

Mobile plant permit – EPR/BB3498HA

Application to Vary Existing Permit

Prichard Remediation Ltd

14th April 2022

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Requirement:	Virginia Park Deployment	Prichard Remediation Ltd
Date of Submission:	14 April 2022	
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Version number and date:	First version submitted	

Introduction

This Odour Management Plan (OMP) is to help manage and mitigate the odours that are potentially produced when operating their mobile plant through the deployment of their mobile plant permit at Virginia Park.

The effective management of the site and the treatment plant used is essential in reducing the risk of odour emissions firstly being created to excessive levels and, secondly, leaving the permitted boundary. The management of the waste, if done correctly, will minimise the risk posed by abnormal operational conditions.

The aim of this OMP is to help the operator identify what conditions are likely to give rise to odour releases and assist the operator in undertaking measures to both mitigate the release and importantly, to help prevent them in the first instance. There are a number of factors that influence the release of odour emissions into the environment, each of which to be dealt with within this plan.

**This OMP has been published in line with the EA guidance note H4-Odour Management and How to comply with your environmental permit.*

**This report will be reviewed and amended where appropriate annually from permit issue date.*

Waste Inputs

The mobile plant deployed will only be used to treat waste that has been coded in agreement with NRW as outlined below. This will often determine how, if any at all, odour will be generated and impact of the site and potential receptors. Table 1.1 below will be used to list the permitted wastes as required.

Table 1-list of waste codes to be accepted for processing

EWC code	Description
19 13 01*	Solid wastes from soil remediation containing hazardous substances
19 13 02	Solid wastes from soil remediation other than those mentioned in 19 13 01

For this section, table 2 aims to identify:

- The conditions by which odour may be produced for certain input waste material and the potential of that release to be an issue (risk based approach; these are deemed as being the potentially most problematic waste streams).
- How to mitigate these conditions by effectively managing the input waste types;

Table 2-Likelihood of odour release from waste inputs

Waste Source	Composition	Potential Issues	Probable situation	Risk	Mitigation
Waste from soils	Mixture of stones, cobbles, soil	Waste have been on site for significant periods of time and absolute condition may be unknown	Generally inert / non hazardous from C&D material	Low	Visual and olfactory checks undertaken routinely during treatment activities
Mixed waste	Some detritus material (mixed plastic / glass bottles)	Waste have been on site for significant periods of time and absolute condition may be unknown	Generally inert / non hazardous from redundant waste materials	Med/ Low	Visual and olfactory checks undertaken routinely during treatment activities

Odour Emission Monitoring

Odour monitoring points have been identified on the site plans and identified in drawing 1 below and will be assessed daily / weekly as required. This will be done on an ongoing basis to ensure there are no issues with odour escaping the boundary. In addition to this should an odorous load / area be encountered and wind direction on site be in the direction of sensitive receptors, additional sniff tests will be undertaken throughout the day. This can be extended where appropriate to include locations off site if a complaint is received.

If findings from any the points identify any odour issues, these will be recorded within the Odour Assessment Report (See annex list). This report then initiates a full investigation to be carried out by the Site Manager and the mitigation measures, highlighted below, will be used to counter the release of odour from site. If issues are encountered/detected by the sniff tests, or we receive complaints, we will investigate and pinpoint the source, undertake a review of site conditions and potential impacts and take appropriate action including limiting / ceasing the operation.

The corrective actions are then logged on an Odour Mitigation Report (See annex list) to ensure that the same cause of release is prevented in the future. The FIDOR principles will be worked to in order to determine the degree of odour pollution.

If issues begin to reappear, or we receive complaints, we will restart the additional monitoring process again as above. This will continue until the source is identified and mitigated for (via on site assessment/review into the cause and record the outcome).

When the identified source has proven to have been corrected (through a clean suite of odour monitoring episodes for a month following the incident) monitoring frequency will return to the initial process of daily monitoring at 4 locations.

The monitoring process will be undertaken by a suitably trained member of staff from the project team who has not been subjected to significant odour exposure for at least 30 minutes and who is fit and well. This allows the assessor to be free of odour fatigue where he/she may become desensitised to the odours emitting from the process. 'Sniff tests' will be carried out and it is not anticipated that the requirements of BSEN13725:2003 (Dynamic dilution Olfactometry) will be needed.

The following records/procedures will be carried out and kept on site or in the head office for inspection when required:

- Odour Assessment Reports-carrying out of daily sniff tests at the locations below.
- Complaints procedure- following the complaint of odours from an off-site source.
- Emissions monitoring- detailed logs of all emissions potentially released from site i.e. odour
- Meteorological monitoring- checks and recordings of the prevailing weather conditions will be made by use of an in-company weather station located nearby.
- Odour Mitigation Form- detailing corrective actions to odour release events.
- An odour diary will form part of the site diary completion if glass wastes are being stored and processed on site at that time.

