

NEWCASTLE-UNDER-LYME BOROUGH COUNCIL

EXECUTIVE MANAGEMENT TEAM'S REPORT TO CABINET

9 June 2021

Report Title: Walleys Quarry Update Report

Submitted by: Chief Executive

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

Ward(s) affected: All

Purpose of the Report

To provide Cabinet with an update regarding ongoing work to address problem odours in the Borough associated with Walleys Quarry.

RECOMMENDATIONS

Cabinet is recommended to:

- (1) Note that work to date by Council officers, supported by the efforts of other agencies, has ruled out the existence of any credible source of the borough odour problem other than Walleys Quarry, and once again call on the operator of Walleys Quarry to accept its role in this issue and work to resolve it.**
- (2) Note that a letter before action has been served on Walleys Quarry Ltd informing them of the Councils work regarding statutory nuisance and affording them the opportunity to provide to this Council any information to satisfy it that the company has an effective action plan and acceptable timeline in place to prevent the emission of regular, persistent and offensive odours detectable beyond the site boundary.**
- (3) Note that any information received from Walleys Quarry Ltd to the letter before action will be considered after the expiry of the 14 day period for response, to inform the subsequent decision on the appropriateness of the Council serving a statutory abatement notice.**
- (4) Agree that the Council continues to work with and support multi agency partner organisations in order to investigate and resolve the odour issues.**

Reasons

To ensure that Cabinet are aware of the latest position regarding this high priority area of work.

1. Background

- 1.1 For a number of years, parts of the borough have suffered from problematic foul odours, widely believed to come from the Walley's Quarry Landfill Site in Silverdale operated by Walleys Quarry Ltd, part of the RED Industries group of companies. Addressing this issue has been a priority for the current administration, with a budget specific budget of £50,000 agreed in February to enabled specialist advice to be secured and targeted work to be undertaken.

- 1.2 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.
- 1.3 This report summarises both the latest position regarding the odours, action to regulate the Walleys Quarry site, and the actions being taken by the Council

