

# Review of an Environmental Permit under the Environmental Permitting (England & Wales) Regulations 2010 (“EPR”)

## Decision document recording our decision-making process

We have decided to vary the Permit for Maple Lodge Waste Water Treatment Works operated by Viridor (Thames) Limited, as a result of an application made by the Operator.

The Permit number is EPR/NP3497NN

The Variation notice number is EPR/NP3497NN/V002

## What this document is about

This is a decision document, which accompanies a variation notice.

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.

## Preliminary information and use of terms

We refer to the Permit (both existing and as varied) as “the **Permit**” in this document; and to the variation of the Permit as “the **Variation**”.

The Operator of the Installation is Viridor (Thames) Limited: we call Viridor (Thames) Limited “the **Operator**” in this document. We refer to Viridor (Thames) Limited’s Maple Lodge Waste Water Treatment Works as “the **Installation**”.

The Application was duly made on 17 September 2014.

## **How this document is structured**

- Our decision
- The legal framework
- How we took our decision
- Key issues in the determination
- Annex 1 – the decision checklist

# 1 Our decision

We have issued a Variation, which will allow the Operator to operate their facility as an Installation, subject to the conditions in the varied Permit.

This Variation does several different things:

- **First**, it gives effect to our decisions following the identification of the Operator as undertaking a “newly prescribed activity” (NPA) under the Industrial Emissions Directive (IED);
- **Second**, it takes the opportunity to bring earlier variations into an up-to-date, consolidated Permit. The consolidated Permit should be easier to understand and use; and
- **Third**, it modernises the entire Permit to reflect our current template. The template reflects our modern regulatory permitting philosophy and was introduced because of a change in the governing legislation. This took place when the Pollution Prevention and Control (England and Wales) Regulations 2000 (“PPC”) were replaced in 2008 by a new statutory regime under the Environmental Permitting Regulations 2007 (now the 2010 version).

The introduction of new template conditions makes the Permit consistent with our current general approach and philosophy. Although the wording of some conditions has changed, while others have disappeared because of the new regulatory approach, it does not affect the level of environmental protection achieved by the Permit in any way.

We consider that, in reaching our decision, we have taken into account all relevant considerations and legal requirements and that the Permit will continue to ensure that a high level of protection is provided for the environment and human health.

The original Permit, issued on 29/09/2003, ensured that the facility, would be operated in a manner which would ensure the protection of the environment specified in the existing Guidance at the time. To the extent that we have substantively altered the Permit as a result of this variation, the new requirements will deliver a higher level of protection to that which was previously achieved.

As we explained above, we do not address changes to the Permit in this document, to the extent that they give effect to either the consolidation of earlier variations, or introduce new template conditions.

## 2 The legal framework

The original Permit was granted on 29/09/2093 under the Environmental Protection Act 1990 and regulated under the Waste Management Licensing Regulations 1994.

The Installation will be subject to the requirements of the Industrial Emissions Directive (IED) 2010/75/EU and regulated under the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No 675). The IED was transposed in England and Wales by the Environmental Permitting (England and Wales)(Amendment) Regulations 2013 on 27 February 2013.

The IED seeks to achieve a high level of protection for the environment taken as a whole from harmful effects of industrial activities. It does so by requiring each of the industrial installations to have a permit from the competent authority (in England, the Environment Agency, or for smaller Installations, the relevant Local Authority). The IED has increased the number of activities that require an Installations permit. These are predominantly regulated as “waste operations” and include (when exceeding specific thresholds described in IED):

- hazardous waste treatment for recovery;
- hazardous waste storage;
- biowaste treatment – recovery and/or disposal;
- treatment of slags and ashes
- metals shredding;
- pre-treatment of waste for incineration/co-incineration;
- biological production of chemicals; and
- independently operated wastewater treatment works serving only industrial activities subject to the Directive

Article 11 of the IED requires the relevant authority (the Environment Agency in this case) to ensure that the Installation is operated in such a way that all the appropriate preventative measures are taken against pollution, in particular through the application of Best Available Techniques (BAT). Under Article 15(2), the Permit must contain emission limit values (ELVs) (or equivalent parameters or technical measures) for any pollutants likely to be emitted from the Installation in significant quantities. These ELVs are to be based on BAT, but also on local factors and EU Environmental Quality Standards. The overarching requirement is to ensure a high level of protection for the environment and human health.

