


OLD OIL WELL PAD SITE
DUST MANAGEMENT PLAN

T.G. PORTER

JUNE 2020



SUMMARY TABLE	
SITE:	Old Oil Well Pad Site – Dust Management Plan
CLIENT:	T.G. Porter
DATE:	June 2020
REFERENCE	IV.176.20
DEVELOPMENT PROPOSAL: Operation of a Non-Hazardous Waste Wood Storage Facility.	

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Date:	June 2020	
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1.0 REVIEW

1.1 Document Review Procedures

This Dust Management Plan is to be reviewed every year or when required by a change in operations, breach of permit, or substantial dust emissions.

Table 1: Document Review

Date of Review	Comments	Name and Signature of Reviewer	Date of Next Review
June 2020	Plan Prepared		June 2021

2.0 INTRODUCTION

2.1 Report Context

This document has been prepared by Ivy House Environmental Limited (Ivy) on behalf of Mike Thompson Partnership Limited as part of the management of the proposed Wood Waste Transfer Station at New Farm, Hampshire to be operated by T.G.Porter (the operator).

The operator proposes to undertake the storage of pre-prepared waste wood fuel bound for Energy from Waste Facilities (EfW). The waste is brought to the site through HGV delivery vehicles. The waste materials will be placed in a designated reception area, so that they may be physically inspected before being removed to the relevant storage stockpile.

The storage activities will take place as shown on EMS Figure 2.

This Dust Management Plan has been produced in accordance with Environment Agency's 'Dust & Particulate Emission Management Plan' Template. The report identifies the potential causes and effects of dust and describes the measures that will be in place to prevent the occurrence of dust at the surface.

This document forms part of the site's Environment Management System (EMS) and will be reviewed on an annual basis and in the event of any dust-related incidents.

3.0 SITE OPERATIONS

The site is located approximately 9.5km southeast of the outskirts of Basingstoke and 5.0km north of the outskirts Alton. The site is centred at approximate National Grid Reference (NGR) SU 72828 45982.

The site location and the environmental permit boundary is shown on EMS Figure 1.

Access for staff and visitors to the site is achieved via Froyle Lane, located to the east of the site, or Pickaxe Lane, located to the west of the site. The immediate surroundings of the site comprise open farmland. The nearest residential dwelling is located approximately 551m north, northeast of the site in Pickaxe Lane.

The site consists of a waste reception, quarantine and waste wood fuel storage areas. The site layout and the environmental permit boundary is provided in EMS Figure 2.

Waste wood fuel will be brought onto site in enclosed/sheeted vehicles. After initial inspection, vehicles will be directed to the waste reception area where the load will be inspected as it discharges. Once accepted, the material will be moved to the relevant stockpile and a note will be taken of the volume of waste in that stockpile.

No treatment activities will be undertaken on site.

3.1 Operating Hours

The operational hours of the site are detailed within the Planning Permission. They are:

- Monday to Friday – 07:00 – 17:00
- Saturday – 07:30 – 13:00
- Sundays & Bank Holidays – Closed

In practise, as the site only receives, stores and despatches pre-prepared wood waste fuel for a single CHP facility and all loads are pre-booked in and out, the opening hours of the site will be far less than this, the gates only being opened to allow vehicle movements or inspections as required.

As detailed in the Environment Permit Application, T.G. Porter will undertake the following Disposal and Recovery operations, provided for in Annex II to Directive 2008/98/EC of The Council of 19th November:

Table 2: Recovery and Disposal Activities

R/D Code	Activity
R13	Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)

3.2 Permitted Waste Types

Waste types to be accepted into the facility are set out in EMS Appendix 2.

3.3 Waste Acceptance Procedures

The site will comply with the waste acceptance procedures outlined in the EMS.

Every vehicle which transfers waste material that arrives on site, must have a Waste Carriers Licence. Before the waste vehicle arrives on site, a check will be made to ensure that the waste carrier is properly licensed. This information can be checked by the following methods:-

- By phoning the Environment Agency on 08708 506 506 and requesting an instant Waste Carrier Validation Check; or
- Checking online on the Environment Agency's waste carrier register on their website.