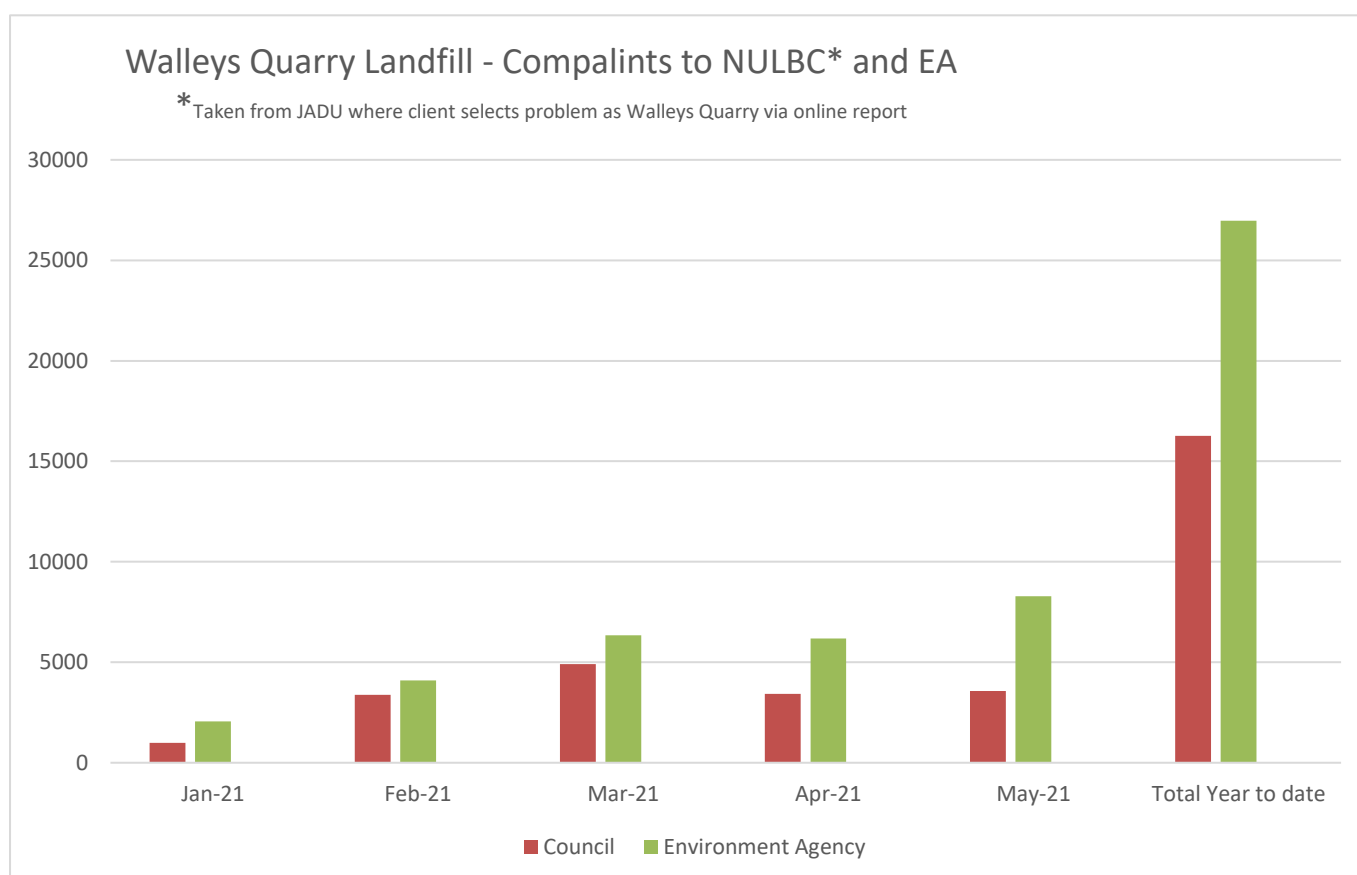
2. Issues

- 2.1 Since the incident on the 26-28 February, and the subsequent Council debate, there has been a step change in multi-agency working regarding the landfill operation, associated odours, and in particular the potential impact on health. Agencies involved in overseeing aspects of the local impact of the landfill have been in regular meetings, as well as senior level meetings between the Council and the Environment Agency. A concerted focus on the issue has enabled progress to be made in a number of key areas, as summarised in this report.

Complaints

- 2.2 Complaints of foul odours escaping from the site continue to be made by residents to both the Council and the Environment Agency. Table 1 below shows complaints made since January 2021, reflecting the major spike in complaints at the end of February 2021. In the first 5 months of 2021 the Council has received a total of 16,265 complaints, and the Environment Agency 26,996. The Council routinely shares anonymised complaints with the landfill operator so that they can be aware of and address community concerns. In some cases the same complaint will have been submitted to both the Environment Agency and the Borough Council.

Complaints To	Jan 2021	Feb 2021	March 2021	April 2021	May 2021	Total Year to Date
Council	993	3372	4913	3421	3566	16,265
Environment Agency	2050	4098	6347	6181	8290	26,966



Council Activity in relation to the Odour Problems

- 2.3 As previously reported, the Council is engaged in a multi-agency effort to secure co-ordinated action to address the issues related to Walleys Quarry. This work involves colleagues from Environment Agency, Staffordshire County Council, Public Health England and the Clinical Commissioning Group. Work to date, and the conclusions drawn are set out in detail below.

