GENERAL

1. **Please submit application form Part F1 – only table 3 Charging type (A) and Table 3 (Additional Assessment Charges (B) to reflect the correct charging.**

   A revised form F is included with this response.

2. **Please provide the list of the EWC waste codes the site wish to include under each activity.**
   - **A1 - Household and Commercial waste transfer station with treatment**
   - **A2 - Refuse Derived Fuel (RDF) processing**
   - **A3 - Asbestos waste storage and**
   - **A4 - Clinical waste and healthcare waste transfer station.**

   Waste transfer -

   The codes not highlighted blue in the supporting statement

   RDF processing -

   15 01 01 paper and cardboard packaging
   15 01 02 plastic packaging
   15 01 03 wooden packaging
   15 01 05 composite packaging
   15 01 06 mixed packaging
   15 01 09 textile packaging
   19 12 01 paper and cardboard
   19 12 04 plastic and rubber
   19 12 07 wood other than that mentioned in 19 12 06
   19 12 08 textiles
   19 12 10 combustible waste (refuse derived fuel)
   19 12 12 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
   20 01 01 paper and cardboard
   20 01 10 clothes
   20 01 11 textiles
   20 01 38 wood other than that mentioned in 20 01 37
   20 01 39 plastics
   20 01 01 paper and cardboard
   20 01 10 clothes
   20 01 11 textiles
   20 01 38 wood other than that mentioned in 20 01 37
   20 01 39 plastics
   20 03 01 mixed municipal waste
   20 03 07 bulky waste

   Asbestos waste storage -

   17 06 01* Insulation materials containing asbestos
   17 06 05* Construction materials containing asbestos

   Clinical waste and health care waste transfer -

   The codes highlighted blue in the supporting statement

3. **Submit a site plan/s clearly showing the proposed permit boundary and location of the emission points.**

   Plan VES_TD_COLW_200_017 included.

FIRE PREVENTION PLAN

Provide a revised Fire prevention plan (FPP) that includes the following information:

1. **Provide a fire prevention plan that is a standalone document. This will aid assessment and the usability of the plan on site.**

   The *site layout plan and sensitive receptor plans are separate to the FPP and are cross referenced as VES_TD_COLW_200_09 (site layout). VES_TD_COLW_200_010 (sensitive receptor). These should be included within the FPP document.*

   VES have found that including drawings embedded within a PDF document makes it more problematic for these to be updated as the drawings are revised in the future as not everyone in the business has access to paid-for PDF editing software. Relevant drawings are consistently referenced throughout the management plan. To ensure the correct plans are requested with the document I have included a revision which references the accompanying plans at the head of the document.

2. **Provide a revised site plan that includes the following:**

- **areas of natural and unmade ground;**

  The FPP drawing has been updated - grey areas are concrete, green areas are unmade ground. There are no areas of natural ground.

- **drainage runs, pollution control features such as drain closure valves and fire water containment systems.**

  Concept drainage network and drain closure valves for foul and surface water are already shown on drawing VES_TD_COLW_200_011. A reference to this drawing is now included in the FPP in section 11.

3. **Provide details of how you will prevent fuels and combustible liquids leaking or trailing from site vehicles and provide a process to detect and clean up if incidents occur (e.g. site inspections, spill kits etc.).**

   Controls will include a daily checklist for plant and machinery which includes checks for signs of fuel leakage. Plant will be maintained and serviced in accordance with manufacturers guidance and recommendations. Evidence of fuel leak identified by any staff on site would be investigated and responded to at the time. There will be a network of easily accessible spill kits located at the site. Proposed locations of spill kits are now annotated onto the FPP drawing.

4. **Provide details of the written procedures for waste acceptance checks to prevent reactions between incompatible or unstable wastes. You must use a quarantine area where necessary.**

   VES will comply with the relevant appropriate measures for Healthcare waste (Healthcare waste: appropriate measures for permitted facilities). Healthcare waste is confined to one bay of 770L bins. Aside from asbestos stored in a locked container and healthcare waste confined to one bay the facility will not take hazardous waste. Due to the type of waste being accepted no procedures covering incompatible or unstable wastes are required.

