

<u>Grange Landfill Site, Rotherham (Dropping Well Tip) –</u> <u>Frequently Asked Questions (FAQs)</u>

What's new in this issue of the FAQs? (December 2021)

This FAQ contains all of the questions and answers that we have published since 2018 in relation the regulation of the permit and activities on site.

This update includes the following (identified as [NEW]):

- conclusion of the South Yorkshire Fire & Rescue Service investigation into the fire in April 2021 at MHH site in Sheffield;
- the reinstatement of borehole BH05;
- the Agency initiated variation.

The questions are grouped together in the year of original publication, as they are often related to activities on site at that time.

To assist you in finding the information you need, the Index below sorts the questions according to specific topics and contains links which will take the reader directly to the question within the document.

Please note the dates next to the questions indicates the date of publication in the FAQs.



INDEX

NEW

Update on Agency Initiated Variation

Will Borehole BH05 be re-instated?

Conclusion of South Yorkshire Fire & Rescue Service (SYFRS) investigation into the fire (April 2021) at MHH site on Carlisle Street, Sheffield.

Environment Agency Process

[July 2021] What is the nature of the waste that is going to be dumped near to a large residential area?

[Dec 2020] Does the Environment Agency propose to vary the Environmental Permit in 2021?

[Jul 2018] Why has a permit been granted for this closed landfill site?

[Jul 2018] I don't agree with this site being re-opened, why were we not given a say?

[Jul 2018] How do you know a person is fit to operate a site?

[Jul 2018] What do we consider in making our decision?

[Jul 2018] What sort of things do you take into account when you determine a permit?

[Jul 2018] How will you keep us informed in the future?



Grange Landfill Site / Droppingwell Tip

[Dec 2020] What further preparatory works are to be undertaken on site before waste for disposal can be authorised on site.

[Jan 2020] Why has work on the site suddenly stopped?

[May 2019] What is the predicted timescale for the site to be completed?

[Jul 2018] How can re-opening this landfill site be safe?

[Jul 2018] What types of waste will be able to be tipped at this site?

[Jul 2018] Why has the fencing been put up recently?

[Jul 2018] What about the reports that trees have been cut down or are in danger of harm?

[Jul 2018] Won't local roads and traffic be affected by the vehicles to the site?

Regulating the permit conditions

[Sept] Why are MHH being allowed to begin tipping before they have been given the official go-ahead?

[Sept] Why are the EA facilitating this by coming up with another exemption that allows even more pre commencement engineering works outside of the U1 exemption he already has which means he can build "containment bunds" around the site?

[Sept] Why does he need "bunds" with a base 15m wide that will allow him the ability to bring in an estimated 30 to 60 thousand tonnes depending on height of tipping all with the permission of the EA?

[Sept] Why are is the EA permitting these bunds - what is the reason?

[Sept] Can you explain how MHH is going to comply with the planning conditions of the permit which state the heights for phase 1 and phase 2 must be level? Given that phase 1 has been overtipped and is 5 metres higher than it should be?



[July 2021] Will quarterly inspections be re-instated?

[July 2021] Why is the site not yet fully secure? And will it be, before operations are permitted?

[July 2021] How will you monitor the amount and type of waste being imported for construction under the U1 exemption?

[July 2021] There seems to be more waste imported than permitted under the U1 exemption. How are you monitoring this?

[July 2021] Can you confirm whether there is a limit on the amount of time the Environment Agency will allow the operator to fulfil the pre-operational condition in relation to Financial Provision?

[July 2021] Can you confirm whether there is a limit on the amount of time the Environment Agency will allow the operator to fulfil the pre-operational condition in relation to validation of the engineering works?

[Dec 2020] What frequency will the Environment Agency undertake routine site inspections?

[May 2019] How will the activities on site be regulated?

[May 2019] The permit makes reference to the operator using appropriate measures, what are 'appropriate measures'?

[Sep 2019] What conditions have you placed with the operator when they are removing the vegetation as some of this has been growing for 20 years + and will have deep roots.

[Sep 2019] Who have the operator put forward as the CQA Engineer and CQA Inspector?

[Sep 2019] What checks have been carried out on these individuals / companies to ensure they have the necessary qualifications / experience

[Sep 2019] How will you be ensuring that the mechanisms of the environmental permit are fulfilled by the operator?

[Sep 2019] How will you ensure that the operator fulfils their requirements to monitor the environment? Within what time frames will they be expected to complete this?



[Sep 2019] At what date will the operator be required to restore and surrender the site?

[Sep] What form of investigations have you carried out on phase one of the existing tip to ensure that it is structurally sound and will not collapse?

[Sep 2019] If phase one of the existing tip was to collapse what are your contingency plans to stop the toxic contents spreading into the surrounding areas?

[Sep 2019] How do you plan to protect the children that play football at Millmoor Juniors Football club from the particles that will be in the air mere yards from the tip site.

[Jul 2018] What conditions have been put in place to protect the environment and improve the site?

[Jul 2018] Why won't the operator just do what they want on site?

[Jul 2018] When will the landfill start to accept waste?

Boreholes

[July 2021] Can you confirm what will happen if the borehole is not reinstated?

[Dec 2020] How many boreholes are on site?

[Dec 2020] If BH05 has been out of commission since October 2019, is the EA getting all the sampling data it needs to properly assess groundwater?