Wastes will be characterised, as required under the Duty of Care Regulations, prior to acceptance of the delivery. Non-conforming wastes will be removed off-site for disposal at a suitably licensed facility. Records of the waste characteristics and origin of the waste will be kept in accordance with Duty of Care requirements.

Waste wood fuel will undergo visual inspection and temperature checking during deposition in the waste reception area. Operational procedures at the site will include specific procedures for waste reception, checking and handling of non-conforming loads/items as detailed in T.G. Porter's EMS for the site. These procedures will be developed to ensure that the requirements of the Duty of Care Regulations, the Environmental Permit Regulations, IED and any other relevant published and finalised legislation are met.

Checks on storage capacity will take the following steps will be followed to ensure that waste accepted on site is done so correctly:-

1. On arrival vehicles will supply the site manager with the relevant paperwork for initial checks. Any discrepancies will be resolved before the waste is accepted on site.
2. All loads will be pre-booked to ensure storage capacity is not exceeded.
3. The vehicle will be directed by the relevant operative to the waste reception area.
4. A visual load inspection will take place as the waste wood fuel is discharged by a technically competent site operative or other designated person, to ensure consistency with the waste transfer note. If this is not possible, the waste will be inspected immediately after offloading in the waste reception area.

5. The waste will be unloaded or tipped in the appropriate area, and then the vehicle will leave the site.

3.4 Unauthorised and Rejected Wastes

T.G. Porter has a clear and unambiguous criterion for the rejection of wastes, together with a written procedure for tracking and reporting such non-conformance, detailed in the EMS. This will include notification to the customer/waste producer. Written/computerised records will form part of the waste tracking system information.

In the event that unauthorised wastes are delivered to the site, the material will be loaded back onto the vehicle that discharged it, if it is possible and safe to do so. If this is not possible, then the material will be quarantined within a designated area and removed from the site as soon as practicable.

3.5 Technical Competence

The site will be supervised by designated technically competent managers who hold the appropriate certificate of technical competence issued by the Waste Management Industry Training and Advisory Board. A copy of the relevant WAMITAB certificates is included in the main permit application documentation.

3.6 Environmental Management System

T.G. Porter will operate their own management system which will ensure that:-

- the risks that dust pose to the environment are identified;
- the measures that are required to minimise dust risks are identified;
- the activities are managed in accordance with the dust management system;
- performance against the dust management system is audited at regular intervals; and
- compliance with the environmental permit.

The dust management system will be reviewed at least once a year or in response to significant changes to the activities, accidents or non-compliance.

3.7 Dust Records

T.G. Porter will keep records of a number of performance indicators and environmental indicators (e.g. activities occurring on site, wind direction etc.). Records will be legible and easily retrievable on request (either in hard copy or electronically). Records will be kept in line with the conditions of the Environmental Permit issued for the site. For example, the following records will be kept:-

- records of potentially polluting events will be kept at the facility during the life of the permit;
- waste inputs to all processes will be recorded 'en masse'; and
- Storage locations and amounts of materials.

The above list is not exhaustive. Records will be kept to satisfy the requirements of the Environmental Permit and all other relevant statutory legislation.

3.8 Incidents and Non-Conformance

T.G. Porter has in place procedures to account for the potential for incidents and non-conformances which may affect the environmental performance of the facility. The procedures as set out below show how any abnormal operation including malfunction, breakdown or failure of plant, equipment or techniques will be dealt with to ensure that normal operation of the facility is regained promptly.

As a minimum, procedures will:-

- detect abnormal operation and investigate the causes;
- assess the information and decide on the appropriate course of action;
- retain normal operation in the short term; and
- prevent against the reoccurrence of the problem in the long term.

As is detailed further in T.G. Porter's EMS, the procedures will ensure that non-conformances are reported, investigated and rectified, and that failures and weaknesses are prevented.

T.G. Porter's EMS provides a means for the management system and the environmental performance of the facility to be evaluated. This will be accomplished through regular workplace inspections and will include, where appropriate, the identification of areas where improvements are required. The regular review of the EMS and its procedures will form an

essential role in ensuring that the systems and procedure remain appropriate to the site activities and legal requirements (including compliance with the Environmental Permit) throughout the life time of the facility.

