Walleys Quarry Landfill Site Scrutiny Review



Report of the Task and Finish Working Group

March 2021

Economy, Environment & Place Scrutiny Committee



1. Executive Summary:

- 1.1 The scrutiny process provided a structured, publicly accessible forum to formally acknowledge the issues of community concern and to hear from interested parties. The Working Party heard factual information about the role and responsibilities of the landfill operator; the role and responsibilities of respective agencies and regulators; impact on the communities surrounding the site, current research and understanding of landfill impacts on health, wellbeing and the environment. The Working Party, as a result of what it heard, makes a series of recommendations.
- 1.2 The working group held several meetings, listened to and received written submissions from eleven different organisations. The operator of the landfill did not participate.
- 1.3 The landfill operates under a permit issued by the Environment Agency and planning permission issued by Staffordshire County Council. The working group identified the main issues of concern; odour, highway and vehicles, wind-blown litter, dust emissions, public health, pests and gull activity, visual amenity and the quantity and quality of daily cover.
- 1.4 The working group findings were that odour was by far the biggest issue and cause for complaint from all parties. The operator has responsibilities to manage the site and any matters which may arise outside of the site. The primary regulator of any odour emanating from the landfill site is the Environment Agency through the permit. It is acknowledged that there are also regulatory responsibilities placed on the Council's Environmental Health function, through the statutory nuisance regime, however its status as an Environment Agency regulated site, leads to additional considerations when it comes to operating the statutory nuisance regime.
- 1.5 A total of 40 recommendations are made to various organisations including the environment agency, the borough council, red industries, members of parliament, Staffordshire county council, the liaison committee and the police. The immediate and overriding recommendation is for the Environment Agency to suspend the permit and therefore prohibit the importation of waste until source of odour has been identified and mitigated.

2. Scrutiny Process:

2.1 At Council on 3rd April 2019 a question was asked about the number of complaints received regarding odours arising from Walley's Quarry; the Leader explained that 61 cases of odour complaints had been received. This issue was again raised at Council on 20th November 2019 when it was referred to the Economy Environment and Place Scrutiny Committee on 17th December 2019. That committee resolved as follows:

"That the Scrutiny Committee set up a task and finish group to examine evidence from the Agencies and organisations concerned with the landfill site and to hear from representatives of parties affected by the landfill activities."

- **2.2** The Task and Finish Working Party was set up with the following Membership:
 - Councillor Gary White (Chairman until March 2020)

- Councillor Andrew Fear (Chairman from March 2020)
- Councillor Gill Heesom
- Councillor Dave Jones
- Councillor Marion Reddish
- Councillor Amelia Rout
- **2.3** The Working Party had the following Terms of Reference:
 - 1. To examine the issues giving cause for public concern in relation to the landfill site at Walley's Quarry, Cemetery Road, Silverdale.
 - 2. To listen to concerns from Local Members, community and stakeholder groups and local businesses surrounding the operation of the site, including the potential impact of any permanent increase in the waste input from 250,000 to 400,000 tonnes per annum
 - **3.** To invite and consider representations from the site operators and relevant statutory bodies into the current operation of the site.
 - **4.** To consider any options and identify opportunities to alleviate community concerns surrounding the continued operation of the site

Activity and Meetings

- 2.4 The Working Party undertook a site visit to the Quarry on 28th February 2020 and were given a comprehensive tour and explanation of the operation of the site by RED. Members returned to the Council offices where they were then given a detailed presentation by the Environmental Protection Team Manager about the history, regulatory arrangements and how a modern landfill facility operates.
- 2.5 Following a period of pause due to Covid-19 the Scrutiny Working Party then resumed its work in August 2020 with a series of meetings, held via video conferencing, to gather information from interested groups and agencies.

Meetings

- **2.6 Wednesday 12**th **August** the group heard from:
 - Background to Walley's Quarry Mr Andrew Bird, Head of Recycling & Fleet Service, Newcastle-under-Lyme Borough Council.
 - Walley's Quarry Liaison Committee County Councillor Simon Tagg, Chair of the Committee;
 - Stop the Stink Campaign Group Steve Meakin;
 - Thistleberry Residents Association (TRA) Dr Angela Drakakis-Smith;
 - Chair Silverdale Parish Council (PC) Henryk Adamczuk;
 - Chair Western Communities Locality Action Partnership (LAP) Henryk Adamczuk:
 - Aspire Housing Group Sarah Oliver;

Aaron Bell MP.

The recordings of this meeting is available at the following link: https://moderngov.newcastle-staffs.gov.uk/ieListDocuments.aspx?Cld=464&Mld=3769

2.7 Wednesday 7th **October** – the group heard from the Council's Head of Planning regarding the planning background to the site and then from representatives of the Environment Agency (EA) regarding their role

The recording of this meeting is available at the following link: https://moderngov.newcastle-staffs.gov.uk/ieListDocuments.aspx?Cld=464&Mld=3755

2.8 Wednesday 18th November – the Working Party heard from the Council's Environmental Health Service (EH).

The recording of this meeting is available at the following link: https://moderngov.newcastle-staffs.gov.uk/ieListDocuments.aspx?Cld=464&Mld=3775

RED Industries Limited Engagement with the Process

- 2.9 The Council's records show that its first engagement with RED Industries in respect of this scrutiny process occurred on 20 December 2019, when RED wrote to the Chairman of the Economy, Environment and Place Scrutiny Committee (EEP) after learning of the resolution of EEP on 17th December 2019 referred to above.
- 2.10 In that 20 December 2019 letter, RED questioned the Committee's ability to be "impartial and unbiased", asserting that RED had been subjected to "considerable unfair treatment by the Council". The letter went on require a number of their concerns to be allayed before they would participate in any scrutiny process.
- 2.11 The correspondence with the Council continued into January 2020 and can fairly be characterised as the Council trying to address RED's concerns, with RED continuing to express a reluctance to engage with the scrutiny process, intimating bias or a lack of objectivity on behalf of the Council and seeking to impose a number of conditions or requirements upon the Council before it would be prepared to engage.
- 2.12 During January and into February 2020, RED sent correspondence to the EEP Chair, the Leader of the Council, the Chief Executive and the Council's Head of Legal and Governance. The correspondence continued in the theme of implying partiality or bias and began to question justification or jurisdiction of Council/EEP to undertake the scrutiny review. The Council's responses disclose continued attempts to address RED's stated concerns, meet their conditions and secure their engagement in the scrutiny process.
- 2.13 On 25 February 2020, the Council's Chief Executive met with RED Industries to try and resolve the impasse. At this point, to secure RED's engagement with the process, it was proposed that they could attend a scrutiny meeting in private (no press or public attendance) but would be content for a transcript of that meeting would be made publically available. Whilst RED were agreeable to this, there was

wider concern from the Council's membership that this approach would not be sufficiently transparent for a scrutiny process. This was at a time prior to the routine video-recording/broadcasting of meetings being held remotely, and the concern was principally around the ability to produce, for the public record, a complete and accurate transcript of a "face to face" meeting, as was the intended approach at the time.

- 2.14 These discussions culminated on 18 March 2020 with the Group Managing Director of RED lodging a formal corporate complaint against the council asserting a flawed rationale behind or lack of justification for initiating the scrutiny process, prejudice and "kowtow to political pressure". The outcome sought was for the Council to withdraw from the scrutiny review. The complaint was rejected, and the Council is not aware that RED asked the Local Government and Social Care Ombudsman to review the matter. At that point, the scrutiny process and related correspondence with RED was put on hold whilst the Council focused on Covid-19 response and recovery operations.
- 2.15 The Scrutiny process and correspondence with RED was revived on 5 August 2020 when the Council wrote to Red to advise them of the arrangements that had been made to hold the scrutiny hearings detailed above by Zoom. RED were invited to participate via a private Zoom session with the Task and Finish group, the recording of which would be made public after the event, mirroring the approach agreed by RED at the 25 February 2020 meeting. RED's response, received on 10 August 2020, continued in the theme of its previous correspondence, asserting a lack of justification for the review, asserting that the Council was prejudiced, that the outcome was predetermined and calling into question whether it was proper for two of the Working Group members to sit on that group because they had not been able to attend a site visit earlier in the year.
- 2.16 The Council responded to RED's 10 August 2020 letter on 12 August 2020. The Council's letter sought to address the concerns raised by RED and repeated the invitation to RED to engage in the process as put in its previous letter, as RED had not responded to that invitation when it wrote to the Council on 10 August. The Council did not receive a response from RED.
- 2.17 The Council wrote to RED again on 1 December 2020 to update RED as to the meetings that had been held to date, providing RED with links to the video recordings of those meetings. The letter repeated the previous offer of participation via a private Zoom meeting (with the recording later being published). It also indicated that it would welcome written submissions from RED and made some suggestions about the process through which this report would ultimately be published, to try and address concerns expressed by RED and secure their engagement in the process.
- 2.18 RED responded to the Council's 1 December 2020 letter on 18 December 2020. RED indicated that they were minded to participate, but hadn't yet decided whether to do so by participating in a Zoom meeting, or by submitting written representations. RED requested further information from the Council to help them decide. The Council responded to RED's letter on 19 January 2021 providing the information requested and reminding RED of the availability of the video recordings of the previous meetings of the Working Group.
- 2.19 RED next wrote to the Council on 27 January 2021. The letter indicated that RED were confused as to whether or not the Council still wanted them to participate in the process, and asked the Council to provide further information about

contributions that had been made to the process to date. The Council responded to RED on 3 February to assure RED that the Council did still want to hear from it, and to provide it with the some of the further information it had requested. The remainder of the requested additional information was sent to RED on 5 February.

2.20 RED next wrote to the Council on 9 February 2021. In that letter, RED committed to providing written representations by 15 March 2021. However, RED also said that:-

"As we undertake the process of review and consideration, it may become apparent to us that elements of our response may be made more efficiently via a meeting with the scrutiny committee. If this arises, we shall contact you directly to organise a suitable time, date and means of delivery."

- 2.21 The Council responded to RED on 11 February 2021. The Council pointed out what it considered to be the ample time RED had been given to review all of the materials and determine whether or not it wanted to participate in the scrutiny process. It explained the administrative timetable associated with producing this report and the need for the matter to be concluded without further delay. It expressed the view that none of the issues would be new to RED and it shouldn't take RED long to make submissions into the process, if it intended to do so. The letter explained that the Council could not accommodate an open-ended timescale or process as suggested by RED in the passage quoted above, and asked RED to make whatever contribution it wished to make to the process before 5.00pm on Friday 26 February 2021.
- 2.22 RED responded to the Council on 16 February 2021. In its letter RED took issue with the chronology set out by the Council in its 11 February 2021 letter, accused the Council of "seeking to impose an arbitrary submission date" for "highly self-justifying" reasons. The letter levels a number of other criticisms against the Council, including that "9 months delay down to COVID, is not tenable", before concluding with observations that:

"this Company is aggrieved by the actions of the Council and that as far as we are aware the Council has taken up a position against the landfill and the Company. These endeavours to impose this arbitrary deadline shows to us that the Council remains firmly committed to this position."

- 2.23 RED sign off that letter by saying:-
 - "...this Company will endeavour to get its submission to you as soon as it can. We cannot guarantee that we will be able to do this by 26th February 2021. We can guarantee that we will provide it by 15th March 2021. We expect this to be fully respected."
- 2.24 The Council responded and concluded its correspondence with RED on this topic on 22 February by reiterating its intention to conclude the review on a timetable which required submissions by RED before 5.00pm on Friday 26 February 2021. No such submissions were received. On 25 February 2021 the Council did, however, receive another corporate complaint from RED in respect of the Council's unwillingness to extend the deadline for submissions.

Materials Provided and Considered

2.25 There has been considerable written material provided to the working group, copies of all the documentation and presentations used are attached in the appendices to this report. These are as follows:

1 2	Planning permission N.12/09/216 MW Section 106 agreement
3	Environment Agency permit
3a	Odour Management Plan
4	Staffordshire County Council written representation
4a	Staffordshire County Council Route Options
5	Environment Agency presentation
5a	Environment Agency complaint data
5b	Environment Agency odour assessment summary
6	Environmental Health presentation
6a	Odour source map
7	Walley's Quarry Liaison Committee report
8	Silverdale Parish Council report
8a	Silverdale Parish Council additional report
9	Western Communities Locality Action Partnership report
10	Thistleberry Residents Association report
10a	Thistleberry Residents Association supplementary report
11	Police Report
12	Aspire Report
13	MP – Aaron Bell report
14	Stop the Stink report
15	Environmental Health complaint data

3. Background and Introduction:

3.1 Walley's Quarry Landfill is located off Cemetery Road Silverdale. The landfill is located on the site of a former clay extraction quarry. The location of the landfill site is shown in the plan in Figure 1 below. The site covers an area of 23.5 hectares.

