

Planning Inquiry

Land to the North of Maple Cross Lodge, Maple Cross, Rickmansworth,
WD3 9SE

Appellant: BCL (Maple Cross) LLP

Planning Application Reference: 21/0573/FUL

Planning Inspectorate Appeal Reference: APP/ P1940/W/21/3289305

Proof of Evidence

in relation to Maple Lodge Nature Reserve

by Keith Pursall (Maple Lodge Conservation Society)

March 2022

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1. Introduction

- 1.1 My name is Keith Pursall. I am Chairman and a Trustee of Maple Lodge Conservation Society (MLCS).
- 1.2 The Trustees of MLCS lease Maple Lodge Nature Reserve from Thames Water and are responsible for its maintenance and development.
- 1.3 MLCS currently has over 400 memberships, including joint and family memberships, which means there are over 600 actual members. The reserve also receives hundreds of visitors every year.
- 1.4 Maple Lodge Nature Reserve consists of 40 acres of lakes, marsh, hedgerows and woodland. It is home to a rich variety of wildlife including waterfowl, woodland birds, bats and butterflies, with many Section 41 and rare species recorded on site.



- 1.5 I am submitting this evidence on behalf of the Trustees and Members of MLCS.

2. Purpose Of Evidence

- 2.1 We believe that the fundamental issues underlying our previously stated objections have not yet been fully resolved; namely the risks to groundwater and dependent ecosystems.
- 2.2 The purpose of submitting this evidence is to itemise our concerns so that they can be fully and properly addressed.
- 2.3 The reserve is very vulnerable to any fluctuations in water supply [B.9]. Our objective is to ensure that the nature reserve's fragile wetland habitats, their dependent species and the water environment that supports them are not harmed in any way and are afforded the maximum protection allowed under UK Law.

3. General Context

3.1 TRDC Development Management Policies Local Development Document [CD 4.30] states:

“10.9 Three Rivers is an area of serious water stress”

3.2 The proposed development site and surrounding land is in a Drinking Water Protected Area, an Environment Agency designated Groundwater Source Protection Zone 1.

3.3 The Water Framework Directive (WFD) groundwater body (Mid-Chilterns Chalk), which underlies the area, is in the lowest DEFRA status classification “Poor”. The chemical element of the DEFRA status classification is “Poor” due to failure to meet the requirements for a Drinking Water Protected Area.

3.4 Maple Lodge Nature Reserve has two habitats of principal importance, listed by the Joint Nature Conservation Committee (JNCC), as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. They are reedbed and wet woodland.

3.5 Both the reedbed and wet woodland are Groundwater Dependent Terrestrial Ecosystems (GWDTEs).

3.6 Maple Lodge Nature Reserve receives its water from a combination of the input stream (which runs alongside the proposed development site), groundwater and rainfall.

3.7 The proposed development requires 3310 piles to be driven through contaminated and unstable land into the aquifer.

3.8 In order to prevent the transport of turbidity, there will be a “compaction barrier” created to the south and east of the site, which will reduce the flow of water towards the reserve.

3.9 The risks are explained in:

Draft Condition C16 - Piling Method Statement (Affinity Water, Thames Water, Environment Agency)

Reason:

The proposed works will be in close proximity to underground sewerage utility infrastructure and the source protection zone of one or more of Affinity Water’s groundwater abstractions for Public Water Supply (PWS). Piling has the potential to impact on local underground sewerage utility infrastructure in addition to contaminant transport to the Chalk aquifer (including manganese), turbidity in the Chalk aquifer and potentially at the PWS abstractions, and on ground permeability, which may affect groundwater levels and flows.

4. Our Concerns

4.1 Summary

- 4.1.1 The proposed project may have an adverse effect on the quality or quantity of groundwater flowing into Maple Lodge Nature Reserve and its two Section 41 GWDTE habitats.
- 4.1.2 The proposed works would involve driving 3310 piles through contaminated and unstable land into groundwater which (a) is already in the lowest DEFRA status classification (Poor), and (b) is in a Drinking Water Protected Area.
- 4.1.3 There is a risk that the proposed project may impact the status of the water quality of the groundwater as well as groundwater levels and flows.
- 4.1.4 Although the appellant has proposed a number of management and monitoring procedures, the risks still remain. If the proposed works, by accident, result in the loss of or harm to Maple Lodge Nature Reserve's Section 41 habitats and species, the effects could be irreversible.
- 4.1.5 There is only one Maple Lodge Nature Reserve. The importance of the reserve as an integral part of the Colne Valley Regional Park was described in a letter from the Conservation Manager of Herts & Middlesex Wildlife Trust [CD.2.7.7 – pages 19 and 20]. It must be protected as far as is practicably and legally possible.
- 4.1.6 A WFD Compliance Assessment has not been completed; nor has certain evidence been presented confirming that the application meets the environmental objectives of the WFD.

