

**NEWCASTLE-UNDER-LYME BOROUGH COUNCIL**

**EXECUTIVE MANAGEMENT TEAM'S  
REPORT TO**

**Council**  
**05 April 2023**

**Report Title:** Walleys Quarry Update

**Submitted by:** Chief Executive

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

**Ward(s) affected:** All

**Purpose of the Report**

To provide an update on Statutory Odour Nuisance assessments in relation to Walleys Quarry Landfill.

**Recommendation**

**That Council note the contents of this report.**

**Reasons**

It has been 5 months since the Council's odour abatement notice was upheld. The notice provided 5 months for Walleys Quarry Limited to 'abate the nuisance'. This report assesses the evidence collated during that period in order to consider compliance with the notice.

1. **Background**

- 1.1 For a number of years, parts of the borough have suffered from 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 (EA) 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 any abatement notice issued by the Council in relation to a 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 Council has received update reports in July 2021 and July 2022 and regular updates in statements from the Leader of the Council.
- 1.4 Cabinet has received monthly updates on the issues relating to the odours, and Health, Wellbeing & Environment Scrutiny have also received updates at each meeting.

## 2. Issues

### Statutory Nuisance Abatement Notice:

- 2.1 Following extensive work, officers determined that the odours from the Walleys Quarry site amounted to a Statutory Nuisance and, on 13 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 The 5 month compliance period ended at midnight on 5 March 2023 meaning that the notice can now be enforced, should there be evidence to substantiate a breach and evidence that WQL are not following best practice in operating the landfill site.
- 2.7 The Council will continue to assess the prevalence of odours off site. In the event that there are further instances of statutory nuisance identified which amount to a breach of the Abatement Notice, the Council’s Enforcement Policy will guide the process to be followed.<sup>1</sup>
- 2.8 This would determine what action the Council would take, and whether that would be formal or informal. Enforcement is usually considered sequentially but should the circumstances or nature of the breach be such, escalation direct to prosecution is possible. The Council would need to obtain the consent of the Secretary of State before it is able to prosecute an offence of breaching an abatement notice, as the site is permitted by the Environment Agency.

### Progress with Abating the Nuisance

2.9 It is helpful to consider the data available for some key indicators since 2019, which was prior to when odour issues relating to the landfill site escalated in December 2020. There are a number of indicators which have been consistently used to monitor odour pollution from the site. These are:

- Complaints – both the Council and the Environment Agency have systems in place to collect and analyse complaints made by members of the public.

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<sup>1</sup> [Environmental Health enforcement policy – Newcastle-under-Lyme Borough Council \(newcastle-staffs.gov.uk\)](https://www.newcastle-staffs.gov.uk)

- Data from static monitoring stations – 4 air quality monitoring stations (MMFs) are located around the site, which produce data which is regularly published. These data include:
  - % time H<sub>2</sub>S emissions exceed the World Health Organisation (WHO) Annoyance Threshold (7µg/m<sup>3</sup>);
  - 5 minute peak level of H<sub>2</sub>S recorded.
- Concentration of H<sub>2</sub>S recorded at the Gas Utilisation Plant (GUP).
- Volume of gas collected and destroyed at the Gas Utilisation Plant.

2.10 These measures, together with the percentage of the site which is capped, provide a good assessment of site conditions and operational performance, and closely reflect the CONTAIN, CAPTURE, DESTROY strategy deployed to control fugitive gas emissions from the site.

2.11 Since 2020, there has been considerable improvement across a number of elements as shown within table 1 below:

Table 1: Annual Walleys Quarry Data.

