

NEWCASTLE-UNDER-LYME BOROUGH COUNCIL

EXECUTIVE MANAGEMENT TEAM'S REPORT TO CABINET

10th January 2023

Report Title: Walleys Quarry – Odour Issues

Submitted by: Chief Executive

Portfolios: Environment & Recycling; One Council, People & Partnerships

Ward(s) affected: All

Purpose of the Report

To update Cabinet on the latest position regarding the problematic odours in the Borough associated with Walleys Quarry including progress in relation to agreement reached following mediation with the operator.

RECOMMENDATIONS

Cabinet is recommended to:

- 1. Note the contents of this update report**

Reasons

To ensure Cabinet is kept updated on the ongoing work regarding the problem odours associated with Walleys Quarry landfill.

1. Background

- 1.1 For a number of years, parts of the borough have suffered from problematic foul odours from the Walleys Quarry Landfill Site in Silverdale operated by Walleys Quarry Ltd, part of the RED Industries group of companies. The Environment Agency is the lead regulator for such sites, testing and enforcing compliance with the permit under which the site operates. The Council also has a role in influencing the operation and performance of such sites, where an operator fails to comply with actions required under an abatement notice issued by the Council in relation to any statutory nuisance caused by the site.
- 1.2 In March 2021, Council held an extraordinary meeting to receive the report of the Economy, Environment and Place Scrutiny Committee review into the Walleys Quarry issues, and to debate a motion demanding the immediate suspension of operations and acceptance of waste at the Walleys Quarry Landfill site.
- 1.3 Cabinet has received monthly updates on the issues relating to the odours, and Council has also been regularly updated.

2. Statutory Nuisance

- 2.1 Following extensive work, officers determined that the odours from the Walleys Quarry site amount to a Statutory Nuisance and, on 13th August 2021, served an Abatement Notice on Walleys Quarry Ltd. (WQL)

- 2.2 The Abatement Notice afforded WQL a period of 5 months to abate the nuisance, with this timeframe being informed by discussion on the nature and extent of potential works required at the site with colleagues from the Environment Agency and with our own landfill and odour experts.
- 2.3 On 2 September 2021, WQL lodged an appeal against the Abatement Notice with the Magistrates Court. This has the effect of “stopping the clock” on the 5 month timeframe to abate the nuisance.
- 2.4 At the Cabinet meeting on 18 October 2022, Members received a report detailing the outcome of a mediation process that had been undertaken. The mediation process was guided by the former Supreme Court Judge and environmental law specialist the Right Honourable Lord Carnwath of Notting Hill. As a result of that process, the Council and WQL were able to agree terms for a settlement which enabled WQL to withdraw their appeal against the notice
- 2.5 On 6 October 2022, His Honour District Judge Grego approved the settlement that the parties had reached, and issued a court order upholding the Abatement Notice and dismissing WQL’s appeal.

2.6 Progress with key elements of the settlement agreement

As part of the Agreement, Council officers, including the Chief Executive are meeting with senior representatives of Walleys Quarry Limited (WQL) to ensure that all aspects of the agreement are implemented.

Meetings are taking place on a regular basis with the outcome to date including:

- a. WQL have published a comprehensive set of its operational plans on its website in a publicly accessible format. [Reference: <https://walleysquarry.co.uk/site-permits-and-policies#MGMTPlans>]
- b. WQL notify any operational changes that may impact on odour emissions from the site. Notifications are published on the WQL ‘Latest Information’ webpage. As an example, advance notice was provided by WQL of potential onsite gas engineering activities that had the potential to create short-lived odour emissions. [Reference: <https://walleysquarry.co.uk/wp-content/uploads/2022/11/Walleys-Quarry-weekly-update-11.11.22.pdf>]
- c. A set of standard key performance indicators are being developed in a score card format to monitor the performance of the operator. Further detail is provided in section 6.
- d. The last Liaison Committee meeting took place on 15th December 2022 and a publically viewable recording of the meeting is available at the link below. Updates were provided by Walleys Quarry Limited, Environment Agency, Staffordshire County Council, Borough Council, Silverdale Parish Council and resident representatives. [Reference: <https://www.youtube.com/watch?v=Nb3ISSX866Q>]

3. Complaint Data

- 3.1 Below is a schedule of complaints received by the Council and by the Environment Agency over the last 3 months, on a weekly basis. Complaints rise and fall broadly in line with the H2S levels recorded at the four monitoring stations around the site, with higher levels of H2S generally causing more annoyance in the community. Historical complaint data is attached to this report as Appendix

1. The number of complaints reported during the period October to December 2022 are trending downwards

| | Complaints to NuLBC | Complaints to Environment Agency |
|----------------------|---------------------|----------------------------------|
| October 2022 | 42 | 102 |
| 3/10/22 – 9/10/22 | | |
| 10/10/22 – 16/10/22 | 52 | 165 |
| 17/10/22 – 23/10/22 | 73 | 186 |
| 24/10/22 – 30/10/22 | 30 | 82 |
| November 2022 | 26 | 116 |
| 31/10/22 – 6/11/22 | | |
| 7/11/22 – 13/11/22 | 52 | 86 |
| 14/11/22 – 20/11/22 | 59 | 113 |
| 21/11/22- 27/11/22 | 29 | 70 |
| 28/11/22 – 4/12/22 | 19 | 47 |
| December 2022 | 43 | 163 |
| 5/12/22 – 11/12/22 | | |
| 12/12/22 – 18/12/22 | 22 | 114 |
| 19/12/22 – 25/12/22 | 12 | 45 |
| 26/12/22 – 01/01/23 | 11 | 39 |