Source & Cause of Odour Problems in the Community

- 2.4 In the operation of a landfill site the successful management of odours emanating from the site involves three closely connected issues:
- **Containment of Gas** – typically by having both effective capping of the site and impermeable base and sides. If effective temporary and permanent capping is in place, over sufficient areas of the site, the opportunity for “fugitive gas” escaping from the surface and flanks of the landfill is greatly reduced, and makes more of the gas generated by the site available for capture.
 - **Capture of Gas** - A gas management system comprising wells and pipework will provide a means to extract gas contained in the site in a managed way, and direct it to equipment used for its destruction.
 - **Destruction of Gas** – Gas collected from the site is destroyed by burning, either in engines designed to burn the gas and generate electricity, or in flares, which burn the gas, but do not have an associated energy plant.
- 2.5 In addition to the three items above, the other variable is the material contained in the waste which results in gas production during its decay.
- 2.6 Walleys Quarry Ltd issued a statement on 25 March 2021 indicating that they had found that a likely source of hydrogen sulphide contamination in the area, not linked to the landfill site and which, according to their assessment, could not originate from Walley's Quarry. The assertion was that ground water that had collected onsite, but which originated from outside of the landfill liner, was found to be contaminated with Hydrogen Sulphide. The suggestion being that the ground water was already contaminated before it arrived on site.
- 2.7 The Council and the Environment Agency have both asked the Walleys Quarry operator to share any evidence that they have underpinning this assertion, but no credible evidence has been provided. However, three distinct strands of work have been progressed by partners:
- The Coal Authority has reviewed their data and dismissed the possibility of the issue being related to former coal workings.
 - Newcastle-under-Lyme Borough Council acts as the regulators for private water supplies (any supply of water not from a public undertaker or licensed supplier). These Regulations place a duty on local authorities to conduct a risk assessment of each private water supply within their area and to undertake monitoring to determine compliance with drinking water standards (except those to single dwellings, unless requested). If the quality of water at a private water supply fails to meet drinking water standards, or if it is considered necessary following a risk assessment, the local authority must ensure that action is taken to address those issues. The conclusion of the work to identify and assess relevant private water supplies was that there were none which posed any risk.

- It is notable that the Environment Agency now directly attribute the odours in the borough to the operation of the landfill site in their public statements, and have determined the existence of breaches of the Walleys Quarry permit in relation to “odour off site at a level of annoyance”. No alternate source has been identified and any suggestion that contaminated groundwater is at the heart of the problem can be rejected for absence of any evidence.

2.8 Council officers are clear that the foul and problematic odours experienced in the borough originate from the Walley’s Quarry site, and are content that there are no credible alternative sources of the odour.

3. **Air Quality Monitoring**

3.1 The Council, Staffordshire County Council, and the Environment Agency are jointly funding a campaign of air quality monitoring which will run until August 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 annoyance threshold, with this analysis published by stakeholders.

3.2 Hydrogen sulphide concentrations were above the World Health Organization’s odour annoyance guideline level (7 µg/m³, 30-minute average) for the following percentages of each week:

Location	19/4 – 25/4	26/4-2/5	3//5 – 9/5	10/5-16/5	17/5-23/5	24/5 – 30/5
MMF1 - Silverdale Cemetery	18%	4%	6%	15%	1%	7%
MMF2 - Silverdale Road	8%	10%	21%	20%	9%	15%
MMF6 - NuL Fire Station	4%	13%	6%	1%	10%	16%
MMF9 - Galingale View	21%	35%	48%	10%	53%	47%

3.3 From this data it is apparent that there was potential for significant odour complaints to occur over these periods, with the Galingale View area most significantly impacted.

3.4 At MMF1, MMF2 and MMF6 24-hour average values were significantly below the WHO 24-hour average guideline value of 150µg/m³. However, at MMF9, the 24-hour average guideline value was exceeded on two days during the monitoring period: 7 & 8 March 2021, the highest of which was 202µg/m³ Exposure to concentrations of hydrogen sulphide above the WHO 24-hour guideline value mean that notable discomfort and irritation. It does not necessarily mean eye irritation or other health effects will occur, but it reduces the margin of safety that is considered desirable to protect health.

3.5 Whilst health experts have advised that the current levels of H₂S exposure are unlikely to lead to long-term health effects, it is nonetheless unacceptable that residents are exposed to the short term effects identified, and routinely reported by residents.

- 3.6 The Analysis of the April data by Public Health England is attached at https://consult.environment-agency.gov.uk/west-midlands/walleys-quarry-landfill-silverdale/user_uploads/health-risk-assessment-air-quality-monitoring---april.pdf . The Council has also used the above data for March as the key input to its analysis as outlined in section 4.

