

Natural Resources Wales permitting decisions Variation

We have decided to issue the variation for Lamby Way Open Windrow Composting Facility operated by Kelda Organic Energy (Cardiff) Limited.

The variation number is EPR/AB3096CP/V002

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

Key issues of the decision

The site will be operated in accordance with the Best Available Techniques and operating Techniques (BATOT).

Key technical standards and control measures are to be employed at the site and will include;

- Monitoring of Open Windrow composting processes.
- Strict waste acceptance procedures.
- Monitoring of meteorological conditions to minimise odour at the facility
- Waste is to be stored and treated within defined areas of the site.
- Careful surface water management across the site, via a sealed drainage system.
- The control of dust and bio aerosols to minimise the issues that they cause.
- Appropriate maintenance of site equipment and vehicles.
- The use of appropriate pest control contractors when necessary.
- Regular inspections of the site and boundary will be carried out.

Biodiversity, heritage, landscape and nature conservation

Given the industrial legacy of the area surrounding this site where the area falls within the region of an active landfill operated by Cardiff Council, the proposed variation is unlikely to cause significant impacts to the biodiversity, heritage, landscape or nature conservation surrounding the site. There are to be no point source emissions to air, water or land from the facility. All surface water that comes into contact with the process will be routed directly to sewer under a consent agreed between Welsh Water and the operator. The facility will be situated on hardstanding ground with a sealed drainage system, therefore emissions to surface water and land are not likely to occur. The only emissions are diffuse emissions, potentially bio aerosols from the open windrow composting. There is minimal risk to the habitats from this type of emission. The operator has implemented numerous control measures to minimise the generation of bio aerosols. There are no emission limits associated with the bio aerosols to assess against for potential damage to the protected site, however it is believed that they will have no likely significant effect on any of the protected sites.

Operator Competence and Environmental Risk Assessment

The operator has completed a full Environmental Risk Assessment for the facility. In completing this Risk Assessment the operator has followed the Environment Agency Technical Guidance EPR – H1 '*Environmental Risk Assessment for Permit (Annex A)*'. The Risk Assessment has assessed Odour, Noise and Vibrations, Fugitive Emissions (including dust, mud, litter and pests) and Accidents. The Risk Assessment concludes that with the implementation of the risk management measures described within the application, potential hazards from the proposed development are not likely to be significant.

The Technically competent manager for the facility is certified to operate the site under WAMITAB. All approved awards are listed within the application under Appendix A.

Bio aerosols Risk Assessment

The operator has provide a site specific bio aerosol risk assessment that has been completed in accordance with EA guidance for the evaluation of bio aerosol risk assessments for composting facilities. As the composting facility is within 250m of sensitive receptors, this was a necessary step. The RA takes into account the distance of the facility from sensitive receptors, Climate – wind direction & rainfall and a summary of the operations. The risk assessment has concluded that the facility has a low risk of impact. However further mitigation measures have been proposed to further limit the potential for release of bio aerosols;

- Meteorological forecasts will be taken into account and monitored
- Certain activities likely to lead to the release of bio aerosols will be limited if the meteorological conditions are unfavourable
- Compost moisture will be maintained between 40%(w/w) and 60%(w/w)

- Hedgerow's border the site, reducing wind speed and increasing turbulence
- Incoming materials will be inspected and off-loaded as soon as possible and non-conforming materials will be quarantined and removed
- Daily visual checks will be undertaken
- Operational areas and site surfaces will be kept clean
- Processes shall take place in designated and controlled areas

Odour

The operator has submitted an Odour Management Plan with their application, that outlines the methods that Kelda will systematically assess, minimise and prevent potentially odorous emissions from the facility

The OWC will be operated to minimise potential odour emissions and in accordance with the conditions of the permit, green waste types are not considered to pose a significant odour risk, however due to the storage and treatment that takes place, it is important to have robust measures to minimise the potential for odorous emissions, the operator has put the following measures in place to minimise any potential for odour;

- Strict waste acceptance procedures
- Rejection at the gate of unsatisfactory waste deliveries
- The quarantine and removal off-site of particularly odorous waste
- Limits on the length of time that wastes are stored and treated on-site
- Close control of the composting process
- Regular turning of windrows
- Routine olfactory monitoring
- Contingencies in the event of an accident or incident

With the implementation of the above control measures and contingencies in place the risk of odour is not likely to be significant.