[Dec 2020] Is a proper functioning BH05 a requirement of the site's permitting conditions?

[Dec 2020] What actions have been taken to reinstate BH05? Will it be reinstated?



Complaints and Investigations

[July 2021] There is a liquid leachate coming from phase 1. What are you doing about it?

[July 2021] There is a constant nuisance of dust affecting residents. What are you doing to investigate this, and ensure that the operator is fulfilling their obligations under the Permit and EMS to ensure that dust suppression measures are in place.

[July 2021] During the afternoon of 1 April 2021, there was a fire at the MHH
Contracting depot on Carlisle Street, Sheffield. Given that it is clear that MHH
Contracting cannot safely manage their current operations, and therefore clear that they cannot manage future operations at the site in Rotherham, do you still consider them to be suitable operators for the disposal over waste?

[July 2021] As the site operated by Grange Landfill, is the opening of a pre-existing landfill site, what would the effects of a similar incident (to the Sheffield fire) be to that waste?

[July 2021] If a fire was to occur would the operator have the financial capacity to pay compensation to the residents in the vicinity?

[July 2021] Considering there is anecdotal evidence of heavy metals and radioactive material being dumped at the site by the previous operators, again, what would the effects of a similar incident be?

[May 2020] What is the current status of the complaints regarding alleged irregularities in the environmental monitoring data submitted by the site operator?



2021 Return to Index

[NEW] Conclusion of South Yorkshire Fire & Rescue Service (SYFRS) investigation into the fire (April 2021) at MHH site on Carlisle Street, Sheffield.

Following the investigation by SYFRS their findings conclude that the fire was accidental and was a result of accumulation of stacked mixed waste which had been in position for a number of years. The Environment Agency has accepted the SYFRS report and is not conducting any further investigation into the cause of the fire.

We will continue to work with the operator to ensure the site is compliant and operates within the permit conditions and regulatory framework.

[NEW] Will Borehole BH05 be re-instated?

We have informed RMBC that reinstatement of BH05 would be our preference. We understand that the operator has now requested a grant of access on to the land owned by RMBC so that BH05 can be reinstated on the eastern boundary of the site.

[NEW] Agency Initiated Variation

As previously reported the Environment Agency will shortly undertake an Environment Agency instigated variation to the current permit on Grange Landfill. The requirement of the variation is purely from an administrative prospective, such as amending registered office address and referencing financial provision agreements. This variation will not be authorising an amendment to the current activities already authorised, nor any change in environmental monitoring.

[Sept] Why are MHH being allowed to begin tipping before they have been given the official go-ahead?

The waste materials currently being accepted on site are for the construction of the external bunds that form part of the geological barrier. This is a requirement for all landfills under the Landfill Directive.

[Sept] Why are the EA facilitating this by coming up with another exemption that allows even more pre commencement engineering works outside of the U1 exemption he already has which means he can build "containment bunds" around the site?

The acceptance of waste for the construction of the external bunds does not fall within the remit of the U1 exemption, but is authorised activity specified within Table S1.2 of the permit (R5 – Recycling/reclamation of other inorganic material). The engineered bunds must be in place and its construction approved by us prior to any waste being accepted at the site for disposal. Construction of the engineered bund is subject to a detailed specification and Construction Quality Assurance plan. This is standard procedure for the development of any new landfill phase. In accordance with Condition 2.5.1 of the permit, landfill infrastructure construction proposals were submitted to the Environment Agency for approval, subsequent approval of the engineering proposals were confirmed on the 20/12/2018. Condition 2.5.2 of the permit specifies that construction of landfill infrastructure shall take place only in accordance with the approved construction proposals.



[Sept] Why does he need "bunds" with a base 15m wide that will allow him the ability to bring in an estimated 30 to 60 thousand tonnes depending on height of tipping all with the permission of the EA?

The construction of the bund is subject to a detailed specification and Construction Quality Assurance plan. This is standard procedure for the development of any new landfill phase. The containment bund will be 3 m high with a crest width of 2m and side slopes set at a 1:3 gradient which determines the bund's basal width.

[Sept] Why are is the EA permitting these bunds - what is the reason? A geological barrier is a fundamental requirement for all landfills. The geological barrier is

A geological barrier is a fundamental requirement for all landfills. The geological barrier is necessary to provide sufficient attenuation to prevent a potential risk to soil and groundwater.

[Sept] Can you explain how MHH is going to comply with the planning conditions of the permit which state the heights for phase 1 and phase 2 must be level? Given that phase 1 has been overtipped and is 5 metres higher than it should be?

Although reference to approved final post settlement contours for the restoration of landfill is made within Section 2.2.5.1 of the Environmental Setting & Installation Design (Report 15748/1) dated December 2015 and illustrated on Drawing No 15748/05, the Environment Agency does not regulate the permitted development heights that are stipulated within the planning consent, this is for Rotherham Metropolitan Borough Council to enforce.

The Environment Agency are aware of the issues regarding the height of Phase 1 and that final contours between Phase 1 and Phase 2 may differ to those proposed within the aforementioned report.

[July] Will quarterly inspections be re-instated?

We have now resumed our routine site inspections on quarterly basis as agreed with Rotherham MBC in 2019 and we have visited the site twice so far in 2021.

It is important to be aware that there are other regulatory activities that the Environment Agency undertakes for each site in addition to our physical site inspections.

