

## Permitting Decisions - Bespoke Permit

---

We have decided to grant the permit for Sandown Quarry Landfill operated by Booth Ventures Waste (Midlands) Limited.

The application number is EPR/WP3642YQ/A001.

The application is to infill and restore the quarry void at Sandown Quarry. This site is currently an active quarry for the extraction of marl / mudstone (from the Etruria Formation) to produce bricks. Upon completion of quarrying activities, the operator proposes restoration of the void by landfilling with non-hazardous wastes.

The infill material will comprise only of wastes which are considered suitable, and which are specified by Her Majesty's Revenue and Customs (HMRC) in The Landfill Tax (Qualifying Material) Order 2011 (as amended) referred to as qualifying materials.

The quarry restoration scheme and final profile will be completed to a level coincident with surrounding perimeter ground levels. The scheme accounts for long term surface water management with control from the restored surface through pond enlargement and that will (through a twin tracked planning application) provide some enhancement to the local ecology.

Table S2.3 Permitted waste types for restoration are to be agreed in accordance with condition 2.7.3. The annual restoration waste inputs in table S1.5 has been set to zero. The operator will be required vary the permit and submit a restoration plan for agreement with the agency prior to the restoration of the site taking place.

Imported wastes with a recoverable composition will be processed to recover aggregates in accordance with the WRAP Quality Protocol for Aggregates. It is anticipated that approximately 5% of the wastes imported will be suitable for processing (crushing and/or screening). The mobile plant will be sited in the quarry void and moved as filling progresses. It will operate on a campaign basis, usually for 2-3 weeks at a time. Processing campaigns usually occur around 4 or 5 times per year, but this is dependent on the import of suitable waste types. Recovered aggregate will either be used on site (e.g. for creation of the access roads and hardstanding areas) or exported and used in accordance with quality protocol (e.g. pipe bedding and highway sub base). The recovery of aggregates from imported wastes will cease when the final restoration of the quarry void is completed.

Related to this site is an application (EAWML 408345) for the use of 35,000 m<sup>3</sup> of inert wastes required to complete the haulage road which will allow HGV access to the mineral

workings in the main void. The ramp will eventually form part of the wider restoration scheme for the whole site.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

## Purpose of this document

This decision document provides a record of the decision-making process. It

highlights [key issues](#) in the determination

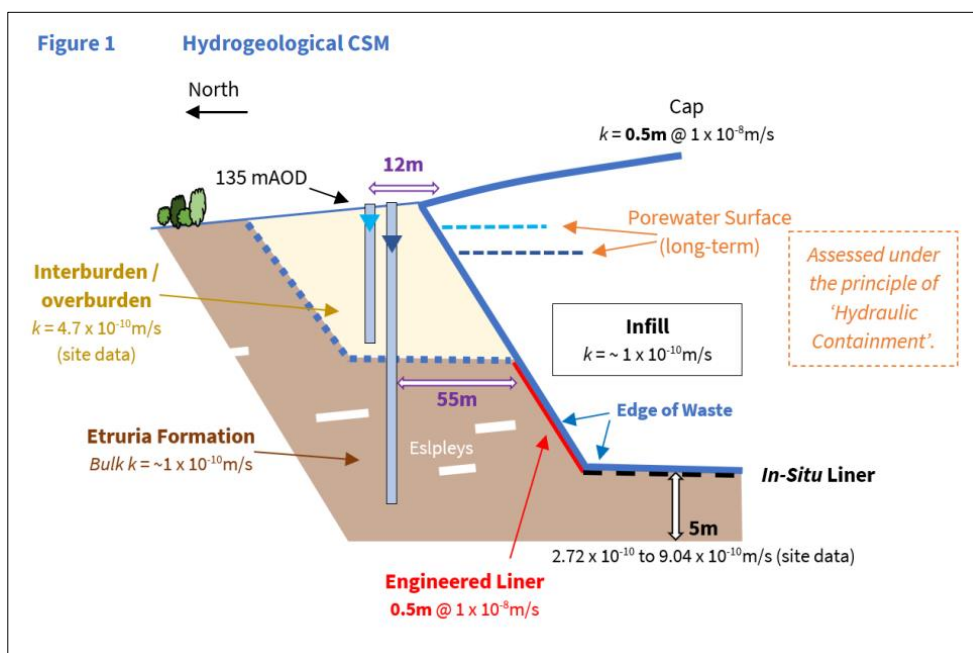
shows how we have considered the [consultation responses](#)

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

## Key issues of the decision

Currently an active quarry for marl and mudstone extraction, this site will undergo post-quarrying restoration via landfilling with non-hazardous wastes. The proposed restoration plan involves utilizing low-pollution excavation waste materials to infill the quarry void. The infill material will be limited to Qualifying Materials (QMs) as specified by Her Majesty's Revenue and Customs (HMRC).



