

# Withyhedge Landfill – November 2024 Update

## Background / Introduction

The purpose of this document is to provide up-to-date information about the recommencement of waste disposal activities by landfill operator Resources Management UK Ltd (RML). It includes details on the actions members of the IMG will be taking in the weeks and months ahead, in response to the changes at the landfill. IMG partners are Natural Resources Wales (NRW), Pembrokeshire County Council (PCC), Public Health Wales (PHW), and Hywel Dda University Health Board (HDUHB).

Some details still require final confirmation, and this may result in small changes to the information set out below. This is because the situation concerning Withyhedge Landfill is dynamic. On balance, the IMG considered sharing as much information as possible and providing an opportunity for open dialogue at this stage to be the priority.

## Withyhedge Landfill drop-in session

You are urged to read this information ahead of attending the drop-in session the IMG is holding at Spittal Church Hall between 3 and 7pm on Thursday 5 December 2024. Representatives from all IMG partners will be present to answer any questions or provide clarity.

[More information about the drop-in session can be found here.](#)

The focus of this document and the drop-in session on 5 December is on future operations at the landfill and IMG members.

The IMG invites anyone with questions to attend the drop-in session. However, there will be zero tolerance to abusive or threatening behaviour. If such behaviour occurs, the event will be closed in the interest of public safety.

For those who have questions but are unable to attend the drop-in session, please email [enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk) or call 0300 065 3000.

## Overview

In late October 2023 NRW, the environmental regulator in Wales, started to receive an increase in the number of complaints of offensive odours from Withyhedge Landfill.

Between October 2023 and July 2024, the reports became continual and significant in volume. Reports were also received by PPCC.

The offensive odours were largely associated with landfill gas emissions from the site. The landfill is operated by Resources Management UK Ltd (RML) and is authorised by an Environmental Permit (permit number EPR/MP3330WP).

Since the start of 2024, RML has taken action to address fugitive emissions from the site. A large part of this work was required under Regulation 36 Enforcement Notices issued to RML by NRW under the Environmental Permitting Regulations (England and Wales) 2016 (EPR).

RML voluntarily ceased waste disposal activities in mid-May 2024, allowing all remaining waste onsite to be capped and for gas collection infrastructure to be installed in those remaining areas. In addition, between June and September 2024 RML made significant improvements to the landfill gas management system. Since August 2024, NRW has seen a substantial decline in the number of odour reports received.

Following the construction of a new cell, RML has notified NRW that they intend to shortly recommence waste disposal activities. It is recognised that this prospect may be a cause of anxiety and concern from members of the community impacted previously.

### **What about events at the landfill previously?**

The investigation is on-ongoing and no further information can be shared on this investigation at this time.

[The full history of activities relating to Withyhedger Landfill since the end of 2023 can be found here.](#)

### **What's the latest on the permit variation application?**

NRW received an application for a permit variation from RML for Withyhedger Landfill at the end of May 2024. This application may be subject to change during the assessment process and, depending on several factors including quality of the information submitted, should be determined in early 2025 by our Installations Permitting team.

The variation application includes proposed amendments to restoration levels (final heights and profiles of the landfill) and modifications to monitoring programmes for groundwater, surface water and leachate. The application does not seek to add extra waste types to those listed for disposal at the landfill.

Due to the level of public interest in Withyhedge as a whole, NRW has committed to engaging in public consultation as part of the determination process for any permit application relating to the landfill or Waste Transfer Station (WTS).

## Recommencement of waste disposal

### Roles and responsibilities

The responsibility to comply with the Environmental Permit at Withyhedge Landfill lies with the operator, RML. This includes permit conditions relating to offsite odours.

NRW's role is to carry out compliance assessment activities to determine if RML is complying with their permit, and to take appropriate regulatory action if non-compliances are identified. Complying with the permit includes adhering to documents which support and sit alongside the permit, for example operating techniques and management plans.

**Note:** The information shared in this section below is based upon that received from RML. None of the IMG partners can be accountable for changes to the proposals outlined by RML.

### When will waste disposal activities recommence?

The Environmental Permit requires the operator to submit a Construction Quality Assurance (CQA) Validation Report following the construction of any new landfill cell. No disposal of waste can take place in any new cell or sub-cell until NRW has confirmed that it is satisfied with the CQA Validation Report.

On 28 November 2024, NRW informed RML that it is satisfied with reports submitted for sub-cells 9A and 9B. Therefore, waste disposal activities could recommence at any time.

RML has indicated a start date week commencing 9 December 2024, which they feel would be sufficient time for updated Waste Acceptance Procedures to be agreed by NRW. A version of this document was received on 26 November and is being reviewed by NRW.