5. **Provide details of how external heating during hot weather will be taken into account and confirm that waste will be shaded from direct sunlight if required and/or any other techniques that will be in place to enable heat generated within the pile to be released.**

   Glass, green waste, inert material, and asbestos are not expected to represent a higher risk of combustion during hot weather.

   Road sweepings generally arrive site saturated from the sweeping process and can dry out in the summer but this would be confined to the external few centimeters of the material. In any event, the largest fractions by volume of road sweeping waste are stone / sand / grit which are not combustible and therefore as a whole this waste is considered low combustible and we do not anticipate any extra controls being required during hot weather.

6. **Confirm you will store waste materials in their largest form (i.e. reducing storage times for treated wastes, for example by organising any size reduction treatment as close to removal of material from site as possible).**

   The FPP has been updated to confirm that as far as practicable material will be stored in its largest form.

7. **Provide further details of maximum volumes and sizes for waste piles on site, in accordance with the guidance, as follows:**

- **Explain how the waste storage capacity volumes in Table 4 'Waste storage capacity' will be maintained, as these are smaller than the dimensions given for the internal and external bays in 'Waste pile dimensions'.**
  For example, the waste pile dimension of Bay 1 – 12 m x 9.6 m x 4 m gives an overall volume of 460.8 m3. Whereas the waste storage capacity is stated as 280 m^3.

  The FPP has been updated to indicate the stated height is a maximum height. Where it is possible to do so storage quantities have been included which are an estimate based on the angle of repose of the waste. Most waste types do not store neatly as a cube so bay sizes take this into account to avoid them being overstocked leading to overspill.

- **Explain what is meant by 'fixed maximum bay capacity of 450m^3', referred to in FPP section 5.2 Waste type/bay assignments.**

  The wording here has been improved in the FPP. Effectively what this section is stating is that the transfer station will have a number of fixed dimension bays up to a maximum of 450m^3. Provided those bays are used in accordance with FPP guidance pile sizes there should be flexibility as to the waste types provided change procedures are followed.

- **Please note that the volume of the quarantine area will need re-evaluating if your pile sizes will exceed 450 m^3.**

  Pile sizes will not exceed 450m^3.

8. **Provide details which show that fire walls and bays are designed to resist fire (both radiative heat and flaming) and have a fire resistance period of at least 120 minutes to allow waste to be isolated. Fire walls must show compliance with all factors outlined in Section 11.2 of the guidance.**

   Details have been included with the response.

9. **Provide further information on your site specific calculations for water supply, in accordance with the guidance, as follows: -**

- ***Confirm how many hydrants are available.***

  The proposed number of hydrants is 4.

- ***Drawing VES_TD_COLW_200_009 appears to show two hydrants - one hydrant per external yard area to the north and east - rather than four hydrants as indicated in section 8 of your FPP.***

  VES_TD_COLW_200_009 does show 4 hydrants; one near the weighbridge office, one near the proposed office and welfare, one near bay 15 and one on the fire pump house.

- **Explain how you have calculated the water supply based on your proposed system and a reasonable worst-case scenario of your largest waste pile catching fire.**

  Water supply calculations are based on Environment Agency guidance in accordance with FPP overarching principals on a waste pile size of 450m^3 (6.66 l/min x 450m^3 x 180min).

10. **Provide further details of how you will contain the fire water run-off from entering the environment. You need to show that containment volumes are in accordance with water supply calculations. Include secondary and tertiary containment facilities for fire water run-off if applicable. If combustible wastes are to be stored on hard standing, please assess the potential effect of fire water on receptors.**

You *have stated that the site will be able to contain firewater in terms of below ground storage and controlled surface ponding but have not explained how this has been calculated.*

The *practical steps for the shut off of the penstock valves in a fire emergency incident should be included within your Fire prevention plan.*

Fire water containment has been calculated as a product of the largest pile size on site (450m^3) and the guidance water supply calculations in section 16 of the Environment Agency FPP guidance (6.66 l/min x 450m^3 x 180min = 540m^3).