## **Stability**

The Stability Assessment (report 5430-BLP-R-008-02, Plough Geotechnical Ltd) confirms that based on the expected geometry of the void that construction of the proposed landfill will be stable and there is no expectation of basal heave as a result of pore-water pressures. Factors of safety for in-situ exposed faces are acceptable.

## **Perimeter gas monitoring**

Three perimeter gas / groundwater monitoring boreholes have been installed around the site (BH22-01, BH2-02S and BH22-04S), placed adjacent to the primary receptors to sample current and future ground gas conditions. Further details are provided in ESID 5430-BLP-R-003-02 and the monitoring plan that supports this application, report 5430-BLP-R-009-02. The primary receptor is the residential property on Stubbers Green Road, monitoring borehole BH22-04S is located in-between the site and the property. Through baseline data collection however it has been established that it is not possible to collect gas samples from BHP-05, BHP-06 and BHP-07 (flush borehole covers with ground level (those pre-existing site boreholes identified at the onset of the permit application process). If possible, a gas bung will be added to BHP-07 (the deepest installation of ~51 m) and utilised / included for future monitoring. Gas monitoring is not proposed for the shallow boreholes (BHP05 and BHP06).

Monitoring of landfill gas in external boreholes is required for boreholes BH1 (BH22-01), BH2S (BH22-02S), BH4S (BH22-04S), BH4D (BH22-04D), BH3 (BHP-03S) and BH7 (BHP-07) on a monthly frequency. Compliance limit is for methane is 1% and for Carbon dioxide it is subject to Improvement Condition IC2a and IC2b Table S1.3 Improvement programme requirements. An Industry Code of Practice on Perimeter Soil Gas and methodology (ICOP) will be required prior to action levels being agreed.

During the consultation of the draft permit the applicant proposed IC2 to be removed based on the application of the Industry Code of Practice on Perimeter Soil Gas and methodology. Detail was provided in support of this however, this was not part of original application and the applicant was advised that they would be required to provide more data before this could be considered and that this should be done separately through a variation application once further data was available. IC2a and IC2b reflect this requirement.

In waste gas monitoring boreholes / probes are also monitored for gas at ELS-GP01 to ELS-GP30 on a monthly frequency and subject to Improvement Condition IC1 Table S1.3 Improvement programme requirements. This IC requires the operator to progressively install in-waste gas monitoring points at a minimum density of 2 points per hectare as part of each phase and commence routine in-waste gas monitoring. The in-waste gas monitoring points are to be installed and monitored progressively during active tipping rather than post completion.

A landfill gas management plan has been provided that includes an action plan following perimeter gas breaches and implementation of remedial action.

Table S3.5 Landfill gas – other monitoring requirements. The gas monitoring frequency has been increased to monthly this is to ensure that the waste acceptance procedures have been managed correctly and that other wastes, in particular plasterboard and bio-degradable wastes are not being accepted such that we would see elevated gas and in particular hydrogen sulphide.

### **Groundwater monitoring**

It is considered that given the current groundwater / Etruria Formation porewater quality and the attenuation capacity of the geological barrier that it is highly unlikely that the proposed restoration scheme could discernibly impact on groundwater quality.

Water quality data collected indicates that the groundwater / porewater is already significantly impacted (in the Etruria Formation and overlying interburden / overburden materials) particularly between the site and the Butterley Hole Landfill and Empire Brickworks Landfill to the north.

