

# RHAYADER DEPOT WASTE TRANSFER STATION

## ODOUR MANAGEMENT PLAN

**Environmental Permit ref. no. EPR/DB3930AB/A001**

|              |                                      |        |         |
|--------------|--------------------------------------|--------|---------|
| Title:       | Rhayader depot odour management plan |        |         |
| Ref:         | EP68                                 |        |         |
| Issue:       | 3                                    | Sheet: | 1 of 14 |
| Issued By:   | Green Dragon Coordinator             | Date:  | DRAFT   |
| Approved by: | Environmental Manager                | Date:  | DRAFT   |



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## 1. Introduction

This Odour Management Plan outlines the methods by which Powys County Council will systematically assess, reduce and prevent potentially odorous emissions from Rhayader depot waste transfer station (WTS), caused by the bulking up and forward transport of domestic food waste (EWC 20 01 08) and mixed municipal waste (EWC 20 03 01) also known as “residual household waste”.

The odour management plan has the specific aim of ensuring that:

- Odour impact is considered as part of routine operations.
- Odour is primarily controlled at source by good operational practices, including physical and management control measures.
- All appropriate measures are taken to prevent or, where that is not reasonably practicable, to reduce odorous emissions to air from the WTS at nearby receptors.

This Odour Management Plan addresses the impact of odour release and the control measures employed to mitigate the risk.

The methodologies presented in this management plan take full account of Environment Agency guidance documentation as detailed below:

1. Technical Guidance Note H4 Horizontal Guidance for Odour.
2. Odour complaint report form 110319
3. Odour diary form version 110319
4. Odour reporting form 110319

## **2. Sources, releases and impacts**

2.1 Odour may be released during the following activity:

- Unloading of domestic food waste into sealed skip

2.2 Once released into the atmosphere, the pathway for odour will be air transport. Sensitive receptors will be humans living close to the site, in particular residential properties to the east of the site.

2.3 Further details on the risks and pathways of odour release are provided in A07 Risk Assessment.

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### **3. Food Waste Acceptance and Storage Criteria**

- 3.1 Food waste and mixed municipal waste will be collected at weekly intervals from domestic and commercial premises.
- 3.2 If for any reason the interval between the collection of a batch of food waste is greater than 1 week, then it will not be taken to this Waste Transfer Station and will be diverted to other delivery points. An exception being that the collection is temporarily delayed by ice and/or snow.
- 3.3 If a batch of food waste or mixed municipal waste is found to be highly odorous on delivery to the Waste Transfer Station, it will be diverted to another delivery point.
- 3.4 Food waste will be stored for a maximum of 3 days in the sealed waste skip before being transferred to the approved delivery point.

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## **4. Odour control measures**

Physical and management measures have been included to control odour at this waste transfer station.

### **4.1 Site Management Responsibility**

- 4.1.1 The Technically Competent Manager (TCM) (or designated responsible person) will have responsibility for ensuring that nuisances and hazards arising from the facility due to odour are minimised. Regular meetings will be instigated to discuss current and planned site operations that will have the potential to generate odorous site emissions.

### **4.2 Physical Control Measures**

- 4.2.1 Physical control measures will be implemented at the site. These control measures are as follows:
- 4.2.2 Food waste will be moved from the site at least twice a week to prevent the build-up of odours.
- 4.2.3 Food waste pods containing food waste residues will be washed out after each tip.
- 4.2.4 The food waste skip will be sealed and kept closed unless being filled.
- 4.2.5 The food waste skip will be washed out once a week.
- 4.2.6 Areas utilised for handling food waste will be cleaned regularly.
- 4.2.7 When filling the sealed skip account will be taken of the prevailing wind direction and temperature. If the ambient temperature exceeds 25degC and the wind is blowing in the direction of the residential housing, the sealed skip will be hosed down with cold water for 5 minutes before opening, to minimise odour.
- 4.2.8 Mixed municipal waste will be unloaded within a sealed building.