This volume of water will be contained by a combination of below ground storage and controlled surface water ponding. This would comprise a below ground storage tank that may be required for attenuation to meet sewer discharge rates and 'dishing' of the yard surface so that water runs towards a low point and collects in one area. The current plan is 390m^3 in the attenuation tank and the rest from dishing of the yard but this has not been fixed at this stage in the project.

In practice this storage volume is extremely conservative as it does not take into account water lost to evaporation / steam, surface tension, containment within the building and within the waste material.

Conservatism is further increased as VES has one of the largest tanker fleets in the country and standard practice in the event of a fire would be to have tanker capacity awaiting fire water generation before yard area containment is required.

DUST and EMISSION MANAGEMENT PLAN

Windrose

1. **Although you have submitted a wind rose data – can you please confirm from which local weather station this data has been taken from?**

   Please also demonstrate that this is a suitable weather station to use (i.e. that the local geography and topography have a similar resemblance to the waste site and therefore the conditions at the weather station will reflect those of the site) and use it to explain how the weather will affect and how dust will affect local sensitive receptors.

   There is a compromise between the quality of data available for very local weather stations and considering weather data from further afield but with more confidence in the quality. For the purpose of this application weather data can be checked and cross referenced from three sources.

   https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/nottingham_united-kingdom_2641170

   Meteoblue provides simulated weather models based on 30 years of hourly weather model simulations and available for every place on Earth. They give good indications of typical climate patterns and expected conditions including wind. The simulated

weather data have a spatial resolution of approximately 30 km and may not reproduce all local weather effects.

https://www.metoffice.gov.uk/services/transport/aviation/regulated/airfield-climate-stats#EastMidlands

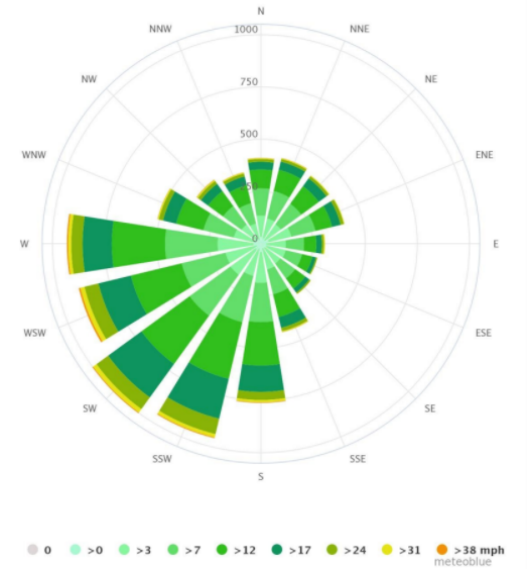
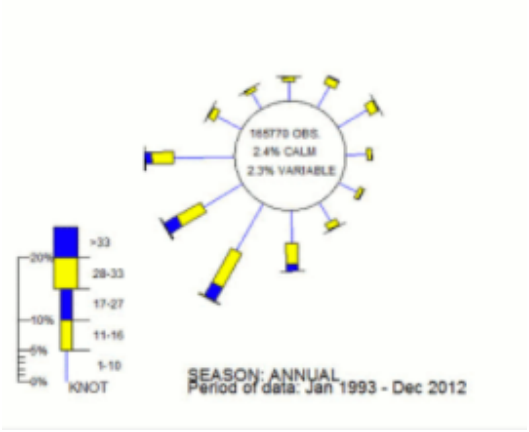
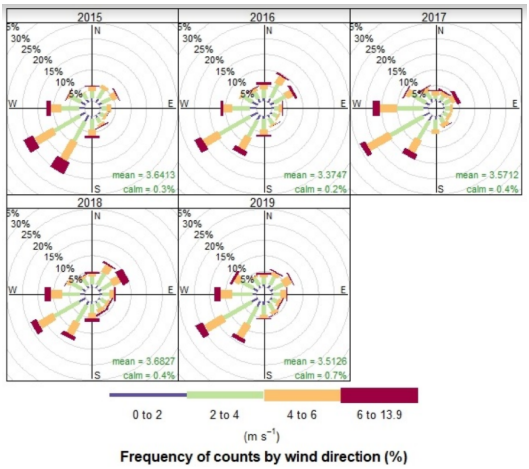
The met office provides data from airport locations so confidence is high. In this case east midlands has been selected. East Midlands can be considered as an urban flat site and therefore has a reasonable degree of consistency with the Colwick location in that the surrounding area is flat and open with developed areas although the meteorological site is more open. The wind rose from East Midlands can be checked for broad consistency with the simulated data.

