APP/EPR/FP3435LA

Appeal by Thames Water Utilities Limited

Environmental Permitting (England and Wales) Regulations 2016

Maple Lodge Sludge Treatment Centre, Maple Cross, Rickmansworth, WD3 9SQ

Thames Water Utilities Limited: Reply
29 January 2025

This document is not intended to reply to each and every paragraph of the EA's Statement of Case, particularly where the position of Thames Water Utilities Limited ("TWUL") has been clearly set out in its own Statement of Case or where the matters raised in the EA's Statement of Case are irrelevant to the issues that will be before the Planning Inspector. Nevertheless, TWUL have sought to identify and address the key issues that are relevant to the decisions to be made by the Planning Inspector by reference to the Environment Agency's Statement of Case. Any failure to address any specific point raised by the EA should not be understood to represent an acceptance of the position adopted by the EA.

Attached to this Reply is paginated bundle marked TW2. References in square brackets are references to page numbers in the form of [TW2/tab no/page no]. Those references to documents in TW1 refer to the bundle attached to TWUL's Statement of Case.

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<u>Summary</u>

1. In this case, the improvement conditions imposed by the environmental permit require infrastructure improvements to an existing site. There is no suggestion that TWUL are introducing new risks into the environment.

2. The changes that are being required by the EA follow a change in the approach taken by the Regulator. Fundamentally, there is no change to the nature of operations on behalf of TWUL.

3. Maple Lodge is the most difficult and complex site within TWUL's estate. The financial cost of the requirements that have been introduced as a consequence of the improvement conditions run into the millions of pounds.

4. Water and sewerage companies have a very specific funding model. That model exists for a number of reasons, not least to ensure that customers get value for money as well as ensuring that customer bills are kept to the minimum required.

5. In order to obtain funding, water and sewerage companies must submit a business plan to Ofwat. That business plan will identify those areas that require funding.

6. In this case, the change in regulatory approach by the EA was made **<u>after</u>** business plans for PR19 had been submitted to Ofwat. The result is that no provision was made to fund the improvements that are required due to the change in regulatory approach and the consequent improvement conditions.

7. It is not reasonable for this specific funding model, the availability of funding provision and how improvements will be paid for to be disregarded where the circumstances are such that improvements are being required to an existing site.

8. The funding for such improvements will only materialise in PR24. Ofwat have now made provision for £28.8m for Maple Lodge IED improvements in AMP8, coupled with a cost sharing mechanism should actual costs exceed that amount.

9. In addition to funding, there are significant practical hurdles to meeting the deadlines that have been imposed. It has been calculated that tank coverings at Maple Lodge will take around 9 years to complete, given operational constraints. Both the permit decision document and the EA's Statement of Case give no indication that the EA have properly taken into account the practical realities of complying with the improvement condition deadlines at the time that the permit was issued.

10. There are elements of significant concern that are raised by the EA's Statement of Case. On its face, the EA have raised the prospect of future permit refusals merely as a result of TWUL seeking to raise funding provision as a practical hurdle to compliance. Criminal enforcement is referred to repeatedly. There are 18 references to "best endeavours", even though this is entirely irrelevant to the determinations to be made by the Planning Inspector.

11. It is the Regulator that determines the relevant timeframe for an improvement condition. For the Regulator to set an unreasonably short deadline for an existing site, where the deadline is impractical and no funding is available to be able to meet that deadline, and then for the Regulator to suggest that the operator is financially incompetent, is contrary to principles of good regulation.

The requirement to factor funding provision into any relevant deadline

12. Numerous legislative provisions require the EA to recognise the availability of funding provision in its decision-making process.