If an odour emission is highlighted as part of the daily monitoring programme, NRW will be notified of the occurrence if it is deemed significant and details of what measures are being undertaken to reduce the odour will be provided.

Local Receptors

Local receptors have been identified for the mobile plant treatment operation and are contained with the site plans for Virginia Park in section 7.3.

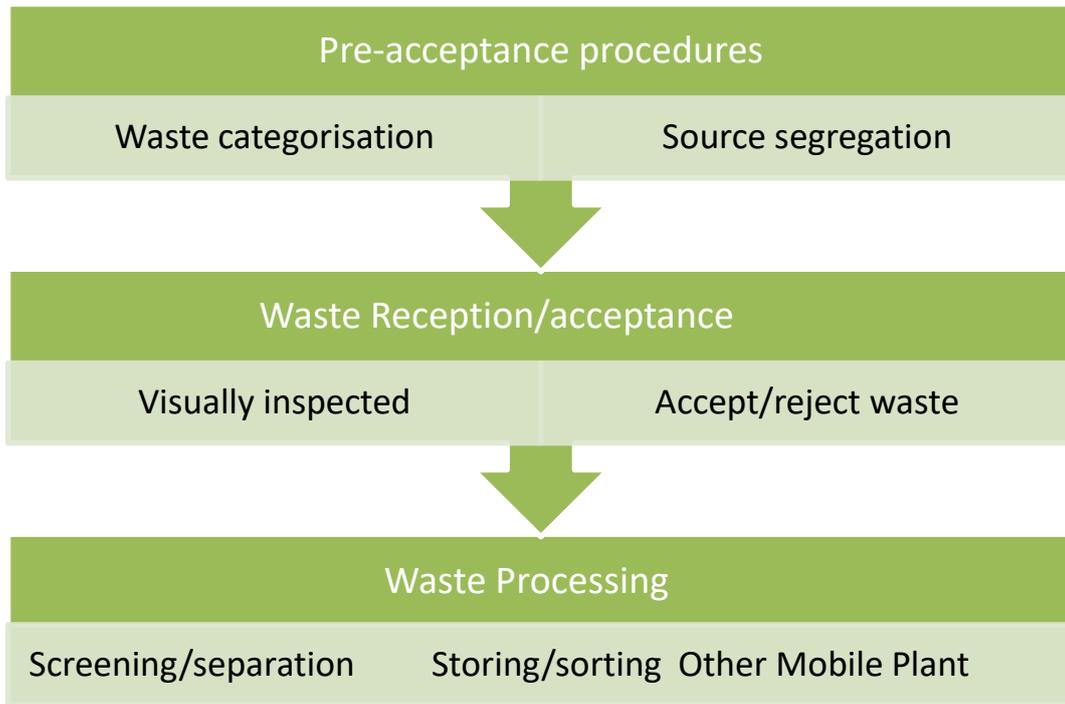
Source-Pathways-Receptor Model

Source	Pathway	Receptor
Release of odour from waste processing on site	Wind and airborne transmission.	Local businesses and residential properties identified above.
		

Management and Mitigation of Odour

The identification of where the odours may originate from is vital to the successful adoption of an Odour Management Plan. There are several processes and points of the site where odour is potentially going to arise:

Process Flow Chart



- Waste treatment area. The waste that is to be delivered / removed could allow for the creation of odours when treated at the site. If the material is odorous, this will be identified on site as soon as possible and an appropriate action taken as per the above.
- Waste processing. The waste processing that will be carried out on site is mechanical and only that required to remove material that is not suitable for reuse but which meets the specification of the client / remediation strategy. It is not envisaged that treating the waste will give rise to significant odours due to the length of time the material has been in place. However. There is the potential for pockets to be encountered.
- Storage of product material. This is often where treatment phases are complete and WRAP QP / end of waste requirements have been achieved, therefore resulting in the end of waste status (glass/aggregate). Product or material will be held / reused in relevant areas as per the site plans and in line with specific site requirements.

Stock Monitoring

Monitoring of any stockpiles held on site will be carried out routinely to ensure that the piles of waste at all stages are being managed correctly. This is vital if an early response to problems is to be achieved and mitigated with minimal disruption both on and off site.

Additional Measures

Occasionally the on-site mitigation measures that will be undertaken to suppress and prevent the release of odours may fail. In these unlikely instances, the first measure that will take place is that the waste being treated will cease. This will enable the management of the facility to further investigate the cause of the odour. For the time period that these mitigation/investigation works are being undertaken, the odorous waste in question will be stored in isolation and covered with non odorous material that will act as a barrier, until either the problem is resolved or the waste will need to be removed from site (whichever is sooner).

If the problem persists for a period of longer than 3 days then odour suppression systems / methods could be considered and this will be totally dependent on the nature of the material being treated and the treatment technology.

Throughout this unlikely set of events, the site management will be in contact with the local receptors, firstly by letter, that will detail what actions are being undertaken and a likely cause of the problem and secondly, if required, in person.