Water quality locally as been reported as being significantly variable and extremely poor at some monitoring location adjacent at other landfill sites. The poor and brackish groundwater / porewater (e.g. chloride, sodium and sulphate recent maximums of 340 mg/l, 522 mg/l and 1,100 mg/l adjacent to Vigo Landfill, 1,400 mg/l, 1,300 mg/l and 820 mg/l adjacent to Highfields South Landfill) indicate the water is not potable (conceptually downgradient and downdip of the site) and far in excess of DWS concentrations. Recent ammoniacal-N concentrations adjacent to the Vigo Landfill site range between 0.9mg/l and 11 mg/l (maximum) and 0.1 mg/l and 3.1 mg/l (average)<sup>37</sup>, and adjacent to the Highfields South site range between 0.1 mg/l and 100 mg/l (maximum) and 0.2 mg/l and 65.6 mg/l (average) <sup>38</sup>. The greatest concentrations are attributed to the Butterley Hole site (adjacent to the northern boundary) at a borehole referenced as HSGW10. Additionally, regarding metals and metalloids there are elevated occurrences of nickel with a wider lateral distribution than the elevated arsenic concentrations observed.

The proposed (revised) compliance limits have been derived from baseline monitoring to data (including additional data obtained since the submission of the permit application). The proposed compliance limits for BH22-02S are based on a maximum concentration + 10% to account for future increases. During the determination process further groundwater data was submitted up to November 2024 for the groundwater boreholes including BH22-02S and for this particular borehole indicated elevated ammonia at 255 mg/l and 274 mg/l. The results continue to show that there are already high concentrations of pollutants within the groundwater once it has flowed through the site, before any waste has been deposited. This is most likely due to the close proximity of two landfill sites further north (Highfields South and Vigo Landfills). The GW within these boreholes continues to deteriorate. As a result, the Ammoniacal Nitrogen compliance limit was raised to 300 mg/l.

Those designated with a superscript \* annotation are proposed to be set as control levels within the permit (BHP-03D and BH22-02D). (Note, assessment levels for groundwater are called control levels and compliance limits for groundwater are called trigger levels. The applicant referenced 'action levels' which is incorrect)

Groundwater quality monitoring has documented the significant impact to the porewaters within the Etruria Marl (not a receptor) from the adjacent site to the north, as such the control levels for BHP-03D have been assigned with the same concentrations derived from BH22-02D as conceptually there is a possibility of increasing and progressive deterioration along the northern perimeter of the site that is not related to the infilling of non-hazardous soils from the Sandown Quarry Landfill site.

Furthermore, it is conceptually possible that the continued vertical migration of impacted water from BH22-02S will progressively deteriorate the underlying and deeper porewater at BH22-02D with time (and conversely BHP-03D). Control levels have been proposed on this basis (i.e. progressive deterioration is expected from the adjacent site), not from Sandown Quarry Landfill.

Sulphate concentrations have been derived from the upgradient locations BH22-04D and BH-04S that are apparently enriched compared to downgradient locations.

Groundwater emission limits, control levels and monitoring requirements have been added for BH2S (BH22-02S), BH2D (BH22-02D) and BH3 (BHP-03D) in Table S3.1.

Control levels are assigned to BH22-02D and BHP-03D on account of conceptualised vertical migration of water from BH22-02S and progressive deterioration.

Sulphate limit assigned to BH22-02D and BHP-03D are from BH22-04D and BH-04S (upgradient quality).

### **Surface water monitoring**

The existing site drains to the Vigo Brook in the western corner of the site. The site drainage passes through a series of settlement ponds before the outfall point.

Drainage channels will be constructed around the south-east, south-west and north-west sides of the restoration surface to collect surface flows and convey the surface water (rainfall) runoff. No channel is provided to the north-east side where the restoration surface falls away from the boundary. The site is split into two catchments to suit the site levels and these combined to a single discharge point through to two attenuation ponds.

The water being managed in the operational phase is surface water from rainwater intercept only. No discharge from the engineered cell is permitted. The discharge of clean uncontaminated water from the quarry void is subject to an historical quarry discharge consent which will no longer be appropriate for the change in activity. The surface water discharge consent that remains outside of this permit for the quarry as the discharge will continue to be required to dewater the void. As soon as the site is engineered the discharge consent will not be needed or more importantly can no longer be used as this is for quarry water only. The surface water management plan for the operational phase has action levels at SW3 based on background surface water quality and a surface water action plan. SW3 monitors an on-site artificial pond that collects intercepted surface water

No compliance limits were proposed as part of this application however, as rainwater runoff the pollution potential is low, and because the operator will be taking appropriate measures to control emissions i.e. settling ponds and surveillance monitoring then compliance limits can be set as an improvement condition where the Operator is required to undertake a specific substances assessment in line with our guidance ‘Surface water pollution risk assessment for your environmental permit - GOV.UK ([www.gov.uk](http://www.gov.uk))’.