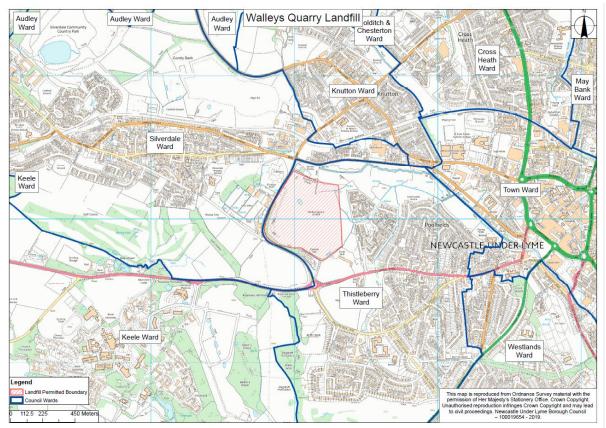
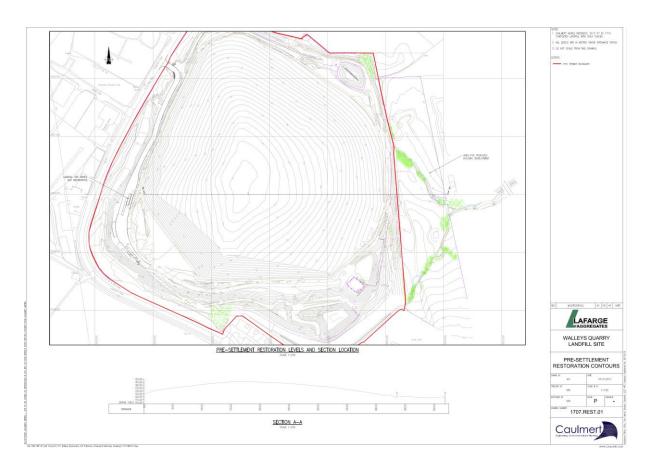


Figure 1: The location of the landfill site and surrounding area.

- 3.2 The site is a former clay pit from which Etruria marl was extracted to manufacture bricks and tiles.
- 3.3 A chronology of the relevant permissions relating to the site and the area immediately adjacent to it is as follows:
- 3.4 On 9 September 1992, an 'Interim Development Order' (IDO) permission was formally registered for Walley's Quarry and approval was sought for a Scheme of Conditions (ref. IDO/N/1). The Scheme of Conditions was reported to the County Council's Planning Committee where it was resolved to amend several conditions and an amended IDO Scheme of Conditions was issued on 17 June 1994. This decision was appealed and the Secretary of State for the Environment, Transport and Regions approved the conditions on 14 November 1997. The permission was also subject to a Section 106 Legal Agreement which was completed on 15 July 1998.
- In 2000 application (ref 99/00341/OUT) for development for residential development was granted by the Borough Council with conditions for the Persimmons Estate Keele Road. In 2003 a subsequent reserved matters application (ref 03/00790/REM) was made to the Borough Council for siting, design, external appearance and landscaping. An appeal was made for failure to give notice within the prescribed period of a decision on an application for the approval of details pursuant to reserved matters and conditions of an outline planning permission. Permission was granted by Planning Inspectorate in 2005, giving approval for the siting, design and appearance of a residential development comprising 280 dwellings. Further applications for the substitution of house types on a number of plots within the development have also been permitted involving a

- small increase in house numbers to that approved on appeal. A total of 291 dwellings have been constructed on the site.
- 3.6 In 2005, the EA issued a permit to Lafarge aggregates, for the operation of a Landfill site. The permit allows the operation of a non-hazardous landfill will a separate cell for stable non-reactive hazardous waste (gypsum & asbestos).
- 3.7 The landfill commenced engineering works in 2006 and landfilling operations in 2007.
- 3.8 Planning permission for the retention of a mess room and ancillary facilities comprising storage areas and a fuel tank within a compound was granted in July 2007 (ref. N.07/04/216 MW). Permission was granted in 13 March 2009 for the construction of a landfill gas utilisation compound to control and convert gas into electricity (ref. N.09/01/216 MW), and permission for an additional gas engine was granted in October 2013 (ref. N.13/04/216 MW). The erection and operation of a leachate treatment plant was confirmed to be permitted development on 11 July 2013.
- 3.9 Copies of the main site planning permission (N.12/09/216 MW) and associated s.106 legal agreements are attached (App 1 & 2). These are monitored by the County Council Planning Regulation team making visits to the site, both prearranged and unannounced (usually unannounced if in response to complaints).
- 3.10 In 2014, Hamptons Field, Keele Road application (ref 14/00948/OUT) for development was refused by the Borough Council on 3rd June 2015, this was appealed and permission was granted by Planning Inspectorate in 14th September 2016 (ref APP/3420/W/15/3138033) for the development of 138 dwellings, stating that odour is adequately controlled via EA permit.
- 3.11 The IDO permission was subject to a periodic review of the conditions with a new set of conditions being approved in May 2016 (reference N.12/09/216 MW) along with an associated legal agreement.
- 3.12 The Review of Old Mineral Permissions (ROMP) application on the IDO in 2016, changed some of the waste classifications but didn't amend the overall nature of the material allow to be tipped within the landfill.
- 3.13 The environmental permit was transferred from Lafarge Aggregates to Red Industries on 3rd Nov 2016. A copy of the permit is attached at Appendix 3.
- In 2020, the Environment Agency approved a variation of the environmental permit for the landfill to receive 400,000 tonnes of non-hazardous waste per annum.
- 3.15 The IDO permission required the winning and working of minerals, the extraction of minerals from stockpiles and the depositing of waste to cease on or before 21 February 2042, where the site is required thorough the planning permission be fully restored by 2042 in accordance with details previously approved by Staffordshire County Council (SCC) as the Waste Planning Authority (WPA).
- 3.16 Post closure, the site will continue to be the legal responsibility of the owner & operator, with ongoing duties under the environmental permit until such time as the EA formally accept surrender of the environmental permit.

3.17 The plans shown below in figure 2 show the finished contours of the landfill site in 2042.



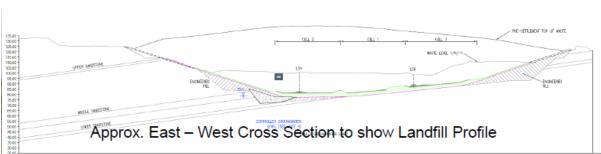


Figure 2: Plans showing contour of site following restoration.

How a landfill operates:

- 3.18 A landfill site is for the disposal of waste materials. It is a designed structure built into or on top of the ground in which waste is isolated from the surrounding environment (groundwater, air, rain). This isolation is accomplished with a bottom liner and daily covering of an approved cover material.
- **3.19** Landfills for non-hazardous waste meet predefined specifications by applying techniques to:
 - 1. confine waste to as small an area as possible
 - 2. compact waste to reduce volume
- 3.20 During landfill operations, a weighbridge will weigh vehicles delivering waste materials, and site personnel may inspect loads for wastes that do not accord with the landfill's waste acceptance criteria. Afterward, the vehicles delivering waste use the existing road network on their way to the tipping face or working front, where they unload their contents. After loads are deposited, waste compactor machines, essentially large loading shovel type machines with large steel wheels with blades rather than tyres spread and compact the waste on and down the working face of the operational area. Bulldozers can also be used for this operation but are less effective in compacting waste on the operational face. After depositing waste and before leaving the landfill, vehicles pass through a wheel-cleaning facility and are re-weighed without their load.
- 3.21 At the working face, the compacted waste is covered with soil or alternative permeable materials daily. Landfills operate as biological reactors in which microbes will break down complex organic waste into simpler, less toxic compounds over time. Usually, aerobic decomposition is the first stage by which wastes are broken down in a landfill. These are followed by anaerobic degradation.

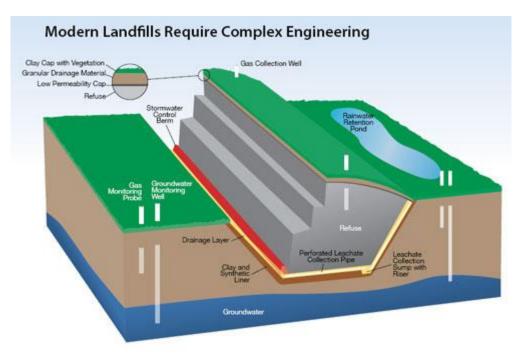


Figure 3: Diagram of how a landfill works.

Red Industries RM Ltd (RED)

- 3.22 RED are the current landfill owners, operators and holders of Environmental Permits (issued by the EA) which allows:-
 - The operation of a Non-Hazardous waste landfill with a separate cell for Stable Non-Reactive Hazardous Waste (gypsum and asbestos). The permit also allows the operation of:
 - a leachate treatment plant for management of leachate arising from the landfill:
 - landfill gas engine and flare for treatment and utilisation of landfill gas from the landfill;
 - o the treatment of waste to produce soil, soil substitutes and aggregates.
- **3.23** Monitoring is required for landfill gas, leachate, surface water and groundwater at a number of points at the facility at different frequencies (weekly, monthly, quarterly and annually).
- **3.24** RED are legally responsible for compliance with the Environmental Permit conditions along with compliance with the planning permission for the site.
 - A copy of the current Environmental Permit is available to view at https://www.redindustries.co.uk/walleys-landfill-community/
- 3.25 The site is engineered into four distinct areas or cells, engineered to contain the waste, as shown in figure 4. Waste disposal started in 2007 in cell 1, in 2011, cell 4c became operational. Waste has been deposited in all cells to varying depths. Cell 1 is the current active tipping cell, the remaining cells have been in use at various times and have been temporarily capped pending their reopening for the further deposition of wastes.

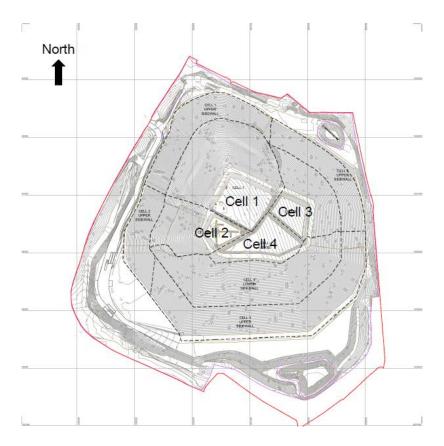


Figure 4: Landfill cells

Walleys Quarry Landfill Engineering

- 3.26 All putrescible wastes degrade, and as they do, in a modern containment engineered landfill, they produce polluting substances known as leachate and landfill gas which is mainly made up of methane. If these substances escape in an uncontrolled manner they can cause pollution to the environment or harm to human health.
- **3.27** Modern Landfills are therefore engineered to:
 - Contain the waste:
 - Collect and treat the contaminated water generated (leachate);
 - Collect gas generated within the landfill.

Desired outcomes:

- 3.28 The environment is protected by preventing uncontrolled releases of liquids and gases. Landfills are constructed using methods and materials that are fit for purpose and will provide a stable structure with the expected levels of environmental protection over their design lives.
- **3.29** Effectively the base and sides of a modern landfill have to be constructed using impervious materials such as clay or manmade plastic in order to prevent leakage of leachate or gas to surrounding ground. All engineering works to ensure containment of landfills is quality assured to high standards as follows.

- 3.30 The permit requires all Construction Quality Assurance documents to be submitted to the Agency for review. No engineering works are allowed to commence until the Agency has confirmed that it is satisfied with the construction proposals (the CQA Plan) and waste cannot be tipped in a new cell until the Agency has confirmed that it is satisfied with the CQA Report. Construction Quality Assurance (CQA) is a process that is used to ensure that engineering works are undertaken to a high standard. The CQA Plan details what materials are to be used, what their specifications are and how they are to be installed and tested. The CQA Report details how the works were undertaken and how the requirements of the specification were met. The CQA process is overseen by an independent third party CQA Consultant (CQA Project Manager, CQA Engineer, CQA Inspector)
- 3.31 Leachate and gas generation need to be carefully managed. Leachate and landfill gas will be generated from degrading of putrescible waste, but will also be affected by weather conditions, particularly with leachate, where rain and snowfall can have a significant impact on levels. For that reason, operational areas, or areas with exposed waste need to be kept to a minimum, and areas not currently operational, but none the less containing waste, should be adequately capped in order to prevent water ingress, which would lead to increased levels of leachate. The base of a modern landfill will have a drainage system built into it which allows leachate to be pumped out and treated, either on site, prior to discharge to a sewer, assuming the correct permissions are in place, or tankered off site to a specialist treatment facility. Landfill Gas similarly has to be removed on an ongoing process. with extraction wells drilled into previously landfilled operational cells, and then each well connected together by pipework which then conveys the gas to a flare stack where it is burnt off to atmosphere, or more likely these days to gas engines which then generate electricity. Each gas extraction well and associated pipework will operate under negative pressure, and the area where gas is being extracted from will need to be adequately capped to ensure air and water cannot enter the area where gas is being pumped from.

4. Regulatory Regimes & Other Groups:

The roles and responsibilities of various parties concerned with the landfill are detailed as follows:

Planning Permission (Staffordshire County Council)

- **4.1** Staffordshire County Council are the Waste Planning Authority for the landfill. See section 3 for details of the planning history for the site.
- 4.2 The planning permission (N.12/09/216 MW) and associated s.106 legal agreements are monitored by the Planning Regulation team making visits to the site, both pre-arranged and unannounced (usually unannounced if in response to complaints). We are not aware of any other current breaches of conditions at the site
- 4.3 Where any breaches of planning control are identified, in the first instance officers would normally bring these to the attention of the site operator and ask them to remedy the breach (unless the breach was having such a detrimental effect on amenity to require immediate formal enforcement action). Where any such breaches have been identified in relation to Walley's Quarry, actions have been taken by the operator and therefore no formal enforcement action has been taken.