4. Odour Nuisance Investigations

- 4.1 The Council's environmental health officers have been following up complaints to establish whether a statutory odour nuisance exists under the provisions of section 79 of the Environmental Protection Act 1990.
- 4.2 In addition to the air quality work outlined above, the Council has deployed two Jerome hand held devices to monitor air quality in the area and also inside the homes of a sample of properties where the occupiers have agreed to such monitoring.
- 4.3 Static units - Typically, one unit has been left for periods of time in a sample property to identify concentrations of H₂S over a prolonged period. The device used in this way has recorded instances where there are elevated concentrations of H₂S in residents' homes at a level exceeding the WHO annoyance level.

Occupiers of candidate properties have been assisting investigations by maintaining records of when the odour is present, how strong and offensive the odour is and how it impacts upon using their home. These records are in the process of being collated. In addition these findings are to be assessed against the Jerome readings and also the air quality monitoring data.

In the previous report, it was detailed that in excess of 25,000 odour assessments had been completed by Officers during odour tours. The data from "odour tours" carried out in February, March and April have likewise been analysed and these demonstrate that the strongest odours are witnessed downwind of the landfill site. This information has been assessed by an independent odour advisor in relation to elements of nuisance.

- 4.4 Officers have conducted regular odour assessment visits, both within the normal working day and out of hours, to monitor and witness odours. During May the team operated a permanent nightshift, responding to approximately 100 night-time calls from the candidate properties. About half the calls resulted in odour assessment visits and provided varied results where the odour was detected but also occasions whereby no odour was detected.

The Council has commissioned external odour experts to use the jointly commissioned Environment Agency's air quality monitoring data to model the likely odour footprint around Walleys Quarry. The prediction from this modelling is consistent with the complaint data; this analysis points to Walleys Quarry being the source of the odour, as reported by residents.

The Council has engaged an advisor who has specific expertise in landfill management and enforcement. This advisor has indicated that the solution to the odours from the landfill site lie in ensuring appropriate capping on the site and the effectiveness of the gas management arrangements on the site – essentially the Contain, Capture and Destroy process set out above.

5. Environment Agency Enforcement Action

- 5.1 The Environment Agency are engaged in a programme of compliance checking and enforcement activity relating to the Walleys Quarry site, with the priority objective of addressing the odour issues associated with the site experienced by the community.

Since February, the Environment Agency has issued 10 Compliance Assessment Report forms to Walleys Quarry, each identifying areas of non-compliance with the operating permit and

specifying works to be undertaken in remedy. These are summarised below. Members will note that in the main these relate to improving the approach to capping and gas management.

- Each breach is classified as being at a particular level:
- CCS1 - Major impact on human health, quality of life or the environment
- CCS2 – Significant impact on human health, quality of life or the environment
- CCS3 – Minor impact on human health, quality of life or the environment
- CCS4 - no impact on human health, quality of life or the environment
- **4 February – Site visit (1 breach)** Breach for collected contaminated surface water which has the potential to generate odour and reduce flow of gas to treatment; **(1xCCS 3)**
- **5 March – Gas review (2 breaches)** Breach for not operating in accordance with LFG Risk Assessment and LFG Management **(1 x CCS 2)**;
- Breach for failure to notify Agency infrastructure was compromised by and take action to restore compliance in shortest time possible **(1 x CCS 3)**
- **23 March – Site visit (2 breaches)**
- Breach for Odour off site at level of annoyance **(1 x CCS3)**
- Breach for the cause of odour, failure to undertake permanent and temporary capping in a timely manner **(1 x CCS3)**
- **26 March – Enforcement notice** relating to capping with a deadline of 30 April
- **18 May – Review of Dust Management Procedures (1 breach)**
- Failure to complete annual review as required by procedure **(1 x CCS4)**
- **19 May – Review of surface emissions and action plan (2 breaches)**
- Breaches for failure to follow requirements of LGFG Management plan and Odour Management Plan **(2 x CCS 3)**
- **21 May – Site visit (2 breaches)**
- Breach for Odour off site at level of annoyance **(1 x CCS3)**
- Breach for the cause of odour, failure for delay in the detection of fugitive emissions and taking remedial actions **(1 x CCS3)**

5.2 Actions Required by the Environment Agency of Walleys Quarry Ltd

The table below sets out actions that have required by the EA of Walleys Quarry Ltd together with due dates and the EA's of whether the works are complete. The EA have advised that items 17, 19, 21 and 22 are either not yet complete or not due for completion.

