CROWNHILL TOPSOIL WASTE MANAGEMENT FACILITY DUST MANAGEMENT PLAN

Unit 1009, Caerwent Army Training Estate,
Caerwent

Produced by: EcoVigour
info@ecovigour.com

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01	18/04/20	Address comments within Schedule 5 Notice	Julian Gregory	

Contents

1. Site Details

Name of the applicant	Crownhill Topsoil
Activity address	Unit 1009 Caerwent Army Training Estate
National Grid Reference	ST 46457 92070

This Dust Management Plan has been prepared for Crownhill Topsoil and Aggregates operation of an Inert Waste Recovery Facility at Unit 1009 of the Caerwent Army Training Base.

The Army Training Base is operated by the Ministry of Defence / Defence Infrastructure Organisation and managed by Landmarc. It is predominantly used for the training of MOD personnel and the storage of MOD assets. Sections of the site are now let to companies for use as commercial / industrial facilities and the site is also used by production companies for the filming of Films and TV Series.

Crownhill proposes to operate an Inert Waste Recovery facility at Unit 1009 which will include:

- The processing of inert soils and construction and demolition waste into topsoil and recycled aggregates;
- The sale of quarried aggregates.

The company currently operate an aggregate wholesale / retail business from the facility, which requires the delivery, storage and re-loading of aggregates from Unit 1009.

1.2 Site Setting:

Unit 1009 is in the north west of the Caerwent Army Training Base. Please refer to the Site Location Plan in Appendix 1.

Grid Reference: ST 46457 92070

Post Code for Site: NP26 5XL

The Army Training Base is operated by the Ministry of Defence and managed by Landmarc. It is predominantly used for the training of MOD personnel and the storage of MOD assets.

Sections of the site are now let to companies for use as commercial / industrial facilities. The site is also used by TV and Film Companies for filming (the latest BBC production War of the Worlds and several episodes of Top Gear have been filmed there)

The site is comprised of eight large concrete and brick-built built buildings, which vary in size between 300m^2 and 1000m^2. Six of these buildings are used by Crownhill. The smallest building is used as a workshop for the storage of plant / vehicle consumables, oils, tools and small items of plant. The larger buildings are used for the storage of topsoil produced and larger items of plant and machinery. Between the buildings are concrete surfaced areas. Some of the site is hard standing

comprising predominantly concrete slab or with some compacted stone areas, these areas are used for the storage of soils and aggregates awaiting processing into topsoil and recycled aggregates.

The landform rises steeply to the north and the site is cut into the side of the hill. The site falls north to south and is split into an upper northern level and a lower southern level, separated by an approximately 3m high batter.

There is a concrete surfaced road which runs throughout the site in a loop, allowing access to all buildings. All of the buildings sit on concrete slabs. Soil storage and processing areas are split into concrete surfaced, compacted stone surface and earth surfaced areas. Refer to the plan in Appendix A for the site layout.

The majority of the site is utilised for the storage and processing of inert soil and stone. Finished topsoil products are predominantly stored within the large building on the lower level of the site. The screen sits outside the building with the output conveyor loading soil into the building through a hole in the building wall.

Feedstock materials with a high percentage of fines, which are moisture sensitive are stored within buildings on the upper level of the site. The remainder of the feedstock materials and the aggregate products are stored in open bunds and bays situated on the hardstanding and stone surfaced areas between the buildings. Produced topsoil is stored within Building 5 on the lower level. The majority of the operations proposed to be undertaken within Unit 1009, will be undertaken within the eastern section of the site.

The nearest building to Unit 1009 is 85m to the south. There are 26 buildings within 500m of Unit 1009, predominantly to the south of the unit but there is one to the north and one to the east, within the edge of the woods. All of these are derelict, many of them are unsafe to enter and are hence unused. The only identified use of these buildings is, during MoD training exercises for troops to practice wall breach techniques i.e using explosive charges to form accesses through walls. Unfortunately, these activities result in further damage to the buildings. Some of the buildings in better condition were used for shelter overnight by troops but due to safety concerns, this has now been prohibited. The MoD / DIO has recently invested in the construction of two new troop shelters within the base (approximately 900m east of Unit 1009), as other buildings which were used by troops for shelter during operations at the base have been deemed unsafe.