### **4.3 Management Control Measures**

- 4.3.1 A site checklist, including an odour diary, will be completed daily to record compliance with risk management procedures.
- 4.3.2 If at any time it is necessary to undertake temporary actions that are likely to cause elevated levels of odour, the TCM (or designated responsible person) will contact Natural Resources Wales (N.R.W.) (and if necessary other interested parties) before such actions are taken to inform them of the operations being undertaken and that the elevated levels of odour will be of a temporary nature. Where practicable, such actions will only proceed when the prevailing wind direction is away from sensitive receptors.

## **5. Monitoring**

### **5.1 General**

- 5.1.1 Weather conditions (including wind speed and direction) shall be visually assessed and recorded at regular intervals. This will enable potential odour issues to be predicted and necessary remedial actions implemented.
- 5.1.2 All operational staff will be responsible for reporting any odour problems immediately to the TCM (or designated responsible person).
- 5.1.3 Daily olfactory monitoring will be undertaken at the eastern site boundary by operational staff (see site map, Appendix 1).
- 5.1.4 The inspections shall be undertaken as follows:
- The operational member of staff will walk slowly along the site boundary and breathe normally. If an odour cannot be detected in this way, the inspector will stand still and inhale deeply facing upwind.
  - If odour is detected while walking and breathing normally, the intensity will be recorded as 3 (moderate odour). If odour can only be detected whilst standing still and inhaling whilst facing the wind then the intensity will be recorded as 2 (faint odour).
  - Following the identification of an odour at the site boundary, an on site inspection will be carried out to trace any odour back to source and enable any corrective action to take place.
- 5.1.5 Observations including time, date, weather conditions, temperature, wind strength, wind direction, intensity, odour type and sensitivity will be recorded in the odour diary (Appendix 2). Site operating conditions at the time of the survey will also be recorded, enabling the identification of any “abnormal” site operating conditions such as downtime for refurbishment or maintenance.
- 5.1.6 Should elevated levels of odour be identified, the TCM (or designated responsible person) will be informed immediately and will initiate the mitigation measures identified in section 6.
- 5.1.7 Wherever possible, odour inspectors will be chosen from office-based staff that are unlikely to suffer from adaptation to odour.
- 5.1.8 Staff will be instructed to avoid strong food or drinks for at least one hour beforehand and those members of staff that have a cold, sore throat or sinusitis will not be used to carry out odour assessments.

## **6. Odour contingency measures**

### **6.1 Introduction**

6.1.1 Elevated levels of odour may be identified either by:

- Receipt of an odour complaint from a third party suggesting that there is an odour from the waste transfer station, or;
- Detection of odour at the site boundary as a result of the monitoring procedures detailed in section 5.

6.1.2 This section details the contingency measures in place to identify the source of elevated odour levels and bring odour levels back under control and minimise their impact.

### **6.2 Odour complaint investigation**

6.2.1 There will be a site odour diary, plus forms to record complaints (Appendix 3), which will be completed by the TCM (or designated responsible person) and recorded as part of the Green Dragon Environmental Management System (GDEMS)

6.2.2 As part of the GDEMS, corporate procedures will be followed in dealing with complaints. The customer care and complaints procedure applies to all complaints, feedback and requests made by third parties regarding Highways, Transport & Recycling operational activities. The procedure given on page 6768 of the staff intranet should be followed. Click [here](#) to access the complaints procedure.

6.2.3 All complaints from third parties will be forwarded to the TCM (or designated responsible person) and recorded within 48 hours.

6.2.4 The TCM (or designated responsible person) will ensure that:

- The complaint is investigated to identify the cause, if necessary this may involve direct communication with the complainant.
- In the event of elevated levels of odour being detected, the presence of “abnormal” on-site activity is assessed and if necessary preventive action is taken that will prevent a reoccurrence of the same problem. These actions must be documented.
- The complainant will be contacted and given information on the investigations conducted and actions taken as appropriate.
- Where a complaint or query is likely to involve a statutory authority, the emergency services, an insurance company, or media, the Head of Operations will be informed.
- All complaints are to be reported to the depot area manager and discussed at site meetings.
- If the investigation indicates that the complaint has not been justified this will be clearly recorded in the incident report.



### **6.3 Elevated odour levels**

6.3.1 Any elevated odour levels identified in section 6.1.1 will be mitigated as follows:

- The TCM (or designated responsible person) will check that the physical control operations as detailed in section 4.2 have been correctly carried out.
- That spillages have been promptly cleaned up, using the spill-kits provided in EP55 Pollution Incident Response Plan.