4.4 Condition 39 of planning permission N.12/09/216 MW required the submission of a detailed restoration and aftercare scheme. The scheme has been submitted and is currently being considered. The submitted documents are not yet valid but when they are validated they can be viewed on SCC website under reference N.12/09/216 MW D2.

Environmental Permit (Environment Agency)

- **4.5** The Environment Agency issued an Environmental Permit for Walley's Quarry's Landfill site on the 9 June 2005.
- 4.6 The permit allows the operation of a Non-Hazardous waste landfill with a separate cell for Stable Non-Reactive Hazardous Waste (gypsum and asbestos). The operator has never used a separate cell and therefore Stable Non-Reactive Hazardous Waste is **not** accepted.
- 4.7 The total quantity of waste allowed to be accepted at the facility is 400,000 tonnes per year. Non-Hazardous waste includes municipal and industrial wastes.
- **4.8** The permit also allows the operation of:
 - a leachate treatment plant for management of leachate arising from the landfill:
 - landfill gas engine and flare for treatment and utilisation of landfill gas from the landfill;
 - Monitoring is required for landfill gas, leachate, surface water and groundwater at a number of points at the facility at different frequencies (weekly, monthly, quarterly and annual).
- 4.9 Landfill sites are required to hold an Environmental Permit, with the conditions of the permit and its regulation meeting with the requirements of The Landfill Directive (EU Directive 1993/31/EC).
- 4.10 The Landfill Directive is enacted into English law under The Environmental Permitting (England and Wales) Regulations 2016, and subsequent amendments. These regulations also provide the mechanism to regulate permitted activities, including landfills.
- 4.11 The objective of the Directive and resulting permit conditions is to prevent or reduce as far as possible negative effects on the environment, in particular on surface water, groundwater, soil, air, and on human health from the landfilling of waste by introducing stringent technical requirements for waste and landfills. For these purposes, the landfill operator is required to operate their site by employing Best Available Techniques (BAT).
- 4.12 The Landfill Directive defines the different categories of waste (municipal waste, hazardous waste, non-hazardous waste and inert waste) and applies to all landfills, defined as waste disposal sites for the deposit of waste onto or into land. Landfills are divided into three classes:
 - landfills for hazardous waste;
 - landfills for non-hazardous waste;
 - landfills for inert waste.

- **4.13** A standard procedure for the acceptance of waste in a landfill is laid down so as to avoid any risks, including:
 - waste must be treated before being landfilled;
 - hazardous waste within the meaning of the Directive must be assigned to a hazardous waste landfill;
 - landfills for non-hazardous waste must be used for municipal waste and for other non-hazardous waste;
 - landfill sites for inert waste must be used only for inert waste;
 - criteria for the acceptance of waste at each landfill class must be adopted by the Commission in accordance with the general principles of Annex II;
 - The following wastes may not be accepted in a landfill:
 - liquid waste;
 - o flammable waste:
 - explosive or oxidising waste;
 - o hospital and other clinical waste which is infectious;
 - used tyres, with certain exceptions;
 - o any other type of waste which does not meet the acceptance criteria laid down in Annex II of the Landfill Directive.
- **4.14** The Directive sets up a system of operating permits for landfill sites. Applications for permits must contain the following information:
 - the identity of the applicant and, in some cases, of the operator;
 - a description of the types and total quantity of waste to be deposited;
 - the capacity of the disposal site;
 - a description of the site;
 - the proposed methods for pollution prevention and abatement;
 - the proposed operation, monitoring and control plan;
 - the plan for closure and aftercare procedures:
 - the applicant's financial security;
 - an impact assessment study, where required under Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment.
- **4.15** Member States must ensure that existing landfill sites may not continue to operate unless they comply with the provisions of the Directive.
- 4.16 The current landfill permit, application documentation, information required from the operator to comply with permit conditions, inspections, investigations and monitoring undertaken by the EA are all a matter of public record. This information can be found on the Environment Agency Public Register which it is required by law to keep.

<u>environmental-permit-compliance/assessing-and-scoring-environmental-permit-compliance</u>

4.18 The EA have provided Figure 5 which provides data on the waste types and quantities imported to Walley's.

EWC Chapter	2019 (tonnes)			
01 - Mine & Quarry	1259			
02 - Agriculture & Food	9			
03 - Furniture & Paper/Card	130			
07 - Organic Chemcial Processes	11			
08 - Paints and Inks	97			
10 - Thermal Processes	9231			
11 - Metal Treatment &Coating	11			
12 - Shaping Metal/Plastics	303			
15 - Packaging	23			
16 - Other waste from Industrial processes	1244			
17 – Construction and Demolition	50911			
18 - Healthcare	953			

Figure 5: Table of waste types imported in 2019.

4.19 As can be seen by far the largest quantity of material imported is from water and waste treatment. This could/would include materials such as filter cake from sewage treatment works, fines from waste processors, and any material following a waste processing activity.

Newcastle under Lyme Borough Council

Planning:

- 4.20 The Borough Council is the local planning authority with responsibility for planning matters in the area surrounding the site. It has no planning responsibility for current activities on the site as these fall within the remit of SCC as the Minerals and Waste Planning Authority.
- 4.21 In recognition of the environmental impacts of landfills and proximity to the surrounding residential areas, the Borough Council has sought to resist the use of the former quarry for landfilling both through the 1992 IDO application to the County Council and the subsequent appeal to the Secretary of State.
- **4.22** The Council in its capacity as the local planning authority also sought to resist residential development in close proximity to the site by refusing planning

permission for residential development on the Hamptons Field site at Keele Road, citing grounds for refusal to include adverse impact on residential amenity caused by pollution from odours.

- 4.23 The refusal of planning permission was subsequently appealed to the Planning Inspectorate (PI). The Council put forward a robust argument, supported by expert evidence about the then impacts of landfill odours and likely future impacts on the development and surrounding communities. The PI however granted permission for residential development and in dismissing the argument about odour impacts, made reference to national planning policy which assumes that pollution control regimes operate effectively and that this would protect amenity. The PI decisions effectively mean that the Council is no longer able to refuse permission for development due to impacts of the landfill.
- **4.24** The Planning Inspectorate's decision can be viewed at https://acp.planninginspectorate.gov.uk/ViewCase.aspx?CaseID=3138033&CoID=0

Environmental Health:

- 4.25 The Council's Environmental Health Service is investigating complaints about odour where it affects people in their home or workplace to determine if the odour can be actioned as a statutory nuisance for the purposes of Part III of the Environmental Protection Act 1990 (EPA 1990). The Council is under a legal duty to undertake a reasonable investigation into complaints about odour nuisance which has the potential to unreasonably interfere with the reasonable use and enjoyment of a person's premises.
- 4.26 In relation to the legal role of the Council, where there is evidence which shows that the odour is actionable as a "statutory nuisance" and this can be linked back to the activities of the landfill, the Council is legally required to serve a nuisance abatement notice on the landfill operator. The decision on whether a matter constitutes an actionable statutory nuisance or not, is delegated to Environmental Health Officers who are trained and experienced in the assessment of statutory nuisances and the law.
- 4.27 An abatement notice cannot require the cessation of landfilling activities or the closure of the site. As with any notice there is a right of appeal on a number of specified grounds. In the event of an appeal, it would be for a Magistrates' Court to determine if the appeal grounds are met with the court then being able to confirm cancel or vary the notice.
- 4.28 A breach of an abatement notice is a criminal offence, however as the site is permitted by the Environment Agency, any decision by the Council to prosecute for non-compliance would require the formal approval of the Secretary of State. This is because the criteria for complying with an abatement notice served by the Council upon a business and the Environmental Permit issued by the Environment Agency are essentially the same.
- **4.29** Anyone affected by the activities of the site can also take their own action under section 82 of the Environmental Protection Act 1990.
- **4.30** See the following for further information on the interaction between statutory nuisance and environmental permitting:

https://www.gov.uk/government/publications/environmental-permitting-guidance-statutory-nuisance/interaction-between-environmental-permitting-and-local-authorities-statutory-nuisance-duties-web-version.

4.31 The Environmental Health Division has also published a dedicated webpage which provides details on the role of the council and others and also gives factual information and details Frequently Asked Questions:

https://www.newcastle-staffs.gov.uk/all-services/environment/environmental-health/walley%E2%80%99s-quarry-%E2%80%93-what-we-can-do

Public Health England:

4.32 Officers from the Council's Environmental Health Division have been and remain in contact with Public Health England (PHE). PHE review data relating to GP consultations and calls to NHS 111 to identify issues of local concern which require further investigation. PHE scientists also provide advice to government and regulators based on scientific research and understanding.

Walley's Quarry Landfill Liaison Committee:

- 4.33 It is a requirement of the county council issued planning permission, through a section 106 obligation, that the landfill operator sets up and operates a landfill liaison committee.
- 4.34 This committee has been in operation since the landfilling operations commenced in 2007. It operates in accordance with agreed Terms of Reference. The liaison committee is a forum for the local committee representatives to raise issues relating to the landfill operation but has no formal powers to act. This committee meets quarterly. Its membership consists of representative's form the following organisations:
 - Red Industries RM LTD (current landfill operator and Environmental Permit holder);
 - Environment Agency (national regulator for landfills);
 - Staffordshire County Council (Waste Planning Authority and regulator for planning permission conditions);
 - Newcastle under Lyme Borough Council officers (Environmental Health and Planning);
 - Thistleberry Residents Association;
 - A residents representative from the local community:
 - A representative from Silverdale Parish Council;
 - Two county councillors (one of which also chairs the liaison committee);
 - A councillor from the Thistleberry ward:
 - A councillor from the Silverdale ward:
 - A councillor from the Knutton ward.
- **4.35** The liaison committee meeting minutes are available to view at

https://www.redindustries.co.uk/walleys-landfill-community/

Parish Council:

- **4.36** Silverdale Parish Council represents 5,000 residents living in 2,700 households and 100 businesses.
- **4.37** The Parish Councils represents residents and the main concerns are odour and the effect on public health, alongside HGV movements, parking and damage to the highways verges.

Western Communities LAP

- **4.38** The total population is about 13,000 in the three wards of Cross Heath, Knutton and Silverdale.
- **4.39** At a local level the issues are
 - Odour
 - Dust
 - Debris from the vehicles
 - Seagulls
 - Visual appearance within the locality

Thistleberry Residents Association (TRA):

4.40 'On the Executive we have three professions experts on waste management and air quality who have advised us on this issue. The Chair of the TRA sits on the Liaison Committee and has done since the beginning. The TRA has worked with three different companies who have run the site. The Chair has visited the site on many occasions, often unannounced, and just after the infilling began the Chair walked on the waste to get some idea of what was involved.'

Police:

- **4.41** The police have the responsibility for criminal law enforcement, including some road traffic enforcement.
- 4.42 Local PCSOs while on patrols, are often approached by residents about the smell that is produced by the guarry, especially in Silverdale village.

Aspire:

4.43 Aspire Housing represent approximately 40 people at the traveller's site situated on Cemetery Road.

MP:

4.44 As the representative of thousands of local people in parliament. Mr Bell MP detailed:

"The issue of the landfill site was a major topic of conversation on the doorstep when I was campaigning for the general election in 2019, and I therefore made it a priority as a new MP to explore what more could be done to address the issue facing this group of constituents. It has been made clear to me by many constituents that this is a significant problem, and it has repeatedly been

impressed upon me, not only by constituents contacting me directly, but also through conversations with Stop the Stink, how significant and widespread the concern is about the odour in particular.

I immediately, upon being elected, undertook to meet with the relevant parties to raise concerns and discuss a way forward. I met with representatives of the Environment Agency in January to discuss the site. I also had a meeting with representatives of RED industries upon being elected."

Stop the Stink Campaign Group:

- 4.45 This group represents 2500 people from around the Poolfields and Knutton area. A petition in relation to the landfill operations was arranged by the group, it received 2500 signatures to close the landfill. This petition is on-line and as of 1st March it has 7,732 signatures.
- **4.46** The campaign group main concern is odour but they have also raised issues relating to gull control, highway safety concerns and the height of the mound.

5. Issues raised:

Summary:

- 5.1 Members have heard through the scrutiny process about many concerns regarding the operation of the landfill site, the overriding concern relates to the complaint of odour.
- The working group heard details of many different issues arising from the current landfilling operations. These concerns cover the following matters:
 - 1. Variation application to EA to increase tonnage from 250,000 tonnes to 300,000 tonnes, which was further updated to 400,000 tonnes;
 - 2. Odours impacting the community in their homes, workplaces and outdoor environment (including the cemetery);
 - 3. Highway and vehicles including safety concerns relating to waste vehicles accessing the site, condition of verges, material falling from waste vehicles, off-site parking of vehicles and mud on the highway;
 - 4. Wind-blown litter:
 - 5. Dust emissions:
 - 6. Public Health including concern about impacts on health, wellbeing and the environment in the surrounding communities;
 - 7. Nuisance from pests, gull activity and number of gulls;
 - 8. Visual amenity;
 - 9. Quantity and quality of daily cover.

