Depot Wet Waste Bay
Fire Prevention Plan (FPP)

South Molton Depot

South Molton Highways Depot, Pathfields Industrial Estate, South Molton, EX36 3LH

Revision Control Schedule					
Rev	**Date**	**Description**	**Prepared By**	**Checked By**	**Approved By**
00	November 2020	Report Created	Hanna Dolling	Oliver Beech	Gary Williams
01	May 2021	Updates to branding and updated section 5.4	Hanna Dolling	Oliver Beech	Gary Williams
02					
03					
04					
File Location:	Devon Highways Groups Page				

Contents

Named Holder Details of the FPP
Name: Gary Williams
Position: Operations Manager

(Non-controlled copies of the management plan will be issued to Milestone 's on-site management team and suppliers).

Useful Links

Information	Link
South Molton Depot Environmental Management Plan	Click here
South Molton trade effluent discharge consent	Click here
Wet Waste Bay Method Statement and risk assessment (H001dh & WWBSM01)	Click here
Devon Highways Groups Page System	Click here
Depot Wet Waste Bay Management Plan	Click here
Depot Wet Waste Bay Odour Management Plan	Click here
Depot Wet Waste Bay Dust Management Plan	Click here

1 Fire Prevention Plan Scope

Milestone staff at this depot are required to work in a manner that reduces fire risk in relation to the wet waste bays. To achieve this, the site team will comply with the contents of this Fire Prevention Plan which outlines the key receptors, responsibilities, arrangement, systems and processes in place to manage potential fire risks whilst dewatering and storing gully waste. This document has been produced as it is a requirement of the bespoke waste permit application.

The objectives of this document are:

- To document and communicate control measures which need to be implemented to manage potential fire risks whilst undertaking these waste activities

2 General Information

2.1 Brief Description of Works

The wet waste bays are used to decant water from multiple highway maintenance activities, including gully emptying, cattle grid cleaning and street cleaning. This new infrastructure is designed to channel the wastewater through a series of treatments before passing through an oil interceptor and discharging into the foul sewer. A trade effluent discharge consent is in place authorised by South West Water. The local authority responsible for the area is North Devon Council.

The solid waste (EWC 20 03 03) is taken to a facility licensed to accept the waste code.

There is a risk assessment and method statement (RAMS) (H001dh & WWBSM01) for the works.

2.2 Staff, Welfare and Operating Hours

The wet waste bay will generally be operational during standard depot hours, however there may be times where they are operated/maintained out of hours or at weekends. This includes supporting emergency works.

2.3 Site Security

The security of a site is important, not only for the protection of the environment, but to prevent unauthorised access and fly tipping. During non-working hours the gully wagon will park in front of the bays to prevent unauthorised waste being tipped on / mixed with gully waste arisings. The whole perimeter of South Molton Depot is secured with metal palisade fencing. The main depot gates are located at the front of the depot and secured with a lock and key. During out

of hours, holiday or non-working periods only permitted key holders will be able to grant access to the depot. Access controls are managed by the Depot Site Agent.

In daytime hours the depot has sufficient staff on site to manage access and security arrangements, preventing unauthorised access.

2.4 Environmental Training

All staff that will operate the wet waste bays will receive a briefing on the RAMS, which will be recorded on the TBT record sheet and saved on SharePoint (internal Document Management System). The document is to be used by the following roles listed in table 3.1.

Any lessons learnt during operation will be cascaded to the staff through bulletins and toolbox talks.

3 Site Contact Information

3.1 Roles and Responsibilities

In addition to the roles and responsibilities established by the contract EMP, roles and responsibilities specific to this location are set out below:

