

# Environment Agency permitting decisions

## What this document is about

This is a draft decision document, which accompanies a draft permit.

It explains how we have considered the Applicant's Application, and why we have included the specific conditions in the draft Permit we are proposing to issue to the Applicant. It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position. Unless this document explains otherwise, we have accepted the Applicant's proposals.

This document is in draft at this stage, because we have yet to make a final decision. Before we make this decision we want to explain our thinking to the public and other interested parties, to give them a chance to understand that thinking and, if they wish, to make relevant representations to us. We will make our final decision only after carefully taking into account any relevant matters raised in the responses we receive. Our mind remains open at this stage: although we believe we have covered all the relevant issues and reached a reasonable conclusion, our ultimate decision could yet be affected by any information that is relevant to the issues we have to consider. However, unless we receive information that leads us to alter the conditions in the draft Permit, or to reject the Application altogether, we will issue the Permit in its current form.

In this document we say "we have decided". That gives the impression that our mind is already made up; but as we have explained above, we have not yet done so. The language we use enables this document to become the final decision document in due course with no more re-drafting than is absolutely necessary.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future.

## Preliminary information and use of terms

We gave the application the reference number EPR/EB3396EC/V001. We refer to the application as “the **Application**” in this document in order to be consistent.

The number we propose to give the permit is EPR/EB3396EC. We refer to the proposed permit as “the **Permit**” in this document.

The Application was duly made on 26/05/2016.

The Applicant is Persimmons Homes Limited. We refer to Persimmons Homes Ltd as “the **Applicant**” in this document. Where we are talking about what would happen after the Permit is granted (if that is our final decision), we call Persimmons Homes Ltd “the **Operator**”.

The Applicant’s proposed **discharge** is located at National Grid Reference SU 55720 62287. We refer to this as “the **water discharge activity**” in this document.

## Bespoke permit

We have decided to grant the permit for Land to the South of Ashford Hill Road operated by the Applicant.

The Permit number is EPR/EB3396EC

This permits the discharge of 24.3m<sup>3</sup> per day of domestic sewage effluent from a new residential development consisting of 35 houses in Ashford Hill. The discharge will be made from a British Standard sewage treatment facility and will discharge to the Baughurst Brook. There is no sewer to reasonably connect to.

Due to local interest in the site the Application has been designated a Site of High Public Interest. 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.

## **Structure of this document**

This document is structured into the following main headings:

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation, web publicising and newspaper advertising responses
- Annex 3 legal duties

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## **Key issues**

Persimmons Homes Limited (the Applicant) made an application for a water discharge activity with a maximum daily volume of 24.3m<sup>3</sup> per day of secondary treated domestic sewage effluent from a proposed new development named Land to the South of Ashford Hill Road, located in Ashford Hill, Berkshire. This water discharge activity will be derived from thirty-five residential properties.

The Application consisted of two discharge options, the first of which being to a tributary of the Baughurst Brook and the second to the Baughurst Brook itself. Initial flow estimates provided by Thames Hydrology indicated that the tributary of the Baughurst Brook exhibited extremely low flows at Q<sub>95</sub>. The Q<sub>95</sub> is a statistic derived from a flow duration curve and represents the flow in the watercourse which is exceeded for 95% of the time which is equivalent to less than 18 days a year of low flow conditions. This location also meant the discharge would enter the Ashford Hill Woods and Meadows Site of Special Scientific Interest (SSSI) much further upstream, extending the time the discharge would spend in the SSSI. Natural England have indicated that a water discharge activity to the tributary of the Baughurst Brook would be unsound due to low flows and that direct effect of the discharge in the SSSI will be minimised by discharging into the larger Baughurst Brook instead. We therefore advised the Applicant that a discharge to the Baughurst Brook rather than the tributary would be the better environmental option to pursue.

We informed the Applicant that only one discharge route would be determined and they agreed that they wished us to determine the second discharge option, direct to the Baughurst Brook.

## **Our proposed decision**

We are minded to grant the Permit to the Applicant. This will allow them to discharge, subject to the conditions in the Permit.

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

## **Receipt of Application**

The Application was duly made on 26<sup>th</sup> May 2016. This means we considered it was in the correct form and contained sufficient information for us to begin our determination but not that it necessarily contained all the technical information we would need to complete that determination.

The Applicant made no claim for commercial confidentiality.

