

Walleys Quarry weekly update – 26 January 2023

The Environment Agency has prepared this weekly update to help the community of Newcastle-under-Lyme and the wider area keep informed about developments concerning its regulation of Walleys Quarry Landfill.

Walleys Quarry Ltd is the operator of the landfill site and it alone is responsible for the hydrogen sulphide emissions escaping from the site.

The Environment Agency is the environmental regulator. We require Walleys Quarry Ltd to meet its environmental obligations and resolve the ongoing odour issues at the landfill as quickly as possible.

News in brief

The Environment Agency has recently concluded consideration of complaints raised by Walleys Quarry Ltd (WQL) into two Compliance Assessment Reports (CARs).

The first CAR relates to our inspection on 14 January 2022. We have withdrawn the Category 1 breach and associated Category 4 notification breach related to blockages in the gas management infrastructure. We have considered further the circumstances around the blockages and the adequacy of WQL's response. We have concluded that WQL took the necessary remedial action in a reasonable time.

The remaining Category 1 breach recorded for deficiencies in WQL's management system has been downgraded to a Category 3 breach. We still conclude that the management systems failed to minimize risks from odour pollution due to surface water flooding preventing the earlier completion and capping of Phase 1. We have revised the likely assessment of the impact as minor rather than major because capping of Phase 2 was brought forward meaning a minor overall impact. WQL provided an updated Surface Water Management Plan which addresses winter weather and high rainfall events, following receipt of the original CAR. The plan was agreed on 19 August 2022. We believe the right controls have been identified to prevent similar issues with surface water. The revised CAR has been provided to WQL and is available as a public register document.

The second CAR relates to our inspection on 8 April 2022. This contained 2 Category 1 breaches relating to waste acceptance and pre-acceptance procedures and management systems. After completing our review, we have concluded that the breaches and associated scores on the CAR are correct.

The revised total CCS score for the 2022 compliance year is 160. The site remains in band F. Our complaints procedure allows WQL to further escalate its complaints if it chooses. We will not provide any further information until the process has concluded.

Our decision regarding the first complaint does not alter the Environment Agency's commitment to our "capture, contain and destroy" strategy which has already proven effective at reducing hydrogen sulphide levels in the local community. The Environment Agency also continues with the investigation into Walleys Quarry Landfill site's regulatory compliance previously announced.

Regulatory activity

We continue to actively regulate and assess Walleys Quarry Ltd’s compliance with its environmental permit. Officers carried out an unannounced site inspection on 25 January to assess general compliance with permit conditions.

The gas extraction rate recorded at the gas utilisation plant on 20 January 2023 was 3150 m³/hr and hydrogen sulphide levels were recorded on 19 January 2023 as 1520ppm. These figures are as expected and within normal operational parameters.

Facebook Group

We are currently working to produce the January Q&A video, which will be uploaded to Facebook before the end of the month. A transcript will be published on Citizen Space shortly after that, for people who don’t use Facebook.

There is an opportunity each month for you to ask us questions about our regulatory work at Walleys Quarry. The next questions thread will open at 9am on Monday 6 February. It will remain open until 5pm on Friday 10 February 2023.

Reporting odour

It is important that you continue to report odour to us. Reports from local people, along with our regulatory visits and monitoring from our mobile monitoring facilities help to create a picture which informs our enforcement and regulatory approach.

The easiest and quickest way to make a report is via GOV.UK at: <https://report-walleys-quarry-smell.service.gov.uk>. If you do report odour to us via our incident hotline, please be courteous to our staff. They are working to deal with your reports as efficiently as possible.

Latest hydrogen sulphide levels

Our Ambient Air Monitoring Team continues to check air quality around Walleys Quarry landfill. It does this through a network of mobile monitoring facilities (MMFs) that are positioned in communities around the site. These check for levels of hydrogen sulphide and methane, which are indicators of odour pollution.

The charts below contain a summary of the raw data collected from our MMFs in the period 16 January to 22 January 2023. During this period, they stayed the same at MMF2 and MMF6 and increased at MMF1 and MMF9.

MMF ID & Location	% of time the monitoring location recorded H ₂ S above the WHO annoyance guideline level %	Change
MMF1 Cemetery	0.3%	▲ on previous week
MMF2 Silverdale Pumping Station	0.3%	▬ on previous week
MMF6 Fire Station	0.0%	▬ on previous week
MMF9 Galingale View	11.1%	▲ on previous week

It is important to note that this is raw data and may change slightly as results are verified.

It's important to note that there will always be short-term fluctuations in the concentrations of hydrogen sulphide leaving the site especially given the low concentrations we are monitoring. The causes can include factors such as the impact of improvement works being carried out on site and changes in the weather.

Concentrations of landfill gas emissions generally increase overnight, during periods of colder weather, and in still wind conditions with clear skies. The exceedance at MMF9 was recorded during the period from around 5pm on the evening of 20 January through to the around 10am on the morning of 21 January 2023. Levels of hydrogen sulphide recorded in this 20 hour period peaked at approximately $20\mu\text{g}/\text{m}^3$. This contrasts with the peak in January 2022, when hydrogen sulphide concentrations were approximately $65\mu\text{g}/\text{m}^3$ over the 24-hour (midnight – midnight) period on 13 January.

Hydrogen sulphide concentrations continue to be greatly reduced compared with the period monitoring began, in both the source emission and ambient air measurements. Air quality monitoring data provides additional confidence that our ongoing regulation is ensuring the source emission of hydrogen sulphide from the landfill site continues to remain low.

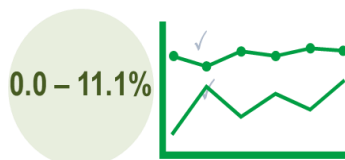
We are not focusing on the monitoring data in isolation and recognise that people may still detect odour from the site. We continue to compare daily odour incident reports with air quality data and source emissions monitoring, looking for trends and issues which may require challenging Walleys Quarry Ltd to further improve site operations and the capture of fugitive emissions.

Odour Reports

In the week 16 January to 22 January 2023 the Environment Agency received a total of 118 odour reports from local members of the public. This was an increase from last week. The highest number of odour reports was on Friday 20 January when 40 reports were received.



Number of odour reports/complaints to the Environment Agency
16 Jan - 22 Jan 2023



Hydrogen Sulphide 30 minute average odour annoyance: % of time above WHO guideline level
16 Jan - 22 Jan 2023



Hydrogen Sulphide Level. 24 hour World Health Organisation guideline to protect against short term health effects

Correspondence

Other than by means of the Facebook Group mentioned above, we are unable to answer questions through social media. If you have a question, you can [email](#) us.

Other sources of information

Newcastle-under-Lyme Borough Council: [Walleys Quarry – Newcastle-under-Lyme Borough Council \(newcastle-staffs.gov.uk\)](https://www.newcastle-staffs.gov.uk)

Staffordshire County Council: [Walleys Quarry – Staffordshire County Council](https://www.staffordshire.gov.uk)

Walleys Quarry Ltd website: <https://walleysquarry.co.uk>