Table 3.1A Depot Roles and Responsibilities

Role	Key Responsibilities	Name
Area Manager	• Ensuring all site licences, consents and authorisations are adhered to on site • Ensuring company procedures for waste management, waste minimisation, sustainability and emergency preparedness and response are implemented on site • Ensuring that site specific training needs are identified and training programmes are effectively undertaken	Dan Trott (Cyclic) & Andy Gerry (Area North)
Site Agent (SA)	• Implementing control measures to ensure compliance with all site licences, consents and authorisations applicable to this site • Ensuring that all incidents are reported and dealt with according to the Environmental Incident Plan • Compliance with DMP and OMP • Delivering inductions, training, toolbox talks as necessary to staff at the Site • Ensuring all waste movements are accurately documented using the appropriate Waste Transfer Note (WTN) • Facilitate the collection and storage of the WTNs	Marc Young
Storeman	• Carrying out water quality sampling and ensure sufficient stock of sampling bottles and cool boxes in the depot • Ensuring any maintenance issues have been reported are actioned • Compliance with DMP and OMP	Paul Roberts
Technically Competent Manager (TCM)	• WAMITAB specific responsibilities shown in appointment letter • Ensure that the requirements of the Environmental Permit are complied with • Be present at the depot for the appropriate amount of time on site each week (as specified in the EA permit) and record this in the TCM site attendance log. • Maintain knowledge and skills with regards to waste management and demonstrate continuing competence every two years by passing the WAMITAB assessment • Trained in the Environmental Management System for the permit and know where to find all the key documentation (plans, training records, forms) including a copy of the permit • Maintain records (such as inspections) required by the permit • Ensure that the waste hierarchy is applied to the generation of waste by the activities on site and off site and that where disposal is necessary it is undertaken in a manner which minimises its impact on the environment • Ensure emergency procedures are in place and implemented when appropriate and that activities are controlled in an emergency • Regular liaison with operational teams including environmental advisor	Paul Roberts
Environmental advisor	• Checking all site specific licences and checking through regular monitoring that the conditions of such consents are adhered to • Ensure records are in place for sampling • Liaison with third parties	Hanna Dolling
H&S advisor	• Provide H&S advice to all staff involved in operating the Wet Waste Bays	Chris Booth

All Employees (Including Milestone Staff and Sub-Contractors)	• Implement the requirement of the DEMP, DMP and OMP • Monitor their workplace for potential threats to the environment and alert their supervisor or manager of any that are observed • Report all incidents that occur on site to OSHENS	All

3.2 Key Regulators Contact Details

Table 3.2A Key Regulatory Bodies

Contact	Location	Telephone Number
Environment Agency	Manley House, Kestrel Way, Sowton Industrial Estate, Exeter, Devon, EX2 7LQ	0800 807 060
Environmental Health	North Devon District Council, Lynton House, Commercial Rd, Barnstaple EX31 1DG	01271 388870
Local Water Authority John Gumbrell	South West Water, South West Water Limited, Peninsula House, Rydon Lane, Exeter, Devon, EX2 7HR	07827 955281

The contract Environmental Advisor is the key point of contact for these regulatory bodies and all communication should be directed through them. Visits and key agreements with regulatory bodies should be recorded on form EHS 008 F03 - confirmation of enforcement agency visit.

4 Sources, Releases and Impacts

4.1 Pathways

This section sets out the potential fire sources, release points and receptors. The pathways by which a fire from the sources identified **may impact upon a receptor are** primarily:

- **Air:** Movement of smoke or any harmful emissions through air will cause air quality issues, particularly relevant for this site which will store waste outside.
- **Runoff:** Potential contamination of firefighting water runoff.
- **Direct exposure:** Fire spreading to adjacent land and properties, potentially exacerbated by dry and / or windy weather conditions. This is particularly important for staff, who could be immediately exposed to fire if the waste in the wet waste bays ignites during operations.

4.2 Receptors and Wind Direction

Receptors and Wind Direction
The receptors are shown on the Site Location Map (**SKA_SM_Permit-012 SLM)** and listed below:

- Residential Properties: There are no properties within 200m
- Industrial units: There are a number of other industrial units operating within the Pathfields Business Park. The unit opposite is an aerospace manufacturing 40m N of the site and also 100m to NE is a wool processing unit. There is an electrical substation 200m to SE.
- Sports facility: There is a rugby field 115m E of the site and a rugby club 195m to the NE
- Commercial office: Adjacent to the site there is a commercial office 40m to W
- Woodland: There is a woodland with footpaths 95m to SW of the site
- Highways depot: The site is located within a highways depot.
- Employees: Milestone staff operating the facility.

- Road Network: The site is accessed by un-named B-road which is 13m to the North of the site. The A361 is 300m to the North East.