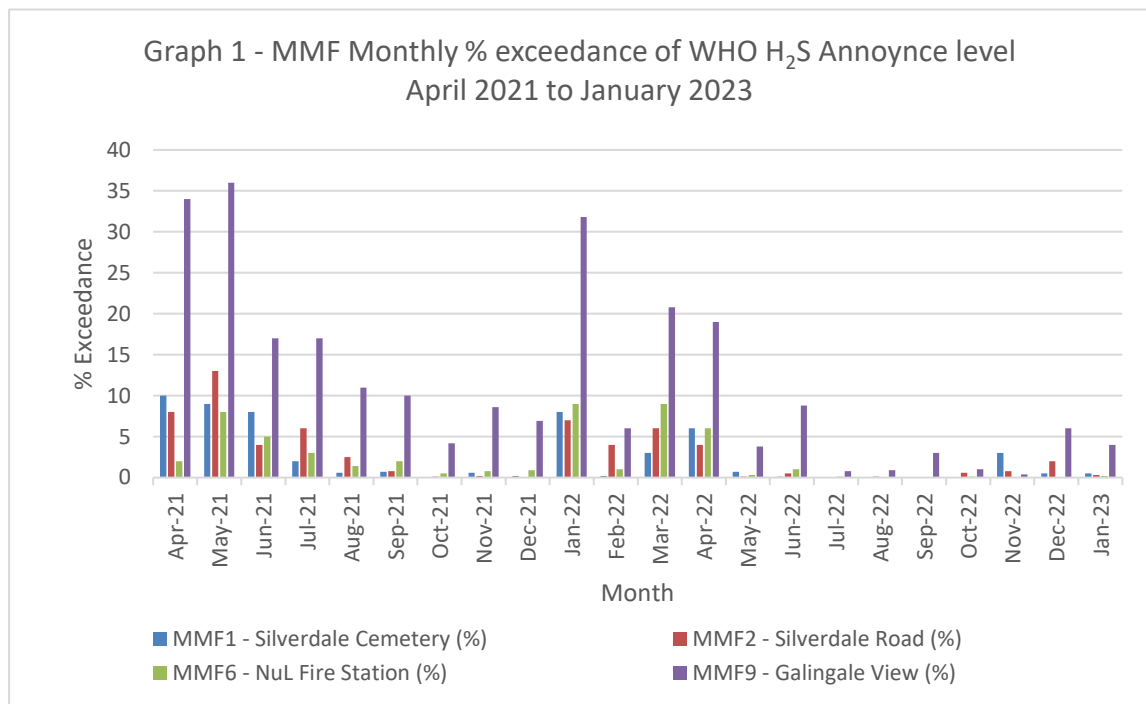
	2019	2020	2021	2022	2023 (to end Feb)
<b>Number of Odour complaints to NULBC</b>	156	918	22239	2968	183
<b>Number of Odour complaints to Environment Agency</b>	1151	2106	43262	13687	598
<b>MMF9 H<sub>2</sub>S (5 min peak) µg/m<sup>3</sup></b>	n/a	n/a	1350.87 (March)	1197.47 (March)	33.29 (Jan)
<b>MMF9<sup>A</sup> H<sub>2</sub>S Highest weekly % Exceedance WHO annoyance level</b>	n/a	n/a	53% <sup>B</sup> (May)	53 % (Jan)	11.1% (Jan)
<b>MMF9<sup>A</sup> H<sub>2</sub>S average weekly % Exceedance WHO annoyance level</b>	n/a	n/a	14.5% <sup>B</sup>	7.71%	2.43%
<b>GUP gas flow (m<sup>3</sup>/Hr)</b>	2104	2113	2749	2801	3010
<b>Annual H<sub>2</sub>S concentration in gas (ppm) at GUP</b>	733	4610	7520	2029	1552 (Average)
<b>Site capped temporary or permanent (%)</b>	24%	24%	40.8% (Mid 2021)	53% (January 2022)	73.6% (January 2023)