For the purposes of a wind rose to guide assessment of any dust complaints this is adequate. It would not be appropriate for example if a coastal vs inland site was being compared or a weather station which was being influenced entirely by local topography e.g. a valley or canyon.

Further detail may be required for modelling purposes where local topography and building downwash effects can be considered as well as modifying surface roughness estimates between the met station and subject site. That level of detail is not required for amenity management plans. In this case as modelling has been undertaken for the odour management plan the consultant has used data from Nottingham, Watnall which is another urban flat site. The consultant has made a minor modification to the surface roughness to account for the slightly more open nature of the meteorological site.

The table below demonstrates that there is good agreement between the three meteorological data sources.

Comparison of meteorological wind data sources to guide future amenity assessment

	**Meteoblue (simulated)**
	**East Midlands Airport**
	**Nottingham, Waddington**

Site Plan

2. **Please include all appendices and layout drawing(s) into the DEMP as a whole document.**

- **The site plan must be drawn to scale with date and a reference number.**

  Already included, no change required.

- **Identify the visual dust monitoring locations around the site perimeter**

  Drawing created within DEMP section 4.2 with dust monitoring locations.

- **Loading and unloading areas**

  Unloading will occur directly into designated bays either internally or externally. All loading for waste stored internally will take place inside the transfer station building.

- **Location of all equipment including mobile plant**

  Added to GA drawing.

- **Storage bays**

  Already included, no change required.

- **Locations of suppression systems and nozzle heads (including their arc coverage area)**

  Added to GA drawing (VES_TD_COLW_200_000 REV C - GA drawing). There is no arc coverage as they are directed only into the shredder hopper.

- **Wheel wash / location of hosing of vehicle (as applicable)**

  There is no wheel wash or fixed hosing point.

- **Different types of site surfaces**

  Added to GA drawing (VES_TD_COLW_200_000 REV C - GA drawing)

- **All buildings, with layout of the internal area of the building.**

  Already included, no change required.

Wheel Wash and access point:

3. **It appears there is no wheel washer in place. In table 3.2 you have stated:**

   "Hosing of vehicles on exit (as required) …"

   Please note ambiguous language is not excepted. Please demonstrate what mitigation measures you have in place to ensure that vehicles will not track mud outside the permitted boundary.

The language in this section has been updated to be more descriptive as to when hosing may be required. This is not anticipated to be a routine activated control measure based on the waste types being accepted.

4. **Confirm if the site has minimised the number of access points to the site from public roads?**

   There is one vehicular access and one egress point to the site on public roads. This is the minimum number required for ideal traffic flow and reduces occurrences of vehicles waiting to unload. The site is in an established industrial estate.

Waste pile heights

5. **Please clarify if the site is storing any potential dusty waste in external bays. If the site is storing potential dusty wastes in the external bays, please confirm whether the bays are oriented in a way to reduce wind whipping?**

   The types of waste stored externally are not prone to dust generation. Waste piles are maintained below the height of the bays which reduces the likelihood of waste being 'whipped' in very high winds.

6. **Clarify the maximum height of the external stockpile and demonstrate that they will be at least 0.5m below the top of wall height.**

   Bay heights are clarified in the FPP. Stock piles will be maintained at least 0.5m below the top of the wall height.

7. **Explain what measures are in place to ensure that staff on site ensure that the maximum heights of the stockpiles are not exceeded.**

   Maximum waste storage height is covering operative training. The height of waste can be gauged easily relative to the bay walls. All waste on site is stored in a bay.