6.3.2 To further mitigate the elevated odour levels the site could temporarily restrict the acceptance of domestic food waste to see if the odour issues continue.

6.3.3 If necessary the TCM (or designated responsible person) will temporarily divert food waste or mixed municipal waste to other delivery points.

6.3.4 In the event of a serious incident requiring the complete shutdown of the waste transfer station for an extended period, contingent treatment points will be used to divert waste that would otherwise have been delivered to the site.

6.3.5 The TCM (or designated responsible person) will ensure a close liaison with N.R.W. throughout all stages of the process following the emissions limit being exceeded.

6.3.6 Once the improvements identified by the TCM (or designated responsible person) have been completed, the manager will commission a further odour assessment to ensure that the improvements have addressed the source of the elevated levels.

6.3.7 If operational failings are identified, the retraining of employees will take place to ensure that all employees operate to the required standard.

### **6.4 Reporting measures.**

6.4.1 In the event of elevated levels of odour being identified, the event will be recorded in the odour diary (or in the case of a third party complaint, the Odour Complaint Report form).

6.4.2 The depot area manager will be informed, along with the Green Dragon Environmental Management System coordinator, who will record the event in the Councils pollution incident register.

6.4.3 The TCM (or designated responsible person) and depot area manager will investigate the performance failure event within 2 hours of being notified of a complaint or detection of odour at the site boundary. If necessary they will report the event to N.R.W. Once the issue has been resolved, the action taken will be reported to the Green Dragon Environmental Management System coordinator so that the issue can be closed in the pollution incident register.

## **7. Emergency plans**

### **7.1 General**

- 7.1.1 This section considers the potential for incidents or accidents which would result in the loss of control of odorous substances and could have an unacceptable short term impact on the local community.
- 7.1.2 Should an emergency occur outside of normal operating hours the duty out of hours officer will be notified by Careline and will coordinate the response. Procedures given in the Duty Manual will be followed.
- 7.1.3 The duty out of hours officer will contact his/her operatives, as appropriate, via mobile telephone. The duty out of hours officer will identify whether the emergency services are required to attend and will contact them directly if necessary.

### **7.2 Abnormal Meteorological Conditions**

- 7.2.1 Abnormal meteorological conditions, such as high or low wind strength, low pressure or high temperatures may promote elevated levels of odour either on site or at nearby receptors.
- 7.2.2 The mitigation measures to be undertaken in the event of abnormal meteorological conditions are the same as the contingency mitigation measures detailed in section 6.3.

### **7.3 Breakdown of equipment and plant**

- 7.3.1 The failure of the sealed skip may cause elevated levels of odour to be created.
- 7.3.2 The mitigation measures to be undertaken in the event of equipment breakdown are the same as the contingency mitigation measures detailed in section 6.3

### **7.4 Waste acceptance criteria**

- 7.4.1 If a batch of food waste or mixed municipal waste is found to be highly odorous on delivery to the waste transfer station, it will be diverted to another delivery point.

### **7.5 Staffing issues**

- 7.5.1 Human error and accidents may cause elevated levels of odour to be created.
- 7.5.2 The mitigation measures to be undertaken in the event of staffing issues are the same as the contingency mitigation measures detailed in section 6.3. In the event of accident/injury, the procedure the Corporate health and safety Policies will be followed.