#### Notes

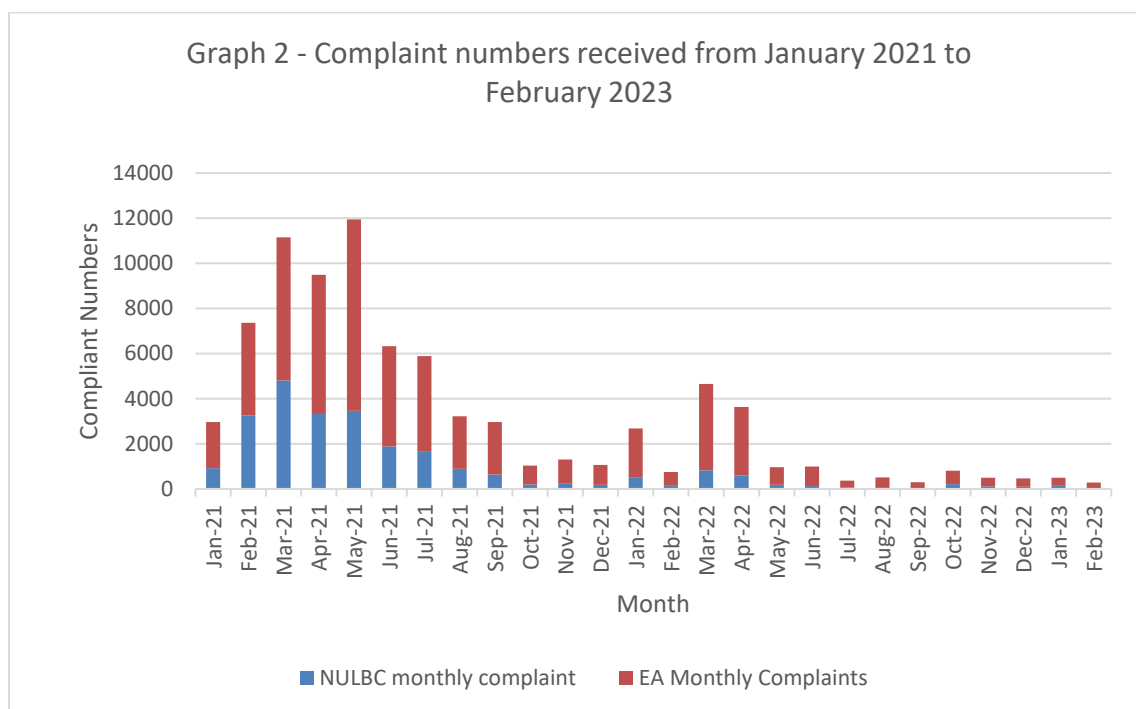
<sup>A</sup> MMF9 data used as this is the highest recorded out of all MMFs

<sup>B</sup> Monitoring commenced April 2021

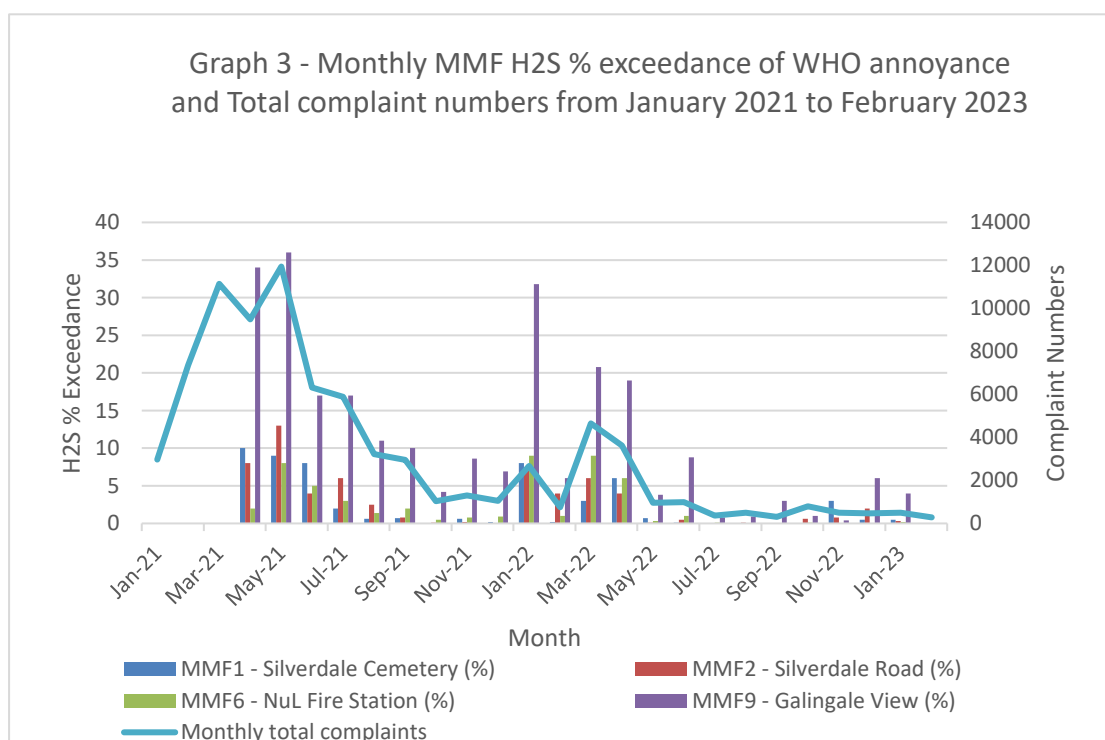
2.12 In order to show the trends in further detail, monthly data for the % exceedance of the WHO H<sub>2</sub>S annoyance level, is shown in Graph 1 below:



2.13 Similarly, monthly odour complaint data in relation to Walleys Quarry has been collated in graph 2, this is for both the EA complaints and those received by the Council. EA data is based on weekly reported figures.