The monitoring plan contains surface water action limits. Compliance limits are required to ensure that the surface water management system is performing as expected.

An abstraction licence is not required, the Operator has confirmed that no groundwater is abstracted and that there is no dewatering of groundwater – porewater hydraulics of the Etruria Formation are provided in report 5430-BLP-R-003-02, the results are consistent with site observations which is that groundwater ingress is not observed.

Action levels for the surface water discharge based on background surface water quality are as follows.

**Surface Water Monitoring Action Levels**

Location	Parameter	Units	Limits	Frequency
SW3 On site Pond	NH <sub>4</sub> -N,	µg/l	5	Quarterly
	Chloride	mg/l	250	
	Suspended Solids	mg/l	50	

A regular suite of analysis is required at each surface water monitoring point this includes SW1 (Swan Pool), SW2 (Culvert – Vigo Brook), SW3 On site Pond, SW4 (Upstream – Vigo Brook).

In addition, we have also imposed two pre-operational measures for future development as Table S1.4 to provide further detail on the surface water management in the final restoration layer, capping and restoration.

**Leachate monitoring**

Given there is not a putrescible component to the waste stream the permit only has the requirement for monitoring leachate quality. Qualifying materials have negligible organic content and a resulting negligible leachate generating potential. There is not a risk-based justification for implementing active management controls for leachate within the site. However, a monitoring schedule has been proposed by the applicant which will include infrastructure capable of being utilised for leachate abstraction should a condition arise where active leachate management is required.

Leachate quality monitoring is required by Table S3.6.

## Confidential information

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

## Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

## Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- The UK Health Security Agency (UKHSA)
- Director of Public Health.
- Walsall Planning Authority
- Walsall Local Authority – Environmental Health
- Walsall Local Authority – Planning
- Health and Safety Executive
- Food Standards Agency
- Natural England

No comments were received from:

- Director of Public Health
- Walsall Planning Authority
- Walsall Local Authority – Environmental Health
- Walsall Local Authority – Planning
- Health and Safety Executive
- Food Standards Agency

The comments and our responses are summarised in the [consultation responses](#) section.

## Operator

We are satisfied 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 our guidance on legal operator for environmental permits.

## The regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility'.

The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

## The site

The operator has provided a plan which we consider to be satisfactory. These show the extent of the site of the facility. The plans show the location of the part of the installation to which this permit applies on that site. The plan is included in the permit.

## Nature conservation, landscape, heritage and protected species and habitat designations

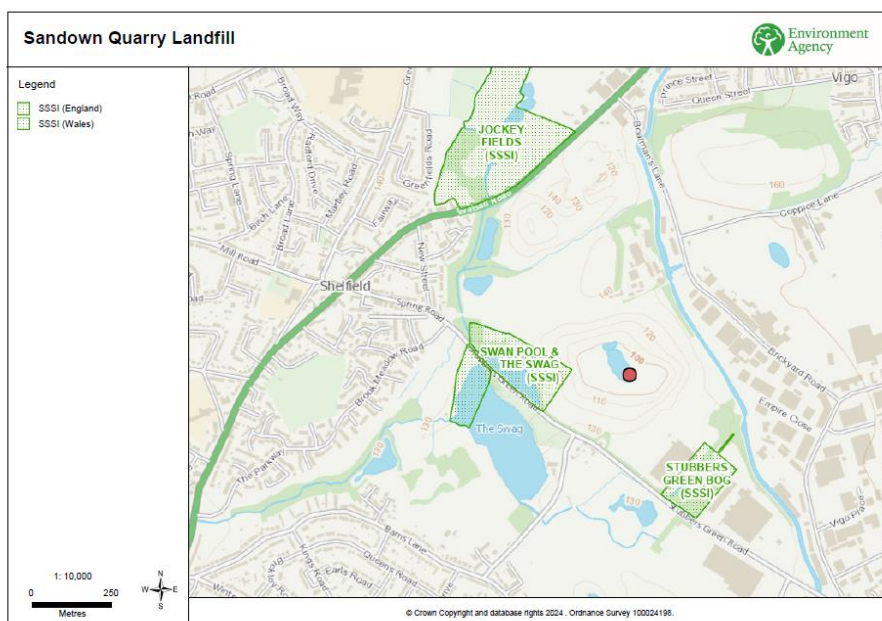
We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

Daw End Railway Cutting SSSI (1.3 km)

Jockey Fields SSSI (340 m)

Stubbers Green Bog SSSI (50 m)

Swan Pool & The Swag SSSI (0 m)



*Locations of SSSI's. Red dot is the centre location of the PPP. Daw End Railway Cutting SSSI not shown to the south at 1.7 km from site centre.*



Natural England were consulted on the Appendix 4.