To assist in the reporting of incidences, T.G. Porter will display a notice at or near the site entrance with the following information clearly visible:-

- Company name;
- Permit number;
- Emergency contact name and the permit holders (i.e. T.G Porter) telephone number;
- A statement that the site is permitted by the Environment Agency; and
- Environmental Agency national number (08708 506 506) and incident hotline number (0800 807060).

3.9 Complaints Procedure and Daily Log

T.G. Porter has in place procedures for any complaints received from the operation of site activities, as detailed in the EMS. As a minimum T.G. Porter will record the following upon receipt of a complaint by either a member of the public or if notified by the Environment Agency. Additionally T.G. Porter will also undertake the following actions upon receipt of a complaint:-

- The site manager will be informed;
- The site boundary and the site of the complaint shall be checked for dust to substantiate the complaint;
- T.G. Porter will review activities occurring on site at the time of the complaint;
- T.G. Porter will review the direction of the wind at the time of the complaint;
- The source of the dust will be traced and remediation action shall be undertaken, including damping down and/or clearing any area or stockpile causing the nuisance;
- The Environment Agency shall be informed;
- Following a substantiated complaint, T.G. Porter will review the dust management techniques, including reviewing the site layout and storage arrangements; and
- T.G. Porter shall report back on the above actions to the Complainant or the Environment Agency as appropriate.

T.G. Porter will also maintain a site diary which will track deliveries to and from the site, note any abnormal weather conditions, any incidences at the site such as dust, noise, odour, spills or discharges or any malfunction with regards to machinery. The daily log shall also record all housekeeping activities. The daily record sheet can be found in Appendix D of this document.

3.10 Accident Management

3.10.1 Mud Debris

The site will comprise concrete hardstanding which will be maintained free of potholes to prevent the pooling of surface water.

Should mud on road be attributable to operations at the site, T.G. Porter will take remedial action (road sweeping, water bowser, washing of vehicles on site) as necessary in accordance with the procedures set out in the EMS and the conditions of the Environmental Permit.

3.10.2 Leaks and Spillage

In the event of any potentially polluting leak or spillage occurring on site, the following actions will be taken.

1. Minor spillages will be cleaned up immediately, using proprietary absorbent. The resultant materials will be placed in a container for off-site disposal to a suitable facility as appropriate.
2. In the event of a major spillage, which is causing or is likely to cause polluting emissions to the environment, immediate action will be taken to contain the spillage and prevent liquid from leaving the impermeable area and drainage system. The spillage will be cleared immediately and placed in containers for off-site disposal. Records of spillages and incidents will be kept on site together with a summary of the remedial action taken.

3.11 Maintenance Procedures

A planned preventative maintenance programme (PPM) is in place within New Farm to cover any plant used on site to minimise the risk to safety, health and the environment by ensuring that all appropriate items and elements within the site are serviced and inspected on a regular basis or to the manufacturers' maintenance schedules.

Details of faults, breakdowns and repairs are documented and records are maintained at the site office. Faults and breakdowns will be investigated and the service schedule revised if necessary.

4.0 DUST AND PARTICULATE (PM10) MANAGEMENT

4.1 Air Quality Management Zone

The site is situated within the North East Hampshire District. A search of the East Hampshire County Council website has identified that the site is not within an Air Quality Management Area.

4.2 Receptors

Sensitive receptors within 1,000m of the facility have been identified in Table 3 below. As the Dust Management Plan looks at the 'worst case' scenario, any receptors at a distance greater than 1 km have not been assessed unless they have the potential to be impacted.