2.14 Throughout this investigation, there has always been good correlation between complaint numbers and the levels of H<sub>2</sub>S monitored at the MMFs. This relationship between the two is shown in graph 3. Complaint numbers shown are EA and Council complaint totals.



2.15 The following conclusions are drawn from the annual and monthly data:

- Complaint numbers received have reduced considerably from a peak in spring 2021;
- MMF9 monitors the highest H<sub>2</sub>S levels of the four monitoring stations, the peak H<sub>2</sub>S levels have reduced each year since the peak in 2021;

- The % weekly exceedance of the WHO annoyance level for H<sub>2</sub>S is reducing each year of monitoring;
- The gas capture rate at the Gas Utilisation plant is increasing;
- The H<sub>2</sub>S concentration in the landfill gas is reducing from a peak in 2021;
- Capping of the site has increased considerably and now 75% of the site is temporarily or permanently capped.
- Peaks have been shown in the highest H<sub>2</sub>S levels and H<sub>2</sub>S % exceedance during each winter/spring period, the magnitude of the peak has reduced each year.
- Peaks have been shown in complaint numbers during each winter/spring period, the magnitude of the peak has reduced each year.
- Annual figures for complaints and H<sub>2</sub>S concentrations (at GUP) are reducing but are not yet at levels equivalent to 2019 data.

#### Odour Expert Data Review:

2.16 Given the community significance of the issue of odours from the quarry, the Council has commissioned an industry expert, who acted as the Council's Odour Expert through the appeal, to review data relating to odour between November 2022 to January 2023. This review was to provide an independent assessment of progress, and of the resulting position which has been arrived at vis-à-vis odours.

2.17 The review considered:

- Surface emission monitoring reports;
- The effect of meteorological factors on complaints numbers;
- Air quality monitoring data;
- Compliance Assessment Reports (CAR) issued by the EA;
- Sniff test results for observations carried out by NULBC staff;
- Sniff tests results from the EA.

2.18 The conclusion states (**emphasis added**):

*"This preliminary review shows that:*

- *There have been improvements to the scale of hydrogen sulphide and landfill gas releases, this is evidenced by the EA monitoring, the surface emission survey and hydrogen sulphide content of the gas entering the GUP.*
- *Odour emissions continue to occur, this is evidenced by the EA monitoring, the surface emission survey and NULBC sniff testing.*

*The evidence set out in this review still shows:*

- *That there is a reduction in the frequency of episodes of hydrogen sulphide being present at noticeable level,*
- *That the intensity of pollution had reduced but on occasions remains at noticeable levels, the peak concentrations are lower than the peak levels which occurred when the Abatement Notice was issued.*

***It is Ricardo opinion that, in order for there to be a statutory nuisance, some of the FIDOL factors, namely Frequency, Intensity and Duration would need to be at an increased frequency, increased intensity and a longer duration."***

FIDOL:

2.19 The assessment of odour is broken down into a number of factors, this is often referred to as 'FIDOL' the individual elements are defined in table 2 below. In the determination of nuisance all elements have to be established.

Table 2 – FIDOL

Frequency	How often an individual is exposed to odour
Intensity	The individual's perception of the strength of the odour
Duration	The overall duration that individuals are exposed to an odour over time.
Odour unpleasantness	Odour unpleasantness describes the character of an odour as it relates to the 'hedonic tone' (which maybe pleasant, neutral or unpleasant) at a given odour concentration/ intensity.
Location	The type of land use and nature of human activities in the vicinity of an odour source. Tolerance and expectation of the receptor. The 'Location' factor can be considered to encompass the receptor characteristics, receptor sensitivity, and socio-economic factors.

Dialogue with WQL:

2.20 As part of the Agreement, Council officers, including the Chief Executive, are meeting regularly with senior representatives of Walleys Quarry Limited (WQL) to ensure that all aspects of the agreement are implemented. This active engagement has resulted in a number of outcomes including:

- a) WQL have published a comprehensive set of its operational plans on its website in a publicly accessible format.
- b) WQL notifies the Council of any written amendments to the listed Operational Plans/Procedures within 48 hours of such notification by the Environment Agency, and this has occurred in line with the agreement.
- c) WQL notify any operational changes that may impact on odour emissions from the site Notifications are published on the WQL 'Latest Information' webpage. In February, advance notice was given by WQL of the installation of new vertical wells that had the potential to create short-lived odour emissions.
- d) A set of standard key performance indicators in a score card format monitor the performance of the operator, these are reported to Cabinet each month.
- e) Liaison Committee meetings are recorded in a publically viewable format, increasing community visibility of the work of this body which includes input from Walleys Quarry Limited, Environment Agency, Staffordshire County Council, Borough Council, Silverdale Parish Council and resident representatives.