4. Air Quality Monitoring Stations

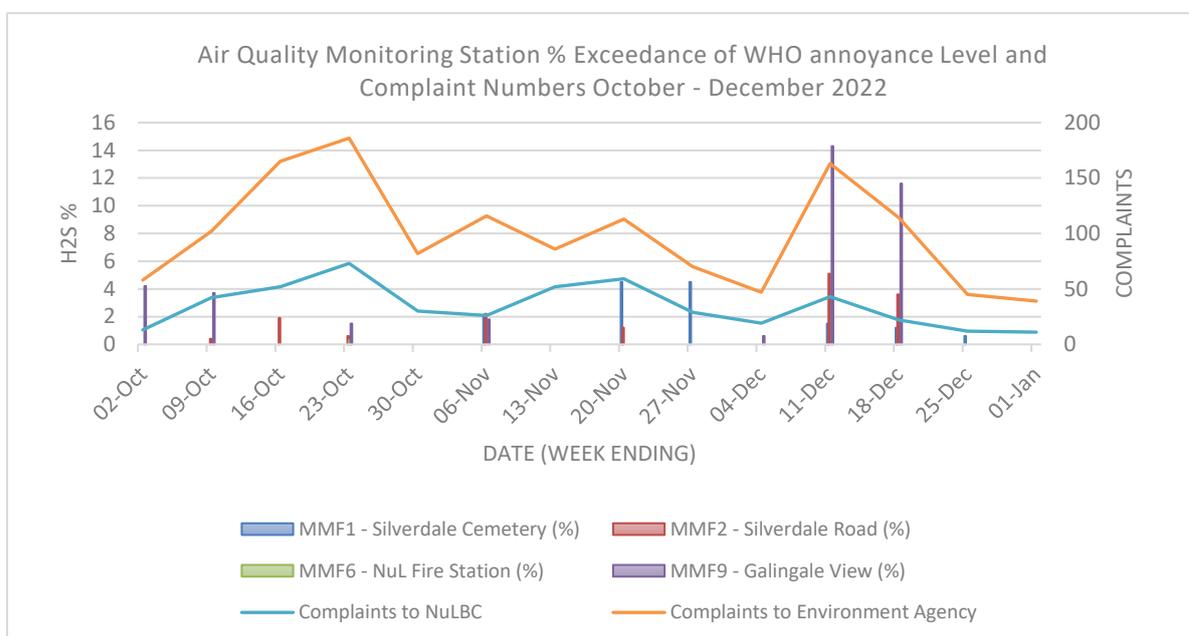
4.1 The Council, Staffordshire County Council, and the Environment Agency are jointly funding a campaign of air quality monitoring utilising four static air monitoring stations. Data from these stations is reviewed to provide information in relation to two standards relating to Hydrogen Sulphide (H₂S) – the WHO Health threshold and the WHO odour annoyance guideline, with this analysis published by stakeholders.

4.2 Over the last 3 months, No Hydrogen sulphide concentrations were above the World Health Organisation's health threshold and H₂S levels were above the odour annoyance guideline level (7 µg/m³, 30-minute average) for the following percentages of each week. Historical data is attached to this report in Appendix 2.

| Location | MMF1 - Silverdale Cemetery (%) | MMF2 - Silverdale Road (%) | MMF6 - NuL Fire Station (%) | MMF9 - Galingale View (%) |
|----------------------|--------------------------------|----------------------------|-----------------------------|---------------------------|
| October 2022 | | | | |
| 3/10 - 9/10 | 0 | 0.4 | 0 | 3.7 |
| 10/10 – 16/10 | 0 | 1.9 | 0 | 0 |
| 17/10 – 23/10 | 0 | 0.6 | 0.3 | 1.5 |
| 24/10 – 30/10 | 0 | 0 | 0 | 0 |
| November 2022 | | | | |
| 31/10 – 6/11 | 0 | 2.2 | 0 | 1.8 |

| | | | | |
|----------------------|------------|------------|----------|-------------|
| 7/11 – 13/11 | 0 | 0 | 0 | 0 |
| 14/11 – 20/11 | 4.5 | 1.2 | 0 | 0 |
| 21/11 - 27/11 | 4.5 | 0 | 0 | 0 |
| 28/11 – 4/12 | 0 | 0 | 0 | 0.6 |
| December 2022 | 1.5 | 5.1 | 0 | 14.3 |
| 5/12 – 11/12 | | | | |
| 12/12 – 18/12 | 1.2 | 3.6 | 0 | 11.6 |
| 19/12 – 25/12 | 0.6 | 0 | 0 | 0 |
| 26/12 – 01/01 | 0 | 0 | 0 | 0 |

The complaint and air quality data is combined and shown in the graph below. The data continues to show that the percentage of time above the World Health Organisation odour annoyance guideline level fluctuate across the four locations.



In December the percentage exceedance increased over a two week period at MMF 9 to 14.3% (05/12-11/12) and 11.6% (19/12-25/12), although still significantly lower than 2021 and early 2022. The EA weekly briefings report that that ‘concentrations of landfill gas emissions generally increase overnight, during periods of colder weather, and in still wind conditions with clear skies’.

These conditions occurred over this two week period in particular;

- ‘between Wednesday 7 December and Friday 10 December where temperatures were generally below freezing and fell as low as -5C’,
- ‘between Wednesday 14 December and Friday 16 December where temperatures fell to below -9C’.