Table 3: Relevant Receptors within 1,000m

Receptor	Direction from Operational Area	Minimum Distance from proposed permit boundary (approx..) (m)
Designated ecological habitats e.g. Ramsars, SAC, SPA, SSSI		
n/a		
Other Designations e.g. National Parks, ANOB, World Heritage Sites		
n/a		
Historic buildings / listed buildings / archaeological sites		
n/a		
Domestic Dwellings		
Pickaxe Lane	S SE	669
Pickaxe Lane	N NE	551
Schools, Shops, Commercial and Industrial		
Mid Hants	N	530
ABC Global Solutions Ltd	N	612
Asset Business Supplies	S SW	540

Farm Land		
Open Fields	N, S, E, W	0
Local Wildlife Sites		
n/a		
Protected Species		
n/a		
Protected Habitats		
n/a		
Surface Water		
River Wey	S	5.2
Groundwater (sensitivity)		
In accordance with the MAGIC website, the site is within a Ground Water Protection Zone III.		

4.3 Dust Management

Source/Pathway

The site manager will be responsible for undertaking all dust management procedures. The site staff will be responsible if the site manager is not available.

The effects of dust may be both immediate and long term, presenting a significant burden for the operator and regulatory agencies. The potential causes of dust are identified within Section 2.2.4 of Sector Guidance Note 5.06 – Treatment of Hazardous and Non-hazardous waste and are reviewed below with reference to EA guidance and provide an assessment of the source and potential pathway for pollution:-

- Open vessels;
- Sampling activities;

- Storage areas (for example bays, stockpiles, lagoons etc);
- The loading and unloading of containers;
- Transferring/bulking up of material from one vessel to another;
- Conveyor systems;
- Poor building containment and extraction;
- Potential for by-pass of abatement equipment (to air or water);
- Spillages;
- Accidental loss of containment from failed plant and equipment; and
- Tanker and vessels manhole opening and other access points.

4.4 Agency Guidelines for Management of Fugitive Dust

The facility is a waste operation under the Environmental Permitting Regulations 2016, and so is subject to Appropriate Measures. The Operator has adopted the relevant measures for dust control as outlined within Agency Guidance 5.06 – Treatment of Hazardous and Non-Hazardous Wastes. The relevant control measures undertaken by the operator are as follows:-

- Ensuring stockpiles are situated within the most sheltered areas of the site;
- Provision of wind breaks if required;
- Ensuring minimal handling of material;
- Covering of all storage areas if required;
- Where dust creation is unavoidable, use of sprays, stockpile management techniques, windbreaks and so on;
- Regular inspection (daily) of all infrastructure shall be undertaken;
- The site is bunded on all sides by a bank of thick trees;

- The waste wood fuel to be stored has been pre-prepared and so carried minimal fine material likely to be a cause of wind-blown dust; and
- Regular housekeeping including cleaning of site equipment shall be undertaken, as and when required.

Additionally the following control measures may be appropriate for controlling dust from a waste facility:-

- Content of material and orientation of long stockpiles in the direction of the prevailing wind;
- Surface roadways; and
- Make sure vehicles stay on paved areas.

4.5 Suspended Solid Benchmark Emission Values

Agency Guidance 5.06 – Treatment of Hazardous and Non-hazardous wastes, sets out the benchmark value for particulate to air for fugitive dust emissions is set out in Table 4 as follows:-

Table 4 – Particulate Benchmarks

Activity	Benchmark Value
Fugitive emissions from equipment, plant buildings, storage yards and materials handling	"No visible dust" criteria may normally be appropriate

Agency Guidance note M17 sets out emission guidelines for waste sites to ensure that nuisance dust will not impact on sensitive receptors. M17 sets out that dust is not likely to cause a nuisance at sensitive receptors provided it does not exceed $200 \text{ mg m}^{-2} \text{ day}^{-1}$. Monitoring is normally undertaken using a Frisbee Gauge.

4.6 Wind Speed and Direction

The specific risk assessment completed for Dust Fugitive Emissions is detailed in Table 5 below. In many cases there is an inter-relationship between this risk assessment and meteorological conditions, where relevant this has been identified. The pathway is determined by the location of the receptor relative to the site, the distance from the site boundary (m) and the frequency (likelihood) the prevailing wind will blow in the direction of the receptor as determined by historical wind rose data at Odiham, located approximately 2.9 miles north of the Site (www.windfinder.net).