The Environment Act 1995[1]

> ***4.- Principal aim and objectives of the Agency***
>
> *(1) It shall be the principal aim of the Agency (subject to and in accordance with the provisions of this Act or any other enactment* ***and taking into account any likely costs****) in discharging its functions so to protect or enhance the environment, taken as a whole, as to make the contribution towards attaining the objective of achieving sustainable development mentioned in subsection (3) below.*
>
> (emphasis added)

[1] TW2/1/1

The Environment Agency's Objectives and Contributions to Sustainable Development: Statutory Guidance[2]

"1.3 The Agency is required to take into account any likely costs in achieving its principal aim, ***and to take account of the likely costs*** *and benefits in exercising its powers. This includes costs to people and organisations, and costs to the environment.*

3.10 The Environment Agency's work can have major social and economic as well as environmental consequences. The Environment Agency should develop approaches which deliver environmental requirements and goals ***without imposing excessive costs*** *(in relation to benefits gained) on regulated organisations.*

(d) Industry regulation

- *To set permit conditions in a consistent and proportionate fashion based on Best Available Techniques and taking into account all relevant matters including:*
    - ***Sectoral and site-specific compliance costs****; and*
    - *The resulting local, national and transboundary environmental benefits."*

(emphasis added)

The Deregulation Act 2015[3]

108 Exercise of regulatory functions: economic growth

(1) A person exercising a regulatory function to which this section applies must, in the exercise of the function, have regard to the desirability of promoting economic growth.

(2) In performing the duty under subsection (1), the person must, in particular, consider the importance for the ***promotion of economic growth of exercising the regulatory function*** *in a way which ensures that-*

(a) Regulatory action is taken only when it is needed, and

(b) Any action taken is proportionate.

(emphasis added)

[2] TW2/2/8
[3] TW2/3/19

Growth Duty Statutory Guidance[4]

> *"Regulators should seek to provide services in a way that meets identified business needs and maximises cost effective delivery. This involves assessing what the perceived regulatory barriers are at each stage of the product lifecycle and putting in place measures to minimise such burdens. When a regulator runs a quick process with minimal inputs and compliance burdens for a business, that frees up business to use the time and money they would otherwise spend with the regulator instead to put to more productive uses, leading to lower operating costs, driving profits and investments. With less time and money on regulatory compliance, businesses can redirect resources toward more productive activities such as innovation, expansion and job creation. Lower compliance costs can potentially lead to more competitive pricing and improved product or service quality, benefiting consumers and driving increased demand.* ***Regulators should adopt an agile and flexible approach to reach pro economic outcomes.****"*

(emphasis added)

13. It appears that the EA accepts this proposition[5], despite the attempt by the EA to mischaracterise the points made by TWUL as an issue of financial competence:

> *"As the regulator, we have a responsibility to consider that an operator of any regulated facility should be financially capable of complying with an environmental permit."*

Funding that has been made available in PR24

14. Following the Final Determinations made by Ofwat, funding provision for IED enhancements are now available for the TWUL estate, including at Maple Lodge. TWUL has been awarded £28.8m specifically for Maple Lodge. In addition, a cost sharing mechanism has been put in place should costs at the site exceed this figure.

Overview of Thames Water's PR24 final determination[6]

> *"In our final decision, we are increasing the amount we include in the delivery mechanism from £944 million in our draft decision to £1.22 billion. This is for improvements to storm overflows, phosphorus removal from wastewater that enters rivers and Industrial Emissions Directive expenditure."*

[4] TW2/4/47
[5] Paragraph 136 of the EA's Statement of Case
[6] TW2/5/66

PR24 final determinations: Expenditure allowances – Enhancement cost modelling appendix[7]

"To assess efficient cost of IED compliance over the 2020-21 to 2029-30 period, we issued a data request in August 2023 that asked for scheme level IED cost and cost drivers data with the cost data split into several categories:

- *Secondary containment;*
- *Tank covering for abatement of fugitive emissions;*
- *Cake pad / cake storage covering;*
- *Control and monitoring;*
- *Liquor sampling;*
- *Permit application; and*
- *Other*

We asked companies to re-submit the data in December 2023 to help account for the further clarification of IED compliance requirements (for example, in terms of scope). We also created an additional business plan Table ADD14 for companies to provide updated IED data in response to draft determinations.

We used this scheme level data to determine efficient costs of compliance with IED requirements as part of the PR24 price review. We have data on cost and cost drivers at all company bioresources treatment centres subject to IED. That creates a sample of schemes available across all companies over the 2020-30 period.