The EA stated that these were the lowest recorded temperatures during the monitoring study to date. Despite these unfavourable conditions and the higher percentage, exceedance the maximum level of hydrogen sulphide recorded did not exceed 20ug/m³ (as a 30min average). The EA reported that the levels have been 100’s and 1000’s of ug/m³ monitored in the past.

5. Environment Agency Regulatory and Enforcement Action

5.1 The Environment Agency has continued to provide weekly updates on their regulatory activity on the Walleys Quarry Landfill Citizens Space website. These updates reflect regular EA officer presence at the site to review progress with the Contain Capture Destroy strategy. Extracts from the last 4 weekly updates are provided below:

News in brief – 1st December 2022 - Regulatory activity.

We continue to actively regulate and assess WQL's compliance with its environmental permit by reviewing data and conducting inspections.

The 7 additional gas wells have been connected to the gas collection network and the extraction of landfill gas from them has begun. Data we have received indicates that gas flow to the gas utilisation plant (GUP) continues to remain relatively steady.

The extraction rate recorded on 25 November 2022 increased slightly to 3,177 m³/hr and the recorded level of hydrogen sulphide [H₂S] at the gas utilisation plant was 1,200 ppm. These results are within the normal operational fluctuations we expect.

News in brief – 8th December 2022 - Regulatory activity.

We continue to actively regulate and assess Walleys Quarry Ltd's compliance with its environmental permit by reviewing data and conducting inspections.

Our officers carried out an unannounced site inspection on 5 December 2022 to assess the compliance with permit conditions and the restoration cover.

The extraction rate recorded on 25 November 2022 was 3100 m³ /hr and the recorded level of hydrogen sulphide at the gas utilisation plant was 1220 ppm. These results are within the normal operational fluctuations we expect.

In our weekly update of 24 November 2022, we stated that officers had carried out an on-site inspection that week. That was incorrect. Our regulatory activity instead involved an offsite review of 7 recently installed Pin wells along the western edge of the site, including the calculation sheet and installation drawings, which was carried out remotely. We have amended the archived 24 November 2022 update to reflect this.

News in brief – 15th December 2022 - Regulatory activity.

We continue to actively regulate and assess Walleys Quarry Ltd.'s compliance with its environmental permit.

The gas extraction rate recorded on 9 December 2022 was 2950 m³/hr, with hydrogen sulphide levels at 1600 ppm. These results are within the normal operational fluctuations we expect. The slight increase in hydrogen sulphide levels seen at the Gas Utilisation Plant is not unexpected following the recent installation of the additional 7 pin wells into a zone of elevated hydrogen sulphide. In addition, more gas is being extracted from the north-east quarter of the site to alleviate gas migration, which is also in an area of elevated hydrogen sulphide concentrations. These actions capture additional hydrogen sulphide and reduce fugitive sources

News in brief – 22nd December 2022 - 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 20 December 2022.

The gas extraction rate recorded on 16 December 2022 was 2830 m³/hr, with hydrogen sulphide levels at 1580 ppm. These results are within the normal operational fluctuations we expect. The slight increases in hydrogen sulphide levels seen at the Gas Utilisation Plant (GUP) over the past two weeks are not unexpected following recent installation of the additional 7 pin wells into a zone of historic landfill gas containing elevated hydrogen sulphide. The wells capture additional hydrogen sulphide and send it for destruction at the GUP, reducing fugitive emissions.

News in brief – 5th January 2023

We continue to actively regulate and assess Walleys Quarry Ltd's compliance with its environmental permit. Officers carried out an unannounced site inspection on 20 December to assess general compliance with permit conditions.

The gas extraction rate recorded on 28 December 2022 was 3288 m³/hr and hydrogen sulphide levels were recorded on 29 December 2022 as 1490ppm. These figures from the gas utilisation plant were as expected and within normal operational parameters.

We also reviewed the Quarter 3 monitoring data relating to Walleys Quarry and issued a further Compliance Assessment Report (CAR) on 22 December 2022. Assuming this is not challenged by the company, the CAR will become public register on 20 January 2023.

6. Key Performance data

- 6.1 Through the settlement agreement both Walleys Quarry Ltd and the Council have developed key performance indicators in relation to relevant data from each organisation. These key performance indicators are shown in Appendix 3.
- 6.2 The data from the Council covers the period of October to December 2022, and provides complaint numbers, air quality data, H₂S and officer assessments. Some of the data for December is unavailable and will be updated in subsequent reports.
- 6.3 The data from Walleys Quarry Limited covers the period December 2022 and provides data on waste acceptance, odour management, landfill operations, landfill gas management, leachate management and information relating to the EA regulator as the primary regulator of the site. The data is supported by explanatory notes, which are also contained within Appendix 3.

7. Proposal

Cabinet is recommended to:

- **Note the contents of this update report**

8. **Reasons for Proposed Solution**

8.1 To ensure Cabinet is kept updated of the ongoing work to address the issues associated with the odours from Walleys Quarry landfill and to keep under review opportunities to further action.