RML has stated they will provide updates confirming details about the recommencement of waste disposal on their website in advance of these activities resuming at Withyhedge Landfill.

## What will it look like when the site starts accepting waste again?

RML has informed NRW that it will take several weeks before the site returns to full operational capacity, and initially waste will only come from the recycling sites which form part of their wider business group in Cardiff. The number of waste deliveries entering the site will steadily increase until it reaches a maximum rate of approximately 35 per day.

There is no permit condition relating to the number of vehicles arriving at or leaving the landfill each day. The number of vehicle movements over the course of a year will be determined by the annual tonnage of waste the landfill is allowed to accept.

## What changes have been made to site operations and infrastructure?

The operator has made significant investment in on-site infrastructure across the site since RML voluntarily suspended waste disposal activities in May 2024. This has been centred around the gas management system which is the primary control measure for preventing emissions of landfill gas from the site and includes:

- Complete replacement of existing landfill gas flare and ancillary equipment
- Installation of an additional stand-by landfill gas flare

NRW identified and communicated with RML the need for a review of procedures and plans relating to waste acceptance, and the management of waste disposal activities.

Review of management plans and procedures at any regulated facility should be routine. This may be for several reasons including, but not limited to, where there is a change to operations, in response to an incident, or part of a periodic review to ensure details are up to date.

In early November 2024, NRW received a draft document outlining the proposal for updated waste procedures at the landfill. NRW confirmed it supported the proposal in principle but advised a detailed site-specific procedure was required. A draft has been received by NRW and is being reviewed.

The proposal mentions the business group's Cardiff sites as the only places from where waste will be accepted initially. Dialogue around updating waste acceptance procedures and sampling plans at the Cardiff sites started with NRW's South Central Industry Regulation team several months ago.

To assist in the preparation of the proposal, RML contracted their consultant to investigate previous waste inputs into the landfill to determine if any waste streams

should be excluded in the future. Further enquires relating to waste streams may be necessary, and therefore more detail cannot be shared at this time.

The proposal RML has made involves enhanced testing at the Cardiff sites and additional scrutiny at Withy hedge. These areas will be the key regulatory focus for NRW at both locations in South Wales in the early stages of resumed waste disposal activities.

In summary, site infrastructure improvements and updated procedures have been proposed by RML as a mechanism to significantly reduce the likelihood of a repeat of the situation and impact caused to residents living near Withy hedge Landfill in the past year.

## Site management during waste acceptance

A phasing plan for waste disposal activities within Cell 9 has been prepared by RML and shared with NRW. The waste phasing plan details how wastes will be deposited within the cell to ensure capping and landfill gas collection infrastructure can be installed as soon as possible.

The plan outlines how temporary capping will be progressively installed to ensure open areas of waste are kept to a minimum. When final waste heights are achieved permanent capping will be installed.

The landfill gas abstraction infrastructure identified for Cell 9 includes conventional gas wells (large vertical pipes which extend deep into the waste mass), as well as sacrificial pin and horizontal wells. These will be installed in a phased manner as wastes are deposited in Cell 9.

RML has stated that landfill gas generated from Cell 9 will be carefully monitored to ensure the volume and composition is as expected. The company has also planned to undertake regular surveys to identify any fugitive emissions from Cell 9.

Contingency procedures have also been discussed, if Cell 9 produces emissions likely to cause offsite polluting odours. RML has committed to maintaining a stockpile of material to allow for the rapid capping of Cell 9 if required.

## Odour

Landfill sites are dynamic and have the potential to release occasional odours, even when they are well managed with appropriate and well-maintained control systems.

The intensity and frequency of odours from Withyhedge Landfill experienced offsite between October 2023 and July 2024 were far higher than would be expected. In recent months the number of odour complaints received by NRW has significantly decreased; 23 reports were received in October and four in November 2024. Some of these have been deemed unsubstantiated on the basis that the wind direction or odour description was inconsistent with the landfill as a source.

Prior to October 2023, NRW typically received a low number of complaints (one or two a month). It is recognised that monthly averages moving forwards are likely to be higher than this. However, it is important to acknowledge that occasional reports would be within normal expectations and NRW will respond to these as appropriate, depending on the specifics of the reports received.

The cause of the offsite odours between October 2023 and July 2024 was landfill gas. This was often recognised and identified from its gassy and/or eggy smell, the latter caused by hydrogen sulphide, a trace element of landfill gas.