There is sufficient provision of resources and staff on site that are employed full time to ensure that material can be processed. All machinery is regularly serviced, and routinely checked in between services. Almost all equipment can be repaired/replaced within the day.

Sniff testing would be undertaken daily to determine if there were any issues and action taken accordingly.

Complaints Procedures

Prichard Remediation Ltd as part of this document have committed to a series of procedures that aim to highlight any odour releases from site and the plant being used that may become a nuisance for surrounding receptors. If an odour is identified within the odour assessment monitoring rounds, this is logged and reported to the site management who initiate an investigation into the source of the odour.

If a complaint is made to the site that has already been identified within the daily assessment, no further action beyond what has already been instigated on site will occur. The complainant will be made aware of what remediation is taking place to mitigate the odour release.

In the event that a complaint is made regarding odour that was not identified within the daily assessment it will be directed to the Recycling Manager and company Director. An External Compliant Form will be completed for the incident and logged formally. The Site Manager will

initiate an on-site investigation as soon as possible after the complaint is received. Any findings and resultant corrective actions will be detailed to the complainant.

All complaints and odour releases will be logged on the Assessment Report forms and any investigation findings/remedial action will be documented on the Odour Mitigation Report form.

In the event that multiple complaints are received from different complainants (3 substantiated within an hour of each other from different complainants), the above procedures will be initiated in addition to the following:

- A repeat of the odour assessment rounds at each location identified above.
- An assessment of the type of on-site activity taking place compared to the current meteorological conditions.
- A review of the management and mitigation procedures.
- Further assessment of the location of the complaints to understand if there are any other reasons e.g. geographic etc that may have concentrated the odour to a particular location.

All reports will be made available to NRW if requested.

Corrective actions from confirmed odour identification

The investigations mentioned above will result in corrective actions to be implemented to reduce/remove the odour and to mitigate the effect of poor conditions on site that resulted in the odour release initially. The corrective actions will include procedural reviews included in the following non-exhaustive list:

- Waste treatment review
- Meteorological interpretation review-to identify whether site staff reading the data incorrectly

Odour Prevention and Dispersal

The levels of potential releases of odour will be controlled so far as reasonably practicable on site by adopting the measures outlined within this section of the plan.

To avoid the unnecessary nuisance off site from site operations, Prichard Remediation will ensure that operations will only take place in the first instance if odours are not identified within the sniff tests. Weather conditions and forecasts will also be monitored closely.

Additionally, dispersion rates may be high when the wind speed is high, in some situations this may lead to the odour being diluted as weather conditions may take the odour higher into the atmosphere and so the local receptors may be unaffected by site operations. This is dependent on accurate monitoring of meteorological conditions and the nature of the material being encountered and method of treatment.

Annex List

A--External Complaint Form

Date and time of complaint:	Complaint reference number:
Name of complainant (if available):	
Contact details of complainant (address and phone number):	
Date and time of incident (if different):	
Detected location of odour emission (NGR if available):	
Weather conditions:	
Wind direction and speed:	
Complainant description of odour:	
Other comments/observations from complainant:	
Receptor Sensitivity: (Low, medium or high)	
Previous complainant (Y/N):	
Odour Mitigation Report reference number:	
Form completed by (sign and date):	

Odour rating	Description
0	No odour (unsubstantiated report)
1	Very slight odour
2	Slight odour
3	Distinct odour
4	Strong odour
5	Very strong odour
6	Extremely strong odour

Receptor Sensitivity: Low (footpath, road) Medium (ind./com. premises), High (Residential)

B--Odour Assessment Report

Monitoring Point	Time	Odour Rating	Interrupted? (Y/N)	Description	Weather Conditions	Wind Direction
1						
2						
3						

Assessment undertaken by: _____ **Assessment Reference number:** _____

Date: _____

The assessing employee must use the rating system below to identify any odours throughout the monitoring round.

Odour rating	Description
0	No odour (unsubstantiated report)
1	Very slight odour
2	Slight odour
3	Noticeable odour
4	Strong odour
5	Very strong odour
6	Extremely strong odour

Action required at points: _____

C—Odour Mitigation Report

Report Completed by:	
Date and Time:	

Responsible member of management:	
Odour Assessment Report Reference:	
External Complaint Reference Number:	
Confirmed Source of Odour: (if appropriate)	
Suspected Source of Odour: (if no odour remains)	
Weather Conditions:	
Wind Speed and Direction:	
Further Action Required on Site?	
Corrective Actions Undertaken:	
FIDOR assessment	
Frequency of detection:	
Intensity as perceived:	
Duration of exposure:	
Offensiveness:	
Receptor sensitivity:	
Odour Eliminated at Site:	
Odour Eliminated at Detection Location:	

Complainant Contacted by:	
Date and Time:	
Incident Closed by:	
Date and Time:	