	Action	Due Date
1	Remove leachate contaminated surface water to treatment	20 Feb 21
2	Submit weekly reports on operation of gas management system	15 Mar 21
3	Provide information on technical details of capping material and extent of temporary capping.	2 Apr 21

4	Provide amendments to permanent capping plan	
5	Submit a programme of works including gas management and treatment apparatus, telemetry and additional wells	12 Apr 21
6	Confirm quality of surface and settled ground waters in compliance with emission standards.	
7	Required cell 1, which is the completed cell, to be permanently capped. Permanent capping is a term used when the cell is no longer being used for the deposition of waste and the cell is considered to be closed, and significant assists in containing and capturing gas.	30 Apr 21
8	Required cell 2 to be temporarily capped. Where capping work is being carried out on an area of the landfill which is not completed but no waste is being added for some time, it is termed temporary capping, as waste may still be added on top.	30 Apr 21
9	Provide an updated plan of infrastructure for managing gas collection.	
10	Submit the results of a surface emissions survey to be carried out by the site following completion of the installation of new wells in February 2021.	12 May 21
11	Submit notifications for instances of telemetry failure	ongoing
12	Ensure any planned disruption to infrastructure is managed in accordance with the site's Landfill Gas Management Plan and it is for the shortest time necessary.	ongoing
13	Provide information for Fugitive Gas Management Plan and Action Plan.	28 May 21
14	Complete works specified in Fugitive Gas Management Plan and Action Plan.	various
15	Submit a report on their response to the complaints received over the weekend of 26-28 February.	26 Mar 21
16	Complete the actions operator has identified following its surface emissions survey work.	1 June 21

17	Repeat a full surface emissions survey by 18 June and report its findings by 25 June to allow the regulator to evaluate the effectiveness of the actions.	25 June 21
18	Liaise with gas contractor and take all appropriate measures to ensure gas emissions are controlled.	ongoing
19	Given the reported corrosion identified to some pipework at the gas utilisation compound, investigate as a matter of urgency the integrity of the rest of the gas utilisation plant and flares to ensure there are no leaks of landfill gas which could lead to potentially hazardous and/or explosive atmospheres of fugitive emissions off site. Submit a report detailing the findings of this investigation and what remedial works have been undertaken by 4 th June 2021.	4 June 21
20	Ensure that the odour management plan and landfill gas management plan are followed in full and complete the specified works in the action plans.	ongoing
21	Complete a methane flux box survey, which is a different type of emissions survey used to test the capping	30 Sept 21
22	Submit a revised dust management plan	14 June 21

The current focus of the remedial work being required by the Environment Agency is consistent with the issues identified by the Council's own advisors as being necessary to bring the odour problems under control.

6. Health Surveillance

- 6.1 Public Health England (PHE) are using the air quality data gathered by Public Health England to provide an ongoing assessment of the health risks associated with the odours from Walleys Quarry. The work of PHE has established that there is little likelihood of long term health effects from the levels of exposure being monitored. There is, however, a likelihood of short term effects such as irritation to eyes, nose and throat.

Staffordshire County Council have launched an online "Symptom Tracker" to enable residents to log any health impacts which they are experiencing, and work is ongoing with Keele University to review existing health data to identify whether there are any identifiable changes in GP or other medical presentations which correlate to the impact of the landfill operation.

7. Lobbying

- 7.1 In addition to the multi-agency effort to bring Walleys Quarry into full compliance, operating without a negative impact on the community, lobbying of government on the issue has continued in the interests of accelerating the process of arriving at a solution.
- Matt Hancock MP, Secretary of State for Health & Social Care wrote to the Chief Executive of the Environment Agency on 4 May 2021 urging the agency to “exercise the full range of their regulatory and enforcement powers over the company and, with Local Authority partners, engage effectively with the affected community to urgently resolve the problems at the site, for the benefit of the community’s health and wellbeing.”
 - The Chief Executive wrote to Rebecca Pow, Parliamentary Under Secretary of State at the Department for Environment, Food & Rural Affairs, following up on the resolution of Full Council, and asking again for a full review of the regulatory performance of the Environment Agency in regard to Walleys Quarry. In the letter attention was drawn to gas concentrations in the gas collection infrastructure on site which were indicative of a site in need of intensive management and regulatory attention.
 - Cllr Alan White, leader of Staffordshire County Council wrote to the Chief Executive of RED Industries on 14 May 2021 expressing dismay at their stewardship of the site and urging urgent action to resolve the odour, and to re-impose the suspension of deliveries until the odour problem is permanently resolved.
 - Aaron Bell MP secured an Adjournment Debate in Parliament , held on 19th May 2021, in which testimonies from local residents as to the ongoing adverse impacts on their daily enjoyment of their homes, their physical and mental health were shared with the House.