Enforcing the Abatement Notice:

2.21 As outlined above, if necessary the Council now has the power to take enforcement action in relation to future odours from Walleys Quarry, subject to establishing a breach of the notice and obtaining Secretary of State's permission.

2.22 In order to consider any breaches of the abatement notice, it is useful to revisit the relevant requirements of the abatement notice, a copy of which is shown in Appendix 1. The reasoning

for the requirements are detailed below, with the italic bold text reflects the requirements or text used within the abatement notice:

- 2.23 ***Satisfied of the existence*** – The Council would need to be satisfied of the existence of an odour related Statutory Nuisance. This would entail the odour being considered against the issues of frequency, intensity, duration and offensiveness and location (the FIDOL factors). Such factors would have to be established in determining a breach of the notice.
- 2.24 ***of smell amounting to a statutory nuisance under section 79(1)(d)*** – The smell contains many and varying chemicals and concentrations of such; it's the amalgamation of these which create the smell nuisance. Although much of the monitoring relates to hydrogen sulphide, this is not the only odorous compound and any in relation to any future breaches, all smells could be considered.
- 2.25 ***Premises (including land) falling wholly or partially within the area encompassed by the boundary line identified on the attached plan reference NULBC02-*** An area of land where the nuisance exists was defined in order ensure that the notice was clear and specific in nature and to enable the Council and Walleys Quarry Ltd to be able to assess compliance. Through the settlement agreement, there was an inner boundary added to exclude the landfill site. Any breach would have to be substantiated off site and within this area.
- 2.26 ***to abate the nuisance*** - There are numerous different options abate the nuisance. In these circumstances, it would have been overly prescriptive for the Council to specify exact works and in what way these should be completed. Instead, we simply required the abatement of the nuisance. In any enforcement action there would be a requirement to show that the nuisance had not been abated.
- 2.27 ***AND ALSO HEREBY PROHIBIT YOU from causing, permitting or otherwise allowing the recurrence of the nuisance thereafter*** – This provision creates an ongoing responsibility for Walleys Quarry Ltd to comply with the terms of the abatement notice and not create or allow a further statutory odour nuisance.

#### Best Practicable Means [BPM]

- 2.28 The Environmental Protection Act 1990 states under section 79(9) that in the 'best practicable means' test the following provisions apply:
- a) "**practicable**" means reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to the financial implications;
  - b) the **means** to be employed include the design, installation maintenance and manner and periods of operation of plant and machinery, and the design, construction and maintenance of buildings and structures;
  - c) the **test** is to apply only so far as compatible with any duty imposed by law;
  - d) the test is to apply only so far as compatible with safety and safe working conditions, and with the exigencies of any emergency or unforeseeable circumstances.
- 2.29 Best Practicable Means reflect:
- **local conditions and circumstances** i.e. has the operator of the site taken into account the close proximity of residential and commercial properties, the topographical features of the site, and the impact of weather conditions;



- **the current state of technical knowledge** which would include current guidance/ industry standard(s), conditions of the environmental permit, industry standard operational plans e.g. Odour Management Plan, Landfill Gas Management Plan, Landfill Gas Risk Assessment, Leachate Management Plan, Capping and Phasing Plan;
- **the financial implications**
- **design of the site** including predictive software modelling, installation of the infrastructure of gas wells, gas pipelines, knock out pots, Gas Utilisation Plant, leachate wells and pipework, storage and balancing tanks, leachate treatment plant, temporary and permanent capping;
- **maintenance of plant and machinery** i.e. planned maintenance and reactive work;
- **manner and periods of operation of plant and machinery** including filling the site in a systematic manner to minimise the area of the working face (Phasing Plan) and management of surface water to minimise penetration and leachate production, and
- **design construction and maintenance of buildings and structures.**

2.30 It should be noted that the BPM **test** only applies to normal operation and not in response to an emergency or unforeseen event.