We need to be flexible in our regulatory approach to ensure that focus is placed on those sites that pose the greatest risk to the environment. The annual subsistence charges paid by permit holders are based upon the costs to the Environment Agency of providing an effective level of regulation of those activities. Consequently, our regulatory activities need to be consistent with the charges it receives from permit holders and should reflect the site's performance.



[July] Why is the site not yet fully secure? And will it be, before operations are permitted?

The current permit at Grange Landfill site does not contain any specific condition relating to security, this aspect of site operations is controlled through the site Environmental Management System (EMS). Primarily we require security measures be installed to prohibit unauthorised public access as far as practicable to the operational areas of the site and to prevent unauthorised vehicles gaining access.

Operational areas include: areas of the installation where active tipping is taking place; leachate and gas plant and any area where landfill gas or leachate extraction systems are exposed and could be subject to deliberate damage.

The EMS for this site states: The site entrance and compound will be secured with 2m high palisade fencing and lockable gates. The remainder of the fencing around the site is currently chain link, which will be eventually replaced with stock proof fencing. Following discussions with the operator in 2018, security fencing was installed around the site. Unfortunately damage was caused to the fencing by unknown individuals. Repairs were then undertaken by the operator but damage was caused again. As a temporary measure until the site becomes fully operational the operator constructed security bunds to limit access to the site.

We raised the issue of the damaged fencing with the operator on 23 March 2021. They acknowledged that the fencing needs to be in place and they are planning to do this when they have a full time presence on site actually working on Grange Landfill. The bund is currently fulfilling the purpose of stopping any unauthorised vehicles entering the site.

[July] How will you monitor the amount and type of waste being imported for construction under the U1 exemption?

We have undertaken a number of site inspections whilst the preparatory works to construct the site compound and access road have being undertaken. There is no evidence to show that any of the wastes accepted on site as part of these preparatory works are not suitable in accordance with the U1 Exemption.

We cannot inspect every load that is accepted on the site. However mechanisms are in place that require waste producers, waste carriers and operators to take all reasonable steps to ensure the safe management of waste to protect human health and the environment. Not only is the operator required to comply with the waste acceptance requirements specified within the permit, under the Duty of Care (DoC) requirement they must also keep all records of waste movements and ensure that the waste is accurately described.

The waste streams authorised by the U1 exemption for use in construction are restricted to ensure the waste is suitable; records kept in accordance with the DoC requirement must meet with these waste stream restrictions. No issues were raised during our site inspections carried out on the 23 March & 21 April 2021 with respect to waste currently being accepted as part of the U1 activities.



[July] There seems to be more waste imported than permitted under the U1 exemption. How are you monitoring this?

Waste can be imported to the site for 2 purposes at the moment. Firstly, up to 5000 tonnes of material can be used under the U1 exemption to construct the haul road and a base for the compound.

Secondly, waste can be imported under the conditions of the environmental permit in order to engineer the containment bund. It is for this reason that residents will have seen more material being imported.

We have committed to carrying out regular site inspections to assess compliance with the conditions of the permit and during the site inspection on 11 June we checked, and were satisfied that, the material being imported was suitable.

At the previous site inspection on 23 March we checked compliance with the terms of the U1 exemption. At that time we were satisfied that the material was suitable and we reminded the Operator of the tonnage limit that applies.

[July] Can you confirm what will happen if the borehole is not reinstated?

The reinstatement of BH05 is preferable but not essential to the monitoring of any impacts from the landfill site. If it were in place it would give a fuller picture to demonstrate that the landfill is performing as designed and to provide reassurance that site is not having a discernible impact upon groundwater, by reference to a pre-established baseline readings.

If no agreement can be made regarding reinstatement of BH05, then any potential crossgradient impact on the groundwater from Phase 1 cannot be determined, which was one of the primary reason for its installation, along with determining baseline conditions.

However, failure to reinstate BH05 is not critical in terms of permit regulation as there remains sufficient up-gradient and down gradient groundwater monitoring boreholes on site to assess any potential groundwater impact.

[July] Can you confirm whether there is a limit on the amount of time the Environment Agency will allow the operator to fulfil the pre-operational condition in relation to Financial Provision?

We can confirm that as of 4 March 2021 financial provision was secured and in place in accordance with Condition 1.21 of the permit. The agreed financial provision is set aside by the operator to cover their costs of meeting all the obligations of the permit including during the aftercare period. Financial provision does not cover the day to day costs of operating the site or the costs of installing operational infrastructure. There are specific circumstances that allows us to call upon the fund to undertake essential pollution prevent works, although funds cannot be used to fulfil planning permission requirements.



[July] Can you confirm whether there is a limit on the amount of time the Environment Agency will allow the operator to fulfil the pre-operational condition in relation to validation of the engineering works?

There is no limit on the time given to complete any pre-operational condition specified within the permit. As the term pre-operational would suggest, the specified activities, namely deposit onto land for disposal cannot commence until all pre-operational work has been completed.

[July] There is a liquid leachate coming from phase 1. What are you doing about it?

We have received allegations regarding this along with several photographs. The images seemed to suggest that the oily residue is a result of a common phenomenon caused by iron bacteria within the soils naturally producing hydrocarbon that creates an oily-looking film. This can be seen as a sheen where it comes into contact with water and can also lead to slimy rust-coloured iron bacteria deposits.

