

Environment Agency permitting decisions

Variation

We have decided to issue the variation for Frog Island Waste Management Facility operated by Shanks Waste Management Limited.

The variation number is EPR/ZP3533BS/V006.

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:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Key issues
- Annex 1 the decision checklist
- Annex 2 web publicising responses

Key issues of the decision

Odour

The operator has revised odour modelling and predictions from the time of their original application. Previous modelling was based on a theoretical scenario, whereas this variation includes detailed odour modelling informed from actual monitoring data collected during site operations.

In addition to odour modelling the applicant has provided an Odour Management Plan written in accord with the Environment Agency's H1 and H4 Horizontal Guidance Notes.

The Environment Agency has audited and reviewed both the revised detailed modelling and Odour Management Plan provided by the operator.

A Schedule 5 Notice was served to Shanks Waste Management Limited (the Operator) on 4 August 2014, requiring further information and consideration of

the potential for odour impacts from the site, in respect to both the detailed modelling and OMP.

Following revision to the odour modelling we accept the amendments and modelling predictions presented (based on actual emissions). The updated predicted concentrations (of odour) for the existing scenario and activities on site have been validated and is suitable for use in this determination. The current operations on site have had no historic complaints relating to odour (at baseline levels or otherwise) and have evidenced the implementation of Best Available Techniques which includes the management of process to reduce the potential for odour emissions arising.

In support of the detailed odour modelling, the applicant has provided a Best Available Technique (BAT) appraisal to demonstrate their implementation of best practice on site. This supports the operators conclusions that odour emissions and baseline levels are reasonable and well managed in accord with the Environment Agency's latest guidance i.e. Horizontal Guidance Note 4.

Current levels of odour created by the site appear to have little significant impact and the risk of significant nuisance or pollution caused by odour is deemed to be low. Furthermore, the location of the site is not highly sensitive and the internal bio-drying process tending to reduce the odour potential of materials. With wastes being received in a "fresh" state (i.e. within seven days) and the drying process remaining effective and optimised, then the risk profile of the site will likely remain moderate to low. Further reduced with appropriate regulatory controls in place, in the form of an auditable and enforceable Odour Management Plan (OMP) and its integrated commitments to control the potential for fugitive emission of odour. This should ensure that a low risk of odour pollution continues.

Odour Management Plan (OMP)

In line with the Environment Agency's H4 Guidance Note, the operator has written and implemented an Odour Management Plan (OMP), this was undertaken following a request for further information issued by the Environment Agency, required as part of the Environment Agency's duly making process.

The installation and scheduled activities relate to the storage, handling and treatment of waste therefore an OMP is an effective tool in the control, management and abatement of potential odour emissions. The OMP was technically reviewed by the Environment Agency with two Schedule 5 Notices being served on 16 July and 20 October 2014.

The Notices requested revision to the operators OMP in order to ensure that it adequately provided detail of the proposed management procedures with respect to odour emissions and abatement – in line with the Environment Agency's H4 Guidance Note. The provision of an OMP also required the operator to provide an emergency contingency plan. The Environment Agency has reviewed these plans and has accepted them as satisfactory during the determination process.

Acceptance and Storage of Waste

This variation seeks to add additional waste codes to the permitted list of acceptable waste types. We, the Environment Agency, have reviewed these additional waste codes and compared the suitability and compatibility of these wastes against those currently accepted on site. Please refer to the “waste types” section in the table below for further information.

Additionally, we have reviewed the site’s operating techniques, storage capacities and general facilities to ensure that the site is capable of accepting the additional wastes types and volumes.

Whilst the annual throughput of waste at the Bio-Material Recovery Facility (Bio-MRF) will remain unchanged (at 192,000 tonnes per annum) the operator has applied to increase the annual throughput of waste at the Re-use and Recycling Centre Materials Recovery Facility (RRC-MRF).

Annual throughput will increase from 25,000 tonnes per annum to 160,000 tonnes per annum. Part of the justification for this increase is the inclusion of new waste streams being brought to site from local Reuse and Recycling Centres (RRCs). These high calorific energy wastes will be blended and baled with the existing RDF output from the Bio-MRF prior to transport for energy from waste recovery.

Given the proposed increase in waste throughput, we have reviewed the application with respect to any proposed process change, site storage capacities and capabilities and systematic controls for the site activities and methodologies at the RRC-MRF. We, the Environment Agency, accept these proposals following our review of the application.

Regulated Activities

The application made by the Operator, Shanks Waste Management Limited, provides detailed information and descriptions of the site activities and processes.

Since the original permit was issued the Environment Agency’s guidance , as well as legislation, has been revised and updated. Our review of the application and supporting documents identified that a number of changes were required within Table S1.1 – Activities. An explanation of how we, the Environment Agency, have reached our decisions is included below:

Bio-MRF

The main activity taking place on site is the biological treatment of waste for the purpose of recovery. Biological treatment involves the heating of waste to encourage and optimise the conditions for aerobic digestion of waste.