## **Requests for Further Information**

Although we were able to consider the Application duly made, we did in fact need more information in order to determine it, and made several requests for further information and clarification.

Having carefully considered the Application and all other relevant information, we are now putting our draft decision before the public and other interested parties in the form of a draft Permit, together with this explanatory document. As a result, at this stage in the process, the public has been provided with all the information that is relevant to our determination, including the original Application and we have given the public three separate opportunities (including this one) to comment on the Application and its determination. Once again, we will consider all relevant representations we receive in response to this final consultation and will amend this explanatory document as appropriate to explain how we have done this, when we publish our final decision.

## **Consultation Process**

As part of our consultation process the Application was advertised on our consultation page on the gov.uk website. This advertisement was open for 4 weeks, between 27<sup>th</sup> May 2016 and 27<sup>th</sup> June 2016. It generated eighteen public representations. As a result of this relatively high level of public interest, we designated the Application as being of high public interest. As such, we have followed our guidance outlined in Regulatory Guidance Series No RGN 6 – Determination involving sites of high public interest. As part of wider government reforms to guidance, RGN13 was withdrawn on the 1<sup>st</sup> February 2016 and not replaced. However, we consider it still indicates good practice with respect to sites of high public interest.

Following the designation as high public interest, we further advertised the Application in two local newspapers (Newbury Weekly News and Basingstoke Gazette). The newspaper advertisement was initially placed on the 25<sup>th</sup> August 2016. Due to an error in the advert this advertising was re-run 2 weeks after the initial advert on the 8<sup>th</sup> September 2016 with a new 4 week consultation period. A further 23 public representations were received as a result of this further consultation period, meaning a total of 41 public representations were received.

Consultations were sent to;

- Natural England
- Basingstoke and Deane Borough Council

Both Natural England and Basingstoke and Deane Borough Council responded to consultation requests. These responses can be viewed in Annex 2.

## **Key issues of the decision making process**

A water discharge activity, in general terms, is defined in Schedule 21 of the Environmental Permitting (England and Wales) Regulations 2010 (the “EPR”) as meaning the discharge or entry to inland freshwaters, coastal waters or relevant territorial waters of any poisonous, noxious or polluting matter, waste matter or trade effluent or sewage effluent.

The Application is to discharge domestic sewage effluent to the Baughurst Brook (falling with ‘inland freshwaters’). This flows through the Ashford Hill Woods and Meadows SSSI and National Nature Reserve (NNR).

We discuss below how we assessed the impact of this water discharge activity on the Ashford Hill Woods and Meadows SSSI and on the water quality in the Baughurst Brook.

## **Water Framework Directive 2000/60/EC (WFD)**

The WFD requires (amongst other things) that member states “implement the necessary measures to prevent deterioration of the status of all bodies of surface water...” (Article 4.1(a)(i)) and “protect, enhance and restore all bodies of surface water... with the aim of achieving good surface water status...” (Article 4.1(a)(ii)).

Baughurst Brook (water body ID GB106039017200) is a body of surface water for the purposes of the WFD. Its status is assessed by reference to a number of parameters, which are given a categorisation (Bad, Poor, Moderate, Good or High). Baughurst Brook’s overall status is assigned based on the worst performing parameter.

In the last available classification year Baughurst Brook was categorised overall as “Moderate” due to low flows not supporting “Good” status and physico-chemical quality elements (specifically dissolved oxygen) being at “Moderate” status. In all other respects the measured parameters were at “Good” or “High” status. The objective is that Baughurst Brook achieves “Good” status overall by 2027.

Concerns over the impact on the water quality in the Baughurst Brook were raised by members of the public in relation to this Application. As part of the process of assessing the impact of this discharge on the Baughurst Brook, water quality modelling was carried out in line with our guidance document Operation Instruction OI 50\_12 “Water Quality Planning: no deterioration and the Water Framework Directive”.

To carry out the water quality assessment a number of data streams are required, namely;

- Upstream river flow data (Q<sub>95</sub> and mean)
- Upstream river quality data
- Effluent flow volume
- Effluent quality

- River target quality

#### ***Upstream river flow data (Q95 and mean)***

Upstream river flow data was generated using the Low Flows Enterprise modelling package and supported by additional information including our own data and a report provided by the Applicant, which provided a suitable Q<sub>95</sub> and mean flows for a discharge of this volume. A number of consultation responses raised concerns over low flows in the Baughurst Brook, which resulted in us looking to gather further evidence as indicated below to support a scientifically robust and evidence based Q<sub>95</sub> we could have confidence in using in our water quality modelling. The Q<sub>95</sub> is the recognised low river flow statistic used in water quality modelling because it reflects the flow we would expect when the river is supported by groundwater base flow only. This enables us to ensure that when we model the impact of a discharge on the receiving watercourse it enables us to see what the most severe impact can be.