The nearest residential property is Great Llanmelin Farm, 670m to the west of Unit 1009. Llanvair Road forms part of the residential estate 1km to the SE, near the entrance to the site, were Crownhill haulage vehicles enter and exit the site.

A deep ephemeral drain runs along the southern boundary of the western section of the site, eventually discharging into the Castrogi Brook to the west of the site, via a 700m long culvert beneath a section of the base. This drain is dry for the majority of the year as the upstream section was diverted prior to Crownhill leasing the property.

The Castrogi Brook runs to the west of the site in a north south direction.

To the west of the site approximately 30m from the western site boundary is a section of the Dinham Meadows SSSI as well as many agricultural fields. There is another section of the Dinham Meadows SSSI approximately 70m east of Unit 1009.

Llanmelin Wood SINC / Semi Natural Ancient Woodland is located to the north and east of Unit 1009, approximately 70m from the northern site boundary. This is a dense woodland which is upslope from the site. Within this woodland approximately 300m NW of Unit 1009 is Llanmelin Woods Hill Fort Scheduled Monument.

2. Site management

The Site Manager will exercise, either personally or by delegation to suitably trained and responsible staff, day-to-day control of the site. They will be responsible for the satisfactory working of the whole site and for ensuring full compliance with the dust management plan.

Staff at all levels will receive training and instruction on the contents of this plan and in their duties relating to all operations and the potential sources of dust emissions. Particular emphasis will be given to conditions and processes which require dust mitigation procedures to be initiated and working practices to minimise dust emissions.

The Site Manager will ensure that customers and suppliers are aware of the need to comply with the provisions of this plan so far as they are relevant to their activities on site. Specifically, the enforcement of site speed limits, no go areas of the site, requirements for the sheeting of loads, conditions which will require the closure of the site.

Any member of staff who fails to comply with the provisions of the dust management plan will be re-trained as necessary and may also be subject to disciplinary action. External hauliers failing to observe the requirements in respect of vehicle operations will be asked to leave the site.

Roles and responsibilities will be delegated as set out below:

2.2 Roles and Responsibilities:

Simon Stone shall have overall responsibility for overseeing the management of the environmental aspects of the operation of the facility. Anthony Skaratts the Site Manager will have responsibility for the day to day management of the site.

Simon Stone

Tel: 01291 430 066

Mob: 07880 722 436

Email: info@crownhill.co.uk

Anthony Skaratts

Tel: 01291 430 066

Mob: 07749454652

Email: info@crownhill.co.uk

Role / Personnel / Organisation	Contact	Responsibilities
Company Manager: Simon Stone	Tel: 01291 430 066 Mob: 07880 722 436 info@crownhill.co.uk	• Overall responsibility for the operation of the business and the Environmental Management of operations at Unit 1009 involvement. • Responsibility for the development and implementation of the CEMP.
Site Manager: Anthony Skaratts	Tel: 01291 430 066 Mob: 07749454652 info@crownhill.co.uk	• Responsibility for the day to day operation of the site, including the instruction of mitigation for environmental / Ecological impacts such as noise and dust. • Will have a detailed understanding of the conditions of the Environmental Permit, the EMS, the, EMP, DMP and the Noise and Vibration Management Plan. • Will inspect the condition of amphibian exclusion fencing weekly. Will record findings and arrange repair of any damage observed. • Will report observations and findings to the Office Manager for audit and traceability purposes.
Office / Commercial Manager: Alex Stone	Tel : 01291 430 066 Mob: 07825 700989 accounts@crownhill.co.uk	• Will have an understanding of the monitoring and reporting requirements for the operations of Unit 1009 as set out within the Environmental Permit, the EMS, the, EMP, DMP and the Noise and Vibration Management Plan. • Will operate a calendar highlighting when monitoring is required, and will collect and collate monitoring forms to demonstrate compliance with the conditions of the EP. • Will forward information from weather forecasts and from the

Role / Personnel / Organisation	Contact	Responsibilities
		weather station to the Site Manager.
Weighbridge Manager Sarah Lewis:		• Will assist with undertaking environmental monitoring at Unit 1009 i.e. Collection and changing of the Dust Deposition Gauge. • Collection of weather data. • Observations on wind speed and dust levels on site.
Environmental / Support: EcoVigour Ltd	Tel: 08448 400 401 jgregory@ecovigour.com	• Will provide training of the contents and requirements of Environmental Permit, the EMS, the, EMP, DMP and the Noise and Vibration Management Plan. • Will assist with environmental monitoring of the site. • Will undertake an environmental / ecological audit of the site every six months. • Will undertake surface and groundwater monitoring every six months.

