

# Walleys Quarry Landfill Site - Frequently asked questions

Last updated: June 2021

The information in this document is presented in the form of frequently asked questions (FAQs). The purpose of these FAQs is to provide a response to commonly asked questions regarding the Walleys Quarry Landfill which is regulated by the West Midlands Area of the Environment Agency.

We will update these FAQs as and when we receive additional questions.

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## 1. Landfill regulation

### 1.1 How is Walleys Quarry Landfill site regulated?

The Environment Agency regulates compliance with an environmental permit ("the permit") held by a landfill operator, which is the case for Walleys Quarry Landfill. Within the permit there are conditions controlling the operations that can be carried out on the site. Operations that include waste types and volumes, construction and design of the site infrastructure, emission limits and the location and frequency of environmental monitoring.

The conditions of the permit are designed to prevent pollution and where that is not possible, to minimise impacts to the environment and human health. Appropriate measures are required to be taken by the operator of the permit, which incorporates the application of best available techniques.

We have produced a document that explains what we require landfill operators to do. You can find this guidance on gov.uk using the following link: <https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance>

Please note, the guide brings together key items from several Environment Agency regulatory guides so cannot be read in isolation and it does not replace those regulatory guides.

Due to the size of operations, we consider most landfills to be an 'Installation'. This is a category of regulated facility; it does not change the requirement to hold, and comply with, a permit.

## 1.2 Where can I find information about environmental permits for specific sites?

Copies of the permit for the operators of individual sites contain site specific information. These permits are held on our public register and can be requested from us. Please see question 8 for full details on how to do that.

## 1.3 What are minor breaches of an environmental permit?

A minor breach of a condition within an environmental permit is one we would reasonably expect could have a minor, potential impact on human health, quality of life and the environment. Information about how we score permit breaches is set out in guidance available here:

<https://www.gov.uk/government/publications/assessing-and-scoring-environmental-permit-compliance/assessing-and-scoring-environmental-permit-compliance>

We have formal descriptions of each category within our Compliance Classification Scheme ("CCS") guidance which enables scoring to be consistent.

The 4 categories that our officers use to score permit breaches are:

- CCS 1 – a non-compliance which could have a major impact on human health, quality of life or the environment,
- CCS 2 – a non-compliance which could have a significant impact on human health, quality of life or the environment,
- CCS 3 – a non-compliance which could have a minor impact on human health, quality of life or the environment,
- CCS 4 – a non-compliance which has no potential environmental impact.

We describe a CCS 3 breach as a minor breach and CCS4 is often used for administrative errors.

## 2. Odour

### 2. 1. How do you assess compliance in respect of odour from landfill sites?

The permit includes a condition that requires the operator to prevent odour off site or, where that is not possible, to keep it to a minimum.

The operator will describe how it will achieve this in a document called an Odour Management Plan ("OMP"). The OMP must be kept up to date and each revision is assessed by our officers to ensure it covers all the key areas of operations in relation to odour management.

We assess compliance with the odour condition by:

1. Visiting the area where odour has been reported to assess if the report is correct,
2. attributing the odour to the activities on the site, and
3. going on site to determine if the operator is not doing something that it should be in order to control the odour.

This approach is set out in our national guidance and is supported by cases where the Environment Agency and other regulators have taken enforcement action.

We use an assessment process intended to provide as much information as possible. The 'FIDOR' acronym - Frequency, Intensity, Duration, Offensiveness and Receptor Sensitivity - is a useful reminder of some factors that influence the degree of odour pollution.

Odour intensity describes the strength of the odour as perceived by an individual officer. We record odour intensity using a scale of 0 to 6 as follows:

- 0 – No odour
- 1 – Very faint odour (need to inhale into the wind to smell anything)
- 2 – Faint odour (you can detect an odour when you inhale normally)

- 3 – Distinct odour (there is clearly an odour in the air as you leave your car or enter the area)
- 4 – Strong odour (a bearable odour but strong, you could stay in the area for some time)
- 5 – Very strong odour (unpleasantly strong, you will want to leave the area quickly)
- 6 – Extremely strong odour (likely to cause nausea and a strong need to remove yourself from the odour immediately)

The operator can be found to be in breach of its permit if:

1. odour that is at a level likely to cause pollution outside the site boundary can be substantiated by an officer and found to be due to activities on the site, and
2. the operator is not following all appropriate measures to manage that odour.