4.1.7 Compliance with the environmental objectives of the WFD must be confirmed before project authorisation [A.9].

4.2 Water Quality

4.2.1 The legislation designed to protect the quality of groundwater must be taken into consideration in this case.

4.2.2 The water environment is protected by the WFD, which is transposed into UK legislation via the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (WFD Regs).

4.2.3 As an EU instrument, the WFD is based on the precautionary, prevention and polluter pays principles as per Recital (11) [A.2].

4.2.4 The prevention principle allows the Secretary of State to act pre-emptively, i.e. to refuse an application which could lead to a deterioration in water quality rather than waiting for the deterioration to occur before the project is stopped.

4.2.5 The precautionary principle allows the Secretary of State to act on imperfect scientific information, i.e. to refuse an application if there is a real risk of deterioration, even if there is scientific uncertainty as to the likelihood / extent / timescale.

4.2.6 If the Secretary of State deems that the evidence presented does not prove with sufficient certainty that there would be no deterioration in water quality, then the application should be refused on the basis of the prevention and precautionary principles.

4.2.7 Reg 33 of the WFD Regs requires the Secretary of State, in exercising his functions, to have regard to the relevant River Basin Management Plan [A.12].

4.2.8 The relevant River Basin Management Plan in this case is the Thames River Basin District River Basin Management Plan (RBMP) - December 2015 [CD 7.2.17].

4.2.9 In Part 1, Section 1.1. The purpose of a river basin management plan [A.13], it states:

“• Baseline classification of water bodies

- One of the main purposes of this plan is to prevent water bodies deteriorating. The first step to preventing deterioration is to understand the baseline status for all the quality elements in each water body. Deterioration from the baseline is not permitted, except in very specific circumstances that are described in this plan.”

4.2.10 With regard to protected areas [A.13] it states:

“• Statutory objectives for protected areas

- This plan highlights the areas of land and bodies of water that have specific uses that need special protection. These include waters used for drinking water, bathing, commercial shellfish harvesting and those that sustain the most precious wildlife species and habitats. The plan ensures that these areas have the legally binding objectives in place that protect those uses from potentially harmful activities and new developments.”

4.2.11 The legally binding objectives for Drinking Water Protected Areas are stated in Part 1, 2.4. Protected area compliance and objectives [A.16]:

“Drinking water protected areas

The objectives for drinking water protected areas are to ensure that:

- under the water treatment regime applied, the drinking water produced meets the standards of the Drinking Water Directive plus any UK requirements to make sure that drinking water is safe to drink*
- the necessary protection to prevent deterioration in the water quality in the protected area in order to reduce the level of purification treatment required*

These objectives are at risk when increasing pollution levels caused by human activity could lead to more treatment being needed in the future and where measures are needed to reduce pollution”.

4.2.12 In Part 1, 2.2 Environmental objectives [A.14] it states:

“The environmental objectives summarised in this section are legally binding. All public bodies must have regard to these objectives when making decisions that could affect the quality of the water environment.”

4.2.13 Therefore, if the Secretary of State deems that the evidence presented does not prove with sufficient certainty that the proposed project would not have an impact on the purification process of drinking water, then the application should be refused on the basis of the prevention and precautionary principles and to comply with the objectives of the Thames River Basin District RBMP [CD 7.2.17].

4.2.14 Part 1, 2.3. Preventing deterioration [A.15] states:

“To protect the many uses and benefits the water environment provides it is essential to prevent it deteriorating. The water industry and many of the businesses essential to the economy have invested billions of pounds in

infrastructure that rely on secure supplies of clean water. Preventing deterioration also protects wildlife and people's health and wellbeing."

4.2.15 As the water body (Mid-Chilterns Chalk) is already in the lowest status classification (Poor), then any deterioration will contravene the WFD (and by extension the WFD Regs) and therefore any proposed project which may cause deterioration should be refused under the prevention principle and in accordance with the relevant CJEU rulings [A.6 – A.8].