- Water Bodies: The nearest water course (un-named) is 160m to the North-West which is separated by the road. The River Mole is located 320m to the East.

No receptors have been identified as sensitive. The prevailing wind direction in the area where the site is located is South/ South-Westerly (see figure 1). Hence, in the event of a fire, the receptors most likely to be impacted are those immediately North/North-East. This includes industrial units and the access road.

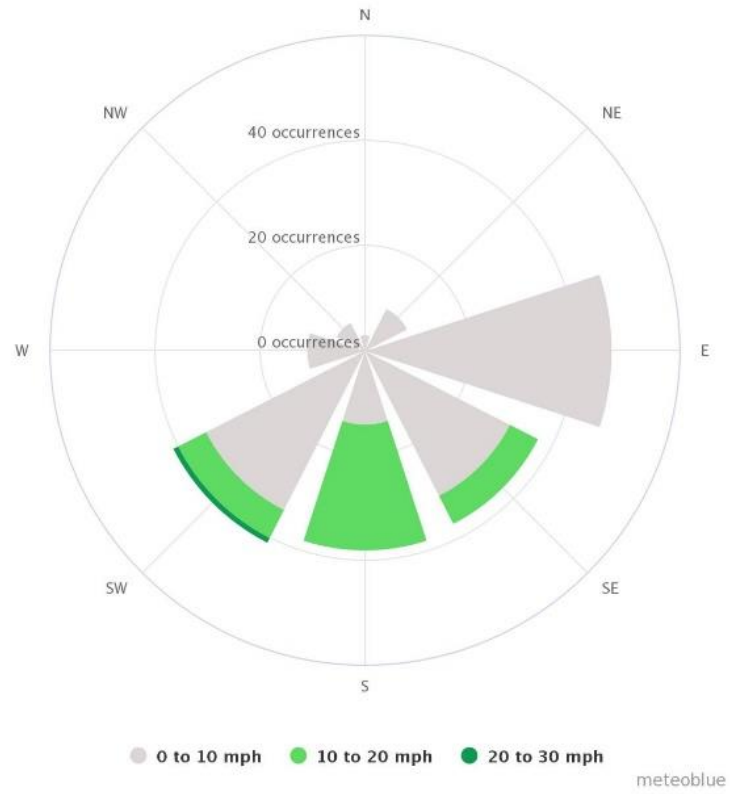

Figure 1: Wind rose based on South Molton readings from Meteoblue website (13/08/2020 to 20/08/2020) showing average wind direction and strength.

5 Primary Fire Prevention Measures

5.1 Sources of fire / combustion

The control measures set out in this document are commensurate with the fire potential for the wastes. See table 5.1A.

The gully tankers are Euro Stage 2 emissions rating (manufactured 2017), and the waste is sealed within tanker. 20 03 03 waste typically has a high moisture content, especially at the point of tipping, which minimises the risk of combustion.

Table 5.1A Source Pathway Receptor Routes

Sources	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Arson / fly tipping of combustible items	Deliberate ignition of material / fly-tipped items in wet waste bays through act of vandalism	Industrial and commercial units, Milestone highways depot staff	Airborne particulates / smoke / hazardous emissions & direct exposure	Depot security measures, including perimeter fencing. Placing gully tankers in front of the wet waste bays when not in use / out-of-hours to prevent un-authorised access.
Plant and equipment	Plant or equipment malfunction during operation.	Industrial and commercial units, Milestone highways depot staff	Airborne particulates / smoke / hazardous emissions & direct exposure	Regular checks in line with manufactures guidelines. Fire extinguishers located throughout the depot.
Bad housekeeping & smoking	Discarded litter build-up (e.g. dropping lit cigarettes butts)	Industrial and commercial units, Milestone highways depot staff	Airborne particulates / smoke / hazardous emissions & direct exposure	Ensure a culture of good housekeeping on site, including regular bay sweeps to remove dust, reinforced by regular site inspections. The depot has a strict no smoking policy where smoking is only permitted in a