We received from the Applicant a low flow estimation report produced by Wallingford Hydrology Solutions (WHS) which showed similar results to that shown in our own modelling. We also carried out spot flow gauging on the Baughurst Brook and requested a low flows assessment from the Applicant who instructed Water Resources Associates (WRA) to carry this out, which they did and which the Applicant submitted to us.

Based on all this evidence we consider that we have been able to produce a scientifically robust Q<sub>95</sub> for the Baughurst Brook at the discharge location and upon which we can reasonably base our decision making for this Application.

#### ***Upstream river quality data***

An upstream river quality monitoring point was not available therefore the modelling used quality data from the nearest suitable alternative, which is the point where data is gathered to classify the Baughurst Brook for WFD purposes (a point on the Baughurst Brook below Ashford Hill Tip, PKER0005). This classification point is located approximately 850m downstream of the discharge location and provides a suitable reference point as the sample data from here will take into account the current upstream permitted discharges, and there are no known additional inputs or abstractions between the discharge location and the classification point. We therefore consider this to be a representative measure of the existing water quality in the watercourse at the point of discharge.

#### ***Effluent flow volume and quality***

Effluent flow volume and effluent quality were provided by the Applicant. The target quality was derived following the procedures laid out in our guidance OI 50\_12 (Water Quality Planning: no deterioration and the Water Framework Directive).

#### ***River target quality***

As indicated above the Baughurst Brook exhibits an overall classification of "Moderate". However, its chemical classification is "Good" with ammonia being classified as "Good" status in 2015. Biochemical oxygen demand (BOD) was classified as "High" status in 2009, the last available classification year for BOD. BOD is not part of our formal classification process, but we still use it for

regulation, including setting permit limits. Modelling was carried out to assess the impact of the discharge on BOD and ammoniacal nitrogen as is standard for a sewage effluent discharges of this volume.

### ***Water quality assessment***

Water quality modelling was carried out using the Mass Balance Calculation v2.5, Monte Carlo Simulation with BOD and ammonia being assessed. Following OI 50\_12, modelling was carried out with a target quality showing a 10% deterioration in current quality, 0% deterioration in current water quality and to achieve the WFD class targets.

For ammonia this resulted in a discharge quality of 14.17mg/l being required for the discharge to cause no more than a 10% deterioration, 3.74mg/l for 0% deterioration and 14.17mg/l to meet the class target, which is in line with the legal duty under WFD set out above to prevent deterioration in waterbody status. For BOD, again the same no deterioration criteria were used and this resulted in a discharge quality of 108mg/l being required for the discharge to cause no more than a 10% deterioration, 9.25mg/l for 0% deterioration and 423.31mg/l to meet the class target (in line with the WFD legal duty of preventing deterioration).

We have proposed emissions limits of 5mg/l ammonia, 15mg/l BOD and 30mg/l suspended solids on the Permit. We are satisfied that the proposed treatment facility, which will provide a design standard of 1mg/l ammonia, 10mg/l BOD and 15mg/l suspended solids, will protect the current water quality in the Baughurst Brook and will ensure that the relevant WFD objectives of overall good status by 2027 are not compromised.

### **The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000)**

The Baughurst Brook sits within the Ashford Hill Woods and Meadow SSSI. SSSIs are protected under the Wildlife and Countryside Act 1981. Section 28G of that Act requires that we take reasonable steps, consistent with the proper exercise of our functions to further the conservation and enhancement of the special features of SSSIs. Section 28I further requires that we consult with Natural England and take their advice into account before permitting operations likely to damage any of the special features of a SSSI.

The Ashford Hill Woods and Meadows SSSI comprises an extensive and varied complex of woodlands and agriculturally unimproved meadows lying in a broad shallow valley. Concerns were raised by members of the public at the consultation phase over the impact on the proposed water discharge activity on the SSSI.