Variation Application

- One of the elements for the working group to consider, it its terms of reference, was the permit variation application.
- 5.4 The variation application was received by EA on 12 December 2018 to increase the permitted quantity of waste annually (January to December) from 250,000 tonnes to 300,000 tonnes. Applicant amended the application (13 May 2019) to increase annual tonnage to 400,000 tonnes. Consultation on application between

- 24 May 2019 to 20 August 2019. The consultation on the draft "minded to issue the variation" decision commenced on 19 August 2020 for 28 days.
- The EA confirmed that it will only issue a permit variation, if we believe that harm to the environment, people and wildlife will be minimised and that the operator has the ability to meet the conditions of the permit.
- 5.6 The planning information details that completion of site, via the planning permission issued by Staffordshire County council requires waste disposal to cease by 2026.
- 5.7 The additional waste **could** enable the site to be completed sooner, by 2024. However, this is dependent on the operator implementing and accepting the additional waste tonnes.
- 5.8 While the application is being determined the EA have allowed the operator to accept more waste in 2019 than the current permitted limit of 250,000 tonnes subject to appropriate controls. The EA detailed that decisions to allow temporary situations like this are made on a case by case basis in line with EA regulatory remit.
- The EA has granted the variation to permit 400,000 tonnes per annum in Autumn 2020.
- 5.10 The grant of this variation was during the period of this scrutiny process. Therefore, although the views were sought from all the contributors and can be seen in the written representations made (appendices 9 to 14). The findings of this group cannot be taken into account, so conclusions or recommendations in relation to this matter have not been detailed.

Odour

5.11 Information and data was received by the working group in relation to odour, this is shown below:

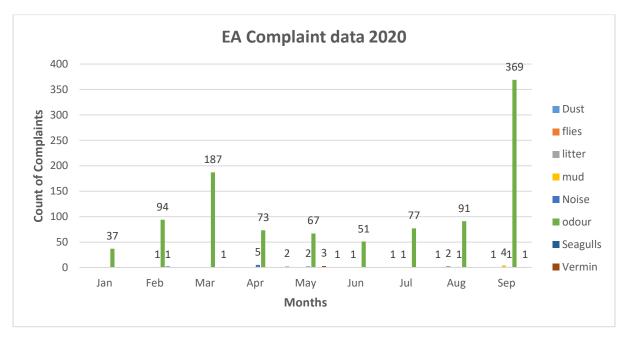
Environment Agency:

5.12 The permit for the site (appendix 3), at condition 3.3.1 states:

Emissions from the 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.

- **5.13** The odour management plan referred to above is attached at appendix 3a.
- 5.14 The group requested the EA to provide complaint data, as attached in appendix 5a, this has been converted into the following table and graph and shows complaint data for 2020.

Count of Months	Column Labels								
Row Labels	Dust	flies	litter	mud	Noise	odour	Seagulls	Vermin	Grand Total
Jan						37			37
Feb					1	94	1		96
Mar						187		1	188
Apr					5	73			78
May	2				2	67		3	74
Jun	1			1		51			53
Jul		1		1		77			79
Aug	1		2		1	91			95
Sep		1		4	1	369		1	376
Grand Total	4	2	2	6	10	1046	1	5	1076



5.15 Two air quality monitoring repots have been prepared by the EA, they detailed:

"Study 1 - 6th July 2017 to 14 February 2018:

Comparison of the particulate data from the monitoring at Silverdale with the Air Quality Strategy objectives showed that the monitoring location was subject to concentrations that would be expected to meet their respective AQS objectives.

The hydrogen sulphide data was compared with the respective World Health Organisation (WHO) guidelines and was found to be within the specified health limits. Comparison of the data with the guidelines for odour annoyance indicated that there were 34 instances during the monitoring period, on 11 separate days where the 30 minute average hydrogen sulphide concentration was greater than 7µg/m³. These results suggest that complaints due to odour nuisance from hydrogen sulphide could be expected for less than 1% of the monitoring period.

The highest levels of particulates were seen, not from the direction of the landfill site, but from the direction of residential properties to the south west of the monitoring site. The highest level of hydrogen sulphide and methane were seen,

not from the direction of the landfill site, but from north of the monitoring site. Slightly lower levels were seen from the direction of the landfill site, which were thought to be emissions from the gas management compound.

Study 2 - 15 January 2019 to 25 June 2019:

Comparison of the particulate, nitrogen dioxide and benzene data from the monitoring at Silverdale with the air quality strategy objectives showed that the monitoring location was subject to concentrations that would be expected to meet their respective AQS objectives. Toluene, ethylbenzene and m&p-xylenes were found to be below their respective environmental assessment levels.

The hydrogen sulphide and toluene data were compared with their respective World Health Organisation (WHO) guidelines. Toluene was found to be below the specified health and odour limits. Comparison of the hydrogen sulphide data between the 15 January 2019 and 12 February 2019 (28 days) with the WHO guidelines showed that concentrations were below health limits, but exceeded odour limits for 6% of the shorter monitoring period. Comparison of the hydrogen sulphide data between the 28 February 2019 and 25 June 2019 (118 days) with the WHO guidelines showed that concentrations were below health limits but exceeded odour limits for 1% of the monitoring period.

Consideration of the directional sources of hydrogen sulphide and methane suggested that the highest contributing sources were seen from the direction of the landfill site, alongside lower contributing sources.

Consideration of the directional sources of oxides of nitrogen suggested that the highest contributing sources were seen from the direction of the landfill site from the gas management compound, alongside lower contributing sources."

- 5.16 The EA detailed odour monitoring tours which are conducted at a number of locations, and take into account recent complaints to ensure these locations are included in the tour. When officers have detected landfill type odours during a tour they record the type of odour, for example whether it's a gassy smell or a smell of fresh or rotting waste. The officer gives it an odour strength rating ranging from 0 (No odour) to 6 (Extremely strong odour). As part of their odour assessment work the EA has also undertaken on site monitoring with a portable hand held laser, a GeotechTDL 500. The laser is specifically calibrated to detect methane, rather than general flammable gases, at parts per million levels. This meter helps determine whether landfill gas, escaping from the site could be causing an odour. The officer also records the location of the odour, wind direction, weather conditions and whether the odour is constant or intermittent.
- 5.17 During the Covid19 period the EA continued to carry out odour tours. They carry out the tours strictly in line with Government Covid19 guidance. Our odour tours are determined by the location and frequency of the complaints, and after the tour the EA contacts the Walley's Quarry landfill site operator with the findings. Officers can also visit the site after a tour to meet the operator. The Environment Agency requires the operator to manage odours on site in accordance with its 'Odour Management Plan', which requires the operator to carry out investigations into any odour we detected during the odour tour, and report back to us.

- 5.18 The operator is required to use Best Available Technique (BAT) to manage the site to ensure that its waste operations on site prevent or at least minimise odour potential.
- **5.19** Officers explained to the working group that odour sources at a landfill could be attributable to lateral migration, the active tip face or area, from uncapped active calls, from capped areas, or leaks and failure in gas collection systems.
- **5.20** Officers confirmed that there was no permanent capping on site to date but some temporary geomembrane capping was installed 2019 to prevent emissions. It was estimated that half of site would be capped by end 2020.
- 5.21 The working group explored further with EA officers the assessment and rating of odour. EA officers explained that they considered an odour rating of 3 out of 6 off site could cause pollution. On such occasions officers could go on site to check all control measures are in place on site. It was confirmed that no landfill would be odour free. Officers were asked 'How many times detected 3 or above?' it was confirmed that in January 2019 off site odour resulted in a breach permit on 1 occasion. Members also explored what officers considered to be a persistent odour and it was confirmed that this would be considered to be over 10 minutes. The details of monitoring was provided and is attached at appendix 5b.
- Members also explored further the assessments of odour by nose as opposed to mechanical methods or instrumentation. Officers confirmed that the permit condition was written such that it was perceived by an authorised officer of the EA and not instrumentation. It was also confirmed that the EA were not intending to complete any further air quality monitoring. Members commented that the monitoring was at one location whereby predominant wind was present 50% of the time, this was considered insufficient. See section 6 for an update on monitoring. Officers confirmed that visits to the site would be a mix of planned and unannounced visits.

Environmental Health:

- 5.23 Officers detailed that odour complaints are assessed by visits to people at home / workplace during day and sometimes out of hours to coincide with when complaints are received. Officers trained and experienced in the assessment of nuisance.
- **5.24** Statutory Nuisance: need to consider and evidence material interference with reasonable use and enjoyment of property this includes frequency, duration, effects, character of area, and time of day.
- **5.25** Odour is typically characterise according to 5 'FIDOL' factors:

Frequency – How often the exposure occurs;

Intensity – The perception of strength of the odour according to the VDI 0-6 scale;

Duration – Length of odour event or length of time exposed:

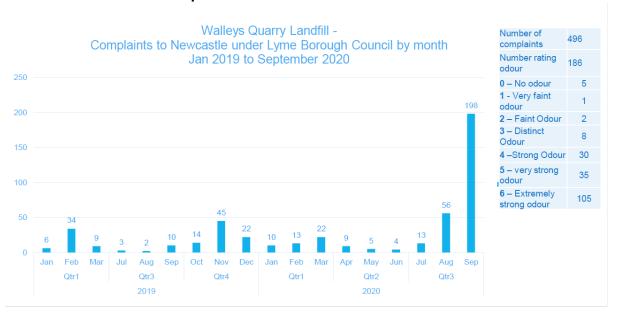
Offensiveness – Hedonic tone (Pleasant, neutral, unpleasant);

Location – Type of receptor – residential most sensitive.

5.26 Officers will engage with complainants, give an opinion and answer questions and acknowledge concerns. Generally like the EA instrumentation not used, this is because odour contains many chemical components. The nose is sensitive to a wide range of different chemicals/odours and it is particularly sensitive and able to

detect sulphurous odour. Portable devices typically measure in concentrations of parts per million and are designed to measure the concentration of a particular chemical. In terms of odour assessment the concentrations concerned are detected at concentrations of parts per billion and whether what is detected is a statutory nuisance.

Data for all complaints received:



- 5.27 Members asked about complaint data and its correlation to weather conditions. Officers detailed that from the data (graph above) it could be seen that there were seasonal peaks, tending to be in the winter months, although also there has been a peak in August/September this year.
- 5.28 Members also asked officers about other odour sources within the area, this is something that has been considered, on occasions other odours have been detected these may include agricultural and household sources. Any potential source has been mapped, this is attached as appendix 6a. These sources, although mapped and investigated have been eliminated from the investigations. However, we are having further discussion with regard to the sewage pumping stations to understand emissions and operation of these.
- **5.29** The Coal Authority have been contacted and they confirm no H2S monitored from mine workings. They provided the following information:

"We visited our monitoring points in the area before Christmas and did not detect any abnormal gas. In particular there was no hydrogen sulphide detected at them and only trace methane at one. The spot readings we took mirrored the readings collected periodically by our contractors.

We also noted that one of our vents is located in a particularly densely populated area where we detected no odour and we believe it likely there would be a number of complaints from this housing estate if there were odours associated with our venting.

We did not notice any odours at any of our monitoring locations during the visit, however we did notice an odour in the region of Newcastle Under Lyme College. I am not sure if this is related but this is some distance from our venting and not at a location of recorded workings."

Walleys Liaison Committee:

- 5.30 Cllr Tagg presented that there had previously been odour issues 2013 & 2015 and the previous operator undertook works including changes to site layout, odour masking measures at the boundary and the building of a leachate treatment plant on site. The result was that odour subsided considerably.
- 5.31 In relation to odour, in 2018 the committee pressed for EA monitoring, which was undertaken and they also encouraged Red to liaise with the local community, which resulted in community newsletters.
- **5.32** He confirmed that there was robust challenge of operator and regulators at the liaison committee.

Thistleberry Residents Association (TRA):

- The presentation detailed that the odour was inescapable in the surrounding area. They detailed that odour can be short lived or transient in nature and that they considered the EA was not sufficiently responsive to complaints.
- 5.34 Additional detail was provided in the written submission, which can be seen in Appendix 10, and which details that in terms of the issue of odour. Its prevalence and sometimes intensity, the EA appears to have failed in its duty to properly monitor the site. That said there was nothing to prevent the company from resolving the issue without any direction from the EA. It should not take 48 hours for a complaint to reach a field officer when it is known that these odours can come and go by the hour or less. The monitoring equipment should have been places on an optimum site to capture the most relevant data.
- The association also details that apart from spikes in the occurrence of odour the TRA has found that all three companies who have run the site have managed it well. On the occasions that the Chair has visited unannounced it has been clean, lorries were logged in and out, their wheels washed, and no odour was detected coming from the leachate plant when the leachate was being transferred to the containers for removal.