4.2.16 The Thames River Basin District RBMP allows projects to be exempted from meeting the WFD's environmental objectives, but only if a derogation has been granted under Article 4.7 of the WFD [A.19]. There is no derogation under Article 4.7 in this case.

4.2.17 In any case, the proposed development does not meet the criteria for exemption set out in the Thames River Basin District RBMP [A.19].

4.3 Water Quantity

4.3.1 The legislation designed to protect the groundwater needs of protected areas must be taken into consideration in this case.

4.3.2 The reserve's two GWDTE habitats (reedbed and wet woodland) are afforded protection under the Water Framework Directive (WFD) through the protection of the groundwater on which they depend [A.3].

4.3.3 We wish to ensure that the protection afforded to the two GWDTE habitats under the WFD is adhered to in this case.

4.3.4 In Technical Advice Note Eighteen: The Water Framework Directive [CD 7.2.18], the Planning Inspectorate advises:

“the Inspectorate supports the preparation and submission of separate WFD assessment reports by Applicants, which clearly explain how the requirements of WFD have been met”.

4.3.5 Technical Advice Note Eighteen [CD 7.2.18] has no statutory status and applies to National Infrastructure Projects, which this application is not. However, it does give the reason why it is necessary for there to be a clear statement on how the requirements of the WFD have been met:

“2.2 WFD, HRA and EIA influence decision-making in different ways:

- the WFD assessment – informs the SoS in relation to the duty to have regard to the RBMP and any supplementary plans (Regulation 33 of the 2017 Regulations);”

4.3.6 It also contains this advice on the need to assess any risk of deterioration by having regard to the WFD objectives, with any conclusions being supported by a robust evidence base:

“4.28 The WFD assessment should assess the risk of impact to the water bodies, having regard to its specific elements and objectives. The assessment should identify if there is a risk of deterioration of any WFD element as a result of the Proposed Development and any conclusion reached should be supported by a robust evidence base. A 2015 judgment in the EU Court of Justice (Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland [2015] EUECJ C-461/13) found that the WFD precludes the authorisation of individual projects which may cause the deterioration of the status of a body of water, unless a derogation under Article 4.7 of the WFD is justified. Further, the judgement also ruled that activities which jeopardise the attainment of ‘good’

overall status are similarly precluded from authorisation. The Court advised that ‘deterioration of status’ is established as soon as the status of at least one of the quality elements falls by one class, even if the change does not result in a fall in classification of the water body as a whole (This applies unless the water body is already in the lowest status class in which case any deterioration is considered to be deterioration in status under the WFD). Therefore, Applicants should clearly identify any predicted deterioration in status in any of the quality elements within water bodies.”

4.3.8 Therefore, if the Secretary of State cannot be satisfied the risks have been clearly identified and ruled out on the basis of a robust evidence base then, as per Recital (11) of the WFD [A.2], the precautionary and prevention principles apply and the application should be refused.

4.4 WFD Compliance

4.4.1 If no derogation has been granted under Article 4.7, as is the case with this application, then in order to authorise the project, there has to be certainty of compliance with the WFD at the time of granting planning permission. This precludes such a check from taking place only after that time [A.9].

4.4.2 The WFD is also based on the polluter pays principle as per Recital (11) [A.2].

4.4.3 Therefore, the appellant must propose mitigation measures for the scenario where, by accident, their activities result in the loss of or harm to Maple Lodge Nature Reserve’s Section 41 GWDTE habitats.

4.4.4 Planning Inspectorate Technical Advice Note Eighteen [CD7.2.18] advises:

“4.4 Mitigation relied upon to demonstrate compliance ... must be appropriately defined and sufficiently secured.”

“4.29 If specific mitigation is required in order to ensure no risk of deterioration of water bodies as a result of the project, this should be clearly identified in the WFD assessment. Any necessary mitigation should be explained in detail alongside a prediction of its likely efficacy and an assessment of any residual effect. It will also be necessary for the assessment to clearly explain the type of mechanisms to be put in place in order to secure the delivery of such mitigation, including reference to any DCO requirements/deemed marine licence conditions, or other legally binding methods and timescales for delivery.”

4.4.5 Technical Advice Note Eighteen [CD 7.2.18] applies to National Infrastructure Projects. However, the principle applies in this case. If the appellant is relying on mitigation measures in order to comply with the WFD objectives, then these need to be defined before authorisation.

4.4.6 *“The type of mechanisms to be put in place in order to secure the delivery of such mitigation”* need to be clearly explained.