We have carefully reviewed the features of the SSSI and the Application and have concluded that the proposed water discharge activity is not likely to damage any of the special features of the SSSI. We reached this conclusion as there is little hydrological connectivity between the Baughurst Brook and the

SSSI (it is very incised and the wet features of the SSSI downstream of the discharge point are not adjacent to the brook) and therefore very little risk to the SSSI. Connectivity would only occur during a flood event where the dilution would be so great as to render any impact insignificant. The Baughurst Brook appears to be more of a hydrological sink for the meadows rather than a supply source.

As a consequence of our conclusion, we are not obliged by section 28I of the Act to consult with Natural England prior to permitting. However, we have consulted with them in any event. This was via our standard process of sending them an Appendix 4 document. Natural England has confirmed that they agree with our determination that there is no likelihood of damage to the special features of the Ashford Hill Woods and Meadows SSSI as a result of this discharge.

As a consequence of this, and the controls on emissions (in particular of ammonia, BOD and suspended solids) in the Permit, we also consider that we have complied with our duty under section 28G of the Act in respect of this Application.

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## Annex 1: decision checklist

Aspect	Justification / Detail	Criteria met
		Yes
<b>Consultation</b>		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with our guidance on High Profile Sites, our Public Participation Statement and our Working Together Agreements.	✓
Responses to consultation, web publicising and newspaper advertising	The web publicising, consultation and newspaper advertising responses (Annex 2) were taken into account in the decision.  The decision was taken in accordance with our guidance.	✓
<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 our guidance on the meaning of operator.	✓
<b>European Directives</b>		
Applicable directives	All applicable European directives have been considered in the determination of the Application.	✓
<b>The site</b>		
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 including the discharge point.  A plan is included in the Permit and the Operator is required to carry out the permitted activities and apply the operating techniques described at the locations shown.	✓
Biodiversity, Heritage, Landscape and Nature Conservation	The Application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat (i.e. the Ashford Hill Woods and Meadows SSSI and NNR).  A full assessment of the Application and its potential to affect the has been carried out as part of the permitting process. We consider that the proposed discharge is not likely to damage the special features of the Ashford Hill Woods and Meadows SSSI and NNR.	✓

Aspect	Justification / Detail	Criteria met
		Yes
	Formal consultation has been carried out with Natural England. The consultation responses (Annex 2) were taken into account in the permitting decision.	
<b>Environmental Risk Assessment and operating techniques</b>		
Environmental risk	<p>We have carried out a risk assessment on behalf of the Operator.</p> <p>The Operator considers this risk assessment is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, all emissions may be categorised as environmentally insignificant with the exception of ammoniacal nitrogen, BOD and suspended solids, which required limits to be placed on the Permit. The Permit will contain limits on these emissions as indicated in the body of this decision document.</p>	✓
Operating techniques	<p>We have reviewed the techniques proposed to be used by the Operator and compared these with the relevant guidance notes.</p> <p>The proposed techniques / emission levels for priorities for control are in line with the benchmark levels contained in relevant technical guidance notes and we consider them to represent appropriate techniques for the facility.</p>	✓
<b>The permit conditions</b>		
Emission limits	<p>We have decided that emission limits should be set for the parameters listed in the Permit.</p> <p>It is considered that the numeric limits described below will prevent significant deterioration (including deterioration in status) of receiving waters and ensure that the attainment of the objectives for those waters are not jeopardised by the proposed discharge. This is in line with OI 50_12, "Water Quality Planning: no deterioration and the Water Framework Directive". We have imposed numeric limits because either a relevant environmental quality or operational standard requires this. The emission limits are:</p>	✓

Aspect	Justification / Detail	Criteria met
		Yes
	<ul style="list-style-type: none"> <li>• Ammoniacal nitrogen (expressed as N) – 5mg/l</li> <li>• BOD – 15mg/l</li> <li>• Suspended Solids – 30mg/l</li> </ul>	
Considerations of foul sewer	<p>We agree with the Operator's justification for not connecting to foul sewer.</p> <p>Connection to the nearest public foul sewer would mean the discharge would enter the Ashford Hill Woods and Meadows Site of Special Scientific Interest (SSSI) much further upstream, extending the time the discharge would spend in the SSSI. Natural England stated that an additional discharge at this location would be unsound. The Ashford Hill treatment works operated by Thames Water was designed specifically for the housing estate it serves. There is no available capacity to accept this additional discharge. This would discharge to the tributary of the Baughurst Brook which would be unsound as previously stated in respect to the location of the SSSI.</p>	✓
<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 our guidance on operator competence.	✓

## Annex 2: Consultation, web publicising and newspaper advertising responses

We set out below a summary of responses to consultation, web publication and newspaper advertising and the way in which we have taken these into account in the determination process.