We considered this was likely to be the cause rather than leaching from Phase 1. To establish this, we undertook a site inspection on the 21 April 2021 and confirmed this to be the case.

[July] There is a constant nuisance of dust affecting residents. What are you doing to investigate this, and ensure that the operator is fulfilling their obligations under the Permit and EMS to ensure that dust suppression measures are in place.

During the site inspection on 11 June 2021, we reminded the operator of the speed restrictions the site have within their Environmental Management System, as a measure to reduce levels of dust. There is now a bowser on site, to be used to reduce the amount of dust on site. There is also a wheel wash, which will soon be operational. This will be used to prevent deposits of mud and dust on the roads outside of the site.

Once the site is operational, the working area will also be kept to a minimum, in order to reduce levels of dust.

Future site visits will include checks for any issues relating to dust or mud. As an organisation we have committed to inspecting the site on at least a quarterly basis until further notice.

[July] What is the nature of the waste that is going to be dumped near to a large residential area?

Grange Landfill is restricted to inert waste which is defined as "waste that does not undergo any significant physical, chemical or biological transformation". Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater.



[July] As the site operated by Grange Landfill, is the opening of a pre-existing landfill site, what would the effects of a similar incident (to the Sheffield fire) be to that waste?

As the site is only permitted to accept inert waste on site any risk of fire is minimal. Also all waste deposits within Phase 2 of the landfill will be physically separated from those wastes deposited within Phase 1.

[July] Considering there is anecdotal evidence of heavy metals and radioactive material being dumped at the site by the previous operators, again, what would the effects of a similar incident be?

There is no evidence that radioactive material has been previously deposited within Phase 1 of the landfill. The site has never been authorised/permitted to accept radioactive waste, and a strict regulatory regime applies to the movements of such material. As stated above, as waste deposits within Phase 2 will be physically separated from those in Phase 1, then any risk from fire on site is minimal.

[July] During the afternoon of 1 April 2021, there was a fire at the MHH Contracting depot on Carlisle Street, Sheffield. Given that it is clear that MHH Contracting cannot safely manage their current operations, and therefore clear that they cannot manage future operations at the site in Rotherham, do you still consider them to be suitable operators for the disposal over waste?

South Yorkshire Fire and Rescue Service have completed their investigation into the fire and we have included a summary of their findings here.

With respect to Grange Landfill Limited, we have no immediate concerns regarding their suitability as an operator.

[July] If a fire was to occur would the operator have the financial capacity to pay compensation to the residents in the vicinity?

This aspect is not within the remit of the Environment Agency and we therefore have no comment to make on this point.



2020

[Jan] Why has work on the site suddenly stopped?

Prior to accepting waste for deposit, preparatory works need to be completed on site, such as a haul road and a secure compound. These preparatory activities were underway in September 2019, but had to be temporarily stopped due to poor weather conditions; the ground was too waterlogged to carry out the works safely. The preparatory work was due to recommence in early spring 2020 when the weather improved, however, due to the unprecedented consequences of the Covid 19 emergency, further delays were incurred. These works have now recommenced.

[May] What is the current status of the complaints regarding alleged irregularities in the environmental monitoring data submitted by the site operator?

We received multiple complaints alleging irregularities in the environmental monitoring data submitted by the site operator. We take all complaints extremely seriously and we have thoroughly investigated the complaints. Please read our conclusions here.

[May] What is the timeline for the investigation into the complaints, including when it is anticipated to conclude?

Whilst the complaints are being investigated we are unable to specify a timeline for the investigation. However you can be assured that we shall carry out a full and transparent investigation into the complaints.

[May] Will the findings of the investigation be made public?

To avoid prejudicing any potential legal proceedings we are unable to make public any details of the investigation until it is concluded.

[Dec] What frequency will the Environment Agency undertake routine site inspections?

In December 2019 we agreed with Rotherham MBC (RMBC) that we will seek to undertake routine site inspections on quarterly basis until further notice. However with the restriction that the Coronavirus epidemic placed upon us, we had to prioritise ruthlessly what we do and ensure we all make the right choices about where and how to work. Therefore our environmental focus was on preventing serious harm to the environment. That means, for example, continuing as far as possible to regulate high risk and high impact industries; responding to major pollution incidents; and fulfilling our legal duties. As Grange Landfill is considered a low risk site, as it was not yet operational, we were unable to commit to undertaking inspections on quarterly basis.

Since March 2021 we have resumed more regular site inspections and copies of inspection reports (CAR forms) are now published on our Information Page. We expect quarterly inspections will continue, however this will be subject to whether any further government restrictions are imposed.



[Dec] What further preparatory works are to be undertaken on site before waste for disposal can be authorised on site.

Preparatory works are continuing on site. Currently work is on-going to construct an attenuation pond on the western side of the site. Basically this attenuation pond is an important element in the management of surface water and forms part of the solution to manage storm-water and surface water runoff. An additional attention pond will also be constructed on eastern boundary of the site, albeit smaller in size to one constructed on the western side of the site. These site preparation works will be ongoing and the operator does not have to provide a schedule of when they will be completed.