4.4.7 No mitigation measures have been defined for the loss of or harm to Maple Lodge Nature Reserve’s Section 41 GWDTE habitats.

4.5 TRDC Policies

DM6 [CD 4.25], DM8 [CD 4.26], DM9 [CD 4.27]

4.6 NPPF

Paragraph 174 [CD 4.10]

5. Appellant's Reports

5.1 Hydrogeological Impact Assessment and GQRA (7th June 2021)

5.1.1 This report [CD 1.3.6] is a desk-based study which makes use of a conceptual model.

5.1.2 The preface to this report states:

Where this report relies on field data these will have been interpreted with reasonable skill, care and diligence, but these data may not fully represent true conditions. Ground conditions may vary from those assumed on the basis of data relied on in this report.

5.1.3 We have already submitted our comments on this document in our Re-Statement of Case, dated 16th August 2021. Our main comments were:

i) The report misrepresents Maple Lodge Nature Reserve and is selective in its choice of ecological evidence [CD 2.7.11 - pages 4 to 9].

ii) The report confirms that groundwater flows from the proposed development site to the reserve and that piling will have an adverse effect on the flow of water to the reserve [CD 2.7.11 - pages 9 to 10].

iii) The report uses estimates to calculate the inputs to the reserve of 75% from the stream, 11% from direct rainfall and 14% from groundwater [CD 2.7.11 page 10]. These estimates are not supported by any actual readings.

iv) We supplied actual readings which showed that input to the reserve is predominantly from groundwater and not the stream, as is claimed in the report [CD 2.7.11 - pages 10 and 17].

5.1.4 On 1st July 2021 the Environment Agency withdrew their objection (subject to conditions) based on the appellant's Hydrogeological Impact Assessment and GQRA. This was before we submitted our comments on the report on 16th August 2021.

5.1.5 At the TRDC Planning Committee meeting on 21st October 2021 the decision letter, Sections 7.12.31 to 7.12.41, accepted the results of the conceptual model, even though we had previously supplied actual readings which showed that the basic data used for the model were incorrect [CD 2.7.11 – pages 10 and 17].

5.2 Maple Lodge Nature Reserve Hydrogeological Impact Assessment (16th December 2021)

5.2.1 This report [CD 1.3.7] is a data review which makes use of a conceptual model.

5.2.2 The preface to this report states:

Where this report relies on field data these will have been interpreted with reasonable skill, care and diligence, but these data may not fully represent true conditions. Ground conditions may vary from those assumed on the basis of data relied on in this report.

5.2.3 The report contains updated data on the flow of groundwater at the proposed development site.

5.2.4 The report states that “*groundwater flow in the RTD aquifer at the site is variable*” and the groundwater flow calculations are based on the “*available site data*” [CD 1.3.7 – page 8].

5.2.5 Similarly, it states that “*from the available site data, groundwater flow in the Chalk aquifer is predominantly to the south*” [CD 1.3.7 – page 8].

5.2.6 There has been no measurement of groundwater flows other than on the proposed development site. In particular, there has been no measurement of groundwater flows at a main receptor – Maple Lodge Nature Reserve – as requested as a condition by the Environment Agency in their letters dated 1st July 2021 [CD 2.1.18 – page 2] and 15th February 2022 [CD 7.2.24 – page 1].

5.2.7 There has been no measurement of groundwater flows between the proposed development site and Maple Lodge Nature Reserve.

5.2.9 The flow of water in the input stream appears to have been estimated. The report states [CD 1.3.7 – page 10]:

“The calculations have been updated as follows:

Flows from the RTD aquifer to the stream on the western boundary have been updated to include groundwater flow along its full length, estimated as 400 m. It is assumed that groundwater will be influent to the stream from one side or the other 100% of the year”.

5.2.10 There appear to have been no actual readings taken in the stream.

5.2.11 There is a stated assumption that “*groundwater will be influent to the stream from one side or the other 100% of the year*” [CD 1.3.7 – page 10]. We have already provided evidence to show there are times when there is no flow from the stream into the reserve [CD 2.7.11 – pages 10 and 17].

5.1.12 Affinity Water’s Water Resources Specialist has previously advised that “*the major factor here is the stream inlet (calculated as 806m³/d from the total inflow*

of 1079m³/d) I would expect some direct river flow gauging in that stream to verify the theoretical calculations that carry quite a bit of uncertainty... I would expect to see the outflow calculations too (including stream outflow), to make sure that the water balance is complete (i.e. water in equals water out plus lake storage)” [CD 2.7.11 – page 10].