Any future odours from the landfill may be of this gassy/eggy nature, or could resemble bins, or a sweet rubbish smell from fresh waste arriving and being handled at the site. If encountered, distinguishing between these types of odours can help NRW identify potential sources and causes.

It is important to note that there are other sources of odours in the vicinity. Some of the odours smell like those that can originate from the landfill.

## What should I do if I smell the landfill again?

If you smell an odour you believe to be coming from Withyhedge Landfill, please report it to NRW as soon as possible. Include a description of the odour, its strength (faint, strong, very strong), when and where it was noticed, and how long it was present.

Odour reports help NRW to build a picture of when and where odours are prevalent in the community. They inform NRW's response and can be cross-referenced with local meteorological data and activities at the landfill.

Report a smell [via our dedicated form](#) or by calling 0300 065 3000.

If you are concerned about impacts on your health, you should:

- Seek advice from a medical professional, e.g. GP; or
- Contact NHS Direct Wales on 111 or at <http://111.wales.nhs.uk/>

## Why does this document keep referring to ‘minimising’ odours - why can’t NRW make sure there is no odour from the landfill?

NRW, as the environmental regulator in Wales must work within certain legal frameworks to ensure our actions are robust to challenge.

Assessing compliance at a regulated facility (site with a permit) requires comparing the operator’s activities against specific wording in permit conditions and supporting documents. Within the Environmental Permit for Withyhedge Landfill, permit condition 3.3.1 relates to odour. It states:

*“Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.”*

The wording of this odour permit condition is the standard wording found in virtually every operational landfill site in England and Wales.

The condition recognises that it may not be practicable to prevent all emissions which could cause odour, and in this case, they must instead be ‘minimised’. The operator must take all appropriate measures to prevent or minimise emissions and NRW will carry out checks to ensure these are being employed.

‘Appropriate measures’ can be extensive and may be linked to waste disposal management, for example applying suitable cover over freshly deposited waste, or suitable and adequate landfill gas collection. Establishing whether appropriate measures have been applied or followed can be complex.

If the operator is using all appropriate measures to prevent or minimise emissions which could cause offsite odours there may be no contravention of the odour condition, even if offsite odours are present.

Furthermore, for the operator to be non-compliant with the odour condition of the permit, offsite odours, or the potential for offsite odours (from emissions) must be deemed to be, or likely to be, polluting. This assessment is undertaken by authorised and trained NRW officers. In line with odour assessment guidance, faint and/or brief odours may not be considered likely to be polluting.

## **Air Quality**

### **What is happening with Air Quality monitoring at the moment?**

Early in 2024 an Air Quality Group (AQG) was formed with representatives from PCC (Chair), NRW, PHW, HDUHB and with Geotechnology (RML's consultant) as a standing member. The AQG reports to the IMG on aspects of air quality monitoring and data review and analysis in relation to Withyhedge Landfill.

Since July 2024 a static monitor recording hydrogen sulphide and meteorological data has been in place at Spittal School. The equipment, monitoring and assessment of data is being carried out by an independent third party, Ricardo Ltd, commissioned jointly by PCC and NRW.

In recent months while waste disposal activities at the landfill have been voluntarily suspended, and in response to reducing odour complaints this has been the predominant form of air quality monitoring undertaken by, or on behalf of IMG members.

Recently a network of air quality monitors has been installed around the landfill boundary by RML. This data will be shared with the AQG and incorporated into ongoing analysis as appropriate.

### **How long is the monitor staying at Spittal School?**

This monitor is scheduled to remain in place for six months, covering the upcoming winter season (until end December), and whether this time period is extended pending the site re-opening for waste acceptance is currently being reviewed pending the decision from the IMG, PCC and NRW.

### **Will there be more monitoring when waste disposal starts again?**

The static monitor will remain in situ to gather data after waste disposal activities recommence. The benefit of the monitoring to date is that a baseline has been established against which air quality after the change of activities at the landfill can be compared.

Spittal School was selected as a location for the static monitor for several reasons. These include those which are practical, for example being accessible and having an outdoor power supply. However, more fundamentally Spittal is located in the prevailing wind direction from Withyhedge Landfill, and it was the location from which the highest number of odour reports made to NRW were received.



NRW has mobile equipment (Jermone monitors) capable of recording hydrogen sulphide ad hoc to support odour assessments or record 30-minute averages if landfill gas odour is detected offsite. It is also possible to deploy these Jermone monitors in a static location for a short period of time, for example between a day and a week. NRW will be using these monitors in both scenarios after waste disposal activities recommence.

The intention is to utilise Jermone machines in addition to the data being gathered by the static monitor at Spittal School.