2.31 At the time the Abatement Notice was confirmed, the Council accepted that the plans in place at that time for the management of odour at Walleys Quarry amounted to Best Practical Means. It was also agreed that these would evolve with the site's development. It is evident that ongoing, consistent, good management at the landfill site is key to controlling off-site odour.

2.32 If the Council was to instigate a prosecution for failure to comply with the Abatement Notice, it would be imprudent to do so unless the Council was clear from information available to it that the landfill operator was no longer using best practicable means were used to prevent, or to counteract the effects of, the smell nuisance.

2.33 The Council would take into account whether WQL were lawfully operating under the terms of an environmental permit and whether WQL were complying with those requirements (and all other relevant requirements). The permit contains an odour condition:

*'emissions from activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment 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'.*

### 3. **Proposal**

3.1 That Council note the content of this report.

### 4. **Reasons for Proposed Solution**

4.1 To ensure Council is updated with regard to the requirements of the abatement notice and informed of the current position and work in relation to the odours from Walleys Quarry landfill.

## 5. **Options Considered**

- 5.1 From the point at which the abatement notice became enforceable at midnight on 5 March 2023, the council has powers (not duties) available with regard to future action. It is only breaches post this date, which could be considered for enforcement action. Options considered include:
- 5.2 Do nothing until post 5 March 2023 where there is an enforceable position. This is not considered to be in the interest of the Council or the community.
- 5.3 Review and present the data available since October 2023. This option provides information to Council and the community but falls short of providing a current conclusion.
- 5.4 Review the data available since October 2023 and provide a position in respect of Statutory Nuisance, as per this report. This option is considered to provide information to Council and the Community of the information available and the council's current assessment of statutory nuisance.

## 6. **Legal and Statutory Implications**

- 6.1 A comprehensive review of the legal position is contained within section 2 of the report. In addition, it should be noted that if the council were to prosecute WQL for a breach of the Abatement Notice, in addition to securing the consent of the Secretary of State, it would need to be able to prove its case "beyond all reasonable doubt". This is a much higher burden of proof than the "balance of probabilities" burden of proof that applies when seeking to secure an Abatement Notice.

## 7. **Equality Impact Assessment**

- 7.1 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.

## 8. **Financial and Resource Implications**

- 8.1 Dedicated officer resource has been allocated to continue the Council's work regarding Walleys Quarry Landfill.
- 8.2 From April 2023 there is £100k reserved for legal action associated with Walley Quarry landfill site. In the event that formal action is required, a separate report will be brought to full Council to approve additional funds.

## 9. **Major Risks**

- 9.1 A GRACE risk assessment has been completed identifying the following main risks:

- Failure to achieve a reduction in odour levels;
- Community dissatisfaction at odour levels;
- The ability to take enforcement action against abatement notice;
- Failure to evidence a breach of the abatement notice;
- Secretary of State refuses permission to undertake prosecution proceedings.

- 9.2 Controls have been identified and implemented in order to control these risks, the main controls include:

- Provisions in settlement agreement ensures greater transparency for public;
- Provisions in settlement agreement ensures regular meetings with Walleys Quarry which enable issues to be discussed;
- Dedicated officer resource for Walleys Quarry work has been secured;
- Continued air quality monitoring provision;
- Robust procedure for investigating complaints with experienced officers;
- Specialist expert advice maintained;
- Multi-Agency partnership working continues.

## 10. UN Sustainable Development Goals (UNSDG)

10.1 The Council Plan 2022 to 2026 is relevant to this report. Priority two: a successful and sustainable growing borough, where a priority is to 'secure a successful resolution to the Walleys Quarry odour problem'.

10.2 It also contributes towards Priority 1 – One Council delivering for Local People & Priority 3 – Healthy, Active and Safe Communities<sup>2</sup>

10.3 The monitoring and assessment of Odour from Walleys Quarry contributes towards the following UN Sustainable Development Goals<sup>3</sup>



## 11. Key Decision Information

11.1 As an update report, this is not a key decision.

## 12. Earlier Cabinet/Committee Resolutions

12.1 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, 6th December 2022, 10th January 2023, 7th February 2023 and 14<sup>th</sup> March 2023.

## 13. List of Appendices

13.1 Appendix 1 – Walleys Quarry Ltd Abatement Notice

<sup>2</sup> <https://www.newcastle-staffs.gov.uk/downloads/download/506/council-plan-2022-26>

<sup>3</sup> <https://sdgs.un.org/goals>

14. **Background Papers**

14.1 Ricardo - Review of data