3. Risk of Dust Impacts without Mitigation

Dust is defined by the British Standards Institution as particles below 75 µm in diameter which settle out under their own weight but which remain suspended for some time. Large particles tend to be deposited close to the source and smaller particles have the potential to travel greater distances.

Fine dust, essentially particles up to 10 µm, is commonly referred to as PM10, particles up to 2.5 µm are referred to as PM2.5, these are generally limited to vehicle / plant emissions, particularly for diesel engines. PM10 is measured to agreed standards and, through the National Air Quality Strategy (NAQS) objectives to be achieved for a range of pollutants, which forms part of the Air Quality Objectives (AQO). The AQOs for PM10 are 50 µg/m3 averaged over 24 hours, not to be exceeded more than 35 times per year and 40 µg/m3 as an annual mean.

The DMP will be revised as necessary in accordance with changes to the NAQS, such as in relation to objectives for PM2.5.

Coarser dust is generally regarded as 'nuisance dust' and can be associated with annoyance, although there are no official standards (such as AQO) for dust annoyance. Coarse dust particles larger than 30 µm are generally accepted to make up the greatest proportion of dust emitted from inert waste management facilities, and to be largely deposited within 100m of the dust source(s) (BS 6069 Part 2 1994). Adverse impacts due to nuisance dust are considered most likely to be experienced within this distance.

The quantity of particles travelling past a particular location in a given time is termed the dust flux and this can be measured by placing a sampling device (a dust flux gauge) in the vertical plane to capture the dust as it passes by in a direction nominally parallel to the ground.

Fugitive Dust – refers to dust derived from a mixture of sources or a source not easily defined and includes dust generated from vehicular traffic on unpaved roads, materials transport and handling and unvegetated soils and surfaces.

The potential for nuisance impacts due to dust generated from Cornhill's operations at Unit 1009 will be assessed using a Source Pathway Target risk assessment methodology. In terms of the source, factors such as likely consistency of dust and airborne particulates will be considered. Within pathways, weather conditions including prevailing wind direction will be considered along with the topography of the site and features, which would provide screening from dust flux.

Source:

- Dust emitted from vehicle movements
- Dust emitted from crushing operations
- Dust emitted from materials handling
- Dust emitted from material stockpiles
- Vehicle emissions PM10 / PM2.5

Pathway:

- Airborne dust, which can be carried from site via wind and air movements.
- Particulate vehicle emissions.

Receptors

- Local ecology including Dinham Meadows and Coombe Valley Woodlands SSSI's, Llanmelin Woods, etc
- Site employees
- Other users of the Army Base
- Nearby residents (the nearest occupied property is a Great Llanmelin Farm 670m to the west or Llanvair Road 1km to the SE, however the residential properties to the SE are near to the site entrance where Crownhill haulage vehicles enter and exit the site.

3.2 Potential sources of PM10 and PM2.5 during site operations:

There is potential for dust particles from materials processing operations at the site to be in the size range for PM10 and in exceptional cases PM2.5 i.e. 10 µm for PM10 and 2.5 µm for PM2.5. However the key emissions for these particles will be from diesel plant and vehicles, in particular older items of plant, which do not conform to current emissions standards.

Crownhill currently use the following equipment at Unit 1009 as part of their aggregate supply business:

- Mercedes Actros HGV 44t Tractor Unit – 2015 – Euro V Emissions Standard
- 3No Mercedes Arocs 8x4 Tipper Trucks – 2018 – 2019 – Euro VI Emissions Standard
- Mercedes Arocs 8x4 20t Tipper fitted with a grab – 2019 - Euro VI Emissions Standard
- Mercedes Arocs 8x4 20t fitted with s hook loader – 2019 - Euro VI Emissions Standard
- Iveco 8x4 20t fitted with s grab – 2015 – Euro IV Emissions Standard
- 2No Transit 130 Tipper - Euro VI Emissions Standard
- Doosan DL200 Loading Shovel – 2019 – NRMM Tier IV Emissions Standard. No DPF
- JCB 411 Loading Shovel – 2010 – Unknown Emissions Standard
- Merlo 42.7 Telehandler – 2018 - NRMM Tier IV Emissions Standard. No DPF
- Doosan DX140 Excavator – 2019 - NRMM Tier IV Emissions Standard. No DPF
- JCB 814 Power Slide Excavator – 1988 - Unknown Emissions Standard
- New Holland TL80 – 2000 - Unknown Emissions Standard