However, if an operator is taking appropriate measures (including following its OMP) then no breach of the permit has occurred even if some odour pollution is being caused.

If non-compliance is found the operator may be required to take additional odour control measures that go beyond normal industry practice, reduce the scale of operations or cease operations altogether. This last option must be proportionate to the impact being caused and doesn't automatically mean an immediate end to odour pollution. As such, the Environment Agency will usually try to work closely with the operator so it can find a solution to the pollution that is occurring.

If an officer cannot undertake offsite odour assessments, physically inspect the activities on site to establish the source of the odour, or say what appropriate measures are not being taken then it is not possible to record a breach of the odour condition.

## 2.2 Are odours which come from landfill operations considered pollution?

“Pollution” is defined in Regulation 2 of The Environmental Permitting (England and Wales) Regulations 2016 (other than for a water discharge or groundwater activity) as “any emission as a result of human activity which may (a) be harmful to human health or the quality of the environment, (b) cause offence to a human sense, (c) result in damage to material property, or (d) impair or interfere with amenities and other legitimate uses of the environment.”

If the level of odour has one or more of the specified impacts contained in the definition above, we consider it to be pollution.

## 2.3 How does the Environment Agency regulate in respect of odours coming from a landfill?

Our officers carry out odour checks on and around the site. If they experience what they consider to be odour pollution beyond the site boundary, they must be certain it is coming from the site. They must also determine that the operator is not taking appropriate measures to manage those odours. Impact from odour is scored on the basis of actual impact applying the Compliance Classification Scheme (CCS) guidance: <https://www.gov.uk/government/publications/assessing-and-scoring-environmental-permit-compliance>

Repeated confirmed odour breaches are likely to result in an escalation of enforcement response, particularly when no corrective action plan is proposed by the operator.

We have a range of permitting and enforcement powers that we can use. We require the operator of any site that we regulate to be well run and managed, and not to cause harm to the environment or human health. If we agree an action plan with an operator to address compliance problems, this does not mean we have ruled out taking other enforcement action in the future. Our focus will always be to ensure any issues are resolved as quickly as possible. Any enforcement response we take will be in accordance with our published enforcement and sanctions guidance which you can find on our website at the link below: <https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy>

The operator is informed about any odour reports we receive that relate to the site, but we do not release personal data, so they cannot identify individual reporters. The operator is expected to respond to reports of odour in accordance with its Odour Management Plan (OMP) for the site, and to advise us of any resulting changes to operations.

## 2.4 How do individuals' levels of sensitivity to odour and odour annoyance differ?

Odour sensitivity describes how sensitive a person is to a particular smell. If you are highly sensitive to an odour you can detect it when it is present at lower concentrations in the air than someone who has a low sensitivity. Sensitivity to odour annoyance is slightly different because it describes how easily someone is offended by a particular smell.

How easily annoyed a person is by a smell also varies widely. A lack of annoyance may be because an individual is less sensitive to a smell, for the reasons given above, but it may also be related to where they are and what they are doing when they experience it. This is really important when it comes to the difference between experiencing smells in or around your home, compared to experiencing them as part of your work. You are much more likely to be offended by a smell if it disturbs your home and leisure time than if it impacts on you in your work place or away from home.

Odours can also remind people of past experiences, both good and bad. This is due to how smell is processed in your brain. Because of this, if you associate a smell with a bad memory it may have the effect of upsetting you or annoying you more easily. These differences in sensitivity and annoyance are perfectly normal. It is important for all those involved in managing and reporting odour to be aware of why differences might occur and to be cautious before dismissing other people's points of view.