Stop the Stink Group:

- 5.36 The group started in mid-2017 due to odour concerns, they have detailed that 2500 people signed a petition to close the landfill due to odour. It was stated that 2020 was unprecedented in terms of odour issues. They had thousands of comments during lockdown from residents affected in homes and gardens. The odour was affecting their quality of life. The group confirmed that initial complaints were odour detailing that on bad frosty nights odour is worse, can't keep windows open, hang washing etc.
- 5.37 It was detailed that new houses were too close to site, but there is a need to consider those houses already there and impact on them and their occupiers.

- 5.38 It was detailed that the speed of EA response was shocking, residents ask for feedback, but it is never received. They consider that the EA need to speed response up, as residents are not complaining for nothing.
- **5.39** They consider it is time to stop putting in what is creating the odour and they consider it is creating a public nuisance.
- 5.40 The EA consistently state levels are within permitted levels, yet odour levels have caused schools and other businesses to close on occasion due to concerns that there was a gas leak. There is a concern that a gas leak could be dismissed as odour from the site. A full copy of the written submission is at Appendix 14.

Western Communities LAP:

- **5.41** Detailed during their presentation the experience of a Silverdale Road resident who experienced, odour, dust, gulls, material from vehicles, visual impact from site. They detailed the effect on mental health as the impacts from the landfill mean they cannot get outside.
- 5.42 The written submission is at Appendix 9, it is detailed that the odour can be variable both within its strength and when it can appear and so is not always weather dependant. It can also be different as to where it appears in the locality.
- 5.43 The effect is that especially with the odour that it is frequently difficult to enjoy one's home, not be able to sit out in the garden or even do the gardening. Often the smell enters the home during the night (sleeping with the window open) and does wake you up. Smell is subjective and affects people in different ways. The current way of defining the smell on reporting is flawed in this way and little notice appears to be taken of how the reporter feels about the situation at the time.
- **5.44** They also detailed a lack of response from EA, raised Red's social responsibility and the need to improve relations with residents.

Silverdale Parish Council:

- **5.45** Detailed during the presentation that the variation was temporarily approved by EA and Red; they considered this had been badly communicated.
- **5.46** It was detailed that they consider that the EA are complacent and have given Red the benefit of doubt
- 5.47 They recommended that new technology is considered on site in the form of electronic nose, so that monitoring could happen at all times when there is no-one onsite.
- **5.48** In respect of the two EA air quality monitoring reports, they detailed:

"The two studies of air quality at Silverdale made comparisons of findings with the WHO Air Quality Guidelines. The choice of multiple criteria across the range of pollutants; gases, particulates and other substances emitted are complicated. I found interpretation those results was inherently very difficult (practically impossible for observers without any scientific training).

There is a role for an independent scientific intermediary to advise the borough on the data collection and interpretation method and methodology taken during an Air Quality Monitoring episode particularly in a consultation over the variation to a landfill licence.

There is a role for public health education to enable residents to better understand the terminology of WHO Guidelines. Guides to the WHO Air Quality Guidance should be produced so that an air quality publication can be accessible to the non-specialist. Furthermore, WHO guidelines are not absolute standards but depend on current scientific understanding. The review published in 2006 further research may change the criteria for maximum toxicity levels.

I would suggest that the monitoring of scientific research takes place to ensure that any new risks from air pollution from the environment is quickly assessed and responded to expeditiously.

The second Air Quality report contained systematic inconsistencies in analysis because the detection point was moved in mid-February 2019. This was a significant change and meant data could be interpreted differently for Hydrogen Sulphide as follows:

- (1) There were 76 occasions between 15 January 2019 and 12 February 2019 (28 days), on 12 separate days where the 30-minute mean value exceeded the WHO guide value of 7µg.m-3. (Report 2 pp14-15);
- (2) There were 67 occasions between 28 February to 25 June, on 26 separate days, where a 30-minute mean value exceeded the WHO guide level of 7µg.m-3.(Report 2 pp12-13);
- (3) (MY POINT*) Therefore there were 143 occasions between 15 January and 25 June 2019 where a 30-minute mean value exceeded the WHO guide level of 7μg.m-3.

As there were no records between 13 and 27 February, the estimate where a 30-minute mean value exceeded the WHO guide level of 7µg.m-3 including the missing data is...(a higher value)

The change in the position of the direction point meant that the extrapolation of other findings relied on a specific interpretation and a choice in the data sequence. This interpretation may have worked for the benefit of the company."

*My – referred to in written submission in appendix 8.

MP Aaron Bell:

- 5.49 During his presentation, Mr Aaron Bell MP sympathised with community as the landfill was affecting the quality of life and mental health. He confirmed that he had met with EA, Red and many groups on here. The EA didn't confirm smell coming from landfill, which was disappointing.
- 5.50 He had met with Red and they do a number good things for community but it was disappointing that Red say they are 'compliant' will not admit site smells despite all complaints. Red need to engage on basic facts, smell, there will be lack of trust.
- 5.51 He detailed Parliamentary debate and described the EA as toothless, with a lack of response time or powers to react quickly, DEFRA (Department for Environment, Food and Rural Affairs) need to give EA better powers.

- **5.52** He detailed that lockdown has made this harder to live with.
- 5.53 He recommended permanent monitoring sites, with live data providing RAG (Red; Amber; Green) rating, to enable community to view the data and provide faith in reporting system.
- 5.54 He detailed that this was clearly a big issue for local community, town and business and that the community were having their lives blighted.

Findings

- 5.55 The working group findings were that odour was by far the biggest issue and cause for complaint from all parties. The operator has responsibilities to manage the site and any matters which may arise outside of the site. The primary regulator of any odour emanating from the landfill site is the EA through the permit. Although it is acknowledged that there are also regulatory responsibilities placed on Environmental Health, albeit as it is an EA regulated site, there were some limitations to this.
- 5.56 There is an overwhelming level of complaint in relation to odour surrounding the landfill site, it is noted that the source of the odour has not been confirmed by either the EA or RED, however it is noted that there are no significant alternative sources of odour been presented to the group.
- 5.57 The group consider that the use of scientific instrumentation should be used for the assessment of odour and specific air pollution limits should be detailed within the EA permit conditions, thereby making it more enforceable.
- 5.58 Odour is adversely affecting a wide community, the nature, duration, extent and exact chemical compounds in the odour has not been established, but it is clear that there is a regular and persistent source of odour, which needs to be addressed.

Highways & Vehicles:

5.59 Information and data was received by the working group in relation to highways and vehicles issues. Each organisation provided the following details:

EA:

- 5.60 All landfill sites have the potential to cause nuisance with vehicles using the site leaving mud deposits at the site entrance and on the highway. At Walley's Quarry there are a number of measures in place to minimise nuisance from mud and comply with the requirements of the permit.
- Vehicles using the site must go through the wheel wash facility before leaving the site. The site has a long exit road which helps dry vehicles after they have been through the wheel wash, before they leave the site. The use of the concrete waste transfer unloading pad also minimises vehicles travelling on muddy site roads. The operator uses a road sweeper to keep the site entrance and adjacent highway clean.
- **5.62** When EA Officers undertake odour tours, they also record whether there are issues with mud on the road, whether there is any dust nuisance from the landfill,

- they record whether there are birds flying above the site or perching on adjacent buildings.
- 5.63 The Environmental Permit requires the site operator to use management systems to prevent or at least minimise environmental impact from the site regarding the above potential nuisance issues.

Staffordshire County Council (SCC):

- 5.64 A written response was provided to the group in relation to specific questions asked by the working group, a full copy of this is at appendix 4 and 4a and the main points are detailed as follows:
- 8.65 Reports about the highway concerns damage, parking etc. should be reported using the SCC online system 'Report It'. Many of these would relate to the surrounding road and not specifically Walleys, it is therefore not possible to provide a figure of number of complaints. Where issues are reported about parking these would be forwarded to the Community Traffic Management Office. Although there was an issue raised last year by the Nursery and Silverdale Parish Council no further reports have been logged
- 5.66 SCC were asked about potential road and weight restrictions and detailed that any weight restriction must be carefully investigated and where part of the main network is being used (i.e. A and B roads) restricting their use is most likely not appropriate. In some cases, restricting lesser routes may still require 'Except for Access' to be added which may not provide the restriction being sought.
- 5.67 Condition 15 of planning permission N.12/09/216 MW for landfilling in Walleys Quarry allows up to 880 HGV movements per full working week (440 in and 440 out).
- In relation to use of the layby and verge damage, SCC advise a parking restriction can be used to prevent overnight usage although enforcement of this would be problematic unless the Police would agree to do so given their 24 hour operation. A daytime restriction for the layby could be considered but would limit the use for any vehicle which may impact any visitors to the cemetery who use the layby to park. In terms of general parking causing obstruction, where identified to be occurring, this could be prevented with the use of a parking restrictions. Where considered necessary physical barriers can be introduced (bollards, railings etc.). However, the priority given will be low if purely an amenity issue with make safe works more likely to be carried out rather than the introduction of bollards etc. The bollards installed at each of the layby in the recent past were funded by the landfill operator in order to address issues caused by vehicles visiting the quarry.
- 5.69 Schedule 3 of the s.106 legal agreement for the landfilling operations requires vehicles leaving the site to use the wheel wash to prevent deleterious material being deposited on the public highway. The agreement also requires that waste being taken to the site is sheeted or otherwise contained, again to prevent any deleterious material being deposited on the public highway. Conditions 14, 16, 17 and 18 in planning permission N.12/09/216 MW also relate to quarry vehicles keeping the public highway free from mud and debris.

Liaison Committee:

5.70 The presentation detailed concerns about highways matters particularly on cemetery road. Councillor Tagg in the written submission detailed 'many highway issues particularly around the entrance to the landfill in Cemetery Road are being looked into by Staffordshire County Council, and Councillor Jones and myself as the local County Councillors for the area, have asked highway officers to work on a solution to address the road safety issues caused by lorry movements and 'parking up''. He indicated that he was seeking to use County Councillor's Divisional Highway Programme (DHP) fund to resolve some of these matters.

Thistleberry Residents Association:

5.71 Detailed that for the variation application there was a need for more monitoring & traffic control along cemetery road

Silverdale Parish Council:

5.72 The parish council reports:

"damage to the pavements and greens next to Silverdale Cemetery by HGV manoeuvres opposite the site entrance raised which is still outstanding. I recorded the Reg. Numbers of 6 HGV's parking in a line overnight in Silverdale Road near a care home then dispersing at dawn. I sent these details to the Managing Director of Red Industries and to Newcastle Police. The problem abated to some extent but HGV parking is very difficult to police and could be eliminated by a system of appointments for drivers."

Stop the Stink Group:

- 5.73 Representatives detailed that traffic on Cemetery Road was an issue, detailing that mud was terrible and if wet would have been a hazard. It was considered that vehicles were not being washed correctly.
- 5.74 They detailed that the group had been bombarded with parking and highway issues. They expressed concern with variation that when more vehicles entering site, there would be chaos, detailing further issues with nigh-time illegal parking and untaxed vehicles had been referred to police.
- 5.75 A funeral was detailed whereby the layby full of lorries and parking on grass verge, making lay-by unusable for its purpose, mourners had to walk through mud. This coupled with the presence of the smell throughout the service at sad time was a concern.
- 5.76 It was detailed that traffic has become terrible and an example was provided when 5 articulated lorries were parked and queuing to enter site during the morning.

Police:

5.77 The police detailed in their written submission (Appendix 11) are aware of queuing vehicles waiting to get onto the site; queuing through the traffic lights and along cemetery road, however because this generally occurs early morning (between 0500-0700) there are very few commuters/residents that are affected by this.

Findings:

- 5.78 The working group acknowledge that the principal regulator for off-site highway matters is SCC along with some Police responsibilities. The control of vehicle on site and exiting is the responsibility of Red, with the principal regulators being the EA and SCC. It is also acknowledged that Red do not have control of the vehicles or their behaviours but they do have opportunity to influence these behaviours through their business operations.
- 5.79 The findings were that vehicle controls outside of the site were on occasions causing disruption and inconvenience to the surrounding roads and neighbours. It has been demonstrated that the infrastructure is on the landfill site to control mud being tracked onto the highway.

Wind Blown Litter:

- **5.80** Limited information and data were received by the working group in relation to wind-blown litter.
- **5.81** Thistleberry residents association in their written submission indicated that they understand that there is litter and parking control outside the site.
- 5.82 In particular, it was noted during the EA question time that the primary measure to control wind-blown litter was the use of daily cover.

Findings:

5.83 The working group findings were that litter was not one or the primary areas of concern during this scrutiny review.

Dust Emissions:

5.84 Information and data was received by the working group in relation to dust.

EA:

The operator is required to know when potentially dusty waste loads arrive on site. This enables the operator to handle dusty loads to specifically minimise nuisance. Dusty waste is carefully handled and covered over as quickly as possible. The operator uses an onsite water bowser to damp down dust on site roads and the working area during dry weather. Vehicle speed restrictions are used on site to minimise dust disturbance from vehicle movements.