For the operation of the Inert Waste Recovery facility, Crownhill proposed to employ the following at the site:

- Terex Finlay 863 Screener – 2019 - NRMM Tier IV Emissions Standard. No DPF
- Terex J960 Crusher – 2020 - NRMM Tier IV Emissions Standard. No DPF

Crownhill are committed to the adoption of a modern fleet of plant and vehicles and have invested heavily in new equipment over the last 3 years.

3.3 Dust Potential Magnitude

The proposed operations have been assessed for their potential to produce dust in line with the Institute of Air Quality Management's Guidance on Monitoring in the Vicinity of Demolition and Construction Sites.

Activities have been assessed as follows prior to mitigation being applied:

Activity	Assessment	Dust Emission Magnitude
Movement of Soils and Aggregates	There is potential for dust to be agitated from materials within vehicles during transport to and from the site. Materials travelling into the site will have travelled some distance and	Small

Activity	Assessment	Dust Emission Magnitude
	hence particulates which could be mobilised, will have been. Materials exported from the site will be granular or cohesive in nature and hence particulate production potential is low.	
Crushing	Crushing of inert construction and demolition waste is likely to result in high outputs of particulate matter, without suitable mitigation, as fines can be wind-blown during loading and the dropping of materials from conveyors. Further fines will also be produced from the crushing operation. The crusher is only used periodically for short durations i.e. wastes are imported and stockpiled and once a sufficient quantity is available, they are crushed over a 1-2 day period. On average, the crusher would operate for approximately 5 days a month.	Large
Screening	As above	Medium
Soil and Aggregate Loading	Loading, includes loading into vehicles and into crushing and screening equipment. Particulates are likely to be mobilised during the dropping of materials into plant and vehicles.	Medium
Vehicle Movements	Soil picked up on the tyres of vehicles is deposited on site roads as a paste. This dries and is further trafficked which turns it into a fine dust, which can be agitated by vehicle movements and the wind. Due to the fine nature of this dust, it has potential to be carried substantial distances by strong winds. The number of vehicle movements per day will vary with ongoing site operations but assuming that 75,000t of waste can be accepted per annum, this would equate to approximately 270t per day. Assuming all of this is delivered in 20t road vehicles, this would equate to 14 vehicle movements onto site and a corresponding 14 vehicle movements off site. This gives 28 vehicle movements per day. I reality, this would likely equate to 50+ vehicle movements on some days and considerably less on others.	Large

The majority of activities undertaken at the site, will be undertaken within the eastern section of the site, with the western section only used for soil storage.