We are required by Article 13 of the IED to keep abreast of developments in BAT. In addition, Article 13 requires us to carry out a periodic review of the permit’s conditions, and to update them if necessary.

The IED also requires the European Commission to organise an exchange of information between EU Member States so that what are known as BAT reference documents (or BREF notes) can be published, creating a level playing field across the EU, providing a consistent set of standards for new

plant, to which regulatory authorities in the Member States can then have reference. These BREF notes are the basis for our own national sector technical guidance. The Commission is also required to update BREF notes on a regular basis. The waste treatment BREF notes are currently being reviewed and a final issue date is anticipated in 2016. Under the IED, all permits will be subject to review within four years of the publication of revised BREF notes. This means that we will need to do a further review against any new standards in the BREF notes at sometime in the future.

The IED is to be implemented over several years commencing from 7 January 2013. For existing installations operating “newly prescribed activities”, the relevant date for implementation is 7 July 2015.

### **3 How we reached our decision**

It is the Operators responsibility to ensure they are correctly regulated for the activities they are carrying out. Following adoption of the IED, the Environment Agency has engaged in a range of briefings and communications with the waste industry sector to raise awareness of the implications of the Directive and the need to ensure their facilities are correctly regulated (particularly after the implementation date of 7 July 2015 for newly prescribed activities).

Early in 2014, the Environment Agency provided further briefings to industry trade bodies and wrote to operators we believed may be implicated by these changes. We provided detailed information sheets that described the implications and the process operators should follow if they decided to have their activities permitted as Installations.

We confirmed that most facilities fell into one of two groups:

- Facilities permitted from April 2007  
When these facilities were permitted, a thorough assessment would have been carried out to confirm whether the proposed activities were using “appropriate measures” as a standard to protect the environment.

This standard of protection is the same standards that would have been assessed against had the facilities applied as an Installation activity (i.e. BAT). The permit would have also been issued with modern conditions that ensured protection of the environment.

We consider that these facilities are effectively ‘IED-compliant’ in terms of the technical standard of the facility with the exception of the “newly prescribed activity”. For these facilities, we consider that, in general, no further technical assessment is required, so administrative variations are an appropriate mechanism to show the activities as Installation activities. The administrative variation is a necessary route for the Operator to formally ask for this activity to be included in their permit and for us to advertise that request on our Public Register.

It is understood that the Environment Agency granted permits for new waste activities under the Waste Management Licensing Regulations 1994 beyond April 2007. Where a facility falls into this group, the Environment Agency shall determine whether or not the application was assessed using “appropriate measures”. Where it is determined that the application was assessed using “appropriate measures”, the application will be designated as an “administrative variation”.

- Facilities permitted before April 2007

For these facilities, a “normal” or “substantial” variation is appropriate because a detailed technical assessment is required on aspects of the Application ecological impact assessment, site operations, waste types etc in addition to the administrative changes.

Substantial variations will only be relevant where the newly prescribed activity is being added to an existing installation permit.

The original Permit was granted on 29/09/2003. We have reviewed the documentation submitted in support of the original permit in this determination. We are not satisfied that the standard of protection was assessed using appropriate measures. We have determined this Application as a normal variation. As the Variation will not have any negative effects on the environment, it is not a substantial variation and so does not require consulting on.