Sources	Pathway	Receptor	Type of impact	Where relationship can be interrupted
				designated smoking shelter which is located away from the gully waste bays.
Solid Gully waste	Materials stored in bays spontaneously combusts or ignited by an external source.	Industrial and commercial units, Milestone highways depot staff	Airborne particulates / smoke / hazardous emissions	The waste typically has high moisture content, especially when initially handling / tipping into bays. Waste will be suppressed with water when required to prevent dried waste becoming combustible. Waste will typically be removed before it becomes friable and more susceptible to combustion.
Electrical faults	Uncertified / damaged electrical equipment and / or cables could malfunction and spark.	N/A - no electrical installation / cables part of the wet waste bay infrastructure.	N/A	N/A
Hot works activities / hot exhausts	Hot works (e.g. welding) or exhausts could ignite surrounding area if left unsupervised / without fire watch.	N/A - no hot works / exhausts part of the wet waste bay infrastructure.	N/A	Hot works permit is required before works could commence ensuring a safe system of work is in place to mitigate the risk.

5.2 Other potential sources of fires close to South Molton Depot

Table 5.2A Other Sources of dust and emissions close to South Molton Depot

Company	Address	Type of Business	Distance from South Molton depot site boundary (m)
Link Road	A361	Highways	300m NE
British Wool	Pathfields, South Molton EX36 3DU	Manufacturing	100m NE
Jewsons	Station Yard, Station Rd, South Molton EX36 3LL	Builders Merchant and Timber Centre	200m NE
Hanson Aggregates	Station Yard, Station Rd, South Molton EX36 3LL	Aggregate production	250m N
Nick Agar Aggregates	Pathfields Business Pk, South Molton EX36 3LH	Haulage and aggregate production	450m NW
RGB Building Supplies	Pathfields Business Park, South Molton EX36 3LH	Builders Merchant and Timber Centre	360m W
SWM & Waste Recycling	Pathfields Business Park, Hacche Lane, South Molton, Devon, EX36 3EH	Waste Transfer Station	630m to NW
M Way & Son haulage depot	Pathfields Business Park, South Molton, EX36 3LH	Haulage	240m W
South Molton Recycling Centre	Maclins Quarry, Station Road, South Molton, Devon, EX36 3EB	Waste Transfer Station	300m SE

5.3 Impacts

The impacts of a fire as a result of Milestone activities will be linked to the receptors identified in Section 4.

The receptors are more likely to be impacted by the following conditions:

- Prevailing wind direction is towards receptors.
- Local weather conditions. Windy and / or prolonged dry weather could potentially contribute to additional risk of combustion and resulting impacts at the receptor.

The impacts from a fire occurring on the site are anticipated to be minimal, given the nature of wet wastes, location within an industrial park setting, and the foul drainage connection with a penstock system fitted. However, this would be reviewed as part of the investigation if an incident was to occur.

5.4 Fire Management

Fire management is detailed in the depot Health and Safety Plan. This applies to the whole depot, including the wet waste bays.

- Weekly checks on fire suppression equipment, alarms and escape routes which are recorded and stored in the depot HSE files.
- Fire drills undertaken twice annually for all operatives and any other tenants within depot.
- Procedure on discovering a fire within the depot, including fire alarm and fire suppression equipment locations, evacuation details, assembly point and liaising with the fire brigade.
- Fire Warden training to provide detailed knowledge of the fire safety strategy of the depot, awareness of human behaviours during fires and training to identify potential sources of fire or use firefighting equipment if needed. The Fire Wardens undergo refresher training every 6 months. The Fire Wardens are to perform a managing role in any fire situation.
- All flammables must be correctly stored and clearly signed.
- Any attempt to contain the fire must only be done so without endangering the individual.
- Smoking is not permitted anywhere within the depot.

All operatives and visitors are briefed on the actions to take during a fire in the site / visitor's induction to ensure individuals understand fire precautions and evacuation procedures. Specific fire prevention methods relating to the wet waste bays will be incorporated in the depot fire risk assessment, wet waste bay RAMS and included in the wet waste bay induction. This Fire Prevention Plan will form part of the Environmental Management System to operate the wet waste bays. All documents are available to depot staff.

If any operative discovers a fire or near miss that has a potential to cause a fire, it will be logged as a H&S incident using the OSHENS reporting system which forms part of the Milestone Management System. All incidents and near misses are investigated and appropriate corrective action taken.

Measures to reduce the risk of fire from the wet waste bays, either as a result from waste self-combustion or ignition from an external source, was considered in the design of the bays themselves and during any operation activities.