At the time of the original application, Frog Island Waste Management Facility was regulated under Scheduled Activity S5.4A(1)(a)(i) which is predominantly viewed as a disposal activity. In view of the descriptions provided by the operator we have identified that the main purpose of the waste treatment process is that of a recovery operation. Therefore the Environment Agency, in agreement with the operator, have revised and changed the main scheduled

activity to S5.4A(1)(b)(i) – the recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment. A full description of the activity and limitations is provided within Table S1.1 of Variation Notice EPR/ZP3533BS/V006.

Following the Environment Agency's review of the application, made by Shanks Waste Management Limited, we have identified that one of the main purposes of the site plant is to shred, blend and bale high calorific wastes brought to site from local surrounding Reuse and Recycling Centres (RRCs). Historically, this waste stream had been sent to landfill from the RRCs but will now be brought to the Frog Island Lane Waste Management Facility and shredded before being blended with the Refuse Derived Fuel (RDF) Bio-MRF product, prior to its collection and transport off site for use as a fuel at energy from waste facilities. Following our review of the application and discussion with the operator we have identified that this process falls under a new scheduled activity defined as pre-treatment of waste for incineration or co-incineration under S5.4A(1)(b).

In addition to the above activity, the operator has stated that a new shredder will be installed for the purpose of shredding high calorific wastes brought to site. This waste stream has been historically sent to landfill from the RRCs but will now be brought to the Frog Island Lane Waste Management Facility and shredded before being blended with the RDF Bio-MRF product prior to collection and transport off site; to be used at energy from waste facilities. This process is viewed as a new activity defined as pre-treatment of waste for incineration or co-incineration under S5.4A(1)(b), as shown within table S1.1 of the permit.

RRC-MRF and the Treatment of Gully Detritus

At the time of the original permit application, the running and operation of the RRC-MRF and treatment of gully detritus, were set within the permit as Directly Associated Activities (DAAs). Following our review of the variation application which included process descriptions, we the Environment Agency, have revised both DAAs to become waste operations in accordance with our latest guidance, including Regulatory Guidance Note 2.

The on-site treatment of non-hazardous waste for the purpose of recovery or disposal is viewed as not having a technical connection with the Bio-MRF and can run independently of the other site processes. The RRC-MRF is also housed in an entirely separate building.

From the descriptions provided, all processing steps (including shredder and trommel) are viewed as physico-chemical treatment processes and are for the purpose of materials recovery, even though a small percentage of waste is disposed of to landfill. The definitions within Schedule 1 do not include physico-chemical treatment for recovery as an activity. Therefore these processes, the dewatering of gully detritus and sorting and screening of non-hazardous waste, are viewed as a waste operation. The intention of the treatment process is to recover items such as glass, paper, plastics and metals for example, with only some residues being landfilled, therefore the overall treatment process is considered recovery.

Directly Associated Activities:

Following our review of the process descriptions, provided within application EPR/ZP3533BS/V006, the Environment Agency has identified a number of Directly Associated Activities (DAAs) relating to the site operations and scheduled activities.

The process of manually sorting, shredding, screening and the separation of wastes are viewed as physio-chemical treatment activities for the purpose of recycling. Furthermore, the bailing, compaction and repackaging of the treatment outputs is also viewed as a DAA. Finally, the storage of outputs pending recovery or disposal is again viewed as a DAA to the scheduled activities.

Industrial Emissions Directive (IED)

The Environmental Permitting (England and Wales) (Amendment) Regulations 2013 were made on the 20 February and came into force on 27 February. These Regulations transpose the requirements of IED. Amendments have been made to the conditions of this permit so that it now implements the requirements of the EU Directive on Industrial Emissions.

Soil and Groundwater Monitoring

As a result of the IED requirements all permits must now have condition 3.1.5 relating to soil and groundwater monitoring.

The Environment Agency's H5 Guidance states that it is only necessary for the operator to take samples of soil and/or groundwater and measure levels of contamination where there is evidence that there is or could be existing contamination and:

- The environmental risk assessment has identified that the same contaminants are a particular hazard; or
- The environmental risk assessment has identified that the same contaminants are a hazard and your risk assessment has identified a possible pathway to land or groundwater.

H5 Guidance further states that it is not essential for the Operator to take samples of soil or groundwater and measure levels of contamination where:

- The environmental risk assessment identifies no hazards to land or groundwater; or
- Where the environmental risk assessment identifies only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or
- Where the environmental risk assessment identifies hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

Variation and Consolidation

The consolidation comprises updating the whole of the original permit to a modern standard incorporating the changes implemented by the Environmental Permitting (England and Wales) (Amendment) Regulations 2013 which transpose the requirements of IED. Amendments made due to the variation of the permit are as follows:

- Condition 3.1.5 – refers to periodic monitoring for groundwater and for soil.
- Condition 4.3.1 and 4.3.2 - refers to; in the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment and/or breaches any permit condition.
- Schedule 6, Interpretation – IED reference now set within the definitions.

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application, supporting information and variation notice.