Construction of a geological barrier will need to be installed at the base of each phased cell. The geological barrier is a lining system constructed to the highest engineering standards to provide short, medium and long term environmental protection. The main components of the lining system proposed is a clay liner. This is normally constructed from reworked clay materials, either naturally occurring clay materials or weathered and/or processed mudrocks. Testing is underway to determine whether the natural in-situ geology meets the required specification equivalent to 1m thick with a permeability of less than or equal to 1x10⁻⁷m/s consistently across the whole base of the site. If not then an artificial geological barrier shall be installed using suitable clays to meet the above specification. The operator will give us notice when they are to construct the lining system so we can inspect the works. The construction of the barrier will also be continuously overseen by an independent Construction Quality Assurance (CQA) engineer who will provide a report back to the Environment Agency.

[Dec] How many boreholes are on site?

In total 5 groundwater monitoring boreholes remain in place around the site. (BH01, BH02, BH03, BH04 & BHA.)

[Dec] If BH05 has been out of commission since October 2019, is the EA getting all the sampling data it needs to properly assess groundwater?

It is beneficial that we have BH05 reinstated to demonstrate that the landfill is performing as designed and to provide reassurance that site is not having a discernible impact upon groundwater, by reference to a pre-established baseline readings.

[Dec] What actions have been taken to reinstate BH05? Will it be reinstated?

We have informed RMBC that reinstatement of BH05 would be our preference. We await the operator to formally request RMBC if groundwater borehole (BH05) could be reinstated on the eastern boundary of the site, as grant of access on to the land owned by RMBC would be required. Unfortunately until a formal request has been submitted and a decision made on this request by RMBC, we cannot say whether this groundwater monitoring borehole will be replaced.



[Dec] Is a proper functioning BH05 a requirement of the site's permitting conditions?

Reinstatement of BH05 will ensure there is an enclosing envelope around the site footprint to enable accurate determination of any potential impact upon groundwater from the site; also to enable us to identify when a site no longer presents a significant risk of pollution or harm to human health to enable an application for a certificate of completion to be made, and thereby formally end the licensing or permitting process and the legal duty to monitor.

Ultimately if no agreement can be made regarding reinstatement of BH05, then any potential cross-gradient impact on the groundwater from Phase 1 cannot be determined, which was one of the primary reason for its installation, along with determining baseline conditions. However, as sufficient information is available to determine the baseline conditions before activities on site have commenced; and there remains sufficient up-gradient and down gradient groundwater monitoring boreholes on site to assess any potential groundwater impact, then failure to reinstate BH05 is not critical in terms of permit regulation.

[Dec] What was the outcome from the enforcement investigation regarding alleged irregularities in the environmental monitoring data submitted by the site operator?

Upon reviewing correspondence obtained from a number of sources and discussions held with the operator we can conclude that BH05 was not destroyed in April 2017 as alleged, although we are aware that damage to the head works was caused to BH03, BH04 and BH05 in 2017. Work was undertaken to repair the damage to BH03, BH04 & BH05, following which the operator has continued to obtain samples from these boreholes, other than BH05, which became no longer serviceable from November 2019 onwards.

We are certain that groundworks were undertaken in the area around BH05 by a third party contractor in April 2019. Millmoor Juniors football club were instructed to repair the track by RMBC, after the club had used it to access land they lease from RMBC. There was no specific request as part of these groundworks to remove BH05.

On 30 January 2020 we received from the Operator the Annual Monitoring Report – 2019 for the Site (Report number 15748/13). This annual report is required to be submitted in accordance with Condition 4.2.2 of the permit. Sections 3.6 & 3.14 of the report make reference that BH05 was vandalised and that samples were unable to be taken in November 2019.

We challenged the operator's ability to locate and obtain groundwater samples after these groundworks had been undertaken. Without definitive evidence it is not possible for us to dispute the operator's version of events that BH05 was still serviceable up until October 2019 after which time it became no longer serviceable.

Therefore we found no evidence to suggest that the site operator had falsely submitted sampling data from the borehole once it had fallen out of service.



[Dec] Does the Environment Agency propose to vary the Environmental Permit in 2021?

As previously reported the Environment Agency will shortly undertake an Environment Agency instigated variation to the current permit on Grange Landfill. The requirement of the variation is purely from an administrative prospective, such as amending registered office address and referencing financial provision agreements. This variation will not be authorising an amendment to the current activities already authorised, nor any change in environmental monitoring.



2019

[May] What is the predicted timescale for the site to be completed?

The activity involves the deposit of 661,000m³ of inert waste at a rate of 150,000 tonnes/83,333m³ per year. Based upon these calculations it estimated that it will take approximately 8 years to complete. However, this timescale is purely dependent on the volume of inert waste being available. As there is significant variation in the availability of inert waste of being available at any one time in all likelihood the proposed timescale to complete are considered very conservative.

[May] How will the activities on site be regulated?

The activities on site will be regulated by the Environment Agency in a number of ways: Inspection - where an officer visits the site. Inspections are usually planned, but can be unannounced. Environment Agency staff undertake a compliance visit, which is an assessment of the activities being undertaken on site in line with the environmental permit. Compliance Assessment - The Environment Agency undertake compliance assessments which are desk based reviews of whether the site is complying with permit requirements, for example reviewing submitted environmental monitoring data and waste returns data. The Environment Agency may take action if they suspect that a breach of permit conditions has occurred. Our actions might include:

- · giving advice and guidance,
- · amend permit conditions,
- serving an enforcement notice, which will state what have to be done to bring activities back into compliance and by when,
- serving a suspension notice if there's a risk of pollution,
- prosecuting if we believe it's in the public interest.