Dusty Wastes and other

8. **Provide a table listing the potential dusty waste types that will be received by the site and an assessment of their dust potential. For more information, please see the attached DEMP example template table 2.1.**

   VES do not agree this should be required for the subject site with the reason that we do not anticipate specific waste types to be particularly dusty rather we expect this to be minimal and variable depending on a variety of factors. If it was identified that a particular source was dusty then if required additional controls would be reviewed.

9. **Describe any possible issues of dust from neighbouring sites. For more information, please see the attached DEMP example template table 1.2.**

Plan and description added to the DEMP. It should be noted this may develop / change as further data becomes available once VES has a permanent presence at the site.

10. **Confirm are loads sprayed on arrival and before tipping to reduce dust and particulates when tipping?**

    The types of waste received at the site are not likely to generate dust during loading and unloading therefore spraying would not increase containment and would also use water and energy so could not be justified as an appropriate measure.

11. **Confirm whether the operations will be reduced or ceased in the event of unfavourable conditions; i.e high winds, bad weather condition.**

    VES does not anticipate high winds being a particular source of additional risk for the types of waste being handled at the site. Site operations will not automatically cease in high winds or other bad weather conditions unless pollution was occuring.

House keeping

12. **Provide the following details on the proposed housekeeping:**

- **How often the onsite sweeping will take place. *i.e. daily***

  Inspections will take place daily with cleaning undertaken if required.

- **Confirm how different surface areas will be cleaned. *i.e. the hard standing will be dampen down and the concrete area will be swept.***

  All operational trafficked areas are concreted, there are no areas of the site which are hardstanding.

- **Any areas that cannot be swept under and dust accumulates. Confirm how these areas will be cleaned.**

  Accumulations not reachable by vehicle mounted mechanical cleaning will be cleared manually using a shovel and brush.

- **Confirm how often the site haul road and highway will be swept.**

  The roadway will be inspected daily and cleaned if required.

13. **Confirm if conveyors / picking stations are covered?**

    If the shredding process was being carried out externally covers for the conveyors may have been specified. There is a balance between ease of cleaning and build up of residue which increases the risk of fire starting and spreading, and dust emissions. In this case VES has experience from the same activity being carried out elsewhere that open conveyors are not a significant source of dust emissions when shredding

residual waste. The waste does not tend to be dusty and the size fraction created does not act like a dust.

Manual pick stations are not part of the process and do not form any part of this application.

Suppression systems

14. **How far the fixed suppression systems cover the stockpiles (*e.g can it reach the entire pile?)***

    There is a fixed dust suppression system over the shredder hopper to control dust emissions at the hopper loading stage. The suppression system is not designed to cover internal stockpiles.

15. **Clarify when the dust suppression systems are to be switched on and off.**

    The dust suppression system is expected to be used during shredding. As the system consumes water, usage will be reviewed periodically to ensure resource use is optimised, this may result in the pattern of use changing. This would be undertaken in accordance with a management of change process.

16. **Demonstrate that there is sufficient water supply and pressure for a worst-case scenario. *(e.g –drought and dry weather condition)***

    The hopper misting system is not a high water consumer. If there was a drought the fire water storage tank could be used as a backup. The small consumption from the fire water tank would be insignificant and would not affect the ability of the site to respond to a fire (there is sufficient water in the tank above FPP requirements to serve this purpose).

17. **Demonstration that the sites drainage system is suitable to contain the amount of water used.**

    The volume of water use will be low and is not expected to generate any leachate. Most of the water will evaporate or remain saturated in the waste. VES has no concern regarding the capacity of the drains to accommodate a small amount of excess water generated by the suppression fitted to the hopper.

18. **If the suppression system relies on a pump, then you must confirm what contingency plan you have in place in the event of power failure.**

    In the event of power failure the shredding system would also be offline and the water spray system would not be required.

19. **Provide detail on how dust will be controlled in areas not covered by the dust suppression systems.**

    See DEMP section 3.2.

20. **Explain what happens if the control measures fail? *(e.g – cease operations and informing local area officer).***

    If control measures fail then if pollution was occuring operations on site would cease. The DEMP has been updated to make this clear.