## 2.5 What are the likely sources of odour at a landfill?

Odour sources from a landfill include leachate and landfill gas created from the decomposition of the waste, newly deposited materials on top of the waste mass, and delivery vehicles carrying waste to the site.

## 2.6 Why does the Environment Agency use “sniff tests” and not monitoring equipment for odour assessments?

Sniff testing is the name given to the assessment of smells using the human nose. Some people are surprised that the human nose is used rather than monitoring equipment. There are several reasons for this.

The odour condition in environmental permits require odour pollution to be “perceived by an authorised officer” which means that it is necessary for an officer to actually smell the odour themselves.

The human nose is still the best means we have for detecting the full range of gases that cause odour. The concentrations at which these odorous gases are present in outdoor (ambient) air is usually very low beyond site boundaries (even if the smell is intense), and few pieces of equipment are sensitive enough to pick up the full range of these gases, when compared to the nose. In addition, sniff testing is physically versatile and allows us to assess odour at most locations without worrying about external power, weather conditions, terrain etc.

Monitoring equipment is used in specific situations where additional data is needed, if access is available. This is particularly useful when specific gases need to be monitored such as the odorous gas hydrogen sulphide.

## 2.7 What measures are in place to minimise the odour at a landfill site?

Typical measures to minimise odour at landfills include the following:

1. Capturing landfill gas and combusting it using a landfill gas engine or flare;
2. keeping the tipping area as small as possible;
3. covering waste as soon as possible;
4. installing capping over the waste when operational areas have been completed;
5. ensuring the landfill gas management system is operating effectively and installed once gas is being produced;
6. keeping leachate levels low; and
7. avoiding over-tipping older areas of waste.

This is not an exhaustive list, there are other measures which can be used on a site by site basis.

### **2.8 Is temporary capping an option to reduce odours and does it work?**

Yes, there are engineering standards which temporary capping is required to meet before it is considered fit for purpose to minimise odour emissions. Temporary capping is installed to allow time for settlement of the waste in each cell, prior to installation of the final gas infrastructure and final profiling. Once this is all complete and the cell is full, the permanent cap is added which has a similar effect to temporary capping, but for a much longer period. More information can be found at paragraph 5.3 below.

### **2.9 What happens if action plans to address odours don't work and the smell persists?**

An action plan, in relation to odour pollution, is a plan developed by the operator and agreed with the Environment Agency which details the specific tasks the operator intends to carry out in order to control the current cause of the odour. It must be specific and include clear responsibilities and deadlines to be acceptable.

Our officers ensure the operator correctly identifies the source of the odour and that the subsequent action plan is appropriate and focused. However, even if an action plan is completed as expected, sometimes a residual odour may persist. In this situation there are a range of enforcement options open to us, beginning with us providing further advice and escalating through to us serving of a regulatory notice and even prosecution. Our enforcement response is very much dependent on the site-specific situation. In making any decision we consider our enforcement and sanctions policy.

## **3. Health**

### **3.1 What is landfill gas?**

Landfill gas is the main emission to air from landfill sites. It is produced by biodegradable waste in the landfill as it breaks down.

Landfill gas composition varies. It contains mostly methane (around 60% to 65% by volume) and carbon dioxide (around 35% to 40% by volume), but also a number of other 'trace' gases present in very small quantities (around 1% in total).

These trace gases can be extremely odorous and can be detected by the human nose at extremely low concentrations. One of these trace gases is hydrogen sulphide which has a smell like rotten eggs. Hydrogen sulphide is relatively straightforward to monitor and is sometimes used as a 'surrogate' for the other gases. Hydrogen sulphide can be smelt at much lower concentrations than the concentration that can typically cause harm. This means that whilst it is possible to sometimes smell hydrogen sulphide in the air around landfill sites, it is heavily diluted with fresh air.

### **3.2 How do you detect if landfill gas is escaping from a landfill?**

Landfill gas, including the trace component hydrogen sulphide, may be emitted from the surfaces of a landfill. We call this a fugitive emission. Operators of landfill sites complete surveys of the site surfaces to monitor for fugitive emissions and should take action when fugitive emissions are detected. Action includes increased gas extraction, improvement and/or repair of capping or installation of additional gas collection wells.

