SOP.

Green waste is collected predominantly by AF Pinkerton's own haulage fleet thereby providing very good control on input quality and delivered to the exempt processing area on the main farm at Grid Reference TQ 14575 99838. The T6 exemption allows the process of up to 500 tonnes of waste in any 7 day period and to be stored for up to 3 months. In reality shredding takes place once some 300 tonnes is on site.

Once green waste is shredded it is then moved to one of the permitted composting sites, where the actual composting takes place. When complete it is screened and then either spread immediately or stored at an appropriate field location for later application.

#### 1.2 SPECIFIED WASTE MANAGEMENT OPERATIONS

#### 1.2.1 Reception area

Fresh Green Waste is tipped in the reception area on the main farm at Grid reference TQ 14575 99838

#### Composting areas

Location details for the site:	Grid Ref:
Broad Field Blackbirds Lane	TQ14194 99626
Aldenham	Permit No:
Watford	EPR/MB3533DF
	(WML 104440)

Location details for the site:	Grid Ref:
School Field Aldenham	TQ14071 97957
Watford	Permit No:
	EPR/JB3137RJ
	(WML 104915)

# 1.2.2 Summary description of the waste management operations

- The sites will receive shredded green waste processed from the reception area at the main Blackbirds Farm address. This will be transferred by tractor and trailer to the site(s) for composting.
- 2. Composting process will take place as per the SOP to ensure compliance with PAS100QP

3. Tonnage of active compost will be restricted to 500 tonnes at any one time on any one permit.

#### 1.2.3 Types of wastes acceptable for composting

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Table 1: Permitted feedstocks

WASTE CODE	DESCRIPTION OF WASTE
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 03	plant tissue wastes
02 01 06	horse manure and farmyard manure only
02 01 07	biodegradable waste from forestry only
02 01 99	fully biodegradable animal bedding
17	CONSTRUCTION AND DEMOLISTION WASTES (INCLUDING EXCAVATED SOIL)
17 05	Soils (excluding excavated soils from contaminated sites), stones and dredging spoils
17 05 06	plant tissue waste from inland waters only
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES)
20 01 01	paper and cardboard (excluding veneers, plastic coatings or laminates)
20 02	Garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste plant matter only

In reality almost all the waste comes in as 20 02 01 and a limit of 500 tonnes at any one time on each site:

# 1.3 HOURS OF OPERATION

The site will operate during the following hours: -

Monday to Friday 7.30 am to 5.00pm Saturday 8am to 12.30pm

Sundays and Bank Holidays Closed

# 1.4 STAFFING AND UNDERSTANDING OF REQUIREMENTS OF PERMIT CONDITIONS

# 1.4.1 Management

- 1. Alistair Pinkerton and Graham Choake are the Technically Competent Managers ("TCM") for the site; they both hold Level 4 (COMP4) treatment of biodegradable waste. The requirement is for a TCM to be present for at least 8 hours per week. Graham is the site manager. TCMs are aware of their requirement re 'Continuing Competence.
- 2. If neither TCM is available for the minimum required period, an alternative TCM will provide management cover. Responsibilities of the TCM include all overall supervision/responsibility for work carried out on the site, ensuring compliance with permit and planning conditions, and liaison with the Environment Agency, other regulatory bodies and local residents, where appropriate in conjunction with AF Pinkerton.

3. The Site Manager will have responsibility for the day to day operations of the site, ensuring SOP and EMS are adhered to, to oversee the composting schedule, report any problems to the TCM and specialist contractors. He/She will also be responsible for checking the detail on the Duty of Care documentation, keeping all records up-to-date, checking in all visitors to the site and issuing Health and Safety Instructions.

#### 2 SITE ENGINEERING FOR POLLUTION AND PREVENTION CONTROL

#### 2.1.1 General

Broadfield is within ground protection zone 2 and is therefore on a concrete pad with a sealed drainage system.

School Field it on compacted hardcore base as is outside GPZ.

# 2.1.2 Waste acceptance

Green waste is collected by AP's own fleet and drivers are trained to ensure green waste is clean and free from visible contamination when loading from HWRC. When they arrive back at Blackbirds they drive over the weighbridge and leave a copy of the ticket in the weighbridge hut along with the transfer note, ensuring correct details are on all tickets (EWC, SIC, source etc. When they tip the load in the reception area, they check quality as it is discharged for any obvious contamination. If the driver has any concern on quality of delivered material, he/she will immediately inform the site manager who will then determine if the load needs to be rejected or other course of action.