Air Extract system within building

21. **Is there a mechanism in place to ensure the dust collection system works**

    The air handling unit at Colwick is for odour abatement purposes. The system is not designed to abate particularly dusty emissions or control a particularly dusty working environment. It is fitted with a dust pre-filter to ensure small amounts of dust do not impact the performance of the carbon (Dust pre-filter: 27 no. T60 High capacity dust filters). Reference to the system in the DEMP focuses on the negative pressure element of the design which will act as an additional layer of control for low volume fugitive dust and reduce any potential emissions from the building envelope.

22. **Demonstrate what happen with the dust after it has been collected.**

    The filters are exchanged / replaced rather than emptied.

23. **Is the dust collection point protected from collision?**

    See point 22, there is no dust collection point. Used filters will be sent to a suitable licensed facility.

24. **Is the storage of the dust protected from collision? i.e. secure container.**

    See point 22, there is no dust collection point.

Table 3.2

25. **Please remove ambiguous language from this table i.e regularly.**

    Language without specified periodicity has been removed and replaced.

Visual Monitoring

26. **Please attach Visual Monitoring checklist within the DEMP.**

    As a small site (one building) we do not consider this would add much value and has the potential to diminish into a tickbox exercise. Veolia standards are covered in staff training. This is something that could be developed in the future if proposed controls are not sufficient.

Complaints

27. **Confirm a deadline at which you would complete an investigation into a complaint.**

An investigation would be initiated on the day it is received on the basis any observations are contemporaneous with the complaint to give the best chance of it being substantiated. Completion of the investigation would depend on the type of complaint, whether it was contemporaneous and whether it was substantiated.

28. **Is feedback provided to each complaint?**

    Yes, if requested, where VES has the complainant details.

29. **Confirm what procedures you will put in place for review of these complaints by senior management in order to make long term improvements.**

    Veolia operates a purpose designed risk and assurance reporting tool:

    https://www.ecoonline.com/ehs-software

    All accidents, incidents and regulatory inspections findings are logged into the system and the data is used to track required improvements / actions and these require sign off. Through a combination of communication between operational teams and central risk and assurance functions the outcomes of incidents and actions are shared within the group.

30. **Provide details of an escalation procedure if a number of complaints are received.**

    There will be a Business Continuity Plan covering the site which will dictate options for example to divert waste if this was required. VES has a dedicated environmental compliance team and a business crisis line. If high volumes of complaints are received this would be escalated.

31. **Confirm at what point operations on site will stop if numerous complaints are received.**

    Operations will stop if pollution is occuring and cannot be controlled using appropriate measures. Complaints precipitate an investigation and appropriate action is taken ensure appropriate controls are in place to control pollution. Volume of complaints cannot be treated as a sole indicator that operations should cease.

Other points:

32. **Section 2.2 Waste Shredding**

    You have stated "*The medium speed shredder may generate fines during processing, but measures are in place to minimise emissions outside the building envelope.*

    Please clarify what measures the site have in place?

    These are as described in the DEMP key factors associated with this aspect include:

- Spray bays around the loading hopper
- Sympathetic handling of waste material
- Cleaning of the equipment
- -ve pressure building envelope
- Fast acting roller shutter doors
- Waste acceptance procedures

33. **Section 2.3 Waste Storage**

    You have stated *"Appendix A Drawing VES_TD_COLW_200_000"*

    We are unable to locate this drawing reference. Therefore, as stated in Point 2; please include all appendices and layout drawing(s) in to the DEMP as a whole document.

    This drawing is in Appendix F - the DEMP has been updated to make direct references to the drawing rather than the Appendix to make future reference straightforward. See comments elsewhere regarding stand alone document status.

ODOUR MANAGEMENT PLAN

1. **Please confirm if the below is correct.**

   "A central extract ventilation system is already installed within the building. The Carbon filtration system to be installed prior to commencement of RDF production activity."

   Initially the building would be passively ventilated using louvres in each gable end. The carbon odour abatement system would be installed prior to the facility shredding to produce RDF.