### **Why is the landfill being allowed to start waste disposal again when there have been recent Air Quality breaches at Spittal School?**

NRW's primary role as environmental regulator is to take action to protect the environment and human health. In early 2024, NRW issued RML with Regulation 36 EPR Enforcement Notices to undertake urgent and specific engineering work to reduce the source and cause of offsite odours.

All the work required under the Notices served by NRW was completed. In addition, RML chose to make further investments in the landfill gas management system, improving its resilience and reliability.

The decreasing number of odour reports received since August 2024 indicate that the risk from Withy hedge Landfill has reduced. Some reports received in recent months have not been attributed to the landfill based on wind direction or odour description.

Improvements at the landfill have been driven by NRW to reduce the likelihood of emissions which lead to offsite odours. However, the situation will be monitored closely as waste disposal activities recommence.

The static monitor at Spittal School has been in place since July 2024, after RML voluntarily suspended waste disposal activities. Since this time there have been occasions when the World Health Organisation (WHO) odour annoyance guideline value for hydrogen sulphide has been exceeded.

As part of monitoring commissioned by PCC and NRW, a Preliminary Overview of verified data from the first three months of monitoring has been produced by Ricardo.

This overview shows that during the three months, the WHO odour annoyance guideline value was exceeded on nine occasions over four different dates. This amounted to 0.1% of the monitoring period. It is however recognised by the IMG that the static monitor is only recording data at one location.

The overview also shows that on four out of the nine occasions when the level was exceeded, the average wind direction was not consistent with coming from the direction

of the landfill. Ricardo has attributed this to other potential sources of hydrogen sulphide in the area around Spittal.

NRW and PCC have indicated previously that other odour sources exist in the communities surrounding the landfill. The Preliminary Overview corroborates this, in addition indicating that these sources may also be contributing to the hydrogen sulphide recorded at the static monitor.

In summary, the air quality standard exceedances in September 2024 cannot all be linked to the landfill. On the four dates when exceedances were recorded, NRW received one odour complaint. Odours may have been detected in the area but considered to be from other sources and therefore not reported to NRW. This also indicates the risk from the landfill has reduced.

## **Future action by IMG members**

### **What will NRW be doing once the landfill restarts waste disposal?**

In the initial weeks following the recommencement of waste disposal activities at Withyhedge Landfill NRW will have an active presence at the landfill. This will be focused on ensuring that waste acceptance procedures are being followed and that disposal activities are being appropriately managed.

At the same time, members of NRW's South Central Industry Regulation team will have an active presence at the Cardiff-based sites from where waste will be sent to Withyhedge.

At Withyhedge Landfill, checks will also be made on the existing landfill gas management and leachate management systems. Fugitive emission surveys will take place across the site, and regular offsite odour assessments will be carried out. Odour assessments will be informed by odour complaints and mobile hydrogen sulphide equipment will be used to support these surveys.

The Jerome monitors will also likely be set up at fixed locations to record data for between 24 hours and a few days with the locations for deployment determined by predicted wind direction.

### **What will PCC's priorities be around this time?**

In advance of Withyhedge landfill site recommencing its waste acceptance regime PCC want to assure residents that officers will be working closely with colleagues from NRW. We will be carrying out a series of joint visits and odour monitoring as well as checking waste brought onto site.

PCC also want to advise residents that officers will be reacting to odour complaints in a responsive manner and would urge those affected in their homes to call PCC as

soon as possible to allow officers to visit and assess the level of impact as close to the time of each incident as possible.

The council hopes this will not be necessary because of improvements on the site but want to provide continued monitoring during this period which includes the continuous Hydrogen Sulphide monitor at Spittal school.

### **What will PHW's involvement be?**

Public Health Wales will continue to work with partners to advocate for site improvements to minimise any impact on the local community. PHW does not have regulatory responsibilities or powers around the management of a site or ability to carry out environmental monitoring.

We will continue to offer public health guidance to those living near Withyhedge. All PHW's health risk assessments and associated public health advice is publicly available on our website:

EN: <https://phw.nhs.wales/topics/withyhedge-health-risk-assessments/>

CY: <https://icc.gig.cymru/pynciau/asesiadau-risg-iechyd-withyhedge/>

### **What role will HDUHB play in the coming weeks and months?**

HDUHB will continue to provide services to anyone in the local community with health concerns or issues.

### **How will the public hear about what is happening?**

Feedback provided previously has been taken on board and further updates will be provided by IMG when there is new or updated information to provide communities. It is recognised that updates with very little new information can be viewed as pointless.

[RML has been sharing information on their website](#) and has stated they intend to increase their direct communication with local communities shortly.