- The wet waste bays are located away from other depot activities and potential fire sources.
- Each bay has a total capacity of 30T and the waste will be stored onsite for no more than 4 weeks.
- A 1 metre “clearance area” will shield any waste stored in the wet waste bays from wind and reducing the risk of fire transfer from / to nearby infrastructure.
- The wet waste bays are orientated away from the prevailing wind direction to further nullify the influence of wind in fire transfer.

- Gully wastes typically have high moisture content and present a low fire risk. Stored waste will be regularly checked through visual assessment and removed from site to a third-party disposal facility before becoming dry and more susceptible to combustion.

- Gully tankers will be positioned in front of the wet waste bays when not in use to prevent unauthorised access or fly-tipping flammable substances.

- Managing fire water - If a fire occurs in the wet waste bay, the penstock on the smart chain can be closed to contain any firefighting water runoff from reaching the discharge point or any other gullies. All gullies will be covered using bunds available in the spill kit.
- The nearest Fire Hydrant is less than 20m from the wet waste bays located in the adjacent property (SS 71658 26837) and is connected to the mains supply. This is practicable and suitable for the size of the wet waste bay facility. Additional water is not required to be stored onsite.
- Based on one bay catching fire ie 30T = volume of gully waste 1.3m3/T which gives 39m3.
- Based requiring 2000litres per minute for a minimum of 3hours for a 300m3 pile, a 39m3 stockpile (which is equal of 13% of 300m3) would require 260 litres per minute for maximum of 3 hours.

Although the solid waste (EWC 20 03 03) stored within the wet waste bays will have a high moisture content and removed before becoming too dry and therefore more susceptible to fire, we acknowledge waste from highway maintenance actives may be contaminated with combustible waste types (e.g. biomass / leaves). Due to this, wet waste bay operatives will regularly monitor the bays to minimise the likelihood of a fire occurring as the waste dries.

6 Monitoring and Trigger Levels

To ensure that the fire control measures set out in Section 5 are effective, Milestone will ensure that monitoring is in place and communication with potential receptors is maintained. The following monitoring activities are regularly undertaken to ensure continuous improvement:

- Checked multiple times each day as the wet waste bays are located next to the depot entrance and next to the Workshops. The area has CCTV operating 24/7.
- Monthly site inspections by the Agent or Storeman.

- Six-monthly site inspection and / or audit conducted by Milestone internal auditor function (H&S and Environmental Advisors).

All site personnel will be responsible for reporting any issues or near misses that could result in a fire immediately to the Agent and reported onto OSHENS reporting system. This will be highlighted during the wet waste bay induction.

6.1 Fire Prevention Monitoring

Fire prevention monitoring will consist of regular visual checks by operatives and the above scheduled inspections and audits. The depot has trained fire wardens constantly vigilant to potential issues or risks that could result in combustion. It will be the wet waste bays operatives to continuously:

- Monitor for conditions likely to increase the risk of fire combustion / transfer (including weather conditions).

- Identify any contamination within the waste that could increase combustibility.
- Ensure good housekeeping in and around the wet waste bays.

Ongoing temperature monitoring by heat detectors of the wet waste bay was deemed not appropriate and disproportionate to the comparably low risk of a fire occurring due to the high moisture content of the waste and the other control measures implemented. Spot Cairney Screen and/or Flammability Tests could be undertaken randomly to monitor the waste. This is a live document and will be reviewed if required.

7 Relevant Control Measures

The control of fire risk on the site will be the overall responsibility of the designated Fire Warden. Any activities which could potentially cause a fire will be suspended until appropriate control measures have brought the situation under control. Such measures are shown in table 7A.