### Consultee Responses

Response received from
<b>Natural England</b>
Brief summary of issues raised
Natural England are in agreement with our conclusion that the discharge was not likely to damage the special features of the Ashford Hill Woods and Meadows SSSI.
Summary of actions taken or show how this has been covered
An Appendix 4 document was sent to Natural England outlining our view that the discharge was not likely to damage the special features of the SSSI. Natural England returned the Appendix 4 document on 03/10/2016 confirming their agreement with our conclusions.

Response received from
<b>Basingstoke and Deane Borough Council</b>
Brief summary of issues raised
Environmental Health at Basingstoke and Deane Borough Council are not aware of any current issues with any private drainage systems or discharges in the Ashford Hill area. As long as the proposed sewage treatment system is fit for purpose and the effluent is contained within a pipe until the point of discharge they don't have any concerns with the proposals.
Summary of actions taken or show how this has been covered
The discharge will be made via a pipe which will ensure the effluent is fully enclosed until the point of discharge. The treatment system provided is of a high standard and suitable for this type of development.

## Public Representations

### **Topic: Impact on a designated site and local wildlife**

A number of respondents raised the issue of the discharge being made to the Ashford Hill Woods and Meadows SSSI and that this discharge would have a detrimental effect on the SSSI and its features.

Respondents included; PR1, PR5, PR6, PR7, PR8, PR9, PR10, PR11, PR12, PR13, PR14, PR15, PR16, PR18, PR21, PR22, PR23, PR25, PR27, PR30, PR31, PR34, PR35, PR36, PR37, PR39, PR41

### **Summary of actions taken or show how this has been covered**

We have discussed this issue in the Key Decisions section of this document where we explain our conclusion that the discharge is not likely to damage the special features of the SSSI. We have consulted with Natural England and they have confirmed they agree with our conclusion.

### **Topic: Low flows in the Baughurst Brook and the impact on water quality as a result of the discharge**

A number of respondents raised the issue of the Baughurst Brook exhibiting low flows, especially during the summer months and they believe the flow to be generated mainly from domestic sewage effluent discharges.

Respondents also raised concerns over how the Applicant's proposed discharge would affect the quality of water in the Baughurst Brook when combined with the other discharges already being made that either discharge directly into the Baughurst Brook or join the Baughurst Brook after discharging into the nearby tributary of the Baughurst Brook.

A number of respondents highlighted the presence of dead fish in the Baughurst Brook.

Respondents also raised the issue of low dissolved oxygen levels in the Baughurst Brook.

A number of respondents highlighted a study by the University of Reading that described the River Enborne (approximately 1km downstream from the discharge location) as not being in an ecologically resilient state.

Respondents included; PR1, PR2, PR5, PR6, PR7, PR8, PR9, PR10, PR11, PR12, PR13, PR14, PR16, PR18, PR19, PR21, PR23, PR24, PR25, PR26, PR27, PR28, PR29, PR30, PR31, PR32, PR33, PR34, PR35, PR36, PR37, PR38, PR39, PR40, PR41

### **Summary of actions taken or show how this has been covered**

We have discussed the issue of water quality in the Key Decisions section of this document where we explain the modelling undertaken, the measures taken to ensure that modelling is scientifically robust and the emission limits

placed on the Permit as a result. We consider that those emission limits will protect water quality in the Baughurst Brook.

We have no evidence to directly link the presence of dead fish and low dissolved oxygen levels with local domestic sewage discharges. There are several reasons that could contribute to these issues, such as the naturally occurring low flow characteristics of the Baughurst Brook. Our determination shows that this discharge will not materially affect the overall background water quality in the Baughurst Brook. The additional flow from this discharge may help to support the base flows in the watercourse during times of low flow.

In regard to the River Enborne, the overall influence of this discharge will be insignificant when compared to the existing factors already contributing at the point where the Baughurst Brook joins the River Enborne.

**Topic: Type of permit applied for**

A number of respondents raised concerns that the Applicant had applied to discharge at 50% higher than a Standard Rules permit would allow.