## **8. Management Responsibilities and Review.**

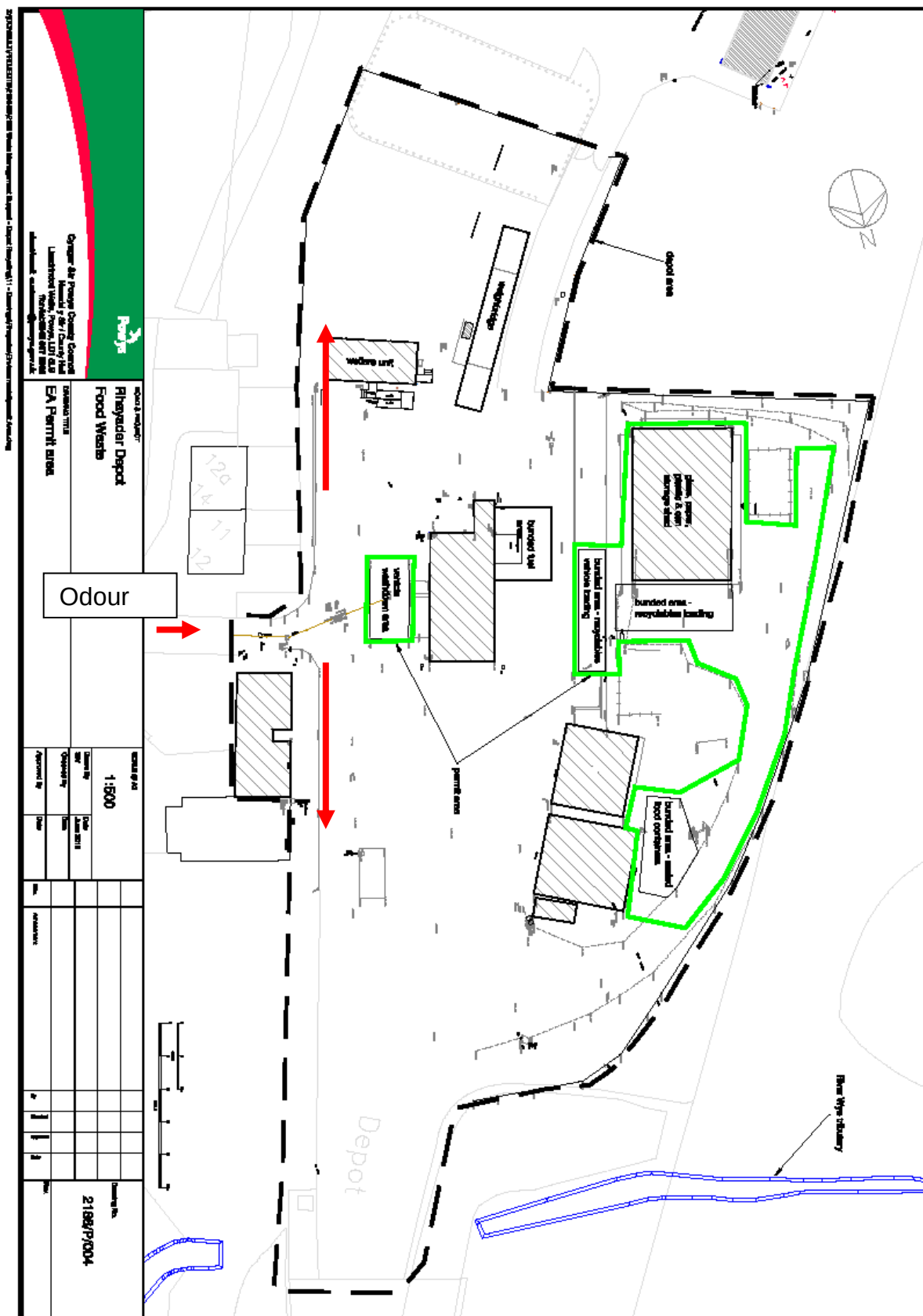
### **8.1 Responsibilities**

- 8.1.1 The control of odour will be managed according to this Odour Management Plan, which includes environmental management at the site accredited to the Green Dragon Environmental Standard.
- 8.1.2 It will be the responsibility of the TCM to ensure that the Odour Management Plan is adhered to at the site.
- 8.1.3 The TCM (or designated responsible person) will be supported by the depot area manager. The depot area manager is responsible for monitoring, evaluation of site performance, (which will include ensuring continued compliance with the Green Dragon Environmental Standard) and the closing out of any non-conformances identified during the internal audit process.

### **8.2 Review of odour control measures.**

- 8.2.1 The depot area manager will review the Odour Management Plan at least annually with the TCM and designated responsible person to ensure that adequate odour control measures are in place. The outcome of the review will be communicated to the Green Dragon Environmental Management System Coordinator, so that changes if required can be made to processes and procedures.
- 8.2.2 Odour control measures will be reviewed through the internal audit process as part of the monitoring and reporting of the Green Dragon Environmental Standard environmental management system.
- 8.2.3 With reference to odour the internal audits will include but will not be limited to the following;
  - Spot check inspections of the paper trail forms and Pollution Incident Register to ensure that all data is entered correctly.
  - Checks to ensure that any issues or complaints have been resolved correctly.
  - Visual inspections to ensure that no non-compliant waste is getting to the site and that waste spillages are promptly cleaned up.
- 8.2.4 External audits of the environmental management system will be carried out in order to achieve and maintain the Green Dragon Environmental Standard.