EH:

5.86 During the presentation a comparison of particulate matter, which are particles which are defined by their diameter for air quality regulatory purposes. Those with a diameter of 10 microns or less (PM10) are inhalable into the lungs. Fine particulate matter is defined as particles that are 2.5 microns or less in size (PM2.5). Therefore it should be noted that PM2.5 comprises a portion of PM10. In terms of sources of PM10 can include dust from construction sites, landfills, agriculture, industrial sources and products of combustion. Whereas some PM2.5 is naturally occurring, such as dust and sea salt other sources include combustion and road vehicles and due to its very fine nature, this can travel considerable distance.

5.87 There is no monitoring of PM10 or PM2.5 within the Borough, so a comparison of monitoring sites within Stoke-on-Trent and London were compared. Neither of these sites exceed air quality objective standards.

Thistleberry Residents Association:

5.88 It was detailed that concern with very small dust particles, called PM2.5, as there is no safe level and recommended that every effort to reduce these elements of dust

Western Communities LAP:

- 5.89 In relation to the variation they oppose increase in tonnage due to pollution from dust (PM10) from HGVs on routes to landfill and within landfill site operations.
- **5.90** Silverdale road resident experience detailed dust from the site.
- 5.91 In the written representation they detailed dust is definitely more of a problem during dry weather and can be exacerbated by wind- symptoms of irritation to nose and throat that only appear when at home particularly during this recent dry spell. (Appendix 9)

Findings:

5.92 The working group findings were that there was concern within the general community regarding dust exposure, there was little mention of visible dust but the concern related to PM10 and PM2.5 exposure.

Public Health:

5.93 Information was received by the working group in relation to public health. PHE have provided the following comments to Environmental Health concerning the landfill site and current issues of community concern.

"PHE has not been presented with any environmental data relating to pollutant levels post February 2018, neither has PHE received any analysis regarding site-related odour complaints related to either local meteorological conditions or on-site practices. With respect to gull activity associated with the site, we would not anticipate that this should pose an issue on a well-run and maintained site, and should be controlled by adherence to environmental permit conditions.

PHE have assessed the environmental data provided by the EA (July 2017-February 2018) and note that these levels are low and would not expect there to be any long-term health consequences. However, odour can be a cause of stress and anxiety, even when the substances causing the odours are not harmful to health at the levels detected at these locations.

If residents have health concerns they are advised to contact their local GP, who (in turn) can seek advice from PHE.

From analysis of syndromic surveillance data for the period up to February 2018, PHE has no evidence at this stage of an increase in GP consultations or calls to NHS 111 by the neighbouring population for symptoms of breathing difficulties or eye problems. We are in the process of obtaining an update for the subsequent period.

PHE does not normally comment on individual research studies, instead reaching a view based on the weight of new and existing evidence. With respect to landfills, PHE's position is that living close to a well-managed landfill site does not pose a significant risk to human health. PHE is continuing to review the evidence base and this work is ongoing."

Silverdale Parish Council:

5.94 It was recommended that Red liaison committee attendance should be boosted with Public Health Role in attendance. Their written submission detailed the Borough Council should not be complacent as the 2 Air Quality Reports ignored issues about vulnerable populations living close to the landfill, and Public Health England is the body that publishes health statistics down to ward level. So medical expertise needs to be brought in to gauge the effects of the landfill operation on the populations of Cross Heath, Knutton, Silverdale and Thistleberry. Data from the last Census and subsequent PHE figures indicate deprivation and lower scores on health in some wards (cross Heath, Knutton and Silverdale) but more should be done to analyse health deficits because boundaries have changed; something for the Borough Council to implement with its partners.

Findings:

5.95 The working group fully understand and appreciates the concerns of people living around the site, however, PHE advice is that there should be no adverse health impacts. It is recommended that further PHE advice is sought following any further pollution monitoring in the vicinity of the site. Any further updates or advice received is to be published on the Councils website.

Pests & Gulls:

5.96 Information and data was received by the working group in relation to pests and gulls:

EA:

Nuisance from Birds

- 5.97 During the operational life of the Walleys Quarry landfill site, the EA has received public complaints regarding birds from the site, usually gulls. The operator is required to deploy the method detailed in its Pest Management Plan, to deter birds staying on site, and scavenging on the waste. We accept that birds can cause nuisance to surrounding properties, by flying over buildings, perching on house roofs and can cause fouling nuisance to buildings, pavements and cars. The EA works with its partner organisations, to help achieve a co-ordinated approach for bird control, to minimise nuisance off site.
- 5.98 Current bird control measure used on the site include the use of 'bangers', birds of prey and ensuring that waste is properly covered as quickly as possible. The operator varies control measures to stop the birds becoming familiar with the control techniques.
- 5.99 In June 2020 the Environment Agency carried out an audit review of the operators management system procedures used to control birds on site. We produced an inspection report which made a number of recommendations to further improve

bird control measure on the Walleys Quarry landfill site. The operator has incorporated these recommendations into their procedures

5.100 Through member questions about daily cover, it was detailed that the daily cover shouldn't be such that birds could forage, and such daily cover is one of the measures to control birds.

Stop the Stink Group:

5.101 Detailed that you could see thousands of seagulls. This gives concern from the bird scarer bangs and also dropping faeces.

Aspire:

5.102 It was detailed that at the traveller's residence on Cemetery Road that there were rats coming from the landfill and residents were fearful coming out at night. They also detailed that there had been a noticeable increase in birds on the landfill site.

Western Communities LAP:

5.103 The group detailed that the seagulls are with us on a daily basis. (Appendix 9)

Findings:

- **5.104** The working group findings were that there was clear evidence of gulls on site, members have seen this for themselves. They appreciate the controls that are in place for this, but these can also impact on the surrounding residents.
- **5.105** They consider that it is Red's responsibility to control and manage gulls and pests on site and the principal regulator is the EA.
- **5.106** It is noted that the main control measure for gulls is the removal of a food supply at the landfill site, this can be controlled through the use of daily cover at the end of each working day.

Visual amenity:

5.107 Information and data was received by the working group in relation to visual amenity.

Western Communities LAP:

- **5.108** They detailed the example of a Silverdale Road residents adverse visual impacts from the site.
- 5.109 In the written submission, they also note that as the landfill has got higher it is now clearly more visible from the house and the road when driving past the site generally making the area unsightly and unpleasant to live in. (Appendix 9)

Stop the Stink Group:

5.110 The representation commented on the visual side of the landfill detailing that can see it.

Findings:

- 5.111 The working group findings were that the landfill has changes over the recent time from being a hole in the ground to become more visual as it is filled. It is also noted that the final restoration height was determined through the SCC planning permission and it is going to be considerably higher than it is at present.
- **5.112** Although the overall height of the landfill is predetermined, the visual amenity of the site can be improved particularly through the effective use of daily cover, which would at least minimise the extent of fill material observed from beyond the site boundary.
- 5.113 The working group's findings were that as the height of the landfill is emerging above ground that the tipped material is far more visible. It appears that there is a link between the nature, quantity and quality of the daily cover material and visual amenity. There also appears to be a link between the control of gulls. Attention to this could also potentially control odours.

Quantity and Quality of Daily Cover:

- **5.114** Information and data was received by the working group in relation to quantity and quality of daily cover.
- 5.115 Through member questioning during the EA presentation it was confirmed that the daily cover used each night comprises waste soil or fines (shredded waste from transfer stations). This is different to the temporary cap which is semi-permanent and of an inert nature. Officers confirmed that they had required daily cover improvements in March they noted that Red had responded to this and improvements had been noted since. It was also confirmed that as landfill gets higher, there is potential for odour and this will depend on daily cover and as the temporary and permanent cap is installed, this will reduce odours and improve gas extraction

Thistleberry Residents Association:

5.116 In their written submission it was detailed that 'It was felt that the company could have reacted more swiftly to the odour issue not only to reduce it but also to put the minds of local people at rest. A thicker covering layer might have gone some way to reduce the intensity of the problem. This site is in the heart of an urban area. It might be that profits might have to take a back seat to making sure that the local residents in the immediate area were not unduly inconvenienced or adversely affected.' (appendix 10)

Findings

- **5.117** It is noted that the responsibility for ensuring suitable and sufficient daily cover is that of the operator and that the principal regulator is the EA.
- 5.118 It is considered, although normal practice at landfill for daily cover to be made up of 'fines' (small material that is screened out from a waste material through an industrial process such as a trammel screener), that such material in itself may be a source for odour, and that on occasions the quantity of such material is such that the waste is clearly observed and is acting as a food source to gulls.

6. Updates:

6.1 During the latter part of 2020 and early part of 2021, there has been a significant increase in complaints relating to odour emanating from Walleys Quarry Landfill Site. Since the presentation of evidence to the working group the following updates have been provided and are quoted below:

Environment Agency:

January 2021:

Update January 2021

- 6.2 We have received an increase in complaints of odour since late December 2020. In response we have increased our visits to the area to complete assessments of odour and site visits. Since the 4 January we have visited the area on 7 occasions, normally with two officers visiting different locations and visited the site on the 11 January. We have detected odour at some locations and these details have been provided to the site operator.
- 6.3 There has been no change in operations at the site to indicate the reason for the increase in complaints. We will continue with odour assessments and visits to ensure all measures are being used to minimise odour impacting local residents.

Bird control

- 6.4 Landfill operators are asked to work towards preventing birds feeding on the landfill site. Deterring birds can lead to them roosting on nearby buildings or land waiting for an opportunity to scavenge for food. Measures to deter birds include the use of bangers and rockets to disperse gulls and covering the waste during and at the end of each day to reduce the 'food' available for birds scavenging. Operators can also employ a contractor to use birds of prey to deter seagulls from the tipping face.
- 6.5 The operator of Walleys landfill notified us in early December that to comply with guidance for bird flu they would be temporarily ceasing the flying of raptor birds at the landfill to reduce the risk of spreading the disease. Raptor birds will prey on other birds for food and are therefore used as a good deterrent.
- 6.6 To maintain the control of bird's, replacement measures have been implemented including the flying lure raptor birds (these birds are trained to fly to a lure and less likely to prey on another bird), increasing the frequency of rocket/banger and increasing the use of distress call deterrents.
- 6.7 The site operator updated members of the liaison committee of this temporary change.

Cleaning of Vehicles

- We are aware of concerns about mud on the highway and vehicles still being dirty when leaving the site. These concerns were raised with the site operator on the 5 January.
- **6.9** Landfill permits require operators to

- prevent vehicles from carrying mud off site,
- monitor the public highway and their site road between the final wheel wash and the public highway and
- if vehicles carry mud or other debris onto the public highway the operator must clean it up immediately.
- 6.10 The operator has confirmed that the wheel wash is operational and drivers are all required to use the wheel wash and remain in place until the cycle has fully finished.
- 6.11 The use of the wheel wash and the requirement for drivers to check their vehicles for debris prior to leaving the site is covered in the site inductions process. There is equipment on site to allow drivers to check and clean loose material before exiting the site. The company has reinforced the need to use the facilities correctly and advice against parking locally.
- **6.12** During a site visit on the 11 January all vehicles an officer observed leaving the site over approximately an hour were seen to be using the facilities correctly.

Past site visits:

- 6.13 We continue to carry out odour assessments in the area. On the 19 October 2020, an Officer did detect a landfill type odour at the Silverdale cross roads traffic lights. However, we did not consider this to be at a level to be in breach of the permit. We informed the operator which is our normal practice. Subsequently, we completed a site visit on the 23 October 2020 and undertook a monitoring exercise using a hand held Tuneable Diode Laser (TDL) monitor. Prior to the visit we detected a landfill type odour on Cemetery Road opposite the site entrance which we rated at 3 out of 6. The operator advised us that the likely source of the odour was a gas well. A member of staff on site had reported that the gas well needed repair that morning. The site was already taking action and the repairs were completed during our site visit. Since our last visit additional soils had been applied to the part of the site which borders the garden centre and the near the site entrance.
- **6.14** Further visits were completed in November and December.

Update 1 February 2021

- 6.15 We have continued to complete amenity assessments within the local area. We have completed 8 assessments for odour since the 1 January 2021 and visited the site on 2 occasions (11 January and 27 January)
 - We have detected odour at some locations, but not at a level considered to be of annoyance. Details have been provided to the site operator.
 - During the last visit on the 27 January odour was detected on the newer housing estate at a level of 2/6 (near Barnacle Place). On further investigation approximately 2 hours later the odour has dissipated.
- 6.16 Operations to bring the landfill to the final levels under the Planning Consent are continuing. The area nearest to the Garners Garden centre is currently being completed to final levels. It is currently anticipated disposal of waste in this area will be completed in early February.