Respondents included; PR1, PR12, PR15

**Summary of actions taken or show how this has been covered**

We have a number of Standard Rule sets for a water discharge activity. These are graded on the potential risk to the environment. The Applicant has applied for a bespoke permit using application form B6 which is the correct application for a discharge of this volume. An appropriate determination has been carried out as a result. A bespoke permit determination allows us to include conditions that are specifically tailored to the needs of the specific watercourse.

**Topic: Management of the Sewage Treatment Plant system**

A number of respondents raised concerns over how a thirty-five house development would be able to ensure that the quality of effluent discharging from the sewage treatment plant could be controlled.

Respondents also raised concerns over how the products that enter the treatment system would be controlled.

Respondents also raised the issue that the area is recognised for having hard water and a nearby development has a ban on the use of water softeners.

Further concerns raised by the respondents included that the system will require the householders to be trained and external controls put in place. A respondent also raised a point that it was unacceptable for householders to face prosecution over a failure of the system.

Respondents included; PR1, PR6, PR9, PR10, PR16, PR18, PR25, PR26, PR27, PR32

**Summary of actions taken or show how this has been covered**

The Operator will be responsible for the water discharge activity and for ensuring that the discharge meets its Permit obligations. The Operator will be held responsible for any failure to comply with these obligations.

The Operator's sewage treatment facility is designed to be robust and deal with products that could adversely effect a standard treatment plant. It will be the responsibility of the Operator to ensure the treatment plant is working effectively at all times.

The Operator must have a management system in place to ensure the system is properly maintained. The Environment Agency is satisfied with the management system proposed.

**Topic: Objections at the planning stage**

A number of respondents commented that there had been 78 objections at the planning stage and that the local MP had raised the issue in the House of Commons.

Respondents also commented on an application to alter the planning permission.

Respondents included; PR1, PR17

**Summary of actions taken or show how this has been covered**

We must determine the Application on the basis of our own duties, only taking into account factors that are relevant to that process. Hence, the determination process for a water discharge activity permit does not take into account objections to planning applications, which are an issue for the local authority. The granting of a water discharge activity permit does obviate the need for the Applicant to obtain any other permits or permissions associated with this activity.

**Topic: Error in the newspaper consultation**

A respondent commented that the newspaper advert placed in the Newbury Weekly News (this was also the advert placed in the Basingstoke Gazette) was incorrect as it stated 24.3cm<sup>3</sup> a day.

Respondents included; PR20

**Summary of actions taken or show how this has been covered**

A new public notice was placed in both the Newbury Weekly News and Basingstoke Gazette correcting this error. The public notice acknowledged the error and the correct volume of 24.3 cubic metres a day was included.

<b>Topic: Odours arising from the discharge</b>
A number of respondents raised concerns over foul odours occurring from the discharge.
Respondents included; PR1, PR2, PR6, PR8, PR10, PR20, PR25, PR29, PR30, PR31, PR33, PR34, PR35, PR36, PR39, PR41
<b>Summary of actions taken or show how this has been covered</b>
We are satisfied that the Operator has in place a suitable management plan for the sewage treatment facility. Adhering to this management plan should ensure odours associated with sewage are contained within the treatment facility. A good quality discharge from a properly functioning treatment facility should not produce adverse odours.
It will be the responsibility of the Operator to ensure that its own Permit obligations are adhered to.

<b>Topic: Non-compliance of nearby permitted sites</b>
A number of respondents raised the issue of a number of other domestic sewage discharges being problematic and causing pollution of the Baughurst Brook along with odour issues.
Respondents included; PR1, PR7, PR31, PR37, PR39
<b>Summary of actions taken or show how this has been covered</b>
We determine each permit application on its own merits and assess its potential impact on the local environment.
Our determination takes into account the contribution of the discharge applied for, including in combination with existing discharges, when assessing the impact on water quality. This has been discussed in the Key Decisions section of this document. However, the performance of other permitted discharges falling below expectations can be addressed through enforcement action and does not influence the determination of this particular application.
It will be the responsibility of the Operator to ensure that its own Permit obligations are adhered to.

<b>Topic: Threat to human and animal health</b>
Some respondents expressed concern over the health of animals, specifically dogs, drinking from the Baughurst Brook.
A respondent also asked the Environment Agency to guarantee the health of individuals entering the Baughurst Brook.
Respondents included; PR1, PR7, PR29, PR35, PR36, PR39, PR41
<b>Summary of actions taken or show how this has been covered</b>

We have discussed the issues of water quality in the Baughurst Brook in the Key Decisions section of this document. As set out in that section, we have concluded that this discharge will not have an adverse effect on the current water quality of the Baughurst Brook so will not adversely affect users of that watercourse.