Aspect considered	Justification / Detail	Criteria met
		Yes
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.	✓
Responses to web publicising	The web publicising responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
Operator		
Control of the facility	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 EPR RGN 1 Understanding the meaning of operator.	✓
The Facility		
The regulated facility	The extent/nature of the facilities taking place at the site required clarification. The decision on the facility was taken in accordance with RGN 1 [understanding the meaning of 'operator'] and RGN 2 [understanding the meaning of regulated facility]. For further details see the key issues section of this document.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application, including the Industrial Emissions Directive (IED).	✓
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of nature conservation, and/or protected species or habitat .</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance. There is no change to the installation boundary or new emission points created as a result of this application for variation, therefore in line with our current guidance and methodologies the decision not to consult was made.</p>	✓
Environmental Risk Assessment and operating techniques		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes including Sector Guidance Note S5.06.</p> <p>An odour management plan (OMP) has been written and submitted in support of the operators application. This has been prepared in line with the requirements of horizontal guidance note H4 – odour management. The OMP has been set within the operating techniques table S1.2 of the variation notice.</p>	✓
The permit conditions		
Updating permit conditions during consolidation.	<p>We have updated previous permit conditions to those in the new generic permit template as part of the permit consolidation. The new conditions have the same meaning as those in the previous permit(s).</p> <p>The operator has agreed that the new conditions are acceptable following discussions with the Environment Agency and a request from the operator to update and modernise their permit.</p>	✓
Odour alternative conditions	<p>We consider that the Applicant's proposals represent the appropriate measures to prevent and minimise odour from the permitted activities.</p>	✓
Raw materials	<p>We have not specified limits and controls on the use of raw materials and fuels.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Waste types	<p>We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.</p> <p>We are satisfied that the operator can accept these wastes for the following reasons:</p> <ul style="list-style-type: none"> • The operator has provide relevant operating techniques and procedures for the storage handling and processing of non-hazardous wastes • The operator is experienced in the pre-acceptance, acceptance, storage and processing of non-hazardous wastes with multiple operational sites across the UK. • The operator has demonstrated the implementation of the Best Available Techniques on site. <p>The operator originally applied to include two “99” codes which we required further information and justification for, in order to consider their inclusion amongst acceptable waste types.</p> <p>Following further discussions with the operator a request for the inclusion of 20 01 99 was withdrawn as further investigation by the operator into the reasoning for its inclusion led to the conclusion that it was no longer a requirement under their local authority contracts.</p> <p>19 05 99 has been included within the permit, following justification by the operator and discussion with the local regulatory team. This specific code is limited, to only allow certain MBT reject wastes to be accepted under this code, as specified in table S2.2.</p> <p>We made these decisions with respect to waste types in accordance with Sector Guidance Note S5.06 and OI 233_08.</p>	✓
Improvement conditions	<p>Based on the information within the application, we consider that we do not need to impose improvement conditions.</p>	✓
Incorporating the application	<p>We have specified 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.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Monitoring	<p>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.</p> <p>Condition 3.1.5 has been set within the permit to meet the requirements of the Industrial Emissions Directive.</p>	✓
Operator Competence		
Environment management system	<p>There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p>	✓
Technical competence	<p>Technical competency is required for activities permitted. The operator is a member of an agreed scheme.</p>	✓
Relevant convictions	<p>The National Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found.</p> <p>The operator satisfies the criteria in RGN 5 on Operator Competence.</p>	✓
Financial provision	<p>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p>	✓

Annex 2: Consultation and web publicising responses

Summary of responses to consultation, web publication and the way in which we have taken these into account in the determination process.

Response received from
Shyn Tong – Environmental Public Health Scientist, Public Health England 13 January 2015
Brief summary of issues raised
<p>Public Health England recommend that any Environmental Permit issued for this site should contain conditions to ensure that the following potential emissions do not impact upon public health: emissions to air from point sources on site; fugitive dusts and particulates from storage and handling activities on site; and odours arising from point sources and other activities on site.</p> <p>In addition, the Environment Agency (EA) may wish to consider the following:</p> <ul style="list-style-type: none">• whether the waste identification and rejection procedures in place are adequate to prevent non-compliant and/or malodourous wastes; and• whether the accident management and control procedures in place are adequate to prevent significant off-site impacts from unforeseen incidents such as fires, especially so as a large protracted fire incident occurred at the site in the summer of 2014. <p>Based solely on the information contained in the application provided, PHE has no significant concerns regarding risk to health of the local population from this proposed activity, providing that the applicant takes all appropriate measures to prevent or control pollution, in accordance with the relevant sector technical guidance or industry best practice.</p>
Summary of actions taken or show how this has been covered
<p>Emissions are controlled through condition 3.1 and 3.2 of the environmental permit. Appropriate management plans would be created and implemented on site if fugitive emissions or emissions not controlled by emission limits resulted from site operations and activities. The site are implementing Best Available Techniques and as result of this we, the Environment Agency, are satisfied that any emissions to air will be controlled and managed to ensure that they remain insignificant.</p> <p>The applicant has also undertaken a BAT appraisal which considers operating techniques against the relevant Sector Guidance Note (S5.06). This has been reviewed and accepted by the Environment Agency.</p> <p>With specific reference to odour, the site has created and implemented an Odour Management Plan and Contingency Emergency Plan written in accord with the Environment Agency's H4 guidance. This has been reviewed and accepted by the Environment Agency as part of the determination.</p>