2. **A site plan should be provided within the Odour Plan marking areas carrying out odorous processes and where the emission points are.**

   VES_TD_COLW_200_000 REV C - GA drawing updated to include the stack emission point and shredder.

3. **Can you please clarify the types of containers the materials are received in?**

   These could be various including but not restricted to e.g. RCV, RORO, skips, smaller vehicles could be used for clinical waste deliveries or asbestos.

4. **Clarify how often the site will be cleaned, particularly the equipment's and the areas where the odorous wastes will be processed.**

   Please be more specific about the cleaning timescale *(I.e – daily, every-1-2 days etc).*Please see the information below this is the best practice for housekeeping, could you please commit to this or something similar

   The facility will be inspected daily for cleanliness but cleaning will only take place if required.

Carbon filter

5. **How often is the carbon filter monitored for:**

a) Inlet VOC concentration

In this type of application we are unlikely to see the levels of VOC necessary to generate high heats of adsorption. We expect to see some aldehydes and functional group compounds as it is these types of compounds that cause the odour. We do however historically see these in microgram quantities and hence again any heat of chemisorption will be dissipated before enough inventory of such compounds can accumulate e.g. to present a fire risk.

b) Outlet VOC concentration

Olfactometry is usually used rather than VOC measurement because of the diversity in odours. A life test of the media bed is undertaken at regular intervals (most likely quarterly) by lab-testing an extracted carbon sample, and this returns a carbon tetrachloride CTC number 'CTC number' which gives a proxy for the amount of remaining activity. This will usually give a good indication of when the bed is about to start breaking through, which it tends to in steps rather than smoothly. Advice is taken externally from the technology provider / contractor under the service contract.

c) Inlet gas temperature

Not monitored, the system operates at ambient temperature.

d) Inlet gas moisture content

Not monitored, the system operates in ambient conditions.

e) Gas flow rate

The system will be installed with pressure switches to give normal and alarm indication of flow and/or pressure loss (e.g. dirty filter).

f) Bed operating temperature

Not monitored, the system operates at ambient temperature. See also point a) in relation to VOC content.

g) Pressure differential

The system will be installed with pressure switches to give normal and alarm indication of flow and/or pressure loss (e.g. dirty filter).

6. **How often is the carbon filter inspected for fouling and leaks?**

We anticipate 3-month checking of the Carbon bed. The beds are a deep layer of granular media and will not 'leak' as such, but even so regular testing of the media is important, and the bed will be tested at various points to get a clear picture. In regards to fouling, this could happen in the event of a prefilter failure, but the pressure sensors on the prefilters will detect this enabling us to respond.

7. **Is the carbon filter fitted with differential pressure transmitters and if so how often are they calibrated?**

The system will be installed with pressure switches to give normal and alarm indication of flow and/or pressure loss (e.g. dirty filter).

8. **Is the carbon filter fitted with a heater/demister to pre-treat the inlet gas? If so, have temperature transmitters been fitted to the inlet and outlet of the heater unit?**

   No heater / demister is proposed to be installed.

9. **What indicators are used to determine when the media should be replaced and how is it ensured that this occurs before the breakpoint of the media is reached?**

   A “CTC” level which is a measure of the activity of the carbon. There will be approximately 3-monthly checking of the carbon media, and when it is approaching a stage where odour will start to breakthrough, a media change can be proactively booked in. It should be noted that this is a comfortable PPM regime; it would be unprecedented for odour to suddenly break through on these sites with low levels of VOCs, and as a result there will not be a critical media change requirement.

10. **For the chemicals that the carbon filter has been designed to treat, have emission limit values been guaranteed, and if so what are they?**

    3OUe at the site boundary.

11. **What type of carbon bed is used *(e.g. standard carbon, impregnated carbon, blended carbon)*, and to what extent is this compatible with the chemicals which the carbon filter is designed to remove?**

    We typically use virgin coal granules for these type of sites. Copper impregnated carbon is generally not required unless for any reason high humidity is encountered. Copper impregnated actually works better at high humidity, so unless these conditions are present, we would use virgin coal granules.