

## Grange Landfill Site, Rotherham (Dropping Well Tip) – Frequently Asked Questions (FAQs)

December 2020 update

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### 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  $1 \times 10^{-7} \text{m/s}$  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.

### Does the Environment Agency propose to vary the Environmental Permit in 2021?

Yes we propose to undertake an Environment Agency instigated variation to update the permit to include the agreed environmental monitoring compliance limits, surface water proposals, updating financial provision agreements and update the status of the completed pre-operational conditions. As this proposed variation is simply giving effect to what has been agreed under a pre-operational condition we consider a regulator initiated variation is appropriate and we do not consider consultation on this variation is necessary or appropriate.

### 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.

We hope to be in a position in 2021 to resume site inspections on a quarterly basis, however this purely dependant on whether any further government restrictions are imposed.

### How many boreholes are on site?

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

### 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.

### 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

### 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.

### Will the groundwater borehole (BH05) which is no longer serviceable be reinstated on the eastern boundary of the site?

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.

### 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. There was no specific request as part of these groundworks to remove BH05.

On 30 January 2020 we received from the Operator via email 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.