5.2.13 The figures contained in Tables 4-1 and 4-2 [CD 1.3.7 – pages 10 – 12] are based on assumptions, estimates and available site data.

5.2.14 The report [CD 1.3.7 59 – page 11] states:

“The updated estimate of average inflow to the lakes is 2580 m³/d, of which 32% is from the stream, 5 % is from direct rainfall, 2% is from the RTS aquifer and 61% is from the Chalk aquifer”.

5.2.15 The report states *“groundwater in the RTD below the site does not flow towards the nature reserve in the drier summer months, but southeast towards the River Colne.”* [CD 1.3.7 – page 15]. This is based on an assumption that the water will continue to flow in a straight line. If that is proved to be the case, then the potential impact on another nature reserve – Maple Lodge Marsh – also needs to be taken into consideration.

5.2.16 Maple Lodge Marsh lies directly south-east of the proposed development site and, like Maple Lodge Nature Reserve, contains a Section 41 GWDTE, wet woodland.

5.2.17 There are many factors that affect the water levels at Maple Lodge Nature Reserve – groundwater in the RTD aquifer, groundwater in the chalk aquifer, water flow from the input stream, water flow to the output stream, direct rainfall plus the operation of two sluice gates. It is important that these are fully

understood in order to establish the baseline conditions for any subsequent groundwater monitoring.

5.2.18 The report [CD 1.3.7 – page 8] acknowledges the complex nature of the reserve's water supply when it states:

“The level of each lake is controlled by an outlet structure. Clubhouse Lake feeds into Marsh Lake by a direct connection channel. It is likely that both lakes are fed by flow through the superficial deposits from the River Colne and upwelling from the Chalk aquifer, as well as direct rainfall. However it is likely that Clubhouse Lake is mainly fed by the river via the superficial deposits, and Marsh Lake receives a greater contribution from the Chalk aquifer via leakage through the superficial deposits”.

5.2.19 Also, both lakes within the reserve are shallow (averaging between 0.5m and 1.0m in depth) and therefore very sensitive to any changes in water levels. These are coming under increasing stress because of the effects of climate change as is apparent in the Water Levels Graph [B.9].

5.2.20 Because of this complexity and sensitivity, baseline conditions should be based on actual data collected at the reserve, rather than a theoretical model based on assumptions, estimates and data solely collected from the proposed development site.

5.2.21 This data should be collected over a number of months, as recommended by the Environment Agency in their letter dated 15th February 2022 [CD 7.2.24 – page 1], in order to cover different conditions.

5.3 Ecological Impact

5.3.1 There has been no formal assessment of the potential impact on the ecology of the reserve measured against WFD parameters.

5.3.2 The Environment Agency, which has a role in protecting Section 41 habitats, has recommended “6-12 months of groundwater monitoring before development in order to establish baseline conditions” [CD 7.2.24 – page 1] on the reserve.

5.3.3 The reason for this condition was stated in their letter dated 1st July 2021 [CD 2.1.18 – page 2] as:

“This condition will ensure that the development does not cause undue detriment to groundwater levels upon which the Maple Lodge nature reserve relies in line with paragraph 170 of the National Planning Policy Framework”.

5.3.4 Assessment of any potential ecological impact on the Section 41 GWDTE habitats must be based on certain evidence.

6. Summary And Conclusions

6.1 Summary

6.1.1 We believe that the fundamental issues underlying our previously stated objections have not yet been fully resolved; namely the risks to groundwater and dependent ecosystems.

6.1.2 The purpose of submitting this evidence is to itemise our concerns so that they can be fully and properly addressed.

6.1.3 The reserve is very vulnerable to any fluctuations in water supply [B.9]. Our objective is to ensure that the nature reserve's fragile wetland habitats, their dependent species and the water environment that supports them are not harmed in any way and are afforded the maximum protection allowed under UK Law.

6.1.4 The water environment is protected by the WFD, which is transposed into UK legislation via the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (WFD Regs). This is implemented through the River Basin Management Plans.

6.1.5 The relevant River Basin Management Plan in this case is the Thames River Basin District River Basin Management Plan (RBMP) - December 2015 [CD 7.2.17] .

6.1.6 Reg 33 of the WFD Regs requires the Secretary of State, in exercising his functions, to have regard to the relevant River Basin Management Plan [A.12].