They confirmed that the application site lies within or may affect Swan Pool and The Swag Site of Special Scientific Interest (SSSI). Natural England was satisfied that the application, provided it is carried out in strict accordance with the submitted proposals, is not likely to adversely affect the features of special interest for which the SSSI is notified.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have consulted Natural England on our SSSI assessments and taken their comments into account in the permitting decision.

The decision was taken in accordance with our guidance.

## **Environmental risk**

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator's risk assessment is satisfactory.

## **General operating techniques**

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

## **Dust management**

We have reviewed the dust and emission management plan in accordance with our guidance on emissions management plans for dust.

We consider that the dust and emission management plan is satisfactory and we approve this plan.

We have approved the dust and emission management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary sooner if there have been complaints arising from operations on site or if

circumstances change. This is in accordance with our guidance 'Control and monitor emissions for your environmental permit.

The plan has been incorporated into the operating techniques S1.2.

## **Waste types**

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.

We are satisfied that the operator can accept these wastes for the following reasons:

- they are suitable for the proposed activities
- the proposed infrastructure is appropriate; and
- the environmental risk assessment is acceptable.

We have excluded the following wastes for the following reasons

Restoration waste type 19 13 02, solid wastes from soil remediation other than those mentioned in 19 13 01 is classed as a Mirror Non-hazardous code. This is because this is a higher risk waste type that requires assessment for its suitability. No assessment has been undertaken.

The Operator has reviewed their waste acceptance procedures /criteria to include the following.

Arsenic <300 mg/kg

Cadmium <20 mg/kg

Mercury <10 mg/kg

TOC <10% with the following caveats (70% of samples to achieve 6% TOC or less and TOC can be raised to 15% when DOC < 1,000 mg/kg).

This has formed part of the permit as Table S2.4

## **Pre-operational conditions**

Based on the information in the application, we consider that we need to include pre-operational conditions.

See key issues section.

## **Improvement programme**

Based on the information on the application, we consider that we need to include an improvement programme.

See key issues section.

## **Emission Limits**

We have decided that emission limits are required in the permit.

See key issues section

## **Monitoring**

We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.

See key issues section.

## **Reporting**

We have specified reporting in the permit.

## **Management System**

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

A full review of the management system is undertaken during compliance checks.

## **Technical Competence**

Technical competence is required for activities permitted.

The operator is a member of the CIWM/WAMITAB scheme.

We are satisfied that the operator is technically competent. See below.

## **Previous performance**

We have assessed operator competence. We do have concerns about operator competence, and we have noted past poor performance on similar sites operated by Booth Ventures. Evidence suggested misdescription issues in August 2024 at other Booth Ventures sites, enquiries at these sites are ongoing. The Agency defines misdescription as the incorrect description given to waste in order to avoid legal requirements for the material.

This section sets out a brief compliance history of three other sites run by the company. Whilst this is an overview of non-compliance, it is important to note that there have been gaps of 2-3 years between compliance visits at these sites, the operator does not have a consistent track record of compliance.

## **EAWML 400397 Arcwood Works Waste Transfer Station**

In February 2024 the regulator conducted an unannounced site visit, during which no breaches were recorded in a CAR form, however a WAR form was produced which found several issues relating to directly applicable legislation. Breaches included:

- Environmental Protection Act 1990 Section 34
- The Waste (England and Wales) Regulation 2011 Reg 35
- Control of Pollution Act 1989 Section 1

It was found that the site was not accurately describing material leaving the site or conducting the necessary checks to be able to classify correctly as per WM3.

- Misdescription by use of mirror codes without the appropriate evidence to support a mirror non-hazardous description.
- Misdescription of material leaving the site as product with no evidence of meeting any quality protocol or testing requirements.
- The site had passed waste to or received waste from unauthorised waste carriers. Transfer notes lacked the relevant information required.

Significant advice and guidance was provided, however the same issues were identified later at Campions Wood Quarry. Investigations are ongoing. (see below).