[May] The permit makes reference to the operator using appropriate measures, what are 'appropriate measures'?

Some of the conditions specified within the permit require the operator to take **appropriate measures** in order to comply with them. European directives use various terms to describe what type of measures should be taken to prevent pollution such as "all appropriate preventative measures", "reasonable", "best available" and "best practicable". These can all be interpreted slightly differently but have the same general meaning that we call appropriate measures.

It is important that the operator takes all reasonable measures to prevent or minimise pollution. Appropriate measures will be based on those described in industry or sector guidance, good practice and an assessment of the costs and benefits. As a minimum we expect operators to implement the measures described in industry or sector guidance, or specified in the management system providing these same level of protection.



[Sep] What form of investigations have you carried out on phase one of the existing tip to ensure that it is structurally sound and will not collapse?

A stability risk assessment was carried out in 2016 which considered the basal sub-grade, the global stability of the basal sub-grade and landfill side slopes, and the stability of the restoration layer.

The assessment concludes that the Over Design Factors are greater than 1.00, even with a high leachate level. Therefore we consider the landfill design to be safe.

With regards to the stability of the restoration layer the assessment has considered potential differential settlement between Phase 1 and Phase 2, due to variations in compressibility between the existing waste which has been in place for many years and the new waste. The assessment concludes that the tensile strains in the restoration layer are less than 3%, even with very conservative differences in compressibility. Again we consider the design to be safe.

[Sep] If phase one of the existing tip was to collapse what are your contingency plans to stop the toxic contents spreading into the surrounding areas?

We have no contingency plans in place for such a scenario as we are satisfied that the design proposals are safe.

[Sep] What conditions have you placed with the operator when they are removing the vegetation as some of this has been growing for 20 years + and will have deep roots.

No details have been provided on the methodology with regards to removal of the vegetative cover on the northern flank of Phase 1. Albeit we will be seeking reassurance from the operator that all precautions are taken whilst undertaking this activity. We will not be requiring removal of established deep roots, rather these trees and shrubs be cut down to the base.

Throughout the construction phase to regularise the slope gradients as far as practical on Phase 1, which may involve the placement of additional subgrade against the flank, these work shall be supervised under Construction Quality Assurance (CQA).

[Sep] Who have the operator put forward as the CQA Engineer and CQA Inspector?

To date the Operator have not appointed a CQA Engineer or CQA Inspector.

[Sep] What checks have been carried out on these individuals / companies to ensure they have the necessary qualifications / experience

Before any of the infrastructure works commence we require the Operator to provide the CV for their nominated CQA Engineer and CQA Inspector. We require that CQA Personnel should have the minimum qualifications and experience as specified in our guidance - LFE 4 Earthworks on Landfill Sites.



[Sep] How will you be ensuring that the mechanisms of the environmental permit are fulfilled by the operator?

See 'How will the activities on site be regulated?' above.

[Sep] How will you ensure that the operator fulfils their requirements to monitor the environment? Within what time frames will they be expected to complete this?

The permit contains conditions to provide assurance that the landfill activities do not cause harm to human health or the environment. The permit requires the operator to undertake regular monitoring from groundwater monitoring boreholes that have been installed external to the site, in addition to the surface water and landfill gas monitoring undertaken on site. This monitoring provides data about any change to the local environment and the data is used to determine the surrender of the permit.

[Sep] At what date will the operator be required to restore and surrender the site?

This is purely dependant on the volume of waste accepted per year, this is explained in more detail above in "What is the predicted timescale for the site to be completed?".

A permit remains in force until it is surrendered or revoked. The permit would not be surrendered, unless an application to surrender the permit was received from the operator and the Environment Agency considered that the site no longer poses a risk to the environment or human health. This surrender process is robust and can only be considered once waste activities have ceased and the site restored in accordance with the permit requirements.

[Sep] How do you plan to protect the children that play football at Millmoor Juniors Football club from the particles that will be in the air mere yards from the tip site.

The onus is on the permit operator to comply with their permit. Our officers will closely monitor activities at the site. If the permit holder fails to comply then we can take regulatory action in accordance with our Enforcement and Sanctions Policy, providing we have robust evidence, gathered by an appropriate officer to show that the conditions have been breached. There are also a number of operational management procedures referred to in the permit, which the operator must abide by.

These operational management procedures are regularly reviewed to ensure they are fit for purpose. Where we consider that additional safeguards are required we can initiate a permit variation to include them. Permit reviews are completed periodically by ourselves, this is typically, but not always every 6 years for operational sites.



2018

[Jul] Why has a permit been granted for this closed landfill site?

When landfilling operations ceased at the site in the 1990's, the existing planning permission and environmental permit which allowed landfilling remained in place.

The Environment Agency were therefore legally obliged to consider any proposal to resume landfilling. We must have regard to due process and legislation when considering applications made to us and providing a business can prove that a site meets all the legal requirements, including environmental, technological and health requirements, then we are legally obliged to issue a permit.

We had no grounds to refuse the permit holder's (Grange Landfill Ltd) application to resume landfilling. We have, however, ensured that the permit has been updated to require that the new landfilling is governed by modern regulatory standards to protect both the environment and the local community.

[Jul] I don't agree with this site being re-opened, why were we not given a say?