Fugitive emissions of landfill gas will dilute and disperse in the air and move with the wind.

Under still weather conditions landfill gas will still become diluted in the air but is less likely to disperse. As the human nose can detect hydrogen sulphide at very low levels it may still be detectable after being diluted. In areas which are protected from the wind, landfill gas is less likely to disperse quickly and therefore it is more likely to be detected (smelt) by residents.

### **3.3 What are the Environment Agency's sources of advice and guidance on health impacts?**

At sites that we regulate, we have a statutory requirement to protect the environment and safeguard people's health. When we respond to incidents that could potentially lead to risks to human health we seek advice and information from Public Health England (PHE) to inform any decisions we make during our

incident response. We also pass on advice and information from Public Health England to the general public as required.

### 3.4 Which organisations have the roles and responsibilities for guarding public health?

**Public Health England (PHE)** is an executive agency of the Department of Health and Social Care.

It provides a technical support service to Government, government bodies, local authorities and the public. For example:

- Independent, expert advice on health risks.
- Interpretation of monitoring data in relation to health.
- Support for public communications about health risks.

Further information can be found at the link below: <https://www.gov.uk/government/organisations/public-health-england>

**Environmental Health** is a department within a local authority. They have statutory duties within their authority boundary including:

- Protecting and improving the health of the residents.
- Regulating smaller industrial processes.
- Producing local air quality management plans including monitoring and assessment.
- Statutory nuisance – noise, gas, smoke, dust, odour and insects.

Environmental Health Officers ("EHOs") also take advice from Public Health England on the potential health impacts from exposure to environmental pollution.

**The Environment Agency** leads the regulation of the sites it issues permits to and is supported by EHOs from the local authority where necessary.

## 4. Planning permission

### What considerations are included in a decision on planning permission?

When the relevant County Council goes through the process of determining planning permission for a landfill site, it considers concerns around the following points:

- operational life of the site,
- final height and profile (visual) of the landfill,
- phasing of the site,
- hours of operation,
- traffic movements to and from the site, and
- the need for the site.

These aspects do not form part of the determination of an application for an environmental permit by the Environment Agency. As a result, questions on these issues should be raised with the local planning authority.

## 5. Landfill design and construction

### 5.1 Who is responsible for providing the standards for landfill design and construction?

The Landfill Directive provides certain technical standards for landfill sites. More information can be found here: <https://www.gov.uk/government/publications/environmental-permitting-guidance-the-landfill-directive>



The Environment Agency has published landfill technical guidance that we expect operators to follow, in addition to the conditions set in their Environmental Permit. Technical guidance has also been published on waste acceptance, water monitoring, landfill engineering, landfill gas and leachate treatment. More information can be found here: <https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance>

Operators also have to consider our published guidance for particular topics such as noise and odour. See link below: <https://www.gov.uk/government/publications/environmental-permitting-h4-odour-management>

This is called “horizontal guidance” and is common to all industry sectors.

## 5.2 How is the site engineered?

The site should be engineered to ensure that the waste is contained in a low permeability liner to protect groundwater. The permit requires construction proposals to be submitted to us at the Environment Agency for approval, prior to construction. Engineered systems are put in place to control and monitor leachate and landfill gas produced by the decomposition of waste. All of the engineering measures are tested and inspected by an independent Quality Construction Engineer to ensure their integrity. Construction Quality Assurance ("CQA") validation reports are required for each new waste cell and no waste can be deposited until we have confirmed that we are satisfied with the CQA validation report.

## 5.3 What is capping, how is the effectiveness monitored and how long does it last?

The Landfill Directive refers to capping as the ‘top sealing layer’. This layer prevents rainwater flowing into the site through the surface and prevents gas escaping. Capping is either a clay or welded plastic membrane with a topsoil layer. The design of a landfill cap must be submitted to us at the Environment Agency for approval before the construction work commences.