## **EAWML 406722 Campions Wood Quarry - DfR**

In July 2024 an announced inspection of the site was conducted, during which no breaches were recorded in a CAR form, however a WAR form was produced which found several issues relating to directly applicable legislation. Breaches included:

- Environmental protection Act 1990 Section 34
- The Waste (England and Wales) Regulations 2011 Reg 35

Following a further audit in August 2024 officers found the same deficiencies in waste transfer information, the site had made no changes following detailed advice in July. Environmental Crime Officers followed through the duty of care chain to several source sites, all of which provided site analysis which showed the company accepting non-inert materials to the site. A large sampling exercise of the site showed further non-compliance with the permit, 10 of 10 trial pits excavated revealed large amounts of non-permitted material, officers' landfill gas monitors alarmed several times during digging, and suspected leachate was noted at the bottom of several pits. Enforcement response resulted in permit suspension.

## **EAWML LP3133FK Britannia Quarry – Landfill**

22 breaches over a 6 month period, relating to permit conditions on engineering for prevention and control of pollution, drainage, staff competency, management systems, operating procedures and reporting and notification and records of activity. This included the acceptance of waste into unsuitable cells, no TCM attendance for over 3 months, failure to manage leachate and inappropriate usage as dust suppression on site, engineering failures in respect of stability, structure and operations. It was also found that the site had accepted Japanese Knotweed, which was not buried as required by the

guidance but left on the top of the area. The site has failed to submit waste returns on a number of occasions, when produced the site had exceeded their limit by 38% in one quarter. Enforcement response resulted in a Warning letter.

This site, Sandown Quarry, is new site and therefore there is no compliance history to assess.

Taking this into account, we do have concerns about operator competence, but we have considered this and on balance we have decided to grant the variation to the permit. We take compliance with our permits very seriously. We will be monitoring the site, and if performance is poor, then appropriate enforcement action will be taken, and we will reconsider the Operator’s suitability to hold a permit.

We have noted that the Operator has recently hired two new operational team members, who will serve as full-time TCMs responsible for managing the sites and will be designated TCMs on the permits. Two further existing TCM members of staff will provide additional support when needed. Furthermore, a fifth employee, is currently registered to complete his WAMITAB certification, ensuring they have comprehensive coverage across their operations. The qualifications and certificates have been provided.

We have checked our systems to ensure that all relevant convictions have been declared. At the time of this application no relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.

The draft permit has been revised since the draft sent to the Operator in June 2024. The permit now contains amended/bespoke permit conditions, this is in light of us completing our assessment of the application, including considerations relating to technical matters and operator competence combined. This is to ensure operations are managed appropriately and to ensure regulatory control is maintained and it is for these reasons we have imposed stricter monitoring conditions as follows.

Permit ref.	Specific amendments made to the permit
IC1	<p>The gas risk is low for QM sites however we do require greater confidence from this operator in this respect and therefore the Operator needs to be able to demonstrate that gas is not being generated. If the gas boreholes are installed as waste is deposited this will ensure there is gas control, if required. Installing these as waste disposal progresses is a precautionary measure and ensures the operator can demonstrate gas management.</p> <p>We have amended the first para of IC1 to require staged borehole construction as tipping progresses at the site:</p> <p><i>The operator shall progressively install in-waste gas monitoring points at a minimum density of 2 points per hectare as part of the restoration of each phase and commence routine in-waste gas monitoring. In-waste gas monitoring points shall be installed and monitored progressively during active tipping rather than post completion, unless otherwise agreed with the Environment Agency.</i></p> <p><i>The landfill gas monitoring boreholes shall be constructed and recorded in accordance with a Construction Quality Assurance (CQA) Plan covering all elements of the landfill gas monitoring system. The proposal shall</i></p>

