

Walleys Quarry Landfill Site

11 November 2021

We have developed this weekly update to help keep the community of Newcastle under Lyme, and wider area, up-to-date with developments around our regulation of Walleys Quarry landfill.

Walleys Quarry Ltd are responsible for the hydrogen sulphide emissions escaping from their site. As regulator we are committed to making sure the operator tackles the problems at Walleys Quarry, to improve things for everyone, as quickly as possible. Our team of regulators continues to put pressure on the operator to take the necessary measures to resolve the hydrogen sulphide issues.

News in brief

Posi-shell and other updates

Later this month, an independent consultant gas specialist will be carrying out another surface gas emissions survey to validate the performance of the Posi-shell capping. We expect a report shortly afterwards; and for the operator to act upon any recommendations promptly.

The central and northeast parts of the site are likely to reach their final height, as determined by the planning authority (Staffordshire County Council), early next year. Walleys Quarry Ltd will then be able to permanently cap that part of the site. The operator is currently developing their plans for future capping at the site.

We also instructed Walleys Quarry Ltd to submit a revised Gas Management Plan, which incorporates a gas improvement programme; setting out a series of long-term measures for improving landfill gas management at the site. This month we will assess and evaluate this plan.

Work at Walleys next week

We continue to get Walleys Quarry Ltd to deliver on the significant improvements to its gas infrastructure that captures and destroys the landfill gas (and hydrogen sulphide) produced as waste breaks down.

As part of those improvements, Walleys Quarry Ltd are carrying out work next week in upgrading the gas infrastructure. Whilst this work is happening, hydrogen sulphide may be detectable off site on occasion(s).

We've pressed Walleys Quarry Ltd about ensuring that they have plans in place on how they will minimise hydrogen sulphide emissions while this work is happening.

This work will further improve the amount of landfill gas that can be processed at the landfill; further reducing the amount of gas escaping from the site.

Latest hydrogen sulphide levels

Last week our monitoring stations recorded an increase in hydrogen sulphide at three of our monitoring stations. There was a corresponding rise in reports from local people, with 402 reports last week. We attended the area in response to the increase in reports and are investigating the cause in this short-term spike. This will determine possible action(s) we expect Walleys Quarry Ltd to take to prevent this occurring again. We remain committed to continuing to use our regulatory powers, as allowed by Government, to require Walleys Quarry Ltd to bring hydrogen sulphide emissions under control.

The levels this week remained below the World Health Organisation's (WHO) 24-hour average health guideline level to protect against short-term health effects but were above the WHO 30-minute average odour annoyance guideline (5ppb) between 0% and 13.5% of the week.

- MMF1 - Silverdale Cemetery = 2.9%
- MMF2 - Silverdale Road = 0%
- MMF6 - Newcastle-under-Lyme Fire Station = 3.3%
- MMF9 - Galingale View = 13.5%

The amount of gas captured and processed on site remains at a very high rate with CLP, the gas contractor running both engines on full power, generating 2000 KW electricity, plus two flares operational on a 24/7 basis.

Our action and the improvements we've required Walleys Quarry Ltd to take since March has seen a significant reduction in hydrogen sulphide escaping the site, but there is still more for Walleys Quarry Ltd to do in reducing hydrogen sulphide levels to those assessed to be safe by the UK Health Security Agency.

A note on monitoring

The Environment Agency currently has four 'mobile monitoring facilities' (MMFs) stationed around Walley's Quarry Landfill Site. This is the greatest number of mobile monitoring facilities the Environment Agency has every used to monitor a regulated site.

These MMFs are purposely placed in carefully selected areas where we observe landfill gas; taking account of local geography, proximity of buildings, wind directions, permissions to use land, locations of other air quality monitors, space to securely place the units and available power supplies.

It is important that we continue to monitor at the same four locations so that we can have continuity in our data sets – allowing us to observe long term trends in the data and to consider if we are seeing a reduction in hydrogen sulphide concentration over time.

The technology measures components of landfill gases, including methane (CH₄), particulates (PM), sulphur dioxide (SO₂) and hydrogen sulphide (H₂S). They also have the capacity to collect weather data, which is important in determining how gases and odours travel and disperse in the environment.

We report every week on the percentage of time we record levels above the above the WHO 30-minute average odour annoyance guideline. This is a level of 5 parts per billion (5ppb). So, when we report a percentage, this is the percentage of the week the hydrogen sulphide levels go above the WHO annoyance guideline. Hydrogen sulphide below this level is still being recorded and is reported on every month. The reports can be seen below in the Air Quality Monitoring section of this website.

Publishing recent correspondence

If you have a question you can email us at enquiries_westmids@environment-agency.gov.uk.

To report odour please call us on 0800 80 70 60 or use our [online reporting form](#)

On these pages, going forward we will share some of the key questions people have emailed us, for everyone to access.

Door knocking

We've recently been out in the Knutton and Poolfields areas door knocking to talk to local people about our regulation of Walleys Quarry and to hear about and understand the impact of the landfill on daily lives.

We're knocking doors randomly, and are not purposely picking some and avoiding others. If the resident is out, we'll pop a note through the letterbox to say we called. We will not ask to come in at any point, and it's ok to not want to talk to us.

We will be out in other areas in the coming weeks. We're also working with multi-agency partners to plan the next steps for community engagement, including further drop in events.

Coal Authority detailed report

Multi-agency partners asked the Coal Authority to review and provide feedback on the report produced by Walleys Quarry Ltd which was entitled 'Interim Assessment of the Potential for External Sources of Hydrogen Sulphide in the Immediate Vicinity of Walley's Quarry Landfill Site'.

The Coal Authority have reviewed this and produced their own report in response. As previously stated earlier in the year, the Coal Authority has reviewed its information and confirmed that the hydrogen sulphide odour is not associated with coal mining. There is no evidence to substantiate the claims made by the operator that hydrogen sulphide odour is coming from another source.

We are updating the information on this webpage every week. To receive notifications, email your contact details to: Engagement_WestMids@environment-agency.gov.uk and we will add you to our mailing list.

See [Staffordshire County Council website](#) for information on public health impacts of odours in the Silverdale and wider Newcastle under Lyme area.

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