We recognise that the resumption of landfilling will be unwelcome in the local community but we must have regard to due process and legislation and we can only consider the proposal on the merits of the supporting operating procedures and environmental risk assessments required by the legislation. In this case, we had no cause or grounds to refuse the operating company's application or to subsequently revoke the permit.

We recognise the concerns that the local community were not consulted on the variation application. We consult the public on certain applications for waste operations but not all. The arrangements for consultations are explained in our Public Participation Statement which can be found on gov.uk. This particular application did not require us to formally consult, however we accept that it may have been helpful to speak to Rotherham Metropolitan Borough Council ahead of the variation.

When a consultation is carried out in regard to an environmental permit it is to understand the risk to the environment and human health of the activity, not about where the site is (as that is subject to local authority planning decisions) or who is doing the work (providing they are assessed as being fit and proper). We issue a permit unless evidence shows that there is a risk to the environment or human health.

The evidence available at the time the permit was determined was sufficient for our specialists to understand and consider that risk and include the necessary conditions that the operator must follow. If any relevant evidence is found to the contrary then there could be a further variation to the permit to ensure mitigation of that risk. However it is unlikely that in this instance it would result in a situation where the permit could be revoked.



[Jul] How do you know a person is fit to operate a site?

The Environmental Permitting Regulations (EPR) clearly set out the criteria which we can take into account when considering someone's suitability at the determination stage as a Fit and Proper Person. The director of Grange Landfill Limited had not been convicted of a relevant offence and did not have a record of continued and serious non-compliances with current permits. We have carried out our Fit and Proper Person assessments appropriately and in accordance with the designated criteria and we consider Grange Landfill Limited is a competent operator.

[Jul] What do we consider in making our decision?

Once we were satisfied that the new activity complied with current landfill regulations and environmental standards, we varied the existing environmental permit to impose conditions requiring the operating company to carry out the landfilling in accordance with their operating procedures and environmental risk assessments.

We also imposed conditions requiring the operating company to install environmental monitoring boreholes around the whole site, including the historically deposited waste, and to monitor the boreholes for an extended period to establish background conditions before landfilling could resume.

We are satisfied that the conditions we have imposed through the variation are appropriate and provide us with the necessary controls for us to require the operating company to adhere to its operating procedures and environmental risk assessments.

Our decision to grant Grange Landfill Limited permit variation application to allow the resumption of landfilling at this site was the subject of detailed internal peer review. We are satisfied that we have acted appropriately in making this decision.

[Jul] What sort of things do you take into account when you determine a permit?

We can take account of:-

we can take account of:-		
Operator		
Control of the facility	That the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with Environmental Permitting Regulations – Regulatory Guidance Note 1 - Understanding the meaning of operator.	
European Directives		
Applicable	That all applicable European directives are considered in the determination	
directives	of the application.	
	The key Directive for a landfill permit is the Landfill Directive.	
The site		
Extent of the site of the facility	Assess the site plan the operator has provided showing the extent of the site of the facility.	
	This plan will be included in the permit and the operator is required to carry on the permitted activities within the site boundary.	
Site condition	Review the information submitted detailing a description of the condition of	
report	the site.	



	We review this description in accordance with our guidance on site condition reports and baseline reporting under Industrial Emissions Directive – guidance and templates (<u>H5</u>).
Environmental risk	We review the operator's assessment of the environmental risk from the facility. Where additional information is required to fully evaluate environmental risks this information maybe be provided through Pre Operational Conditions listed in the permit. No waste will be allowed on site until the risks have been fully assessed following a review of this information.
Operating techniques	We review the techniques used by the operator and compared these with the relevant guidance notes.
	The relevant Technical Guidance Note for a landfill permit is TGN 5.02 Landfill and the Environment Agency's Environmental Permitting Regulations (EPR) Inert Waste Guidance: Standards and Measures.
	We ensure that proposed techniques/emission levels for the facility are appropriate and in line with the benchmark levels contained in the Technical Guidance Note.
The permit cond	
Waste types	We review the list of wastes which the operator proposes to accept on site for recovery/disposal. The permit will specify the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility. The wastes are inert and to be deposited on a Landfill Directive compliant inert landfill.
Pre-operational conditions	Based on the information in the application, we consider that we need to impose pre-operational conditions: Pre-operational conditions are required for the following issues; The location and design of groundwater monitoring boreholes and establishment of baseline conditions including groundwater compliance limits; installation of in gas monitoring boreholes; the size and location of on-site surface settlement lagoon; and finally the characterisation of emissions to the surface water sewer. No waste will be deposited on site until these pre—operation conditions are compiled to the satisfaction of the Environment Agency.
Incorporating the application	We require that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table in the permit.
Emission limits	Determination of strict emission limits for both groundwater and surface are to be agreed following the completion of Pre-Operational Condition number 1 for groundwater and 4 for surface water. No waste will be deposited on site until these pre-operation conditions are compiled to the satisfaction of the Environment Agency.



