1. Risk Assessment
   1. Risk assessment based on general assessments prepared by Enviroarm Ltd as part of H2 screening.
2. Point Source Emissions.
   1. Mobile plant and pumps are potential point sources of emissions of particulates to air used for the placement and covering of waste in the landfill site. The principal type of such emissions would be unburned or part-burned fuel oil in exhausts from internal combustion engines (black smoke). In addition particulate release from crushing and screening is considered as a primary source.
   2. Only proprietary plant and equipment of reputable manufacture and supply are to be deployed and used at the site.
   3. The company expects and requires its management, staff and site operatives diligently to ensure that manufacturers’ instructions for routine maintenance and repair of such equipment are carried out so as to control such emissions to the practicable minimum.
   4. The diligence is to extend to effective supervision of any contractors employed to use any such plant and equipment or to carry out such maintenance and repair.
   5. In instances where emissions become visually noticeable and unacceptable, equipment is to be replaced and withdrawn from service without unjustifiable delay and more effective repairs attempted.
   6. If repairs are ultimately effective, the equipment can be put back into service. If emissions remain unacceptable even after repair, the equipment is not to be used on site again.
3. Fugitive Emissions
   1. There is a risk of emissions of particulates to atmosphere arising from the raw wastes themselves during delivery in vehicles. Where vehicles do not have enclosed bodies, instructions will be given to customers to sheet or net open bodied vehicles and /or containers to minimise such emissions.
   2. Emissions of particulates from incoming wates are intimately associated with escape dust at landfill sites.
   3. There is a risk of emissions of particulates to atmosphere from vehicles driving along the site haul roads both when delivering waste loads and returning empty or when leaving recycled materials onto the public highway. This risk is to be minimised by sweeping the hard surfaced site roads and public roads ( as necessary and without unjustifiable delay) and by using water damping sprays delivered from a point of source water supply near to the site entrance. A film of water is to be visible on the site roads during dry and windy weather conditions that would otherwise allow dust to blow from the site.
   4. There is to be imposed a speed limit of 10 miles per hour and appropriate signage is to be displayed by way on instructions to site users.
   5. Wastes are to be discharged, emplaced and covered down where necessary, as quickly as is possible but with minimum physical disturbance. This is to be ensured by employing only trained and experienced mobile plant drivers.
   6. To help reduce wind flow through the site a landscape bund and tree planting is to be carried out an will be properly maintained.
   7. There is a residual risk that, despite the avoidance and prevention measures described previously, there may till be particulate matter emitted into the atmosphere. It will be a subjective judgement of the site manager as to whether or not such emissions are liable to leave the site boundary and present a nuisance to others.
   8. If there is a real risk of particulate matter leaving the site and becoming a nuisance to others, the site manager is to close the site to those operations that are giving rise to the nuisance without unjustified delay. In reaching this decision, the wind speed and direction are to be taken into account together with the location and proximity of the nearest sensitive receptors.
   9. There are obvious and sensitive receptors in the path of the most common wind direction. The nearest properties are to the north and east of the site, such as DR2, Forest Hill Cottage, DR3, Meriden Village and DR4, a small section of properties off Hampton Grange and D7, Labrunum all lie within near proximity of are principally downwind, however most are well screened from site. These areas are to be monitored if there is a prospect of dust leaving the site and used to inform site management of any decision on closure of individual operations.
4. Particulates Monitoring
   1. On the basis of past experience at similar types of site, the nature of wastes anticipated to be delivered and the disposition of the site itself with respect to sensitive receptors, dust monitoring will be carried out using dust gauges at three critical receptor locations for a one month period per annum.
   2. The company expects and requires its management, staff and site operatives to be vigilant in visually monitoring for and assessing the potential of off-site nuisance of particulate emissions and to take appropriate remedial and corrective action without unjustifiable delay. Such visual assessment for dust/particulates is to be undertaken at least on a working daily basis in conjunction with monitoring data from the on site water station.
   3. All such assessments and instances of remedial and corrective action are to be recorded in writing in the site diary.
   4. In any event, daily meteorological monitoring will assist in managing and monitoring particulate matter emissions.
   5. Additionally, and as noted in the section dealing with the waste acceptance procedures at the site, staff will have prior knowledge of the types of wastes due for delivery owing to their having been subjected to ‘Level 1 -Basic Characterisation’ testing. This provides an opportunity to divert wastes from the site when particular problems might be envisaged for the time being.
   6. At the site itself, the ‘level 3 – on site verification’ visual testing provides a final opportunity to reject any loads that might present a particular problem during the prevailing weather conditions.
   7. On the basis of past experience at similar types of sites, the nature of wastes anticipated to be delivered and the disposition of the site itself with respect to sensitive, dust monitored will be carried our using dust gauges at three critical receptor locations for a one month period per annum. Should a particular problem arise or persist, particulate monitoring equipment is to be deployed at the site in accordance with a programme to be submitted for approval to the Planning Authority and Environment Agency at a higher frequency.
   8. Any such programme will conform to the requirements and recommendations in ‘Technical Guidance Document M17: Monitoring of Particulate Matter in Ambient Air around Waste Facilities’ of the Environment Agency.
   9. Any equipment so deployed is to be proprietary manufactures and / or supplied and operated in accordance to the user’s instructions. Such equipment will most probably comprise deposition gauges and gravimetric analysis: these would be deployed at appropriate locations at the site boundary and at or near the façade of any built receptors. All such monitoring results are to be recorded in writing.
   10. Bioaerosols will not be a problem at the site since wastes are inert.
   11. Thus, there is not to be any monitoring proposed for bioaerosols.
   12. In the event of any complaint about particulate matter either at or leaving the site, the details of the complaint are to be recorded in writing, the basis for the compliant is to be investigated and, if deemed to be justified, appropriate remedial action is to be taken to mitigate the complaint. The results of the action are to be noted and their effectiveness assesses and recorded.
5. ‘Problem Waste’
   1. Particular care is to be taken on receipt of the following wastes as to their potential to give rise to dust nuisance:

* Soil
* Sand
* Clay
* Unsorted demolition waste
  1. All such wastes are to be transported within the site discharged and loaded with extra care and attention.
  2. It may, nevertheless, be necessary to close the site on occasions to some of all of these waste types and management is expected to take such decisions as are appropriate and record such actions.

1. Monitoring
   1. The limit set for dust values at the three identified receptor monitoring points DM1, DM2, and DM3 using frisbee deposition gauges are set out in table DM1 below, twice per annum:

Table DM1: Dust Monitoring Control Levels

|  |  |
| --- | --- |
| Location | Limit mg/m2/day |
| DM1 Forest Hall Cottage (DR2) | 200 |
| DM2 Eastern Limit Hampton Grange (DR4) | 200 |
| DM3 South West, Labrunum (DR7) | 200 |

Approved by

Mr M Ketcher

Director

The following rules/ procedures will be enforced by the Site Managers and the Directors.