- **6.17** Completion of waste disposal within this area will enable:
 - the installation of further deep gas extraction wells for the control of landfill gas. We have approved the construction design for these wells during January.
 - the area to be capped and sealed.
- **6.18** We will continue with odour assessments and visits to ensure all measures are being used to minimise odour impacting local residents

Update 10 February 2021

Air Quality Monitoring – Silverdale

- 6.19 In response to increased community concern of odour within Silverdale and the surrounding areas we have been making arrangements to install Air Quality Monitoring Equipment. We are currently working to resolve electrical installation requirements and anticipate the equipment will be installed by the end of February.
- 6.20 This mobile monitoring equipment will remain in place for at least 3 months and collect monitoring data continuously. The equipment will monitor for the same parameters as previous studies. The data will be collated into a full and summary report which will also be provided to Public Health England to provide expert opinion on any human health impacts. We will publish the findings on our webpage and share them with the liaison group.
- **6.21** For more information regarding our previous Air Quality Monitoring please see the section below entitled 'Air Quality Monitoring'

Update 24 February 2021

- 6.22 In response to increased community concern of odour within Silverdale and the surrounding areas we installed an Air Quality Monitoring unit on the 24 February 2021 in the grounds of the Severn Trent Pumping Station off Galingale View. This location is within a direction where residents have reported concerns of odour.
- 6.23 This Mobile Monitoring Facility (MMF) will remain in place for at least 3 months and collect monitoring data continuously. The unit will monitor for the same parameters as previous studies. For more information on previous studies please go to the section below entitled 'Air Quality Monitoring'. The data will be collated into a full and summary report which will also be provided to Public Health England to provide expert opinion on any human health impacts. We will then share the findings with local residents, including an assessment of any environmental impacts. We are considering options to provide updates to the community while the monitoring is taking place and will confirm how these will be provided shortly.



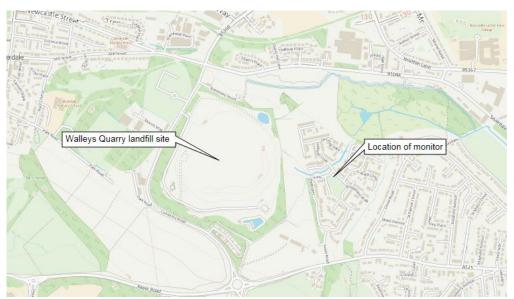
Above: This is from Galingale View on the newer housing estate. The green box in the bottom right corner is where the monitoring station is being deployed.

Update 26 February 2021:

- 6.24 In response to increased community concern of odour within Silverdale and the surrounding areas we have installed an Air Quality Monitoring unit on the 24 February 2021 in the grounds of the Severn Trent Pumping Station off Galingale View. Reports of odour were reviewed to determine appropriate locations. This location is within a direction where residents have reported concerns of odour. The location of the monitor must also be in a secure location with a dedicated electrical supply which must be assessed and approved before operating.
- 6.25 This Mobile Monitoring Facility (MMF) will remain in place for at least 3 months and collect monitoring data continuously. The unit will monitor for the same parameters as previous studies. For more information on previous studies please go to the section below entitled 'Air Quality Monitoring'. The data will be collated into a full and summary report which will also be provided to Public Health England to provide expert opinion on any human health impacts. We will then share the findings with local residents, including an assessment of any environmental impacts. We are considering options to provide updates to the community while the monitoring is taking place and will confirm how these will be provided shortly.



Above: The Mobile Monitoring Facility (MMF) in the grounds of the Severn Trent Pumping Station off Galingale View.



Above: A map of the location of the Air Quality Monitoring- Mobile Monitoring Facility (MMF)

Update 2 March 2021

6.26 We recognise and understand concerns raised about odour in the Silverdale area of Newcastle under Lyme, Staffordshire surrounding Walley's Quarry landfill, operated by Red Industries. This weekend saw a record number of complaints made to our incident centre. We take these reports very seriously and do not underestimate the difficulty of the situation for residents in the area. Our officers contacted Red Industries at the weekend about the reports of odour.

Recent Complaints

6.27 We believe the recent upsurge in complaints over the weekend of 27/28 February 2021 may be linked to work associated with new gas wells drilled by

Red Industries to better manage landfill gas, a requirement of the permit. These new wells, which are due to be connected in the next week will enable more gas from deep inside the landfill to be captured, which we expect to reduce odour in the environment.

- 6.28 We understand Red Industries informed the local liaison group about the gas wells that were due to be drilled in the following two weeks on 16 February 2021, in compliance with permit conditions.
- **6.29** Red Industries is carrying out this work as part of the permit requirements the Environment Agency has placed on it in relation to management of the landfill gas.

Monitoring

- 6.30 As part of the ongoing response to increased community concern, we installed the first of two specialist air quality mobile monitoring units on Wednesday 24 February 2021 in the grounds of the Severn Trent Pumping Station off Galingale View, Newcastle under Lyme. This is an area where residents have specifically reported odour. Unfortunately the unit has not begun collecting data due to electrical supply issues. We understand this is frustrating for residents but this will be resolved by the end of this week.
- 6.31 The equipment will remain in place for at least 3 months to continuously collect data. It will monitor relevant parameters, including methane (CH4) particulates and hydrogen sulphide (H2S). It also has a weather station which will record wind speed, direction, temperature and pressure. The monitoring will allow comparison with levels obtained previously (further details below).
- 6.32 Data will be collated into a full report which we will give to Public Health England to provide expert opinion on any human health impacts. We will then share the findings with local residents and interested parties, including an assessment of any environmental impacts.
- 6.33 The Environment Agency carried out air quality monitoring in 2018/19 and 2019/20, both of which showed that the landfill is not breaching limits set by the World Health Organisation ("WHO"). Public Health England also confirmed there were no associated health risks based on the data. The equipment was installed on:
 - 6 July 2017 until 14 February 2018 on the pumping station off Silverdale Road;
 - 15 January 2019 until 25 June 2019 near the northern boundary of the site, on the grounds of Garner's Garden Centre.

Ongoing Regulation

No landfill site will be completely odour free and there are particular challenges where residential homes have been built in close proximity to landfill sites, as in Silverdale. Planning permission for the construction of landfills and housing are granted by the local county and borough councils respectively or by the Secretary of State on appeal.

- 6.34 The Environment Agency assesses Red Industries' operations against the permit conditions, and takes account of the WHO threshold, as we do for any other site. If we find breaches of permit condition(s) we specify the actions the company is required to take in order to rectify this non-compliance.
- 6.35 In addition to the works on the landfill gas wells, we expect Red Industries to cap part of the site by the end of late Spring/Early Summer, which should help to reduce odour leaving the site boundary. Capping will begin when the site levels reach those specified in planning permission.
- **6.36** We're also working in partnership with Newcastle under Lyme Borough Council to share data and information.

END

Update 5 March 2021

- 6.37 An update from Public Health England has been added to the Health section below.
- **6.38** We have continued to complete amenity assessments within the local area and site visits.
- **6.39** We have detected odour at some locations, but not at a level considered to be of annoyance. Details have been provided to the site operator.
- 6.40 On the 16 February a drilling rig was visible on the site near the border with Garners Garden Centre. As areas of a landfill are filled with waste, infrastructure such as gas wells used to capture landfill gas and feed it to the gas utilisation plan, need to be continually reviewed and updated to ensure effective gas management. The drilling rig has installed an additional 11 gas wells and connected these to the utilisation plant which has increased the amount of gas collected from the landfill. Further wells were still being installed at the time of this update.



Above: Photo of a drilling rig which the company sent to members of the local liaison group.

- We will continue with odour assessments and visits to ensure all measures are being used to minimise odour impacting local residents.
- 6.42 Following the wet weather during late 2020 and early 2021 an increased amount of surface water collected within the landfill. This surface water has drained from the landfilled waste and must be managed as contaminated water. The collected water, has the potential to cause odour and the failure to manage this adequately has been assessed as a minor breach of the site permit. We have required the operator to take action to remove the collected water which must treated on site in the onsite treatment plant or removed by tanker without delay.
- 6.43 There was a fire in the engine compartment of one of the site vehicles on 18 February. This caused a visible plume of smoke for a short period of time around midday. The Fire Service attended and quickly put the fire out. No waste was involved. An investigation is ongoing to determine the cause of the vehicle fire. The site operator notified the liaison group members of the incident.

- 6.44 During a visit on the 26 February a full perimeter tour was completed to monitor for ambient methane concentrations at the boundary of the site. This is a valuable technique in quantifying the potential for the fugitive release of landfill gas given the predominance of methane in such gas. The values encountered on the upper point of the side wall of the landfill void (approximately 10m to 20m inside the permitted boundary) varied from zero to 34 ppm of methane. It was noted that the highest values were recorded in the south western quadrant of the site. This was in the downwind direction at the time of observation.
- 6.45 The potential source of elevated readings was believed to be a leachate extraction chamber that was undergoing routine upwards extension and would be for a short time while the works are completed. This is a normal engineering operation that is necessary to maintain the operational capability of the extraction chamber as waste is placed in the immediate vicinity.
- 6.46 Away from the leachate chamber, readings diminished in a broadly linear fashion to predominantly 0ppm to 3ppm north and east of the site.

Litter Fencing

6.47 Some visual dilapidation of the perimeter litter control fencing was observed during the emissions monitoring exercise. A full review of litter control measures against the management protocol has been required including the provision and maintenance condition of physical barrier systems.

Surface/Ground Water Settlement Lagoon

- Residents reported discoloration in the Silverdale Brook at the location where the company discharge site surface water to the watercourse. We have responded to these concerns, inspected the watercourse and collected samples which have been analysed. The results did not show anything of concern. We continue to check the watercourse on site visits. The chemical quality of the water within the sites lagoon was discussed during the inspection. The design of the lagoon and the proximity of vegetation could leave the system vulnerable to the accumulation of organic matter (leaf litter, algal blooms, etc). In turn this might cause anoxic conditions within the stored water in the event of cold weather conditions.
- 6.49 A review of the consideration of the timing and frequency of the periodic removal of any settled solids from the lagoon has been recommended

Future Capping

6.50 Substantial progress in reaching the final tipping elevations in accordance with the planning permission was observed during the inspection. This is positive news in terms of facilitating the proposed permanent and temporary capping operation of the area. The company reaffirmed their commitment to achieving, and maintaining, a high standard of interim cover.

END

Environmental Health:

6.51 The following news updates have been provided by the Borough Council.

26 January 2021

Walley's Quarry

- 6.52 The Council is currently receiving a huge number of complaints about the landfill site, issues with odours and associated reports of a negative impact on residents' quality of life.
- 6.53 From next week the Council will be extending its hours of operation to include an on-call and out-of-hours response service in order to assist the investigation of complaints. It is hoped that the service, which will be officers on extended duty, will operate 24 hours a day, seven days a week, until further notice.
- 6.54 We wish to encourage anyone who is experiencing any form of negative impact, which they believe to be caused by the landfill, to report them to the Council and the Environment Agency.
- 6.55 The Council is encouraging any residents who are suffering from ill-health, which they feel is a direct result of the issues associated with the landfill site, to consult their GP and also report those issues to the Council and Environment Agency.
- 6.56 The Environment Agency (EA) is responsible for monitoring the site and also regulates the environmental permits held by Red Industries RM Limited ("the operator") for Walley's Quarry.
- 6.57 The Council is taking advice from Public Health England and other organisations in the course of their own investigation but need to hear from residents themselves.

Please report issues using the following:

Via the Council's website: https://tinyurl.com/nxjbvnv

The dedicated Environment Agency website: https://tinyurl.com/y58xlt8t

Via Twitter at @EnvAgencyMids By telephone on 0800 80 70 60

By email: enquiries westmids@environment-agency.gov.uk

29 January 2021

COUNCIL TO FUND URGENT SPECIALIST ADVICE ON LANDFILL ODOUR AS 24/7 MONITORING COMMENCES

- 6.58 Newcastle-under-Lyme Borough Council has allocated £50,000 from its Borough Growth Fund to fund specialist technical advice and support that will enable more effective monitoring of the odours blighting large parts of the borough and alleged to emanate from Walleys Quarry landfill site.
- 6.59 The aim is to legally establish if the source of odours is Walleys Quarry, in Silverdale, which is owned and run by Red Industries RM Limited.
- The site has been highly controversial for several years now, with local residents complaining about the 'foul stench' that they experience within their own homes, gardens and neighbourhood, which they say does come directly from the landfill.
- 6.61 Simon Tagg, the Leader of the Borough Council said: "We are trying to address the issues that residents have been reporting for some considerable time with the Environment Agency and Red Industries.
- 6.62 "The Council doesn't have the specialist expertise 'in house' so we are intending to allocate this funding from the Council's budget in a bid to get adequate, scientifically measured readouts of the actual level of emissions. There is concern that the monitoring that has been done to date by the Environment Agency has been inadequate.
- 6.63 "Whilst the Council has no not directly powers to close down operations at the landfill, the situation is so important to our communities and not just the people living close to the site because complaints come from miles around that we have to take swift, independent action and bring in specialist skills and the advice of industry experts."
- The Council has been recording residents' complaints, and sharing them in real time with Red Industries and the Environment Agency.
- The Environment Agency is responsible for monitoring the site and also regulates the environmental permits held by Red Industries for Walleys Quarry.
- 6.66 While the specialist technical advice is being commissioned and implemented the Council is encouraging anyone who continues to experience any form of negative impact, which they believe to be caused by the landfill, to report the issues in detail, with times and dates, to the Council, Red Industries and the Environment Agency.
- 6.67 From next week the Council will be extending the hours of operation of its environmental enforcement team to include an on-call and out-of-hours response service in order to assist the investigation of odour complaints.
- **6.68** It is hoped that the service will operate 24 hours a day, seven days a week, until further notice.
- **6.69** Please report the issues to the council and the EA using the following:

The Council's website: https://tinyurl.com/y58xlt8t and the dedicated EA website: https://tinyurl.com/y58xlt8t

Via Twitter at @EnvAgencyMids - or telephone the EA on 0800 80 70 60 - or e-mail enquiries_westmids@environment-agency.gov.uk

Ends

10 February 2021

AGENCY BOWS TO PRESSURE AND AGREES THREE-MONTH AIR QUALITY MONITORING AT LANDFILL SITE

- 6.70 In a welcome move, and in response to the rising number of complaints from local residents, the Environment Agency has announced this afternoon that it will undertake a new air quality monitoring exercise around Walleys Quarry landfill site.
- 6.71 The Environment Agency (EA) is the body responsible for monitoring the site and also regulates the environmental permits held by Red Industries RM, the operators of the site.
- 6.72 In recent months the landfill quarry has been the source of an unprecedented number of complaints, with hundreds of residents reporting foul odours that they say impacts negatively on their families and their quality of life.
- 6.73 Simon Tagg, the Leader of the Borough Council said: "I am glad that the Environment Agency have listened to our residents and to the Council on this. We really need urgent action and for the Environment Agency to get stuck in trying to tackle the issues that residents have been reporting for a long time now."
- 6.74 "I will be meeting with the EA this Thursday, along with our local MP Aaron Bell, and will be pressing for a more effective programme of monitoring than anything they have done so far including appropriately sited monitoring equipment and transparency on the data that is collected. And, we want a speedy process and early result. It's what people now expect from the EA."
- 6.75 Today's EA announcement can be viewed here: https://tinyurl.com/y58xlt8t
- 6.76 The Council recently allocated £50,000 from its Borough Growth Fund to finance specialist technical advice and support for its own investigation and is encouraging residents to report the issues they experience to the Council, Red Industries and the Environment Agency.
- Residents can do this via the Council's website: https://tinyurl.com/y5zunpn8 to the EA by telephone (0800 80 70 60) or enquiries_westmids@environment-agency.gov.uk

5 March 2021

COUNCIL LAUNCHES LANDFILL INVESTIGATION

6.78 A Council-led investigation into widespread reports of foul smelling odours in Newcastle-under-Lyme is underway.

- 6.79 The Council has developed a specific and comprehensive plan detailing how air quality will be monitored in the area surrounding Walleys Quarry in Silverdale using £70,000 recently set aside specifically for the investigation which has started this month.
- 6.80 It comes after the Council received an unprecedented number of complaints about the landfill site which peaked last weekend when more than 2,000 residents contacted the authority about foul smells affecting their homes, families and quality of life.
- 6.81 A total of £50,000 from the Borough Growth Fund plus additional resources is funding up to three months of air pollution monitoring using dedicated equipment as well as undertaking daily odour tours and targeted early morning and evening visits. This will be supplemented by specialist technical and legal advice from a QC.
- 6.82 The monitoring equipment will test for a wide range of gasses and substances including hydrogen sulphide, methane, oxides of nitrogen and air-borne particulates.
- 6.83 The Environment Agency (EA) who are responsible for monitoring the site and regulating the permits held by operators Red Industries is currently carrying out a new, and separate, investigation following pressure from the Council and local MP.
- 6.84 An extra-ordinary Full Council meeting has also been called by councillors so that residents' concerns can be put at the forefront of a debate on the problems being experienced over a wide area surrounding Walleys Quarry.
- 6.85 Cllr. Trevor Johnson, Cabinet member for environment and recycling, said: "Residents have been reporting Walleys Quarry as the source of foul odours for some time now but in recent months the problem has really escalated. Today the Environment Agency has announced that Red Industries has breached their permit in relation to water gathering on the site.
- **6.86** "The Council is taking this action as people are at the end of their tether and want something to be done.
- 6.87 "We're fully aware of the community's strong feelings on this and are doing everything we can to support them and fight on their behalf. We've also set aside a significant sum of money to carry out our own investigation into what's going on. After seeing things reach such a critical point at the weekend, we've been working hard to put the plans in place so we can launch a full investigation immediately."
- Residents are encouraged to continue reporting odours via the Council's website https://bit.ly/3c3gwnb and by contacting the EA on 0800 80 70 60 or e-mailing enquiries_westmids@environment-agency.gov.uk.

Ends

Complaint Data:

6.89 Analysis of the complaint data received has been updated and is included in appendix 15, this shows the number and geographic spread of the complaints, plus the odour intensity reported by the complainant.

7. Conclusion:

- 7.1 There is significant community concern about the impact on health, wellbeing and environment caused by the landfilling operations and related activities.
- 7.2 The scrutiny process provided a structured publicly accessible forum to formally acknowledge the issues of community concern, to hear factual information about the role and responsibilities of the landfill operator; the role and responsibilities of respective agencies and regulators; impact on the communities surrounding the site, current research and understanding of landfill impacts on health, wellbeing and the environment and make recommendations.
- 7.3 The working group findings were that odour was by far the biggest issue and cause for complaint from all parties. The operator has responsibilities to manage the site and any matters which may arise outside of the site. The primary regulator of any odour emanating from the landfill site is the EA through the permit. Although it is acknowledged that there are also regulatory responsibilities placed on Environmental Health, albeit as it is an EA regulated site, there were some limitations to this.
- 7.4 There is an overwhelming level of complaint in relation to odour surrounding the landfill site, it is noted that the source of the odour has not been confirmed by either the EA or Red, however it is noted that there are no significant alternative sources of odour presented to the group.
- 7.5 The group consider that the use of scientific instrumentation should be used for the assessment of odour and specific air pollution limits should be detailed within the EA permit conditions, thereby making it more enforceable.
- 7.6 Odour is adversely affecting a wide community, the nature, duration, extent and exact chemical compounds in the odour has not been established, but it is clear that there is a regular and persistent source of odour, which needs to be addressed.
- 7.7 The working group acknowledge that the principal regulator for off-site highway matters is SCC along with some police responsibilities. The control of vehicle on site and exiting is the responsibility of Red, with the principal regulators being the EA and SCC. It is also acknowledged that Red do not have control of the vehicles or their behaviours but they do have opportunity to influence these behaviours through their business operations.
- 7.8 The findings were that vehicle controls outside of the site were on occasions causing disruption and inconvenience to the surrounding roads and neighbours. It has been demonstrated that the infrastructure is on the landfill site to control mud being tracked onto the highway.
- **7.9** The working group findings were that litter was not one or the primary areas of concern during this scrutiny review.

- **7.10** The working group findings were that there was concern within the general community regarding dust exposure, there was little mention of visible dust but the concern related to PM10 and PM2.5 exposure.
- 7.11 The working group fully understand and appreciates the concerns of people living around the site, however, PHE advice is that there should be no adverse health impacts. It is recommended that further PHE advice is sought following any further pollution monitoring in the vicinity of the site. Any further updates or advice received are to be published on the council's website.
- 7.12 The working group findings were that there was clear evidence of gulls on site, members have seen this for themselves. They appreciate the controls that are in place for this, but these can also impact on the surrounding residents. They consider that it is Red's responsibility to control and manage gulls and pests on site and the principal regulator is the EA. It is noted that the main control measure for gulls is the removal of a food supply at the landfill site, this can be controlled through the use of daily cover at the end of each working day.
- 7.13 The working group findings were that the landfill has changed over the recent time from being a hole in the ground to become more visual as it is filled. It is also noted that the final restoration height was determined through the SCC planning permission and it is going to be considerably higher than it is at present.
- **7.14** Although the overall height of the landfill is predetermined, the visual amenity of the site can be improved particularly through the effective use of daily cover, which would at least minimise the extent of fill material observed from beyond the site boundary.
- 7.15 The working groups findings were that as the height of the landfill is emerging above ground that the tipped material is far more visible. It appears that there is a link between the nature, quantity and quality of the daily cover material and visual amenity. There also appears to be a link between the control of gulls. Attention to this could also potentially control odours.
- **7.16** It is noted that the responsibility for ensuring suitable and sufficient daily cover is that of the operator and that the principal regulator is the EA.
- 7.17 It is considered, although normal practice at landfill for daily cover to be made up of 'fines' (small material that is screened out from a waste material through an industrial process such as a trammel screener), that such material in itself may be a source for odour, and that on occasions the quantity of such material is such that the waste is clearly observed and is acting as a food source to gulls.

8. Recommendations:

Recommendations have been made in respect of each organisation, these are:

8.1 The Environment Agency:

- A. Suspend the permit and therefore prohibit the importation of waste until source of odour has been identified and mitigated;
- B. Seek ongoing commitment from EA to monitoring for odour and other emissions (both by officers and by equipment), to publish its findings in a timely manner and to take any appropriate regulatory action arising from its findings. Seek permanent air pollution equipment monitoring of air pollution (including H2S, methane etc) on site and off site and produce an annual report detailing such findings;
- C. Undertake a review of the site risk assessment based on public concern and complaints and undertakes unannounced site audits/visits to ensure that the site is operating to best available techniques and is fully compliant with its permit;
- D. Review compliance with permit condition number 3.3.1 (odour) to establish whether a breach of this condition and to comply with the legal duties under the PPC Act and EA policies and procedures;
- E. Amend condition number 3.3.1 (odour) wording, to assist with enforceability;
- F. Ascertain that there is no link between meteorological conditions, leachate management and odour release;
- G. Ascertain that there is no link between quality and quantity of daily cover, odour release and gull control;
- H. Future permit variations must take into account this report as material consideration when determining any future applications;
- I. Amend EA policy relating to cover material and use of fines as a cover material.
- J. Lobby Government to change national planning policy in relation to the siting of landfills and/or sensitive developments in close proximity to each other:
- K. Provide an annual report for Newcastle-under-Lyme Borough Councils Economy, Environment & Place Scrutiny to review for life of landfill.

8.2 Borough Council:

- A. Undertake a review and appraisal of EA monitoring data and work with the EA for any future monitoring;
- B. Prepare and undertake air pollution monitoring, the results of which shall be made available on the Councils website;
- C. Request confirmation from the EA as to the odour source(s) and to specify appropriate method of control:
- D. Undertake odour nuisance investigations to establish whether a statutory odour nuisance exists under the provisions of section 79 of the Environmental Protection Act 1990 and to comply with the legal duties under that Act:
- E. Seek legal advice regarding any other legal routes to remedy odour and other issues identified to support the local community, business and residents:
- F. Seek further PHE option following any further pollution monitoring in the vicinity of the site. Any further updates or advice received is to be published on the council's website;

- G. Future planning applications must take into account this report as material consideration of evidence of amenity issues surrounding the site, when determining any future applications within the vicinity of the landfill site;
- H. Lobby government and boroughs MPs regarding national planning policy in relation to the siting of landfills and/or sensitive developments in close proximity to each other;
- I. Provide an annual report for the council's Economy, Environment & Place Scrutiny to review for life of landfill.

8.3 RED:

- A. Publicly acknowledge the extent of public concern relating to the impact on the community from the operation of the landfill;
- B. Pro-actively manage the matters of concern, rather than awaiting enforcement action to remedy public concerns;
- C. Investigate and implement operational procedures to emulate best practice to mitigate odour rather than statutory minimum;
- D. Provide real time on site air pollution monitoring on a publicly accessible forum:
- E. Regularly and routinely provide community engagement and liaison outside of the liaison committee. Providing updates to the surrounding community in relation to activities on site. E.g. when gas drilling or equipment break-downs occur:
- F. Appoint independent community representatives for odour assessment, rather than using on-site staff who are more familiar and potentially desensitised to the odour. Emulate best practice as completed by previous operator Lafarge;
- G. Liaison Committee membership to be extended beyond prescribed minimum to include community liaison groups and public health representatives. A public question section to be added to the standard agenda and for all meetings to be webcast;
- H. Publish Red's environmental management plan, including complaints received, investigation reports and findings;
- I. Enhance the quality and extent of daily cover to prevent and improve odour, wind-blown litter and gull control:
- J. Undertake pro-active litter picking off-site, when necessary;
- K. Communicate to all customers requirements relating to no overnight parking on Cemetery Road;
- L. Accelerate the programme of temporary and permanent capping on site.

8.4 MPs:

- A. Lobby government regarding national planning policy in relation to the siting of landfills and/or sensitive developments in close proximity to each other;
- B. Lobby government regarding EA regulation of site and response times.

8.5 SCC:

- A. Review and tighten the planning condition in relation to the management and effectiveness of the liaison committee eg widen membership, public questions:
- B. Implement parking restrictions on surrounding roads and Cemetery Road lay-by monitoring of such measures;

- C. Seek to repair and safeguard the highways verges along Cemetery Road;
- D. Undertake regular traffic monitoring of the access routes.

8.6 Liaison Committee:

A. Chair to liaise with Red to implement liaison committee recommendations as detailed in 8.3 (G) above.

8.7 Police:

A. To undertake speed monitoring on access routes and monitor status (unstable loads) of vehicles accessing the landfill site.