3.4 Weather

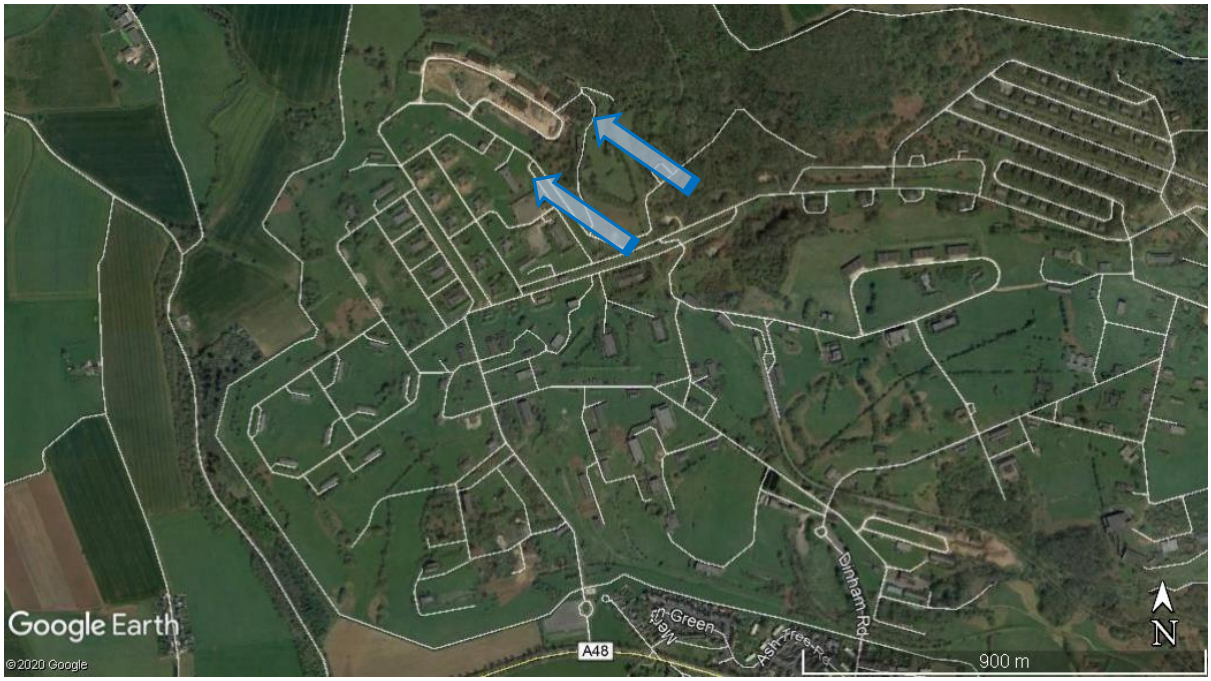
Weather conditions (especially wind and precipitation) can significantly affect dust propagation at inert waste processing facilities. Consequently, a trigger system has been adopted to identify those weather conditions when there is an increased or high risk of wind-blown dust.

The trigger levels are detailed below.

Wind speed			Precipitation		
m/s	Beaufort Scale		Dry	Showers	Heavy Rain
>5.5	4+	Dust and loose paper raised. Small branches begin to move	Red	Amber	Green
1.6 - 5.4	2 - 3	Wind felt on exposed skin. Leaves rustle. Wind vanes begin to move	Amber	Green	Green
0 - 1.5	0 - 1	Smoke drift indicates wind direction. Leaves and wind vanes are stationary	Green	Green	Green

Wind speeds and associated dust 'risk' levels

From historic meteorological data available from the Met Office and observations at the site, the predominant wind direction is from the SW.



Predominant wind direction.

The site sits in a shallow bowl into the side of the hill and hence the very eastern section is shielded from the wind by the rising ground to the east. This wind direction will blow dust in the direction of the Dinham Meadows SSSI to the west of the site.

Rainfall in this area is unpredictable. During extended periods of the year, there are periods of constant rainfall, but during the spring and early summer, it is likely that there will be extended periods of dry weather.

A Bresser 7002580 Wi-Fi weather station has been installed at Unit 1009 on the Weighbridge Office. This has been set to provide an alert when wind speed exceeds 5m/s or for severe weather events. The Office Manager will print weekly weather forecasts which will be displayed in the weighbridge office and canteen.

3.5 Topography

Due to the topography of the site i.e. the land rises steeply to the north and slightly to the east and Llanmelin Woodlands to the north and east, Unit 1009 is sheltered from wind directly from the north and east.

The prevailing wind carries dust towards the section of the Dinham Meadows SSSI to the west of the site. The majority of the activity within Unit 1009 is undertaken within the eastern section of the site, which is approximately 200m from the SSSI. There is a tall headgerow between Unit 1009 and the SSSI, which will provide some screening for the SSSI.

Land to the north is sheltered by the buildings along the northern boundary and earth bunds behind these. These are heavily vegetated with ruderal vegetation, with immature self-set woodland behind this.

Land to the east also rises away from the site, with a large earth bund between Unit 1009 and the access road to the rear of Unit 1009. This is vegetated with immature woodland. There is a building within this area, but this is derelict and has been overrun with vegetation.

3.6 Summary of Dust Contamination Risk to Identified Receptors:

In the consideration of risk of dust contamination to identified receptors we consider all of the factors outlined above:

- The potential magnitude of dust which could be produced by operations at the facility;
- Weather, predominantly the prevailing wind direction;
- The topography of the site and surrounding land form;
- Features which will capture / impede dust flux from the site.