Permit ref.	Specific amendments made to the permit												
	<p><i>be in accordance with the Environment Agency Guidance: LFTGN03 'Management of Landfill Gas' and in accordance with landfill engineering condition 2.6 of this permit.</i></p> <p><i>On commencement of active tipping</i></p>												
IC2	<p>The 1% methane limit has been included in Table S3.2. In terms of CO<sub>2</sub>, action levels will be more suitable given the very poor quality of the surrounding environment which is heavily impacted by historical land uses. We have modified the improvement condition to reflect the need to collect, analyse and recommend action levels.</p> <p><i>IC2a -The Operator shall collect carbon dioxide monitoring data for a period of 12 months at a frequency of once every month in gas perimeter boreholes BH1 (BH22-01), BH2S (BH22-02S), BH4S (BH22-04S), BH4D (BH22-04D), BH3 (BHP-03S), BH7 (BHP-07) as detailed on ESID 12 Monitoring Locations drawing number 5430.3.012 Rev. 01 dated 07/06/2024. By 01/02/2026</i></p> <p><i>IC2b - The Operator shall submit a report in writing for Environment Agency approval. The report shall detail the findings of a review of background perimeter carbon dioxide data, with proposals and justification for carbon dioxide action levels and action plans in accordance with the ICoP methodology. By 01/05/2026</i></p>												
Table S2.1	<p>New Table S2.4 to ensure that WAC limits are clearer in the permit. WAP must be used to ensure that waste is properly characterised and is suitable to go to QM landfill. This is to provide confidence that waste not authorised by this permit is not accepted at this site. The Council Decision specifies waste acceptance criteria for inert, non-hazardous and hazardous waste. These are:</p> <ul style="list-style-type: none"> <li>• a list of wastes which may be accepted at a landfill for inert waste without testing;</li> <li>• limits on the leachability of certain parameters; and</li> <li>• limits on the organic content of the waste.</li> </ul> <p>There are no numerical WAC limits on landfills for non-hazardous waste. A QM site is a non-hazardous site and therefore in this instance we have included limits in the Sandown permit. The WAC limits are based on Total Concentration metal analysis.</p> <table border="1" data-bbox="308 1288 1433 1713"> <thead> <tr> <th colspan="2" data-bbox="308 1288 1433 1355"><b>Table S2.4 Limits for Specified Granular Wastes – Total Concentration</b></th> </tr> <tr> <th data-bbox="308 1355 896 1406">Component</th> <th data-bbox="896 1355 1433 1406">Parameter</th> </tr> </thead> <tbody> <tr> <td data-bbox="308 1406 896 1482">Arsenic</td> <td data-bbox="896 1406 1433 1482">&lt;300 mg/kg</td> </tr> <tr> <td data-bbox="308 1482 896 1559">Cadmium</td> <td data-bbox="896 1482 1433 1559">&lt;20 mg/kg</td> </tr> <tr> <td data-bbox="308 1559 896 1635">Mercury</td> <td data-bbox="896 1559 1433 1635">&lt;10 mg/kg</td> </tr> <tr> <td colspan="2" data-bbox="308 1635 1433 1713">TOC &lt;10% with the following caveats (70% of samples to achieve 6% TOC or less and TOC can be raised to 15% when DOC &lt; 1,000mg/kg).</td> </tr> </tbody> </table> <p><i>New condition added - 2.7.1 (k) they fulfil the relevant waste acceptance criteria, and the total metal analysis set out in schedule 2, table S2.4 shall not be exceeded for the wastes listed in Schedule 2, table S2.1; and</i></p>	<b>Table S2.4 Limits for Specified Granular Wastes – Total Concentration</b>		Component	Parameter	Arsenic	<300 mg/kg	Cadmium	<20 mg/kg	Mercury	<10 mg/kg	TOC <10% with the following caveats (70% of samples to achieve 6% TOC or less and TOC can be raised to 15% when DOC < 1,000mg/kg).	
<b>Table S2.4 Limits for Specified Granular Wastes – Total Concentration</b>													
Component	Parameter												
Arsenic	<300 mg/kg												
Cadmium	<20 mg/kg												
Mercury	<10 mg/kg												
TOC <10% with the following caveats (70% of samples to achieve 6% TOC or less and TOC can be raised to 15% when DOC < 1,000mg/kg).													
Table S3.5	<p>Landfill gas – other monitoring requirements. We have increased the frequency for gas monitoring to monthly this includes hydrogen sulphide. H<sub>2</sub>S is released when sulphur-containing waste breaks down. Concern is if the site should take in waste which contains gypsum particularly fines that would react with moisture to produce H<sub>2</sub>S. We want to ensure the Operator can demonstrate gas is not being generated and increasing the frequency of monitoring provides a check.</p>												