## Appendix 1



## Appendix 2

|                    |  |                     |          |
|--------------------|--|---------------------|----------|
| <b>Odour Diary</b> |  | Form version 110319 | Sheet No |
| Name:              |  |                     |          |
| Telephone Number:  |  |                     |          |
| Address:           |  |                     |          |

|                                                                                         |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------------|--|--|--|--|--|--|
| Date of odour                                                                           |  |  |  |  |  |  |
| Time of odour                                                                           |  |  |  |  |  |  |
| Location of odour, if not at above address<br>(including whether indoor or outside)     |  |  |  |  |  |  |
| Weather conditions (dry, rain, fog, snow etc )                                          |  |  |  |  |  |  |
| Temperature (hot, very warm, warm, mild, cold<br>or degrees if known)                   |  |  |  |  |  |  |
| Wind strength (calm, light, steady, strong,<br>gusting)                                 |  |  |  |  |  |  |
| Wind direction (e.g. from NE)                                                           |  |  |  |  |  |  |
| What does it smell like? How unpleasant is it?<br>Do you consider this smell offensive? |  |  |  |  |  |  |
| Intensity – How strong was it? (see below 0-6)                                          |  |  |  |  |  |  |
| How long did the smell last?                                                            |  |  |  |  |  |  |
| Was it constant or intermittent?                                                        |  |  |  |  |  |  |
| What do you believe the source or cause to be?                                          |  |  |  |  |  |  |
| Any actions taken or any other comments                                                 |  |  |  |  |  |  |

### Intensity

- |                    |                  |                          |
|--------------------|------------------|--------------------------|
| 0 No odour         | 3 Distinct odour | 5 Very strong odour      |
| 1 Very faint odour | 4 Strong odour   | 6 Extremely strong odour |
| 2 Faint odour      |                  |                          |

### Appendix 3

#### Odour Complaint Report Form

|                                  |                                  |
|----------------------------------|----------------------------------|
| Time and date of complaint:      | Name and address of complainant: |
| Telephone number of complainant: |                                  |

|                                                                                                                                         |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Date of odour:                                                                                                                          |                  |
| Time of odour:                                                                                                                          |                  |
| Location of odour, if not at above address:                                                                                             |                  |
| Weather conditions (i.e., dry, rain, fog, snow):                                                                                        |                  |
| Temperature (very warm, warm, mild, cold or degrees if known):                                                                          |                  |
| Wind strength (none, light, steady, strong, gusting):                                                                                   |                  |
| Wind direction (eg from NE):                                                                                                            |                  |
| Complainant's description of odour:                                                                                                     |                  |
| ○ What does it smell like?                                                                                                              |                  |
| ○ Intensity (see below):                                                                                                                |                  |
| ○ Duration (time):                                                                                                                      |                  |
| ○ Constant or intermittent in this period:                                                                                              |                  |
| ○ Does the complainant have any other comments about the odour?                                                                         |                  |
| Are there any other complaints relating to the installation, or to that location? (either previously or relating to the same exposure): |                  |
| Any other relevant information:                                                                                                         |                  |
| Do you accept that odour likely to be from your activities?                                                                             |                  |
| What was happening on site at the time the odour occurred?                                                                              |                  |
| Operating conditions at time the odour occurred (eg flow rate, pressure at inlet and pressure at outlet):                               |                  |
| Actions taken:                                                                                                                          |                  |
|                                                                                                                                         |                  |
| Form completed by:                                                                                                                      | Date      Signed |

#### Intensity

- |                    |                  |                          |
|--------------------|------------------|--------------------------|
| 0 No odour         | 3 Distinct odour | 5 Very strong odour      |
| 1 Very faint odour | 4 Strong odour   | 6 Extremely strong odour |
| 2 Faint odour      |                  |                          |