In response, the Parliamentary under Secretary of State for Environment, Food and Rural Affairs, Rebecca Pow MP sympathised with the thousands of residents who have raised complaints and confirmed that the changes to the gas management being made at the moment by the operator, overseen by the EA, are the things that ought to help to reduce the gas and that The EA’s priority is to reduce the gas, hold the operator to account and bring the site back into compliance. The debate ended with the Minister agreeing to continue to closely monitor the situation, holding the operator responsible for reducing the odours from the site.

8. Proposal – Letter Before Action

- 8.1 The Council’s current work programme regarding this issue is currently focussed on collating and analysing data for the purposes of assessing the existence of a statutory nuisance.
- 8.2 In addition, due to the ongoing prevalence of odours being experienced within the community and based on the information within this report, it has now become appropriate to write to Walleys Quarry Ltd in a letter before action to give the company the opportunity to provide to this Council any information to satisfy it that the company has an effective action plan and acceptable timeline in place to prevent the emission of regular, persistent and offensive odours detectable beyond the site boundary.

Issuing a letter before action is an essential preliminary step in the process that the Council must follow. A Court would expect such a letter to have been served and the company afforded the opportunity to respond ahead of any legal action including an abatement notice

- 8.3 It is also proposed that any information received from Walleys Quarry Ltd to the letter before action is considered after the expiry of the 14 day period for response, to inform the subsequent decision on the appropriateness of the Council serving a statutory abatement notice

9. Reasons for Proposed Solution

- 9.1 To ensure that Cabinet are aware of the latest position regarding this high priority area of work

10. Options Considered

- 10.1 Consideration has been given to a variety of forms of monitoring and enforcement activity, however the expert advice secured has informed the direction selected.

11. Legal and Statutory Implications

- 11.1 The Environmental Protection Act 1990, section 79 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
- 11.1 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.
- 11.2 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.
- 11.3 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).
- 11.4 There is a right of appeal against any abatement notice issued on a number of grounds, one of which is that the site operator is using "best available techniques" to prevent the odours complained of. Compliance with the Environmental Permit issues by the Environment Agency, and any actions required by the Environment Agency will often be sufficient to demonstrate that an operator is using "best available techniques" and that can result in an abatement notice being quashed on appeal.
- 11.5 The appeal process represents a significant resource commitment for the council in both time and expense, so it is important for the Council to be content that it stands a reasonable prospect of defending an appeal against any abatement notice that it issues.
- 11.6 If the council succeeds in securing an abatement notice following any appeal process, 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.

12. Equality Impact Assessment

- 12.1 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 removing this impact.

13. Financial and Resource Implications

- 13.1 None directly arising from this report

14. Major Risks

- 14.1 While the complaints from the public remain at their current level, the Council faces a reputational risk in terms of the public perception of the action it takes to reduce the harm experienced by the public. It needs to balance that risk against the risk of issuing an abatement notice in circumstances where it does not stand a reasonable prospect of succeeding in any appeal against any notice that it issues.
- 14.2 These risks are best abated by the Council continuing to work alongside its partner agencies to shape action taken by the Environment Agency as the primary regulator of the site and to encourage all partners to play active roles in addressing this issue.

15. Unsustainable Development Goals (UNSDG)



16. Key Decision Information

- 16.1 This is not a Key Decision.

17. Earlier Cabinet/Committee Resolutions

- 17.1 This matter has been variously considered previously by Economy, Environment & Place Scrutiny Committee, Council and most recently, Cabinet on 21 April 2021.

18. List of Appendices