We inspect the works to ensure the construction is completed to the required standards.

Environmental Permits for landfills include conditions requiring the site operator to undertake surveys of the site surfaces for fugitive emissions. If emissions are detected action will be required by the operator. This may include repairs to capping or changes to landfill gas management.

Temporary capping can be used to cover areas for defined periods of time, however permanent capping is required to last for the life of the site and its integrity must be demonstrated as part of the process to surrender a landfill permit.

## 5.4 What waste can go into the landfill and who controls it?

The operators of landfill sites are authorised to accept inert, non-hazardous or hazardous waste. The permit for each landfill site lists the waste types and quantities that are permitted to be accepted. The Environment Agency has published guidance on Waste Acceptance Procedures, which includes criteria wastes have to comply with, based on the leachability of organic and inorganic components. This is explained further in the guidance at the links below:

- <https://www.gov.uk/government/publications/waste-acceptance-at-landfills>
- <https://www.gov.uk/guidance/dispose-of-waste-to-landfill>

Waste producers have a duty of care to ensure their waste is correctly described on the corresponding paperwork. Landfill operators have to follow the waste acceptance procedures, which can include sampling, to check that the waste being accepted at the landfill is the same as its description on the paperwork and complies with the permit.

# 6. Environmental permit

## 6.1 What monitoring is undertaken on a landfill site and why?

A landfill permit requires a number of monitoring points to be installed across the site to monitor emissions to groundwater, surface water and air. The permit sets emission limits for certain substances that are used to prevent or minimise pollution but also to ensure that the landfill process is working correctly.

For example, to protect groundwater, monitoring is undertaken prior to waste being deposited so that the “background” quality can be understood. This information is used to determine appropriate emission limits that will not cause deterioration to the water quality. Another example would be the requirement to monitor the surface gas emissions, to check the integrity of site capping and gas collection infrastructure. Monitoring data is required to be submitted to us and we must be informed immediately if the operator detects any emission limit being breached.

### **6.2 How is landfill gas managed on a landfill site and how do you work out the volume of gas being produced?**

We use a gas model to predict the amount of landfill gas that will be produced, when it will be produced, and at what rate. The model uses the tonnage and types of waste accepted at sites. Gas capture rates are also monitored on the site. The figures produced by the model are reviewed against the actual rates of gas production to ensure adequate gas infrastructure is installed to manage the quantity of gas.

The permit requires the operator to monitor for gas in the ground around the perimeter, to minimise the risk of landfill gas escaping.

The landfill gas is collected from gas wells that pipe the gas into a central Gas Utilisation Plant (GUP). The site has a number of gas engines that are used to generate electricity, which is then sent to the National Grid. On this site there is also an enclosed flare that is used to treat excess gas, which can be operated if the engines are not available, for example when they are being serviced.

The operator has to monitor and report back to us on whether the flares and landfill gas engines are operating within the emission limits in the permit.

### **6.3 What is leachate and how is it managed?**

As rainwater lands on the site it drains through the waste in the landfill and dissolves a range of substances which then collect at the base of the landfill. This is known as leachate and it can contain high levels of contaminants.

The base of the landfill site is designed to collect and extract this leachate. The level of leachate at the base of the site is required to be measured and sampled. The amount of leachate within the landfill is controlled by conditions in the permit and any excess leachate has to be removed. Once the landfill cells are filled to capacity with waste, the operator is required to install an engineered cap over the top of the waste to reduce the amount of rainwater getting in, which limits the production of leachate.

Some landfill sites including Walleys Quarry Landfill have a leachate treatment facility on site. Following treatment, leachate will be either removed from site by tanker or discharged to the local sewer. Some sites do not have a treatment facility and leachate is collected in a storage tank and removed from site by tanker for treatment elsewhere.