The risk assessment in Table 6 represents the risk of exposure to a hazard before mitigating controls are put in place. The probability of exposure is therefore not necessarily a reflection of the severity of the impact on the receptor, which may not be sensitive to the hazard. The severity of the unmitigated consequence presumes the receptor has been exposed to the hazard.

However, if the receptor is unlikely to be exposed, then the overall unmitigated risk is low and vice versa. The mitigated risk is the residual risk presented by the hazard after control measures have been instigated.

This is the most realistic representation of the risk as effective controls will be maintained under the requirements of the environmental permit and T.G. Porter's Environmental Management System (EMS).

4.7 Proposed Monitoring Requirements

M17 sets out that dust should be monitored at sensitive receptors. As the site does not have any sensitive receptors within relevant distance of the site, no monitoring is considered to be required.

If it is the case that significant dust is perceived, the site procedures and layout will be reviewed.

If monitoring is required, it would be continuous and the gauges would be analysed monthly by a suitably qualified scientist who is accredited to MCerts level. The results shall be made available to the Environment Agency upon request.

Table 5 below outlines the risk, pathway, receptor assessment and provides management techniques to control/mitigate each of the risks.

Table 5: Dust Emissions Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
To Air						
Site Surfaces and Equipment	Site Workers Occupiers of Domestic dwellings listed in Table 3. Habitats in Table 3. Industrial and commercial premises listed in Table 3.	Atmosphere	<p>The site will employ good housekeeping criteria and shall be on a constant lookout for any dust build up or any spills that could lead to fugitive emissions. Any build-up of dust noticeable on surfaces and equipment will be removed as soon as is practicable utilising a brush and shovel.</p> <p>All site plant shall be inspected at both the start of the work day and the end of the work day to ensure that there is not a build-up of particulates on surfaces and equipment.</p> <p>Sufficient runoff from the site yard will be retained to facilitate dust suppression and cleaning of equipment. Should there be an insufficient amount of water available, the site will utilise mains water.</p> <p>The Site Manager will be responsible for checking wind strength and direction and for maintaining the housekeeping schedule, if the site manager is not available, then a suitably qualified person will be designated for that role.</p> <p>The Site Manager or designated person will also consider stopping operations at the site if operations are found to be causing unacceptable fugitive emissions (as substantiated by the Environment Agency).</p>	<p>Dust could potentially reach the nearby dwellings when a strong wind blows in their direction.</p> <p>Management actions should prevent this happening.</p>	<p>Smothering.</p> <p>Nutrient enrichment.</p> <p>Nuisance – dust on cars, clothing, vegetation, etc.</p>	Not significant.

Vehicle Movements	<p>Site Workers</p> <p>Occupiers of Domestic dwellings listed in Table 3.</p> <p>Habitats in Table 3.</p> <p>Industrial and commercial premises listed in Table 3.</p>	Atmosphere	<p>All trucks delivering waste to and from the site will be sheeted to prevent dust being generated while waste is in transit.</p> <p>Water from the onsite water tanks will be used to dampen the site road if deemed necessary. Sufficient runoff from the site yard will be retained to facilitate dust suppression. If sufficient water is unavailable, the site will consider employing a road sweeper.</p> <p>A speed limit of 10mph will be enforced onsite to prevent the disturbance of dust.</p> <p>Visual monitoring will be undertaken in accordance with permit conditions and a note will be made in the sites daily log.</p>	<p>Dust could potentially reach the nearby dwellings when a strong wind blows in their direction.</p> <p>Management actions should prevent this happening.</p>	<p>Smothering.</p> <p>Nutrient enrichment.</p> <p>Nuisance – dust on cars, clothing, vegetation, etc</p>	Not significant.
Waste Reception Area	<p>Site Workers</p> <p>Occupiers of Domestic dwellings listed in Table 3.</p> <p>Habitats in Table 3.</p> <p>Industrial and commercial premises listed in Table 3.</p>	Atmosphere	<p>If waste which is received into the waste reception area will give rise to dust emissions, the waste will be dampened down to control fugitive emissions and moved to the relevant storage area as soon as is practicable.</p>	<p>Dust could potentially reach the nearby dwellings when a strong wind blows in their direction.</p> <p>Management actions should prevent this happening.</p>	<p>Smothering.</p> <p>Nutrient enrichment.</p> <p>Nuisance – dust on cars, clothing, vegetation, etc.</p>	Not significant.
Storage of waste	<p>Site Workers</p> <p>Occupiers of Domestic dwellings listed in Table 3.</p> <p>Habitats in Table 3.</p>	Atmosphere	<p>Materials will be stored in accordance with EMS Figure 2.</p> <p>Sufficient runoff from the site yard will be retained to facilitate dust suppression, should there be an insufficient amount of water available for dampening wastes, or cleaning of storage surfaces and facilities, the operator will either use mains water or may buy in water.</p> <p>If it becomes apparent that the storage of the wood waste will cause an impact on nearby receptors, the site manager or person who has designated authority, may determine</p>	<p>Dust could potentially reach the nearby dwellings when a strong wind blows in their direction.</p> <p>Management actions should prevent this happening.</p>	<p>Smothering.</p> <p>Nutrient enrichment.</p> <p>Nuisance – dust on cars, clothing, vegetation, etc</p>	Not significant.