Once shredding takes place it is taken by tractor and trailer to one of the permitted composting sites. Several loads are weighed to provide average weight (which is typically 15 tonnes) and then total number of loads are recorded to determine actual initial tonnage on the compost site. Interestingly there is significant mass reduction from initial loads delivered to the clamp area and post shredding. Typically if 200 tonnes is delivered to the site over a week then shredded it has reduced to some 150 tonnes.

# 2.1.3 Site inspection

 The reception area for fresh green waste and the 2 composting sites will be inspected on a daily basis as per table below to ensure exemption and permit compliance. Inspections are recorded in the site diary.

# 2.1.4 Summary of Maintenance and Inspection

1. The TCM and Site Operator will inspect the site. The following Table outlines a programme for inspection, cleaning and maintenance of the site installations.

Table 2: Programme for inspection

Equipment	Inspection Schedule	Look for	Responsible Person	Repair and Replacement Timescale, where possible
Surfaces	1x daily	State of repair and damage	Site Operator	To be agreed between the site and the EA depending on scale and impact of damage.
Information Board	1 x each week	Damage and up- to-date information	Site Operator	7 days
Fire Equipment	1 x each week visual	Visual damage	Site Operator	3 days
	formal	Full check of working order	Specialist	7 days
Vermin and pests	Daily	Inspection and treatment as needed	Site Operator, TCM and specialist contractor	Immediate spraying or pest control contractor call out
Water Collection System (lagoon)	Weekly	Capacity remaining	Site Operator	Remove excess within 5 days

# 3 SITE SECURITY

- 1. Existing fences and hedges around the perimeter fields enclose the composting site. Electronic access gates into the main farm protect the site at all times.
- 2. The Site Operator will ensure that the gates are locked when leaving site.

# 4 SITE OPERATIONS

# 4.1 CONTROL OF MUD ON HIGHWAY

Once shredded the green waste is moved via tractor and trailer to one of the composting sites. Broadfield is within the main farm complex so there are no movements on the highway network. School Field does involve some use of the highway network however the tractor trailers remain on hard standing at all times so no mud is transferred onto the highway.

#### 4.2 FIRE PREVENTION AND CONTROL

# 4.2.1 Fire prevention

- 1. An emergency plan detailing the actions to take in the case of outbreak of fire are to be displayed in the main site office and all site operatives to be inducted on this plan.
- 2. A no smoking policy will apply on all areas of the site. Designated smoking areas are located at the main site.
- The Agency accept that operating composting sites to the PAS100QP standard is best practice and a specific FPP is not required.

# 4.2.2 Fire fighting /suppression equipment

1. There will be fire extinguishers placed in the main Site Office and in site machinery

#### 4.2.3 Procedures to be followed on detection of fires

- 1. Any fire within the licensed area will constitute an emergency. The person discovering the fire must notify the TCM and the Farm Manager immediately.
- If there is a fire, it should be tackled using the fire extinguishers/hoses, provided if it is safe
  for the Operator to do so. Smouldering and/or burning waste shall be removed from the
  heap and laid out to enable its extinguishing. Burnt waste should be disposed of properly.
- 3. If it is unsafe for the Operator to control the fire, the Fire Brigade shall be contacted.
- 4. The Site Manager will notify the Environment Agency as soon as possible and record the incident in the site diary.

# 4.2.4 Shredding of waste

- 1. Shredding of the green waste will take place on the impermeable surface at the reception area by use of either a high or slow speed shredder.
- Operators will remove physical contaminants and oversized material from the green waste, wherever possible and store such in the container available specifically for this purpose.
- The Company will ensure controls are in place to minimise dust and odour emissions during the shredding process.

# 4.2.5 Formation and Turning of Windrows

- 1. Operators will transport the shredded green waste to one of the compost sites by tractor and trailer. It is important to stress that on average for each 100 tonnes of fresh green waste delivered to site once shredded *typically within 7 days of delivery* has reduced to 75 tonnes, due to moisture loss etc. Once this is delivered to the compost site and goes through the sanitisation and stabilisation phases, it further reduces to some 50 tonnes over the typical 6 week period.
- Operators will form green waste into windrows/static piles of approximately 2.5 metres high and 5 metres wide. The length of the windrow will be determined by the availability of space on the composting pad.
- Windrows will be turned at regular intervals using a windrow turner to ensure the thorough mixing of material, to avoid anaerobic conditions and maintain the correct temperatures and

moisture conditions. The size of the windrow reduces over the turning period to a height of approximately 1.8m.

#### 4.2.6 Monitoring

1. Windrows/static piles will be monitored for temperature and moisture on a daily basis during the active phase and then weekly during the rest of the actively managed compost stage. The results of these will be recorded on the "batch monitoring" sheets as per the SOP.