## **4 Key issues in the determination**

The Maple Lodge facility was originally permitted in 2003 as a facility for processing both hazardous and non-hazardous wastes, initially by physical treatment to remove solids followed by blending. At that time the facility discharge all waste output to the adjacent sewage works, where biological treatment took place and dependent on the organic strength of the waste either Anaerobic (Anaerobic Digesters) or Aerobic (activated sludge process) treatment would take place. It was considered that the overall process would result in a product which would not compromise the use of the sewage works sludge as an agricultural fertiliser and accordingly the facility was given a licence as a Recovery operation (R13).

Under determination of the permit for this variation it was agreed with the operator to limit the scope of the previous permitted activities, to match the actual site operations, this comprised:

- Removing the permitted biological treatment of waste from the permit as Viridor Waste (Thames) Limited does not carry out any biological treatment at the site.
- Limiting the waste acceptance list to non-hazardous wastes only, as hazardous wastes will typically not be suitable for biological treatment, and could potentially open a route for dilution of hazardous waste for disposal.
- Permitting the site as a disposal operation (5.4 A(1) (a) (ii) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment) as the operator no longer has

control over the end biological processes and Viridor (Thames) Limited does not control whether wastes are subsequently used for improvement of land or simply disposed of.

- Listing the treatment process to physico-chemical treatment of the waste (D9). It is considered that this best describes the treatment process for the in-line filtering and solids removal for the waste stream. Even though blending occurs it is to produce a consistent feedstock for the AD and AD processes are not typically permitted for blending activities for feedstock preparation.

In summary, following this variation non-hazardous liquid wastes will be accepted at the facility which will be identified and categorised in two different waste streams: high COD wastes, which are filtered and blended before being sent on for anaerobic digestion and low COD wastes, which will undergo blending and settlement before being transferred to the waste water treatment works for aerobic treatment as part of the urban waste water stream.

The low COD threshold is 3,000 mg/l, above which wastes are considered to be high COD and are treated accordingly. The facility is permitted for a maximum annual throughput of 75,000 tonnes per annum of low COD wastes, and 74,800 tonnes per annum of high COD Wastes (> 3,000 mg/l COD defines high COD), with an aggregated throughput 149,800 tonnes per annum maximum.

#### Operating techniques

The operators operating techniques were compared against standards set out in:

- IPPC S5.06 – Guidance for the Treatment of Hazardous and Non-Hazardous Waste
- Environment Agency guidance – How to comply with your Environmental Permit

A revised Working Plan and operating techniques were agreed under this variation, due to the change in scope of the permitted activities as detailed above.

#### Ecological Impact Assessment

The following statutory and non- statutory sites of ecological interest are within 2km radius of the site:

- Stocker Lake Local Nature Reserve (LNR)
- Rickmansworth Aquadrome LNR
- Old Park Wood Site of Special Scientific Interest (SSSI)
- Mid Colne Valley SSSI

A full ecological impact assessment was provided with the application. This is an existing, rather than a new activity and there will be no change in the impacts from the permitting amendments. The control measures that are in place at the Maple Lodge Waste Water Treatment Facility will continue to ensure that there are no significant emissions from the site. Viridor operates

the site in accordance with its Business Management System that includes an Environmental Management System, accredited to ISO 14001. The EMS will be implemented at the site to ensure that the facility is properly managed and maintained to prevent or, where that is not possible, minimise emissions.



## Annex 1 – decision checklist

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

Aspect considered	Justification / Detail	Criteria met
<b>Yes</b>		
<b>Consultation</b>		
Responses to web publicising.	No public responses were received in response to the web publicising of the application.	✓
<b>Operator</b>		
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.	✓
<b>The facility</b>		
The regulated facility	<p>The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations and the following directly associated activities:</p> <ul style="list-style-type: none"> <li>- Section 5.4. Disposal, recovery or a mix of disposal and recovery of non-hazardous waste, Part A(1), (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC concerning urban waste-water treatment - (ii) physico-chemical treatment;</li> </ul> <p>DAAs:</p> <ul style="list-style-type: none"> <li>- On-site laboratory, including temporary storage of samples, and reactants.</li> <li>- Discharge of surface water run-off to foul sewer</li> <li>- Raw materials storage</li> <li>- Vehicle wash</li> </ul> <p style="text-align: center;">•</p>	✓
<b>European Directives</b>		
Applicable Directives	All applicable European Directives have been considered in the determination of the application.	✓
<b>The site</b>		