9. **Options Considered**

9.1 To provide regular updates to Council

10. **Legal and Statutory Implications**

10.1 Part III of the Environmental Protection Act 1990 is the legislation concerned with statutory nuisances in law. This is the principal piece of legislation covering the Council's duties and responsibilities in respect of issues relating to odour nuisance:-

- The Environmental Protection Act 1990, section 79 sets out the law in relation to statutory nuisance. This is the principal piece of legislation covering the Council's duties and responsibilities in respect of issues relating to odour nuisance.
- The relevant part of Section 79 defines a statutory nuisance as any smell or other effluvia arising on industrial, trade or business premises which is prejudicial to health of a nuisance. The Council is responsible for undertaking inspections and responding to complaints to determine whether or not a statutory nuisance exists.
- Where a statutory nuisance is identified or considered likely to arise or recur, section 80 of the Act requires that an abatement notice is served on those responsible for the nuisance. The abatement notice can either prohibit or restrict the nuisance and may require works to be undertaken by a specified date(s).
- It is then a criminal offence to breach the terms of the abatement notice. Because the site is regulated by the Environment Agency under an Environmental Permit, the council would need to obtain the consent of the Secretary of State before it is able to prosecute any offence of breaching an abatement notice.

11. **Equality Impact Assessment**

11.1 The work of the Council in this regard recognises that the problematic odours in the area may impact on some groups more than others. The work is focussed on minimising this impact as soon as possible.

12. **Financial and Resource Implications**

12.1 There are none directly arising from this report.

13. **Major Risks**

13.1 There are no new risks beyond those explored in previous reports.

14. Unsustainable Development Goals (UNSDG)



15. Key Decision Information

15.1 As an update report, this is not a Key Decision.

16. Earlier Cabinet/Committee Resolutions

16.1 This matter has been variously considered previously by Economy, Environment & Place Scrutiny Committee, Council and Cabinet on 21 April 2021, 9th June 2021, 7th July 2021, 21st July 2021, 8th September 2021, 13th October 2021, 3rd November 2021, 17th November, 1st December 2021, 12th January 2022, 2nd February 2022, 23rd February 2022, 23rd March 2022, 20th April 2022, 7th June 2022, 19th July 2022, 6th September 2022, 18th October 2022, 8th November 2022 and 6th December 2022.

17. List of Appendices

- 17.1 Appendix 1. Historical Complaint data
- 17.2 Appendix 2. Historical Monitoring Station data
- 17.3 Appendix 3. NUL and WQL Key Performance Data

Appendix 1. Historical Complaint Data

| | Complaints to NuLBC | Complaints to Environment Agency |
|---|---------------------|----------------------------------|
| January 2022 3/1/22- 9/1/22 | 73 | 352 |
| 10/1/22 -16/1/22 | 258 | 1045 |
| 17/1/22 -23/1/22 | 134 | 651 |
| 24/1/22 – 30/1/22 | 25 | 139 |
| February 2022 31/1/2 – 6/2/22 | 16 | 64 |
| 7/2/22 – 13/2/22 | 31 | 120 |
| 14/2/22 – 20/2/22 | 49 | 166 |
| 21/2/22 – 27/2/22 | 40 | 264 |
| March 2022 28/2/22 – 6/3/22 | 118 | 571 |
| 7/3/22 – 13/3/22 | 72 | 285 |
| 14/3/22 – 20/3/22 | 224 | 1126 |
| 21/3/22 – 27/3/22 | 412 | 1848 |
| 28/3/22 – 3/4/22 | 243 | 1072 |
| April 2022 4/4/22 -10/4/22 | 132 | 895 |
| 11/4/22 – 17/4/22 | 156 | 752 |
| 18/4/22 – 24/4/22 | 65 | 310 |
| 25/4/22 – 1/5/22 | 49 | 213 |
| May 2022 2/5/22 – 8/5/22 | 39 | 193 |
| 9/5/22 – 15/5/22 | 35 | 160 |
| 15/5/22 – 21/5/22 | 43 | 134 |
| 22/5/22 – 29/5/22 | 20 | 81 |
| June 2022 30/5/22 – 5/6/22 | 27 | 169 |
| 6/6/22 – 12/6/22 | 42 | 234 |
| 13/6/22 – 19/6/22 | 25 | 263 |
| 20/6/22 – 26/6/22 | 28 | 208 |

| | | |
|--|----|-----|
| 26/6/22 – 2/7/22 | 9 | 54 |
| July 2022 3/7/22 – 9/7/22 | 4 | 34 |
| 10/7/22 – 16/7/22 | 14 | 72 |
| 17/7/22 – 23/7/22 | 21 | 52 |
| 24/7/22 – 30/7/22 | 12 | 93 |
| August 2022 31/7/22 – 6/8/22 | 22 | 124 |
| 7/8/22 – 13/8/22 | 32 | 133 |
| 14/8/22 – 21/8/22 | 11 | 79 |
| 22/8/22 – 28/8/22 | 12 | 89 |
| 29/8/22 – 4/9/22 | 10 | 30 |
| September 2022 5/9/22 – 11/9/22 | 9 | 64 |
| 12/9/22 – 18/9/22 | 13 | 83 |
| 19/9/22 – 25/9/22 | 14 | 79 |
| 26/9/22 – 2/10/22 | 13 | 58 |
| October 2022 3/10/22 – 9/10/22 | 42 | 102 |
| 10/10/22 – 16/10/22 | 52 | 165 |
| 17/10/22 – 23/10/22 | 73 | 186 |
| 24/10/22 – 30/10/22 | 30 | 82 |
| November 2022 31/10/22 – 6/11/22 | 26 | 116 |
| 7/11/22 – 13/11/22 | 52 | 86 |
| 14/11/22 – 20/11/22 | 59 | 113 |
| 21/11/22- 27/11/22 | 29 | 70 |
| 28/11/22 – 4/12/22 | 19 | 47 |
| December 2022 5/12/22 – 11/12/22 | 43 | 163 |
| 12/12/22 – 18/12/22 | 22 | 114 |
| 19/12/22 – 25/12/22 | 12 | 45 |
| 26/12/22 – 01/01/23 | 11 | 39 |