### **6.4 Where does the waste going to Walleys Quarry come from?**

Waste being sent to the landfill site is collected in the local area from homes and businesses and sent to waste transfer stations. Here it is separated and what can be recycled is recycled. The residual waste from this process is then sent for recovery by incinerators or disposal at landfill sites. There are no restrictions on waste being accepted from further away than the local area. Government policy for several years has been to discourage disposal of waste by landfill and promote the reduce, reuse and recycling of waste wherever possible.

### **6.5 What happens when the operator of the site stops taking waste?**

Once a landfill site is full and it cannot accept any further waste, it is closed. After this happens the permit still requires the permit holder to complete the monitoring required by the permit until the waste mass is stable and no pollution is occurring. This can take up to 20 years.

To remove the obligation to comply with the requirements of a permit the operator has to apply to the Environment Agency to surrender the permit. To do this it needs to demonstrate, using site monitoring data that the site no longer presents a significant risk of pollution or harm to human health. We would only accept a surrender application when this can be demonstrated.



## 7. Amenity

### 7.1 What measures are in place to control pests?

The permit includes conditions to manage pests. Operators are required to prevent birds feeding on the landfill site. The control measures include covering the waste during, and at the end of, each day to reduce the 'food' available for birds scavenging on the landfill.

Measures to disperse gulls can also include the use of netting, bangers and birds of prey to deter them from the tipping face.

Operators are also required to have site specific control measures in place to stop fly infestations. Contracts for spraying insecticide need to be flexible to allow for changes in treatment frequency, to take account for changes in weather conditions.

### 7.2 What controls are in place to reduce litter and waste falling from vehicles going into the site?

Waste hauliers have a duty of care to ensure waste does not escape their control. If residents observe waste falling from a vehicle on the public highway they should report this to the Environment Agency via our incident hotline (see section 11 – how to contact us). Details of the waste company and vehicle registration number will assist in our investigations.

Significant incidents may be passed to the Police as all vehicles drivers are required to ensure any loads are secure.

### 7.3 What measures are in place to control dust?

The permit includes conditions which require the operator to control dust. Dusty waste should be suitably packaged and covered immediately. Site roads within the landfill should be managed to prevent dust generation, and low traffic speeds on site should be enforced.

### 7.4 What measures are in place to control mud and debris on roads outside of the landfill?

Environmental Permit conditions require landfill operators to follow an environment management system that includes measures to:

- prevent vehicles from carrying mud off site, and
- clean up mud and debris from vehicles.

Methods to prevent mud deposits include:

- effective wheel and body cleaners to remove mud and debris from vehicles before they leave,
- regular maintenance of wheel wash equipment, for example water changes for wet systems,
- supervising wheel washing to make sure the equipment is used correctly,
- keeping main site roads free of mud,
- having a sufficient distance of surfaced site roads between haul roads and wheel wash facilities.

### 7.5 How is traffic around the site regulated?

Traffic movements including parking are considered by the relevant County Council as part of the planning permission for the site. They are not covered by permit conditions.

## 8. Public register

### 8.1 Can I see Environment Agency permits, compliance information, inspection reports and monitoring data?

Yes, as the majority of this information is required to be held on our public register, under the Environmental Permitting (England and Wales) Regulations 2016. Below is a link to those regulations:

<https://www.legislation.gov.uk/ukSI/2016/1154/schedule/27/made>

In addition we have chosen to include Compliance Assessment Report ("CAR") Forms on the public register.

General public register information can be searched for on the Defra Data Services Platform here: <https://environment.data.gov.uk/public-register/view/index>

You can also view our public register by calling 0208 474 7856 to make an appointment or email us at [Enquiries\\_WestMids@environment-agency.gov.uk](mailto:Enquiries_WestMids@environment-agency.gov.uk) to request public register information.

## 9. Other regulatory issues

### 9.1 Can I get a Council Tax reduction as a result of the issues we have been experiencing from Walleys Quarry Landfill?

Council Tax rates are set and managed by your Local Authority. We do not have a role in this and suggest you contact your Local Authority directly.

### 9.2 Who is responsible for enforcing statutory nuisance and issuing an Abatement Notice?

The law places a duty on Local Authorities, in this case Newcastle under Lyme Borough Council, to investigate, and if necessary, to serve an abatement notice on a site that is causing a nuisance.