Aspect considered	Justification / Detail	Criteria met
		Yes
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.	✓
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>The following statutory and non- statutory sites of ecological interest are within 2km radius of the site:</p> <ul style="list-style-type: none"> <li>• Stocker Lake Local Nature Reserve (LNR)</li> <li>• Rickmansworth Aquadrome LNR</li> <li>• Old Park Wood Site of Special Scientific Interest (SSSI)</li> <li>• Mid Colne Valley SSSI</li> </ul> <p>A full ecological impact assessment was provided with the application and a full assessment of the application and its potential to affect the sites and habitats has been carried out as part of the permitting process. We consider that the application will not affect the sites and habitats. This is an existing, rather than a new activity and there will be no change in the impacts from the permitting amendments, potentially an improvement due to the cessation of acceptance of hazardous waste. The control measures that are in place at the Maple Lodge Waste Water Treatment Facility will continue to ensure that there are no significant emissions from the site. Viridor operates the site in accordance with its Business Management System that includes an Environmental Management System, accredited to ISO 14001. The EMS will be implemented at the site to ensure that the facility is properly managed and maintained to prevent or, where that is not possible, minimise emissions.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p>	✓
<b>Environmental Risk Assessment and operating techniques</b>		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment has been completed in accordance with the H1 guidance and is considered satisfactory.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes –</p> <ul style="list-style-type: none"> <li>• IPPC S5.06 – Guidance for the Treatment of Hazardous and Non-Hazardous Waste;</li> </ul> <p>The proposed techniques/emission levels for priorities for control are in line with the benchmark levels contained in the above technical guidance notes and we consider them to represent appropriate techniques for the facility.</p> <p>We are satisfied with the BAT assessment provided by the operator which adequately addresses the following points:</p> <ul style="list-style-type: none"> <li>• pre-acceptance of waste</li> <li>• acceptance of waste</li> <li>• storage and handling of waste</li> <li>• process (treatment) description</li> <li>• fugitive emissions to air</li> <li>• fugitive emissions to surface and groundwater (secondary containment, site drainage plan)</li> <li>• odour management</li> <li>• point source emissions to air, water or land (where relevant)</li> <li>• monitoring</li> <li>• accidents</li> </ul>	✓
<b>The permit conditions</b>		
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>	✓
Waste types	<p>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 because they have the necessary infrastructure, operating systems and technical capability to manage these wastes in an appropriate manner.</p> <p>The variation limited the waste acceptance list to non-hazardous wastes only, as hazardous wastes will typically not be suitable for biological treatment, and could potentially open a route for dilution of hazardous waste for disposal. We made this decisions with respect to</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	waste types in accordance with our Technical Guidance Note – <i>Framework for assessing suitability of wastes going to anaerobic digestion, composting and biological treatment.</i>	
Improvement conditions	Based on the information on the application, we consider that we need to impose improvement conditions.	✓
Incorporating the application	We have specified that the operator 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	We have decided that emission limits should be set for the parameters listed in the permit. These were transposed from the previous Permit/Working Plan.	✓
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. These were transposed from the previous Permit/Working Plan. Additional process monitoring was added for the biofilter in line with standard permit template approach.	✓
Reporting	We have specified reporting in the permit.	✓
<b>Operator Competence</b>		
Environment Management System	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.	✓
Technical competence	Technical competency is required for activities permitted. The operator is a member of an agreed scheme. Viridor has developed its own CMS as an alternative to the WAMITB Certificate of Technical Competence (CoTC) in order to meet the technically competent management requirements of its environmental permits. Viridor's CMS is certified by the British Standards Institute (BSI). This approach has been agreed nationally with the Environment Agency.	✓