	Industrial and commercial premises listed in Table 3.		<p>operations are to cease with regards to receiving wastes. If this situation occurs, delivery vehicles will be redirected from the site.</p> <p>If dust from stockpiles does become an operational issue at the site, the site manager will review the site infrastructure.</p>			
Handling of Materials (transfer)	<p>Site Workers</p> <p>Occupiers of Domestic dwellings listed in Table 3.</p> <p>Habitats in Table 3.</p> <p>Industrial and commercial premises listed in Table 3.</p>	Atmosphere	<p>The operator will ensure drop heights are minimised while transferring material around the site, including when depositing material within the reception area and stockpiling.</p> <p>If it is deemed that the handling of wastes is likely to cause an unacceptable impact at offsite receptors, the operator will suspend all handling of materials and delivery vehicles will be diverted.</p> <p>All waste delivery vehicles that arrive on site will be covered (sheeted) or be within fully enclosed vehicles, as will all vehicles that remove waste from the site.</p> <p>Visual monitoring will be undertaken in accordance with permit conditions and shall be recorded in the sites daily log.</p>	<p>Dust could potentially reach the nearby dwellings when a strong wind blows in their direction.</p> <p>Management actions should prevent this happening.</p>	<p>Smothering.</p> <p>Nutrient enrichment.</p> <p>Nuisance – dust on cars, clothing, vegetation, etc.</p>	Not significant.
Mud						
Mud from vehicle movements	Local roads	Tracked on vehicle wheels.	<p>The proposed activity is unlikely to lead to mud from vehicle movements due to the housekeeping measures in place.</p> <p>The site will be fully concreted and the material to be accepted and removed is inherently non-dusty.</p> <p>In the event that mud is deposited on the road, a road sweeper may be utilised.</p>	Unlikely due to measures in place	<p>Local nuisance.</p> <p>Mud on roads is unsightly and can increase the likelihood of road traffic accidents.</p>	Not significant.
Litter						
Windblown litter	<p>Receptors identified in Table 3.</p> <p>Protected Habitats in Table 3.</p>	Air	<p>The proposed activities are unlikely to cause litter.</p> <p>A vigilant watch for litter will be undertaken by site operatives. In the unlikely event that litter is generated by the activity, the Site Manager will implement a litter collection as necessary.</p>	Unlikely due to measures in place.	Local nuisance	Not significant due to nature of waste received and management techniques employed.

5.0 CONCLUSION

The Old Oil Well Site is operated by T.G. Porter and is not situated within an air quality management zone. In addition, the site is not situated within close proximity to any sensitive receptors.

The information contained within the assessment detailed in Table 5 above indicates that site activities are unlikely to cause any disturbance due to the storage and management techniques employed by the applicant. The management techniques will ensure that any fugitive emissions will be adequately contained and managed.

Due to the above measures, we conclude that it is unlikely that local receptors will be impacted by the proposal.