The permit includes specific conditions that address potential relevant statutory nuisances which allows the Environment Agency to take enforcement action where such conditions are breached. The Council and the Environment Agency work together closely to make sure that the operator is not penalised twice for the same activity.

We remain committed to working in partnership to resolve the issues at this site.

### 9.3 Why hasn't the Walleys Quarry Landfill Site been closed?

We understand that many residents would like Walleys Quarry landfill to be closed.

Closing the site will not stop the degradation of waste in the landfill so will not stop the odour pollution that is being experienced. It would also mean the loss of the service provided by the site as well as the business, and therefore jobs. We are only likely to revoke a permit if we consider the operation poses a serious risk to the environment or human health AND all other ways to reduce the odour have been exhausted. At present, we believe the operator has not yet exhausted all the ways to reduce odour.

In addition, the partially filled site is not currently suitable for permanent closure as the gas, surface water and final restoration contours have not been achieved.

We served an Enforcement Notice requiring the operator to take appropriate action to minimise odour including installation of permanent and temporary capping. We have also required the operator to complete its action plan in respect of better control of fugitive emissions. We will continue to review our position and the response from the operator in accordance with our published enforcement guidance, relevant legislation and the Regulators Code. Currently the operator is responding to our regulatory action requiring it to bring the site back into compliance with the permit.

As a reminder, information on our enforcement and sanctions policy can be found here:

<https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy>

### 9.4 Why has the Environment Agency not temporarily suspended waste acceptance?

On 25 March 2021 we decided not to suspend specific activities under the permit, as we did not believe this would resolve the odour issues. Instead we served an Enforcement Notice requiring the operator to take appropriate action to minimise the odour through the use of capping, to be completed by 30 April 2021. At this time, the operator had already voluntarily stopped accepting waste. The deadline for capping work was required as it had not been completed soon enough and we identified the capping as an appropriate measure to control odour outside the site boundary.

On 01 May 2021, following a visual inspection by our officers, the operator appeared to have completed the work. The operator has provided us with a Construction Quality Assessment (CQA) report which includes an independent assessment of the quality of the capping works. We are currently (June 2021) reviewing the CQA Validation Report and following this review will be able to confirm whether the operator has complied with the Enforcement Notice.

### 9.5 Why is Walleys Quarry Ltd being 'protected'?

Walleys Quarry Ltd is not being protected and we continue to challenge the operator to improve its performance at every step.

Since 2019 we have significantly increased the number of site visits we carry out and the amount of scrutiny the operator is under. We have done so with regard to the Regulators' Code, which requires all regulators to act fairly by supporting the businesses they regulate to comply and grow; whilst protecting the environment and people. More information on the Regulators' Code can be found here:

<https://www.gov.uk/government/publications/regulators-code>

## 10. Environmental data

### 10.1 Where were the hydrogen sulphide levels taken from that were on Twitter?

A letter from Newcastle under Lyme Borough Council to Minister Pow circulating on Twitter in mid May 2021 quoted very high levels of hydrogen sulphide. We understand these levels caused concern within the community. We would like to be clear that the levels referred to are measurements taken inside the landfill gas management system pipes (in-pipe), not in the atmosphere. High levels of landfill gas inside landfills are exactly why we require landfill gas treatment. Our air quality monitoring stations continue to record the actual levels in the atmosphere and will do so until at least the end of August 2021.

### 10.2 What are the current levels of hydrogen sulphide?

We provide weekly updates on the levels of hydrogen sulphide on our Citizen Space website. Please click on this link; <https://consult.environment-agency.gov.uk/west-midlands/walleys-quarry-landfill-sliverdale/>

### 10.3 How many odour reports has there been this week?

We provide weekly updates on the number of odour reports we receive on our Citizen Space website. Please click on this link; <https://consult.environment-agency.gov.uk/west-midlands/walleys-quarry-landfill-sliverdale/>

## 11. How to contact us?

### 11.1 Reporting an environmental incident

To report an environmental incident or concern, please call our free 24 hour pollution incident hotline on:

- Telephone: 0800 80 70 60

or

- Email: [ics@environment-agency.gov.uk](mailto:ics@environment-agency.gov.uk)

Please do not try to contact our officers directly to report an incident - we cannot guarantee that your call will be logged and dealt with in a timely manner unless it is made through the pollution incident hotline. If you would like to receive feedback following your report, please can you confirm this whilst reporting your incident.