Appendix 2. Historical Monitoring Station Data

| Location | MMF1 - Silverdale Cemetery (%) | MMF2 - Silverdale Road (%) | MMF6 - NuL Fire Station (%) | MMF9 - Galingale View (%) |
|----------------|--------------------------------|----------------------------|-----------------------------|---------------------------|
| 19/4/21 – 25/4 | 18 | 8 | 4 | 21 |
| 26/4 – 2/5 | 4 | 10 | 13 | 35 |
| 3/5 – 9/5 | 6 | 21 | 6 | 48 |
| 10/5 – 16/5 | 15 | 20 | 1 | 10 |
| 17/5 – 23/5 | 1 | 9 | 10 | 53 |
| 24/5 – 30/5 | 7 | 15 | 16 | 47 |
| 31/5 – 6/6 | 30 | 1 | 6 | 18 |
| 7/6 – 13/6 | 1 | 10 | 10 | 19 |
| 14/6 – 20/6 | 11 | 7 | 9 | 13 |
| 21/6 – 27/6 | 2 | 1 | 4 | 12 |
| 28/6 – 4/7 | 1 | 8 | 8 | 10 |
| 5/7 – 11/7 | 5 | 18 | 3 | 17 |
| 12/7 – 18/7 | 0.4 | 2.4 | 2.1 | 23 |
| 19/7 – 26/7 | 3.6 | 0 | 3.6 | 16 |
| 27/7 – 1/8 | 1.8 | 1.5 | 11 | 26 |
| 2/8 – 8/8 | 1 | 4 | 5 | 10 |
| 9/8 – 15/8 | 0.3 | 7 | 3 | 6 |
| 16/8 – 22/8 | 1 | 1 | 4 | 6 |
| 23/8 – 29/8 | 0 | 0 | 1.5 | 17 |
| 30/8-5/9 | 0 | 0 | 0.3 | 2.1 |
| 6/9 -12/9 | 0 | 1 | 13 | 18 |
| 13/9 – 19/9 | 0 | 0.6 | 7.3 | 11.7 |
| 20/9- 26/9 | 3 | 2 | 6 | 11 |
| 27/9-3/10 | 0 | 0 | 0 | 0.3 |
| 4/10 – 10/10 | 0 | 0 | 0.3 | 5 |
| 11/10 – 17/10 | 0 | 0.5 | 1.5 | 9 |
| 18/10-24/10 | 0 | 0 | 0 | 1.5 |
| 25/10-31/10 | 0 | 0 | 0 | 0 |
| 1/11 – 7/11 | 2.9 | 0 | 3.3 | 13.5 |
| 8/11 – 14/11 | 0 | 0 | 1 | 10 |
| 15/11 – 21/11 | 0 | 0 | 0 | 1.2 |
| 22/11-28/11 | 0 | 0 | 0 | 11 |
| 29/11-5/12 | 0.6 | 0.9 | 0 | 9 |
| 6/12 – 12/12 | 0.6 | 0 | 0.9 | 2.4 |
| 13/12-19/12 | 0.9 | 0 | 3 | 18.5 |
| 20/12-26/12 | 0 | 0 | 0 | 3 |
| 27/12-2/1 | 0 | 0 | 0 | 2.4 |
| 3/1-9/1 | 1.2 | 0 | 2.1 | 16.2 |
| 10/1-16/1 | 14.9 | 11.9 | 21.4 | 53.3 |
| 17/1-23/1 | 6 | 7 | 10 | 41 |
| 24/1 – 30/1 | 0 | 0 | 0 | 5.1 |
| 31/1-6/2 | 0 | 0 | 0 | 0 |
| 7/2 – 13/2 | 0 | 0 | 0.9 | 2.4 |