The principal dust sources identified are, vehicle movements around the site, crushing and screening of inert wastes (short duration). The greatest risk of dust been generated is under the following conditions:

- Periods when there has been no rain for 24hrs;
- Periods when the prevailing wind is from the SE – As indicated by the on site weather station.
- Periods when wind speed exceeds 5m/s – As indicated by the on site weather station.
- Periods when plant and vehicles are trafficking the site – This is most of the time in which the site is in operation.
- Use of the crusher / screen.

4. Controls:

To mitigate against the impact of dust the following actions should be employed:

Action	Description
General Good Site Practice	Drop heights shall be kept to a minimum during the movement of materials. Haul routes will be maintained clear from site material, through grading of coarse material and wet brushing using the yard brush on the Merlo. Haul routes and yards shall be dampened down in dry weather conditions, using water from grey sources where possible. Damping down will be undertaken using the tractor and bowser. Damping down will be triggered by weather information i.e. wind speed exceeding 5m/s and observations of visible dust from the Site Manager. For details of damping down see below. All vehicles and plant on site shall be fully serviced and maintained, where possible vehicles used will comply with Euro IV, V and VI standards and plant will comply with NRMM Tier IV Emissions Standard. Crownhill has invested in a fleet of modern plant and vehicles, which are serviced in line with the manufacturers requirements. No vehicle on site shall be permitted that emits black smoke. No plant or machinery shall be left running when not in use.
Road Cleaning	Site traffic will be confined to the hard surfaced roads which run around the site. Haul roads will be graded clear of site material daily. This will be carried out using a tele-handler fitted with either a bucket (for the removal of large debris) or a wet brush bar. This will be done to prevent dust and prevent site materials being dragged onto roads around the Army Base.
Damping Down	This will be achieved via the utilisation of a towed water bowser fitted with a spray nozzle which will dampen the surfaces with a fine mist spray. Any locations which cannot be reached by this method shall employ a dampening method utilising a sprinkler, operated either from the grey water supplies of the mains. Water from damping down will also be obtained from the attenuation ponds using a pipe and gravel sump to ensure the pump does not agitate silt from the base of the pond.

Action	Description
Crushing / Screening Equipment	Dust suppression will be utilised during all crushing and materials processing operations. This should be done using integrated suppression equipment: - Terex Finlay 863 Screener – Operates via an MPS CCM Control System. With the dust suppression system active, this detects when material is present on the belt and triggers the spray mist suppression system on the inlet and outlet of the screen. Inspection of water connection will be include within start up process. - Terex J960 Crusher – Operates via an MPS CCM Control System. With the dust suppression system active, this detects when material is present on the belt and triggers the spray mist suppression system on the inlet and outlet of the screen. Inspection of water connection will be include within start up process. Dust suppression system will be serviced during service visits in-line with manufacturers service schedule. The Office Manager will be responsible liaising with the lease company to ensure service schedules are maintained.
Speed Signs	A strict speed limit of 10mph is present on the site. Speed signs indicate this across the site. All drivers entering the site will be informed of this speed limit by the weighbridge manager. Enforcement action will be carried out by the site managers with any personnel or visitors witnessed to be violating these restrictions.
Dust Monitoring	See below:
Communication	If it is identified that excessive dust is being generated from the works or if complaints are received, site operations will be halted and NRW will be informed that there has been a breach of license conditions. Contact will be made with NRW officer regulating the site.

5. Sources of Water for Dust Suppression:

Water will be drawn from the following sources for the suppression of dust:

- A 32mm mains supply within Unit 1009;
- 1000l IBCs, which collect rainfall from down pipes from building roofs;

- 1100l above ground tank supplied by a mains water feed, operated by a level valve. This tank is located on a raised bund on the northern boundary of the site to ensure, the head provides sufficient pressure to operate sprinklers within Unit 1009;
- Attenuation ponds within Unit 1009.

6. Smoke:

This section deals with smoke from burning and smoke emitted from plant and machinery. Smoke can contain harmful substances such as carbon monoxide and diesel particulate matter (DPM). This can be dangerous to anyone in the immediate vicinity of the site, as well as contribute to the level of greenhouse gasses in the atmosphere. The impact of smoke on the local environment is low unless the quantities being released are large. Smoke can cause damage to habitats and species and nuisance to local residents via visual intrusion and odour.