6.1.7 The Thames River Basin District RBMP contains environmental objectives which are legally binding. All public bodies must have regard to these

objectives when making decisions that could affect the quality of the water environment [A.14].

6.1.8 The Thames River Basin District RBMP allows projects to be exempted from meeting the WFD's environmental objectives, but only if a derogation has been granted under Article 4.7 of the WFD [A.19].

6.1.9 There is no derogation under Article 4.7 in this case and so the environmental objectives must be met.

6.1.10 Therefore, in making his decision, the Secretary of State must be satisfied that the evidence provided is robust and proves with sufficient certainty that the environmental objectives will be met [A.2].

6.1.11 Also, the Secretary of State must be certain at the time of authorisation that the environmental objectives will be met [A.9].

6.1.12 The risks from piling have been agreed as:

“... the potential to impact on local underground sewerage utility infrastructure in addition to contaminant transport to the Chalk aquifer (including manganese), turbidity in the Chalk aquifer and potentially at the PWS abstractions, and on ground permeability, which may affect groundwater levels and flows.”

6.1.13 The groundwater body (Mid-Chilterns Chalk), which underlies the area, is in the lowest DEFRA status classification “Poor” and the chemical element of the status DEFRA classification is “Poor” due to failure to meet the requirements for a Drinking Water Protected Area.

6.1.14 The Thames River Basin District RBMP states:

“Where the water body is already in the lowest status class ... no deterioration will be permitted. [A.18]”

6.1.15 and, specifically for Drinking Water Protected Areas [A.16]:

“The objectives for drinking water protected areas are to ensure that:

- under the water treatment regime applied, the drinking water produced meets the standards of the Drinking Water Directive plus any UK requirements to make sure that drinking water is safe to drink*

- the necessary protection to prevent deterioration in the water quality in the protected area in order to reduce the level of purification treatment required*

These objectives are at risk when increasing pollution levels caused by human activity could lead to more treatment being needed in the future and where measures are needed to reduce pollution.”

6.1.16 Therefore, the Secretary of State needs to be certain that no deterioration will occur and that the objectives for a Drinking Water Protected Area will be met, in particular the need *“to prevent deterioration in the water quality in the protected area in order reduce the level of purification treatment required”* [A.16].

6.1.17 A WFD Compliance Assessment has not been completed nor is there a clear statement explaining how the environmental objectives will be met, supported by certain and robust evidence.

6.1.18 The appellant’s hydrogeological reports are based on a computer model which uses assumptions and estimates in order to reach its conclusions.

6.1.19 No actual data has been presented to confirm the volumes of water received by the reserve from respectively the input stream, direct rainfall or groundwater. Nor have any measurements been taken for the output stream from the reserve.

6.1.20 The WFD is underpinned by the polluter pays principle [A.2]. If the appellant relies on mitigation measures for the scenario where, by accident, their activities result in the loss of or harm to Maple Lodge Nature Reserve's Section 41 GWDTE habitats, then these must be clearly defined before project authorisation.

6.1.21 There has been no formal assessment of the potential impact on the ecology of the reserve measured against WFD parameters.

6.1.22 No mitigation measures have been clearly defined for the loss of or harm to Maple Lodge Nature Reserve's Section 41 GWDTE habitats.

6.2 Conclusions

6.2.1 if the Secretary of State cannot be satisfied the risks have been clearly identified and ruled out on the basis of a robust evidence base then, because there is no derogation under Article 4.7 of the WFD, the application should be refused under the prevention and precautionary principles.

6.2.2 If the Secretary of State determines that the evidence presented does not prove with sufficient certainty that there would be no deterioration in water quality then, because there is no derogation under Article 4.7 of the WFD, the application should be refused on the basis of the prevention and precautionary principles and to comply with the objectives of the Thames River Basin District RBMP.

- 6.2.3 If the Secretary of State determines that the evidence presented does not prove with sufficient certainty that the proposed project would not have an impact on the purification process of drinking water then, because there is no derogation under Article 4.7 of the WFD, the application should be refused on the basis of the prevention and precautionary principles and to comply with the objectives of the Thames River Basin District RBMP.
- 6.2.4 If the Secretary of State determines that the appellant is relying on mitigation measures in order to comply with the objectives of the WFD, but that these mitigation measures have not been clearly defined, then the application should be refused on the basis of the prevention and precautionary principles and non-compliance with the WFD at the time of project authorisation.