**Topic: Environmental Management System and Risk Assessment**

A respondent commented that the Environmental Management System and Risk Assessment were generic and did not consider the local environmental factors.

Respondents included; PR1

**Summary of actions taken or show how this has been covered**

We are satisfied that the Environmental Management System is adequate for this type of activity.

As part of the determination we carried out a risk assessment on behalf of the Applicant which dealt with the relevant site-specific issues.

**Topic: Increase in traffic**

A respondent raised concerns over the increase in traffic as a result of the development and an associated risk of air and noise pollution.

Respondents included; PR38

**Summary of actions taken or show how this has been covered**

Offsite environmental implications of the Application, such as increases of traffic (and any associated noise and air pollution) are beyond the remit of this permit determination and cannot be taken into account. These matters may be relevant to other determinations concerning the proposed development and should be taken up with the appropriate bodies.

**Topic: Environment Agency Additional Binding Rules**

A number of respondents referenced the Environment Agency's Additional Binding Rules which states "new discharges are not allowed to a ditch or a surface water that does not contain flowing water throughout the year, that is unless there is a drought or an unusually long period of dry weather".

Respondents included; PR1, PR5, PR9

**Summary of actions taken or show how this has been covered**

This is correct and refers to the issuing of a permit under General Binding Rules. The Operator applied for a Bespoke permit, which was the correct process for this Application.

**Topic: P Factor Approach**

A respondent stated that thirty-five houses could constitute a higher flow than is considered under the P factor approach of 0.8.

Respondents included; PR1

**Summary of actions taken or show how this has been covered**

The P factor is derived from Flows and Loads 4. Applying the 0.8 reduction factor for a population equivalent of greater than >50 where volume has been calculated using Flows and Loads 4 is therefore reasonable and sensible when sizing the relevant plant and permitting the discharge.

**Topic: Threat of flooding**

Respondents raised concern that if localised flooding continues to occur or potentially increases then the flooding could cause raw sewage discharges.

Respondents raised concerns that the Baughurst Brook at Old Lane floods regularly and that any further water would be too much for the system to take.

Respondents raised concerns over flooding due to increased volume and potential pollution and contamination from the effluent discharge at times of flooding.

Respondents included; PR1, PR3, PR4, PR5, PR6, PR10, PR11, PR12, PR23, PR25, PR27, PR28, PR32, PR35

**Summary of actions taken or show how this has been covered**

The siting and operation of the sewage treatment facility is the responsibility of the Operator and they should ensure that the quality of the effluent meets the permit conditions.

In the event of a flood the discharge should already meet its permitted requirements. The nature of a flood event would allow further dilution of the effluent and the volume discharged will be insignificant during times of high flows on the receiving watercourse.

The maximum volume of effluent being discharged is 24.3m<sup>3</sup> per day which compares to a Q<sub>95</sub> low flow of 898.6m<sup>3</sup> per day. The “Q<sub>95</sub>” statistic relates to the percentage of time a particular flow will be exceeded, i.e. the flow of 898.6m<sup>3</sup> per day is on average only below that flow for 18 days of the year. This shows that in the worst case scenario the ratio between effluent and river flow is 1 to 37. If we compare the maximum volume of effluent against the estimated mean flow in the Brook (15603.8m<sup>3</sup> per day) the subsequent ratio between effluent and river flow is 1 to 640. This demonstrates that this

additional discharge volume is insignificant in terms of overall flow in the Brook and indeed during flood conditions the river flow to effluent ratio will be even higher.

### **Annex 3: Legal Duties**

In this section we explain how we have addressed relevant legal requirements, to the extent that we have not addressed them elsewhere in this document.

#### **The EPR and related Directives**

##### **Regulation 59 of the EPR**

Regulation 59 of the EPR requires that the Environment Agency prepares and publishes a statement of its policies for complying with its public participation duties. We have published our public participation statement.

This Application is being consulted upon in line with this statement and satisfies the requirements of the Public Participation Directive (2003/35/EC).

Our draft decision in this case has been reached following a programme of public consultation. A summary of the responses received to our consultations and our consideration of them is set out in Annex 2.