Permit ref.	Specific amendments made to the permit
Table S3.9	New table S3.9 Landfill gas emissions from capped surfaces for cells that have accepted non-hazardous waste – monitoring requirements to understand should gas be generated. This is normally a requirement for non-hazardous landfills accepting bio-degradable waste, however, we have included this as a precautionary measure to ensure the operator can demonstrate gas is not being generated.
Table S3.3 and S3.7	<p>The water being managed in the operational phase is surface water from rainwater intercept only. No discharge from the engineered cell is permitted. As it is rainwater runoff the pollution potential is low, the operator did not propose compliance limits but did propose action limits in their SWMP. However, we need to have more confidence that the surface water remains uncontaminated. Whilst action levels have been provided, we require more, control over the quality of the discharge to surface water and therefore included IC3 to require a surface water pollution risk assessment to propose compliance limits at SW3 as appropriate.</p> <p>The Operator has a surface water discharge consent that remains outside of this permit for the quarry activity. As soon as the site is engineered the discharge consent will not be needed or more importantly can no longer be used as this is for quarry water only. Therefore, compliance limits at SW3 would be prudent. We also want to ensure that leachate cannot be discharged to surface water. Any removal must be by tanker. It is also to ensure there will be no contact of surface water / rainwater in the base of the quarry with the waste. If there is then it is all leachate and removed, if necessary, by tanker. Their surface water management plan details this however, compliance limits would be the precautionary approach.</p>
Waste Types	<p>We have restricted the following waste types to the waste description detailed below;</p> <p>19 12 09 – minerals (for example sand, stones), is restricted to the description “minerals (for example sand, stones) from the treatment of waste aggregates that are otherwise naturally occurring minerals - excludes gypsum from recovered plasterboard”. This is to ensure that gypsum is not included within this description as it has the potential to generate hydrogen sulphide gas in anaerobic conditions if biodegradable contaminants are present.</p> <p>19 12 12 - other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11, has been restricted to the description “crushed bricks, tiles, concrete and ceramics, soils and fines from treated inert wastes from the on-site aggregates recycling facility only”.</p> <p>This waste code has the potential to be contaminated with high sulphate waste (such as gypsum from recovered plasterboard) and fines from the treatment of other non-inert wastes. This restriction ensures that wastes categorised as 19 12 12 can only be used in the deposit for recovery activity where they have come from the onsite treatment of wastes. This is to ensure there is a minimal risk of landfill gas, odours or leachate being generated.</p> <p>19 13 02 - solid wastes from soil remediation other than those mentioned in 19 13 01 is classed as a Mirror Non-hazardous code. This is because this is a higher risk waste type that requires assessment for its suitability. No assessment has been undertaken.</p>

## Financial competence

There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.

## **Financial provision**

We are satisfied that the operator has made the necessary financial provision.

## **Growth duty**

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

## **Consultation Responses**

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

### **Responses from organisations listed in the consultation section:**

**Response received from:** UKHSA.

#### **Brief summary of issues raised:**

The main emissions of potential concern were fugitive dust emissions.

#### **Summary of actions taken:**

The Operator included a detailed dust management plan which describes proposed management and mitigation measures to minimise the impact of fugitive dust emissions, including a complaints procedure and the subsequent investigation process.

The Operator did not propose any compliance limits for dust, however an action level of 200 mg/m<sup>2</sup>/day-1 has been proposed and qualitative monitoring is proposed for the first 12



months of the operation. If elevated readings are recorded the dust management action plan will be implemented. Table S3.7 of the permit requires the monitoring to be undertaken quarterly for first 12 months of operation then as agreed by the Environment Agency. The reason being is that it may not be necessary given the appropriate risk management measures being in place, the overall risk from dust generated from site is considered “low” as a result of the processing activity only operating on a campaign basis (and being located at the base of the void for some 15 – 18 years), the effects from windblown emissions are envisaged to be minimal and not detrimental to sensitive receptors.

**Response received from:** Natural England.

**Brief summary of issues raised:**

Natural England confirmed the application site lies within or may affect Swan Pool and The Swag Site of Special Scientific Interest (SSSI). Their reply therefore comprises of their statutory consultation response under the provisions of Section 28I of the Wildlife and Countryside Act 1981 (as amended).

Natural England is satisfied that the application, provided it is carried out in strict accordance with the submitted proposals, is **not likely** to adversely affect the features of special interest for which the SSSI is notified.

**Summary of actions taken:**

None required.

**Representations from community and other organisations and individual members of the public**

None received.