Noise

The OWC Facility will be located on the existing footprint of Lamby Way Landfill Site and will be operated in such a way to minimise noise and vibrations by:

- Care will be taken during loading and un-loading of materials which are too be stored externally
- Site operations will be restricted to hours stipulated in planning consent
- Speed limits will be implemented on-site
- Site access and operational areas will be properly maintained and repaired
- Plant will be selected to minimise noise and operated in accordance with the manufacturers specification
- Staff will be trained in good practice for minimising noise
- Vehicles and plant will be switched off when not in use
- Auditory inspections will be carried out daily

Risks to Air/Land/Water

Air:

There are no point source emissions to air.

Land:

There are no point source emissions to land. Periodic monitoring will be undertaken in-line with the environmental permit.

Groundwater:

There are no direct discharges containing Priority Hazardous Substances to groundwater from the OWC facility. All waste is to be stored and treated on an impermeable, concrete surface with sealed construction joints. Water from the process will be collected and managed in a separate sealed drainage system thereby ensuring that emissions to groundwater are prevented. Periodic monitoring will be undertaken in-line with the environmental permit.

Surface Water:

All waste is to be stored and treated on an impermeable, concrete surface with sealed construction joints. Water run-off from within this area will be managed as potentially contaminated water and routed to the sealed drainage system. The water and leachate will be discharged directly to sewer under a consent between Welsh Water and the operator. The monitoring of effluent quality and quantity discharged from the OWC facility to Welsh Water will be undertaken in accordance with the discharge consent agreed between Kelda and Welsh Water.

Monitoring and Reporting

The operator will monitor the process requirements of the windrows frequently, temperature will be monitored and held within strict parameters. The frequency that the windrows are to be turned are also to be monitored and maintained to ensure aerobic conditions. Records shall be kept daily of the internal temperature of the windrows and also when they have been turned. Monitoring equipment must also be kept on-site and used as required to ensure compliance with the site permit. The moisture content of the windrows will also be carefully maintained to minimise the release of bio aerosols. Records shall be made daily of the moisture content within the windrows.

Annex 1: decision checklist

This document should be read in conjunction with the application and supporting information and permit/ notice.

Aspect considered	Justification / Detail
Operator	
Control of the facility	We are satisfied that the applicant 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.
European Directives	
Applicable directives	All applicable European directives have been considered in the determination of the application.
The site	
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility including the location of the part of the installation to which this permit applies on that site.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p>
Planning permission	We are satisfied that planning permission is in place and is appropriate for the relevant waste operation(s) applied for.
Deposit for recovery	We have agreed that the activity is deposit of waste for recovery.
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat .</p> <p>See Key Issues for full details</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	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.

Aspect considered	Justification / Detail
	<p>The operator will be following BAT procedures on the site in order to minimise environmental impacts.</p> <p>The operating techniques are detailed in the application and follow TGN's:</p> <ul style="list-style-type: none"> - EPR1.0 How to Comply - Sector Guidance Note IPPC S5.06
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 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.</p>
Odour alternative conditions	<p>The application states that daily olfactory inspections will be carried out by staff at the site. All operations will take place in accordance with procedures to ensure that any issues associated with odours will be identified and appropriate remedial actions implemented as soon as is practicable.</p> <p>We consider that the Applicant's proposals represent the appropriate measures to prevent/ minimise odour from the permitted activities.</p> <p>See Key Issues for full details</p>
Noise alternative conditions	<p>The application states that waste acceptance, processing and physical treatment will only be carried out during operational hours. All equipment will be maintained and operated in accordance with the manufacturers guidance and will be maintained in good working order. The applicant has listed measures that will be taken to minimise noise in the application.</p> <p>We consider that the applicant has provided sufficient mitigation measures to minimise the level of noise generated by activities carried out at the site.</p> <p>See Key Issues for full details</p>

Aspect considered	Justification / Detail
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"> • They have the appropriate facilities to accept the waste types listed; • The operator has certified competence in accepting the waste types; • A detailed waste acceptance procedure for the WTP has been provided which assesses all wastes for treatment prior to acceptance on site.
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>
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>These monitoring requirements have been imposed in order to minimise pollution and protect the environment.</p> <p>See Key Issues for full details</p>
Reporting	<p>We have specified reporting in the permit.</p> <p>See Key Issues for full details</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 (WAMITAB).</p>

Aspect considered	Justification / Detail
Relevant convictions	<p>Our Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>Relevant convictions were found and declared in the application. A post-conviction plan was submitted by the operator and assessed as satisfactory.</p> <p>The operator satisfies the criteria in RGN 5 on Operator Competence.</p>