Table 7A Control measures

Abatement Measure	Description/Effect	Overall consideration and implementation	Trigger for implementation
Location of wet waste bays / Solid gully waste.	The wet waste bays are situated at least 2 metres away from other depot activities / potential sources of ignition (e.g. Fuel tanks and depot stores). The nearest building is the Workshops. The driest waste will be stored in the northern bay, which is the greatest distance from any other depot infrastructure, to reduce risk of transfer of fire. The southern bay, nearest to other depot infrastructure, will be used to tip the wettest of waste which has lowest risk of igniting.	Built as part of the infrastructure.	Operational at all times.
Concrete containment walls of wet waste bays	Waste will be kept at least 1m below the top of the wall height.	Built as part of the infrastructure.	Operational at all times

Abatement Measure	Description/Effect	Overall consideration and implementation	Trigger for implementation
	This 1m clearance area will provide a buffer from the wind and reduce flame height and the risk of transfer of fire between bays and / or other depot infrastructure. The bays are facing East – West which is away from the prevailing south/south westerly wind direction.		Gully waste will not be accepted onto site if there is insufficient storage capacity within the waste bays.
Regular rotation and removal of dry waste	The waste will be regularly rotated within the bay. The movement of solid waste between bays for additional drying is under review Regular and timely removal of waste on a "first in, first out" model once sufficiently dry will reduce the risk of self-combustion or ignition form an external source.	Regular checks to ensure waste is not stored for longer duration than is necessary.	Operational at all times Dried waste to be transported to a third-party disposal site when visual assessment indicates the moisture levels have reduced sufficiently Wet waste bays will be regularly swept to remove any loose combustible waste / dust.
Regular oil interceptor / site drainage services	Interceptors are cleansed and maintained every six-months to ensure any hazardous / contaminated runoff (including potential firefighting water runoff) is contained.	Built as part of the infrastructure.	Operational at all times Established six-monthly service to clean and maintain.
Fire suppression equipment	All depot fire extinguishers and	Fire suppression equipment is located	Operational at all times

Abatement Measure	Description/Effect	Overall consideration and implementation	Trigger for implementation
	blankets are checked weekly and located throughout the depot. Fire wardens are trained / refreshed every six months on how to operate fire suppression equipment correctly.	throughout the depot / on operational plant.	
Good housekeeping	Having a consistent and regular inspection regime that is supported by management will ensure site is checked and issues remedied to prevent litter build up which could become a fire hazard. Any litter is removed and placed in skips within the depot. COSHH products will be stored in a designated locked container away from the gully waste bays at all times.	Easy to implement and requires minimal equipment. Encourages a sense of pride and satisfaction amongst the staff which promotes positive health, safety and environmental culture.	Good housekeeping and visual checks are operational at all times Scheduled EHS inspections are taken monthly by Agent / Storeman and six-monthly by Environmental Advisor.
Reaction to extreme weather conditions	Modification and/or stopping of operations in extreme weather conditions i.e. very dry dusty weather. The site will be shut down if conditions prevent normal working methods leading to an unacceptable risk such as risk fire. Such conditions include critical failure of the fire management	Easy to implement as part of best practice and include in operative briefing. Described in the site management system and implemented as appropriate measures.	Upon instruction by Manager

Abatement Measure	Description/Effect	Overall consideration and implementation	Trigger for implementation
	measures, extreme weather conditions, or emergency situations.		
Serviced plant and equipment	Only proprietary plant and equipment of reputable supplier are to be hired at the depot.	Agent to ensure routine maintenance and repair of such equipment are carried out so as to minimise risk of malfunction and becoming a fire hazard. In instances where plant and equipment are deemed unacceptable, equipment is to be replaced and withdrawn from service without unjustifiable delay and repairs attempted. If repairs are ultimately effective, the equipment can be put back into service. If tools / equipment remains unacceptable after repair, the equipment is not to be used on site again	Operational at all times

7.1 Audit and annual review of EMS

Milestone will audit site performance against the EMS which is accredited to ISO14001:2015, including fire risk management on annual basis or if there are any operational or procedural changes, changes in equipment, variations in the permit, or after any accident or breach of the permit.

8 Communication

8.1 Liaison with Neighbours

The highways depot already has an excellent working relationship with its neighbouring commercial, industrial units as well as the rugby club. This will be maintained through regular communication.

9 Complaints

9.1 Complaints Procedure

Any complaints received at the site will be immediately investigated by the Agent and, where appropriate, remedial action taken. The complaint will be reported immediately using the OSHENS incident management system which is part of Milestone management system. This will contain details of the reporter, summary of complaint including date, time. This will require investigation and close out by the environmental or H&S advisor. The site will respond to the complainant within two working days. It may require feedback to the Environment Agency to Local Authority.