#### 4.2.7 Screening of compost

- 1. The material will be screened at a size to suit product usage once it has reached the end of its process or as required for its end use.
- 2. Mobile kit will be brought to site to carry out the screening process.

#### 4.2.8 Product Quality

- The product is certified to PAS100:2011QP
- 5 AMENITY MANAGEMENT AND MONITORING

#### 5.1 MONITORING OF METEOROLOGICAL CONDITIONS

1. The Site Operator will record the weather conditions in the site diary on a daily basis.

# 5.2 CONTROL, MONITORING AND REPORTING OF AERIAL EMISSIONS OF DUSTS, FIBRES AND PARTICULATES

- 1. Operators will monitor the site for dust daily and will record significant dust problems and dust suppression measures in the Site Diary kept in the weighbridge office at the main site.
- If the Site Operator receives complaints about dust, the Site Operator will examine the complaint and will take any appropriate actions, eg damping down areas, etc as soon as possible.

# 5.3 CONTROL AND MONITORING OF ODOROUS EMISSIONS

- 1. The Operator will assess the potential for odour generation from every site activity and amend procedures if they could cause detriment to the local community wherever possible.
- 2. The Site Operator will undertake daily inspections of the site and surrounds, wherever possible as per the Site Odour Management Plan. If the Operator detects unacceptable odours off-site, actions will be taken to minimise odours as stated in the Site Odour Management Plan.
- 3. Odorous loads will not be accepted on site.

# 5.4 CONTROL AND MONITORING OF NOISE

- 1. The location of the site means the likelihood of causing noise nuisance is unlikely.
- 2. The Site Operator will maintain plant and equipment as recommended by the manufacturers.

The Operator will ensure that all vehicles have appropriate silencers fitted.

#### 5.5 CONTROL OF PEST INFESTATIONS

- Waste delivered to site will be inspected to ensure that pest infestations are not imported to the site in deliveries.
- 2. The Site Operator will carry out a visual inspection for signs of pests daily and report evidence of pests to the Operations Manager immediately.
- 3. Bait boxes will be located around the site to control vermin if required and will be inspected daily and topped up as required.
- To control the infestation of flies, bait boards and red top fly bags may be supplied by a specialist contractor and installed around the site if required.

#### 5.6 CONTROL OF SCAVENGING BIRDS AND OTHER SCAVENGERS

- Composting windrows or finished compost should not attract scavenging birds or other scavengers.
- If scavengers do become a problem an expert in the control of birds and pests will be employed to rectify the situation.

#### 5.7 CONTROL OF LITTER

- 1. Operators will inspect the site and surrounds daily, and, wherever possible, collect any litter by the end of the following working day. Priority will be given to off-site areas, with the tidiness of the site attended to once external areas are clear.
- Operators will place plastic and windblown litter into plastic bags before placing in the disposal container.
- Operators will place contamination removed from green waste or other feedstocks before shredding in a designated container.
- The Site/Farm Manager will investigate any complaints received about litter and will carry out any remedial actions as soon as possible.

# 6 SITE RECORDS

- The Site Operator will keep daily waste records at the main office. All logs are to be kept in the site office.
- 2. All weighbridge tickets and information are kept at the main office.
- 3. All other records that may be required will be kept in the main office.
- 4. The TCM will verify the Site diary on a regular basis to comply with applicable legislation.
- Quarterly returns will be submitted to the Environment Agency showing the quantity of waste entering and leaving the site each month.
- 6. The Site diary will record the following:
  - Actions taken in relation to non-conforming waste arriving at the site
  - Severe weather records
  - Contractors on site
  - Emergencies on site
  - Site inspections by the Farm Manager and/or TCM
  - Any remedial works undertaken

- Actions taken in relation to odour, dust, noise, vermin or litter nuisance
- Other relevant information
- 7. Weighbridge records will be maintained for incoming and outgoing wastes as follows:
  - Waste Type
  - European Waste Code
  - The quantity in tonnes
  - Date and Time received/removed
  - Customer
  - Vehicle registration number
  - Waste Transfer Notes to include SIC Codes
  - Any comments

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# 8. Operator Training Records

Details of operators' training will be retained in the main office. Operators will also read and understand the manufacturer's operating manual before using machinery.

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- 9. Vehicle Inspection and Maintenance Records
  - Daily checklists will be completed for all plant and machinery operating on site. These daily checklists will record all faults and breakdowns which should be reported to the Farm Manager daily and are kept in the site office. These faults and repairs will also be recorded in the site diary.

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# 10. Batch Monitoring Records

These sheets record the details of windrow formation and monitoring, such as date windrow was formed, temperature monitoring, turning, moisture monitoring, addition of water and date windrow is screened. These sheets are kept in the site office.