| | | | | |
|---------------|------|------|------|------|
| 14/2 – 20/2 | 0 | 3.6 | 0.3 | 2.4 |
| 21/2 – 27/2 | 0 | 4.8 | 0.6 | 8.0 |
| 28/2 – 6/3 | 2.4 | 0 | 0.3 | 15 |
| 7/3 – 13/3 | 0.3 | 3.3 | 4.2 | 6.0 |
| 14/3-20/3 | 3.3 | 8.1 | 10.8 | 21.2 |
| 21/3-27/3 | 6.8 | 10.1 | 21.1 | 43.2 |
| 28/3 – 3/4 | 1.9 | 9.3 | 18.8 | 25.2 |
| 4/4-10/4 | 1.8 | 2.5 | 6.1 | 26.0 |
| 11/4 – 17/4 | 11.9 | 6.6 | 9.6 | 19.7 |
| 18/4 - 24/4 | 7.1 | 1.8 | 2.7 | 10.4 |
| 25/4 -1/5 | 5.1 | 0 | 1.5 | 9.0 |
| 2/5 – 8/5 | 2.7 | 4.8 | n/a | n/a |
| 9/5 – 15/5 | 0.9 | 1.2 | 0 | 1.8 |
| 15/5 – 21/5 | 0.6 | 2.1 | 0 | 2.7 |
| 22/5 – 29/5 | 0.3 | 0 | 0 | 0.9 |
| 30/5 – 5/6 | 0.3 | 0 | 1.2 | 7.4 |
| 6/6 – 12/6 | 0.3 | 0.6 | 2.1 | 3.6 |
| 13/6 – 19/6 | 0 | 0.6 | 0.6 | 11 |
| 20/6 – 26/6 | 0 | 0.9 | 0.3 | 15.5 |
| 26/6 – 2/7 | 0 | 0 | 0 | 0 |
| 3/7 – 9/7 | 0 | 0 | 0 | 0 |
| 10/7 – 16/7 | 0 | 0 | 0 | 0.9 |
| 17/7 – 23/7 | 0 | 0 | 0.3 | 1.5 |
| 24/7 – 30/7 | 0 | 0 | 0.3 | 1.2 |
| 31/7 – 6/8 | 0 | 0 | 0 | 1.5 |
| 7/8 – 13/8 | 0 | 0 | 0 | 1.8 |
| 14/8 – 21/8 | 0 | 0 | 0 | 0.6 |
| 22/8 – 28/8 | 0 | 0.3 | 0 | 0 |
| 29/8 – 4/9 | 0 | 0 | 0 | 0 |
| 5/9 – 11/9 | 0 | 0 | 0 | 4.2 |
| 12/9 – 18/9 | 0 | 0.3 | 0 | 2.9 |
| 19/9 – 25/9 | 0 | 0 | 0 | 1.8 |
| 26/9 – 2/10 | 0 | 0 | 0 | 4.2 |
| 3/10 - 9/10 | 0 | 0.4 | 0 | 3.7 |
| 10/10 – 16/10 | 0 | 1.9 | 0 | 0 |
| 17/10 – 23/10 | 0 | 0.6 | 0.3 | 1.5 |
| 24/10 – 30/10 | 0 | 0 | 0 | 0 |
| 31/10 – 6/11 | 0 | 2.2 | 0 | 1.8 |
| 7/11 – 13/11 | 0 | 0 | 0 | 0 |
| 14/11 – 20/11 | 4.5 | 1.2 | 0 | 0 |
| 21/11 - 27/11 | 4.5 | 0 | 0 | 0 |
| 28/11 – 4/12 | 0 | 0 | 0 | 0.6 |
| 5/12 – 11/12 | 1.5 | 5.1 | 0 | 14.3 |
| 12/12 – 18/12 | 1.2 | 3.6 | 0 | 11.6 |
| 19/12 – 25/12 | 0.6 | 0 | 0 | 0 |
| 26/12 – 01/01 | 0 | 0 | 0 | 0 |

Appendix 3 – Key Performance Indicators

Date of Report : 6th January 2023

| NULBC | | Information | Measurement | October 2022 | Nov 2022 | Dec 2022 | Summary and Actions |
|-------|------------|---|-------------|--------------|---|---|---------------------|
| KPI 1 | COMPLAINTS | Complaints reported to NULBC | Number | 207 | 146 Number of unique properties: 56 properties Rating 0 = 2 complaints Rating 1 = 1 complaints Rating 2 = 7 complaints Rating 3 = 15 complaints Rating 4 = 29 complaints (19.8%) Rating 5= 38 complaints (26%) Rating 6= 54 complaints (36.9%) % of complaints reporting odour entering the property = 103 complaints (70.5%) % of complaints reporting health effects = 129 complaints (83.3%) | 93 Number of unique properties: 44 Rating 0 = 0 complaints Rating 1 = 2 complaints Rating 2 = 7 complaints Rating 3 = 14 complaints Rating 4 = 16 complaints (17.2%) Rating 5= 23 complaints (24.7%) Rating 6= 31 complaints (33.3%) % of complaints reporting odour entering the property = 74 complaints (79.6%) % of complaints reporting health effects = 84 complaints (90.3%) | |
| KPI 2 | | Complaints reported (daytime 07:00-23:00) | Number | 183 | 137 | 85 | |

| | | | | | | | |
|-------|-------------|---|-----------------------------|-----------------------------|--------------------------|--------------------------|--|
| KPI 3 | | Complaints reported (night-time 23:00-07:00) | Number2 | 24 | 10 | 8 | |
| KPI 4 | | Highest number of complaints during the period | Date (number of complaints) | 18/10/22 (22) | 19/11/22 (15 complaints) | 07/12/22 (13 complaints) | |
| | | Information | Measurement | | | | |
| KPI 5 | AIR QUALITY | Percentage exceedance Odour Annoyance Guideline (Hydrogen Sulphide 30 minute average) | % | MMF 1 (Silverdale Cemetery) | 0.0% | 3 | Awaiting data - UKHSA Health Risk Assessment December Report |
| | | | | MMF 2 (Silverdale Road) | 0.6% | 0.8 | |
| | | | | MMF 6 (Fire Station) | 0.1% | 0 | |
| | | | | MMF 9 (Galingale View) | 1.0% | 0.4 | |
| KPI 6 | | Monthly Average H ₂ S* *data not final as ratification process not complete | ug/m3 over the month | MMF 1 (Silverdale Cemetery) | 0.5 | 1.5 | Awaiting data- EA Air Quality Report – December 2022 |
| | | | | MMF 2 (Silverdale Road) | 0.9 | 0.8 | |
| | | | | MMF 6 (Fire Station) | 0.6 | 0.7 | |
| | | | | MMF 9 (Galingale View) | 0.7 | 0.6 | |