#### **National primary legislation**

##### **Environment Act 1995**

###### **(i) Section 4 (Pursuit of Sustainable Development)**

We are required to contribute towards achieving sustainable development, as considered appropriate by Ministers and set out in guidance issued to us. The Secretary of State for Environment, Food and Rural Affairs has issued *The Environment Agency's Objectives and Contribution to Sustainable Development: Statutory Guidance (December 2002)*. This document:

*“provides guidance to the Agency on such matters as the formulation of approaches that the Agency should take to its work, decisions about priorities for the Agency and the allocation of resources. It is not directly applicable to individual regulatory decisions of the Agency”.*

It requires the Environment Agency:

*“To protect, enhance and restore the environmental quality of inland and coastal surface water and groundwater, and in particular:*

- to address both point source and diffuse pollution;*
- to implement the EC Water Framework Directive; and*
- to ensure that all relevant quality standards are met.”*

The Environment Agency considers that it has pursued the objectives set out in the Government's guidance, where relevant, and that there are no additional

conditions that should be included in this Permit to take account of the Section 4 duty.

(ii) Section 5 (Pollution of the Environment)

The Environment Agency has exercised its powers, when determining this Application, for the purpose of preventing or minimising, remedying or mitigation the effects of pollution of the environment.

As explained above, in assessing the Application and setting permit limits and conditions we have ensured that the proposed discharge should not cause a deterioration in status of the receiving waterbody or jeopardise it achieving its objective of good status by 2027. The Permit therefore fulfils our duty of minimising and mitigating the potentially polluting effects the discharge could have on the receiving environment.

(iii) Section 6(1) (Conservation Duties)

We have considered the Environment Agency's duty to promote the conservation and enhancement of the natural beauty and amenity of inland and coastal waters and the land associated with such waters, and the conservation of flora and fauna which are dependent on an aquatic environment. The conditions of the Permit as a whole will ensure that the proposed discharge does not adversely impact these factors and no other appropriate requirements have been identified.

(iv) Section 7 (Pursuit of Conservation Objectives)

We have considered whether we should impose any additional or different requirements to meet our duty to have regard to the various conservation objectives set out in Section 7 (namely to have regard to any effect which the proposals would have on sites of archaeological, architectural, or historic interest; the economic and social well-being of local communities in rural areas; and to take into account any effect which the proposals would have on the beauty or amenity of any rural area), but concluded that the existing measures contained in the Permit are sufficient.

(v) Section 39 (Costs and Benefits)

The Environment Agency has a duty under section 39 of the Environment Act 1995 to take into account the likely costs and benefits of granting the Application ('costs' being defined as including costs to the environment as well as any person). We have taken this into consideration during the determination of the Application and consider that an appropriate balance is struck between the benefits that granting the Permit will bring and associated costs (including to the Operator and the environment).

Human Rights Act 1998

We have considered potential interference with rights addressed by the European Convention on Human Rights in reaching our decision and consider that our decision is compatible with our duties under the Human Rights Act 1998. In particular, we have considered the right to life (Article 2), the right to a fair trial (Article 6), the right to respect for private and family life (Article 8) and the right to protection of property (Article 1, First Protocol). We do not believe that Convention rights are engaged in relation to this determination.

#### Countryside and Rights of Way Act 2000

Section 85 of this Act imposes a duty on the Environment Agency to have regard to the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty (AONB). There is no AONB which could be affected by the discharges of treated domestic sewage effluent from the Ashford Hill site.

#### Natural Environment and Rural Communities Act 2006

Section 40 of this Act requires us to have regard, so far as is consistent with the proper exercise of our functions, to the purpose of conserving biodiversity. We have done so and, in particular given the matters addressed in the main body of this document concerning water quality and SSSIs, consider that no different or additional conditions in the Permit are required.

#### **National secondary legislation**

##### The Water Environment (Water Framework Directive) Regulations 2003

Regulations 3 and 17 of these Regulations require that the Environment Agency exercises its water resources functions so as to secure compliance with the WFD and the EQS Directive (2008/105/EC) and has regard to the approved River Basin Management Plan for this river basin district.

For the reasons given in the main body of this document, we consider that the conditions and limits imposed in the Permit will ensure that the requirements of the WFD (and EQS Directive) are met. In doing so we have also had regard to the South East River Basin District RBMP (which covers the Baughurst Brook).