## 12. Glossary of technical terms

### *Environment Agency regulation*

**Environmental permit:** A permit consists of a set of conditions which an operator must meet when carrying out their operations to control the risk to human health and the environment. Our officers check that sites are “compliant” with these conditions and record this on a Compliance Assessment Report (CAR) form.

**Pollution:** “Pollution” is defined in Regulation 2 of The Environmental Permitting (England and Wales) Regulations 2016 (other than for a water discharge or groundwater activity) as “any emission as a result of human activity which may (a) be harmful to human health or the quality of the environment, (b) cause offence to a human sense, (c) result in damage to material property, or (d) impair or interfere with amenities and other legitimate uses of the environment.”

**Construction Quality Assurance (CQA):** Written management system which sets out how construction will be managed, checked, tested and recorded to demonstrate that completed works meet required standards and perform as designed.

**Construction Quality Assurance Plan (CQA Plan):** Before work begins to construct a new cell or install landfill infrastructure, the Environment Agency must approve a written document detailing the design of, the materials to be used in, and the Construction Quality Assurance programme (CQA) which will be followed during the works.

**CQA Validation Report:** Report which demonstrates the completed works onsite are fit for purpose. It sets out how engineering works met the agreed construction proposals and is signed off by an independent third party qualified engineer.

**Waste and landfill types:** We permit three different types of landfill, those that accept inert, non-hazardous and hazardous waste. Before waste goes to landfill it must be assessed to determine what type of landfill it can be sent to i.e. inert, non-hazardous or hazardous. This assessment is known as basic characterisation.

**Waste classification:** Waste must be always classified as either non-hazardous or hazardous, using published technical guidance. Inert waste is defined as waste that will not undergo any significant physical, chemical or biological changes e.g. glass.

### *Landfill Infrastructure*

**Liner:** Material used to line the base, sides and top of a landfill to contain the waste and reduce the rate of leachate and gas emissions.

**Tipping area:** Waste is deposited into cells in layers at pre-set area(s) onsite – also called the tipping face or working area.

**Cover:** Material is used to cover the wastes tipped in landfills: daily cover is used on tipping faces at the end of the working day to minimise odour and pests.

**Permanent capping:** When a cell is full a permanent layer of material with low permeability to water and gas, such as a geomembrane or clay, is put on-top of the waste to seal the cell. Restoration soils and landscaping are placed above this layer.

**Temporary capping:** Capping placed to cover waste when tipping is temporarily halted before the cell is completely filled with waste.

**Leachate:** As rainwater percolates through the waste in the landfill, it dissolves a range of substances which then collect at the base of the landfill as a polluted liquid. This is known as leachate and it can contain high levels of contaminants.

**Leachate management system:** A drainage layer and pipework system at the bottom of a landfill cell collects leachate. This is pumped out of the cell and treated at an onsite leachate treatment plant before being discharged to a watercourse, under the conditions of the permit. Leachate can also be sent off site by tanker or discharged into foul sewer drains for treatment offsite.

**Landfill gas:** Gases produced from the landfilled waste consist mainly of methane and carbon dioxide. It also contains varying amounts of nitrogen and oxygen (from the air) and small amounts of other trace components. The gases produced will vary with types of waste and age of the landfill.

**Landfill gas management system:** Gas produced by the decomposing waste is actively removed by a pipework system embedded in the landfill. It is then sent to gas engines to produce electricity or burnt off via a flare.

**Flare:** Used to burn landfill gas extracted from the landfill cells at high temperatures.