| | | | | | | | | |
|----------|---|---|---------------------|---|---|--|---|--|
| KPI 7 | H ₂ S PEAK LEVEL | Level measured over a 5 minute period Date & Time | ug/m3 | MMF 1 (Silverdale Cemetery) | 1.75 18/10/22 10:15 | 31.79 (21/11 04:45) | Awaiting data - EA Monthly Rectified Air Quality Data | |
| | | | | MMF 2 (Silverdale Road) | 44.5 14/10/22 08:35 | 28.36 (03/11 16:15) | | |
| | | | | MMF 6 (Fire Station) | 9.58 23/10/22 21:45 | 9.89 (06/11 02:00) | | |
| | | | | MMF 9 (Galingale View) | 25.12 03/10/22 01:00 | 24.49 (05/11 21:40) | | |
| | | Information | Measurement | | | | | |
| KPI 8 | MOBILE AIR QUALITY MONITORING MOBILE | H2S Peak Level - measured using a mobile monitor | ppb | 5.94 09/10/22 15:30 Gallowstree Lane | n/a | | | |
| | | | | 8.52 21/10/22 17:00 Malham Road | n/a | | | |
| | | | | 11.92 11/10/22 20:00 Halfway Place | n/a | | | |
| KPI 9 | OFFICER ASSESSMENTS | Odour Rating - Officer odour assessment (5 minute) | Max Odour Rating | KPI not reported as the monitoring time <5 minutes for each assessment | KPI not reported as the monitoring time <5 minutes for each assessment | KPI not reported as the monitoring time < 5 minutes for each assessment | | |

WALLEYS QUARRY KPI REPORT

Date of Report: 31-12-2022

| Landfill Operations | Information | Measurement | Summary and Actions (Additional Document Reference as applicable) |
|---|--|---|--|
| KPI 1 WASTE ACCEPTANCE | Non-conformance raised with waste operator | CCS score(s) including summary and actions | 0 Non-conformance raised with operator 0 CCS scores received |
| KPI 2 ODOUR MANAGEMENT | Non-conformance raised with waste operator | CCS score(s) including summary and actions | 0 Non-conformance raised with operator 0 CCS scores received |
| KPI 3 ACTIVE TIPPING AREA | Operational Surface area total | M ² | 101,048m ² |
| KPI 4 ACTIVE TIPPING AREA | Active tipping area | m ² , % of overall operational surface including summary and actions | 19,515m ² |
| KPI 5 CAPPING OF OPERATION AREA | Temporary capping <hr/> Permanent capping | m ² , % of overall operational surface including summary and actions | Temporary Capping 41,501m ² (38%) Permanent Capping 40,032m ² (42%) |
| KPI 6 LANDFILL GAS MANAGEMENT | Surface & Gas infrastructure emission surveys | Number of remaining matters open in the month | 0 FID survey undertaken in December 0 matters remaining open |
| KPI 7 LANDFILL GAS MANAGEMENT | Concentration of Hydrogen Sulphide in 'raw' bulk gas | ppm | 1450 ppm – recorded from CLP H2S GUP input data |
| KPI 8 LANDFILL GAS MANAGEMENT | Landfill Gas capture rate (monitored at the GUP) | m ³ /hr | 3,177m ³ /hr |
| KPI 9 LANDFILL GAS MANAGEMENT | Appendix A LGMP Gas Management Plan (live document) | Progress including summary and actions | See explanatory notes |
| Landfill Operations | Information | Measurement | Summary and Actions (Additional Document Reference as applicable) |

WALLEYS QUARRY

WALLEYS QUARRY KPI REPORT

| | | | | |
|----------------------------|--|-------------------------------|---|--|
| KPI 10 | LEACHATE MANAGEMENT ACTION PLAN | Actions (13 actions) | Progress including summary and actions | See explanatory notes |
| Landfill Operations | | Information | Measurement | Summary and Actions (Additional Document Reference as applicable) |
| KPI 11 | PRIMARY REGULATOR | Compliance Assessments Visits | Number undertaken for which CAR form issued to operator | CAR reports received: 0444633- 13 December 2022 0444124 – 15 December 2022 0445911 – 22 December 2022 0446179 – 23 December 2022 |
| KPI 12 | PRIMARY REGULATOR | Compliance Assessments Visits | Number Undertaken where a CCS score is raised with operator, including summary and actions | 1 regulatory compliance assessments undertaken which resulted in a compliance assessment score – see explanatory notes |
| KPI 13 | PRIMARY REGULATOR | Compliance Assessments Visits | Number Undertaken where no CCS score is raised with operator, including summary and actions | 3 regulatory compliance assessments undertaken which resulted in 0 compliance assessment scores |

WALLEYS NuLBC KPIs Explanatory

WALLEYS QUARRY

Date of Explanatory Notes:

KPI 1 Waste Acceptance

No non-conformances have been received from the regulator within the month. Acceptance procedures under review by the Environment Agency, through the undertaking of an audit in cooperation with WQL, including upstream audits of waste processing sites supplying residues to the landfill business sector.

Waste acceptance carried out in accordance with (Environment Agency) agreed preacceptance and acceptance protocols. All loads were inspected within the period and no loads rejected.

Pre-acceptance/acceptance procedures under review by WQL to adopt the updated Environment Agency guidance relating to domestic seating disposal. Updated producer information and relevant declarations received, as part of WQL preacceptance and acceptance procedures.