Sources:

- Smoke emitted from poorly maintained plant engines
- Smoke from burning materials on site

Pathway:

- Smoke is airborne, so can be transported via wind.

Receptor:

- Site employees
- MOD employees
- Local Residents
- Global Atmosphere

Controls:

- Burning on site is prohibited unless under consent of the Natural Resources Wales and Monmouthshire Environmental Health Department.
- Crownhill is committed to a plant and vehicle replacement programme with the majority of their vehicles now being Euro 6.
- Site vehicles are subjected to daily checks to ensure they are in optimum operational condition. They are serviced as per the manufacturer's recommendations. Records for both are maintained in the site office.
- A fire prevention strategy is present to prevent the spread of fire within the waste operations and also the office.

7. Dust Monitoring:

Not all the airborne or deposited particulate matter around the waste management site will be due to the facility itself; a proportion probably will be, but this process contribution (PC) will be superimposed on top of the underlying, ambient background contribution (BC). The total environmental level (the sum of PC + BC) is what is important from an exposure point of view, although in terms of environmental regulation there will tend to be a strong focus on the PC from the waste management facility.

7.2 Deposition Dust Gauge:

As the site is currently operational as an aggregate wholesale and retail business, the background levels are skewed. However to gain an understanding of the current situation, a Dust Scan DS100 has been installed on the eastern boundary of Unit 1009 adjacent to the Dinham Meadows SSSI. Please refer to the Site Layout Plan in Appendix A for the location of this.

This is a directional dust sampler which collects fugitive dust in horizontal flux from 360° around the sampling head using a sticky pad. The directional dust sampler is often used for 'fence-line' site boundary monitoring and to determine the direction/s from which dust has arisen. Samples from this are being analysed for:

- Absolute Area Coverage (AAC%): a measure of the density of deposited dust (as presence or absence on the sample slide) irrespective of dust colour; and
- Effective Area Coverage (EAC%): the loss of reflectance or 'blackness' of the deposited dust. An estimate of mass deposition per unit area (as measured by a deposition gauge) can be derived, using standard formulae calibrated from site-specific information.

Each DustScan sample incorporates an internal reference against which each analysis is internally calibrated. The dust levels for each sample are assessed individually with approximately 150,000 data points being examined per sample.

Data from the DS100 is being used to build an indication of the dust deposition from the current business and the surrounding atmosphere. This can then be used as a baseline to determine dust emissions from the operation of the Inert Waste Recovery Facility and to identify potential impacts on the SSSI and receptors further afield.

7.3 Monitoring of Weather Conditions:

A Bresser 7002580 Wi-Fi weather station has been installed at Unit 1009 on the Weighbridge Office. This has been set to provide an alert when wind speed exceeds 5m/s or for severe weather events. The Office Manager will print weekly weather forecasts which will be displayed in the weighbridge office and canteen.

If the weather station indicates that wind speeds are in excess of 5m/s, additional visual inspections will be undertaken.

If other operatives at the site, identify dust arising from operations, they will be encouraged to report this to the Site Manager or the Weighbridge Manager, who will then investigate and instruct mitigation as required.

7.4 Visual Assessments for Dust and Emissions:

The Site Manager will record weather conditions within the daily site log. If there has been no rain for 4hrs and if wind speed is in excess of 5m/s a visual assessment for dust generation will be undertaken at the start of the working shift. If there is no rainfall throughout the morning a further inspection will be undertaken following the lunch break. The outcomes of these inspections will be recorded within the daily site log. A copy of the site log can be found in Appendix B.

Visual inspection will be undertaken by walking along the haul route through the site making observations on locations within the site where dust is visible.

8. Training:

The Company Manager, Site Manager, Office Manager and Weighbridge Manager will be given training on the contents of this plan by an Environmental Specialist from EcoVigour.

Crownhill Topsoil and Aggregates will ensure operatives are given toolbox talks on the importance of dust mitigation and the methods to be incorporated at the site. Toolbox Talks will be based on the contents of this DMP. Toolbox Talk Record Sheets will be kept for the talks including attendance sheets.

Dust mitigation will be included within task specific Method Statements for operations like crushing and screening, which will be briefed to personnel undertaking the works.

Appendix A: Site Layout Plan

Appendix B: Daily Site Log