Monitoring	Environmental monitoring shall be carried out for the groundwater, surface water and landfill gas.	
	The methods detailed and to the frequencies specified in the permit are in	
	accordance with Environment Agency Guidance TGN02 'Monitoring of	
	Landfill Leachate, Groundwater and Surface Water' (February 2003).	
Reporting	There are specific reporting requirements specified within the permit,	
	which require submission of all environmental monitoring undertaken on	
	site. In addition the operator must notify the Environment Agency of any	
	malfunction, breakdown or failure of equipment or techniques, accident, or	
	emission of a substance not controlled by an emission limit which has	
	caused, is causing or may cause significant pollution.	
Operator Competence		
Environment	We have reviewed the operators Environment Management System and	
management	there is no known reason to consider that the operator will not have the	
system	management systems to enable it to comply with the permit conditions.	
Fit and Proper	We have carried out our Fit and Proper Person assessments appropriately	
Person	and in accordance with the designated criteria and we consider Grange	
	Landfill Limited is a competent operator.	
Relevant	The National Enforcement Database has been checked to ensure that all	
convictions	relevant convictions have been declared.	
	No relevant convictions were found.	
Financial	No activities authorised by the permit shall be commenced unless the	
provision	operator has entered into an Agreement with the Environment Agency to	
	secure financial provision from meeting the obligations under the permit	
	and has provided the provision.	

We cannot take account of

- Anything outside the remit of the Environmental Permitting Regulations (EPR), e.g. the proposed location of the site, which is done by the local authority via land use planning.
- Whether a site should have a formal designation under Habitats Directive or other conservation legislation.
- Whether the activity should be allowed or not as a matter of principle.
- Land use issues when determining a permit application, even if changing the location of the activity would improve its environmental performance.
- The impact of noise, dust or odour from traffic travelling to and from the site.

We will grant a permit/variation if the operator is able to demonstrate that they can carry out the activity without significant risk to the environment or human health.

[Jul] How will you keep us informed in the future?

To enable us to share information more easily with the community we will use an online portal where we will post our newsletters and answers to the questions we are commonly asked: https://consult.environment-agency.gov.uk/yorkshire/grange-landfill-site-dropping-well-tip/.



[Jul] How can re-opening this landfill site be safe?

There will be no excavation into, or disturbance of, the historically deposited waste area. The area to be filled has not been tipped before. Grange Landfill Limited have provided detailed operating procedures and environmental risk assessments in support of their application to us and, after consideration, we were satisfied that these did demonstrate that the proposed activity complied with the current legislation. Our specialists are satisfied that we have taken all relevant considerations into account in reaching the decision to allow a resumption of landfilling.

[Jul] What types of waste will be able to be tipped at this site?

It is important to note that the proposed landfilling is restricted to inert wastes only and that there will be no excavation into, or disturbance of, the historically deposited waste. The updated legislation means that the definition of inert wastes has changed.

Inert wastes are now defined as "waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the eco-toxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater."

[Jul] What conditions have been put in place to protect the environment and improve the site?

Once we were satisfied that the new activity complied with current landfill regulations and environmental standards, we varied the existing environmental permit to impose conditions requiring Grange Landfill Limited to carry out the landfilling in accordance with their operating procedures and environmental risk assessments.

We also imposed conditions requiring Grange Landfill Limited to install environmental monitoring boreholes around the whole site, including the historically deposited waste, and to monitor the boreholes for an extended period to establish background conditions before landfilling could resume.

Our specialists are satisfied that the conditions we have imposed through the variation are appropriate and provide us with the necessary controls for us to require the operating company to adhere to its operating procedures and environmental risk assessments.

[Jul] Why has the fencing been put up recently?

The existing environmental permit for the site contains a condition requiring the site to be fenced to prevent unauthorised access to the landfill area. We have not enforced this requirement in recent years as landfilling activities were no longer taking place. Rotherham Metropolitan Borough Council asked us to ensure that the site is fenced. We therefore wrote to Grange Landfill Limited, to make them aware that we would now expect them to take steps to comply with the fencing requirement which they have done.



[Jul] What about the reports that trees have been cut down or are in danger of harm?

Environment Agency officers visited the landfill site and met with the Operator on 13 June 2018, following several reports of concern about the trees that had been cut back during bird nesting season. This may be a breach of the Wildlife and Countryside Act 1981, subject to investigation by the Police's Wildlife Crime Officer, however this is not a breach of the Environmental Permit.

Our Biodiversity team has provided advice and guidance to the Operator and has informed the Wildlife Crime Officer in South Yorkshire Police.

In regard to concerns about Walkworth Woods, we have reviewed the exact area that is designated as ancient woodland and its proximity to the Grange Landfill permit. The ancient woodland is neither within nor adjacent to the Grange Landfill Permitted area. We understand, that the woods are protected within the planning system, for which we are not the competent authority.

[Jul] Won't local roads and traffic be affected by the vehicles to the site?

Our regulatory powers are restricted to the landfill activity itself. We have no powers regarding the regulation of traffic to and from the site and any associated disturbance. Such matters are the remit of Rotherham Metropolitan Borough Council.

[Jul] Why won't the operator just do what they want on site?

Our regulatory officers will closely monitor activities at the site. Grange Landfill Limited has a legal obligation to comply with the conditions of the permit and we will use our regulatory powers in accordance with our guidelines in the event of non-compliance. We will work closely with our partners at Rotherham Metropolitan Borough Council when regulating the site and on associated matters, such as traffic, that fall under the Council's remit.

[Jul] When will the landfill start to accept waste?

Once the requirements of the pre-operational conditions have been complied with, landfilling can only resume once financial provision has been secured with the Environment Agency.