KPI 2 Odour Management

No non-conformances have been received from the regulator within the month, with two site regulatory inspections confirming no offsite odour detected by Environment Agency officers. Two extensive Environment Agency site visits undertaken, focusing on a wide scope of permit conditions including engineering, containment, operational activities, landfill gas management, odour and pest management.

KPI 3 and 4 Active Tipping Area

The overall current landfill area remains consistent at 101,048m². The active area is confined to Cell 4 and a small section of cell 2. The current active area remains contained and measures some 19,515m². This is in line with the approved capping and phasing plan, as agreed with the Environment Agency. The active operational area is progressively covered during the day to minimise the time that fresh waste remains uncovered. This is in line with best practice and our operating techniques. We retain healthy stockpiles of cover material to facilitate this progressive covering.

KPI 5 Temporary Capping

Currently, 41501m² of the surface area of the facility is temporarily capped, either using a high specification, low permeability engineering clay or an installed geomembrane. This is in line with the capping and phasing plan for the facility, as agreed with the Environment Agency. Maintenance works continue to clay capped areas in line with the agreed (by the Environment Agency) CQA (Construction Quality Assurance) specifications.

KPI 5 Permanent Capping

Relating to permanent capping, 40,032m² of the surface area of the facility is capped, by the installation of a low permeability geomembrane. This is in line with the capping and phasing plan for the facility, as agreed with the Environment

WALLEYS NuLBC KPIs Explanatory

WALLEYS QUARRY

Agency with all perm capping works being conducted under the process of Construction Quality Assurance (CQA). On completion of the permanent capping works, cover soils continue to be imported to the facility as part of the site restoration process.

KPI 6 - B Landfill gas management

WQL continues to undertake the extensive regime of surface emission surveys, as agreed with the Environment Agency. A FID survey was undertaken in November 2022, in line with the program agreed with the Environment Agency. The next survey is due in January 2023.

The concentration of H₂S at the facility remains within expected limits and in December it averaged 1450ppm at the Gas Utilisation Plant (GUP), as measured by CLP Envirogas Ltd.

The volume of gas captured at the facility remains within expected limits, at 3,177m³/hr. WQL continue to review this position and drive the gas management contractor, CLP Envirogas Ltd to ensure that gas collection is continually reviewed to assess relevant developments that can be made.

KPI 9 Landfill Gas Management - Landfill Gas Management Plan

The LFGMP continues to be developed by WQL and adopted by CLP Envirogas Ltd. From Appendix A of this document, three actions remain open and in progress, namely:

Site Specific Balancing Plan – this is being developed by WQL, in conjunction with the Environment Agency and CLP Envirogas Ltd. A draft has been received and is being reviewed, prior to agreement and submission to the Environment Agency.

Regular monitoring, requested by the Environment Agency of CLP Envirogas Ltd continues and is likely to remain in place.

Installation of horizontal wells in active operational areas continues as the site develops, in line with the approved LFGMP.

The LFGMP is currently being reviewed, with the aim of the development of the next version. This is currently being finalised with CLP Envirogas Ltd and will be submitted to the Environment Agency for approval in January 2023.

KPI 10 Leachate Management Plan

Implementation of the LMP continues to be discussed with the Environment Agency. Average Leachate heads decreased across H1 2022, with active monitoring continuing. Discussions with the Environment Agency continue regarding installation of additional replacement leachate wells to ensure these are completed with the minimum weather-condition risk, environmental risk and risk to the engineering of the facility. Discussions with the Environment Agency are ongoing and it is anticipated that a meeting will be held in January 2023.

WALLEYS NuLBC KPIs Explanatory

WALLEYS QUARRY

KPI TI- 13

Two Environment Agency visits were undertaken at the facility in December. No non-conformances have been received from the regulator within the month, relating to these extensive audits of the site.

Two further CAR assessments were issued in December:

0444633:

Cell 4 upper sidewall liner works – Environment Agency sign off relating to cell engineering.

0445911:

CAR report currently being reviewed and has been challenged by WQL.

Four CCS3 received, relating to:

- B1 Infrastructure – CCS3 score issued relating to leachate levels on site being above the standard compliance levels for the site. This is a historic issue at the facility, relating to the engineered basal shape, along with the depth and curvature of the extraction wells. Our external expert advice is that we continue to appropriately cap the site and reinstall leachate wells, at the appropriate time to limit risk. Extraction and subsequent treatment on site or removal to licensed disposal remain in place.
- E2 Emission – CCS3 score issued relating to ammoniacal nitrogen recorded in groundwater below site. This is a historic issue, with our external environmental experts advising that this matter is due to the extensive offsite use of fertiliser from agriculture. This view is reinforced from ammoniacal nitrogen being evident upstream of WQ.
- E2 Emission – CCS3 score issued relating to methane exceedances in external boreholes. The source of the methane is unclear. However, WQL are currently working with CLP Envirogas Ltd to review and appraise options for reducing the methane concentrations accordingly. This will be submitted to the Agency in January 2023.
- G1 – monitoring – CCS3 score issued to monitoring not being submitted for wells LS1B and LS2B. The two referenced wells have failed, due to movement and displacement within the landfill area and will be replaced in due course. However, there are other wells within the landfill which are hydraulically linked and therefore representative monitoring is still recorded and submitted to the Agency. Contributing to the compliance assessment, the Environment Agency stated that results were not recorded from BH203 due to access issues to the well. This appears to be an error and should refer to BH208, where a sample was not obtained due to insufficient liquid present in the well and therefore it was not possible to sample the borehole.