We used a hybrid modelling approach to set efficient allowances for IED compliance at final determinations:

- *Scheme level econometric modelling for secondary containment and tank covering costs; and*
- *We apply the company level modelled efficiency of secondary containment and tank covering to other IED costs."*

And later:

[7] TW2/6/200

"Table 36: Summary statistics for IED dataset of the cost drivers used

Variable	*DD*	*FD*
Number of sites	*117*	*114*
Enhancement totex for secondary containment	*£559.67m*	*£653.97m*
Enhancement totex for tank covering	*£609.24m*	*£632.56m*
Enhancement totex for all other categories	*£374.02m*	*£324.74m*
Secondary containment bund wall surface area	*72,447m2*	*72,723m2*
Secondary containment volume of bund	*932m3*	*922m3*
Surface area of tank covers provided	*156,544m2*	*158,810m2*

The table shows that secondary containment and tank covering form the majority of enhancement totex required to comply with IED. Therefore, our modelling approach focused on developing scheme level econometric models that use key cost drivers to model efficient secondary containment and tank covering costs."

And at page 123:

- *We are providing PR24 allowances for IED compliance obligations that were required to be delivered in the current 2020-25 price control period*

Aligning risk and return[8]

"Our PR24 final determinations extend the protection for changes in costs that are over and above those reflected in general inflation (also referred to as relative price effects). In addition to labour costs, we extend those protections to energy expenditure allowances and plant and material enhancement costs. We extend standard cost sharing to bioresources and we have also introduced or amended bespoke cost sharing arrangements for expenditure on enhancements, Industrial Emissions Directive expenditure allowances, and some other large investment areas.

[8] TW2/6/314

…

Our PR24 final determinations include a number of targeted amendments to the risk and return package compared with the arrangements in place for the 2020-25 period. These aim to support companies to deliver the step increase to the financing and investment requirement in the 2025-30 period, while also seeking to protect customers from a miscalibration of the price determination package. These amendments include:

…

- *The introduction of a delivery mechanism for Thames Water and Southern Water that will allow them to claim additional expenditure allowances in 2025-30 for additional schemes, not able to be included in the expenditure allowances;*

…

- *The introduction of enhanced (25%) cost sharing rates for investments associated with the Industrial Emissions Directive, environmental permitting regulation (EPR) permits, abstraction charges, discharge consents, schemes included in enhanced engagement and the large scheme gated process;"*

The availability of funding and the length of time that has realistically been available for compliance

15. Paragraph 8 of the Environment Agency's Statement of Case does not accurately reflect the correct context of where TWUL finds itself at this point in time. It reads:

> *"Water and Sewerage Companies (WaSCs) were notified, at a Water UK Strategic Steering Group meeting as far back as 2 April 2019, that all sewage sludge AD facilities including this site, were required to comply with the requirements of the IED. WaSCs were also informed that the date for all operators to be compliant with the Waste Treatment BAT conclusions was 17 August 2022. As such, it is important to recognise that prior to this appeal the Appellant has already had nearly 5 years to develop and implement solutions which met BAT against improvement conditions IC12, IC13, IC14, IC15a, b and c, IC16, IC17a and IC19a."*

16. However, key to understanding the correct context in which this appeal is made includes:

i) Although WaSCs were informed on 2 April 2019 that the EA had changed its approach and determined that the biological treatment of sewage sludge fell within the scope of the IED, it would not have been possible or practicable to start to "*develop and implement solutions*" as of that date. The EA were still consulting on and finalising guidance on the 'appropriate measures' to be taken by WaSCs in September 2022.

ii) There have been significant delays in the permitting process, and very few AD sludge treatment centre environmental permits have been processed[9]. The draft permit for Maple Lodge was issued in February 2024. It is the draft permit that sets out the specific deadlines for Maple Lodge. The EA's covering email enclosing the draft permit identifies that the EA are not asking for comments on the conditions that have been imposed at the point when the respective deadlines are imposed.

iii) The paragraph shows no appreciation that the timing of the application of the IED to AD at sludge treatment centres fell outside of the funding cycle for proper scoping and costing for the PR19 5-year period of 2020/21 – 2024/25. Appropriate funding is critical to implementation.

17. TWUL's PR19 business plan was submitted in September 2018[10]. No allowance was made in the business plan for any infrastructure improvements as a consequence of the Industrial Emissions Directive. At the time, this approach was entirely understandable and consistent with the position of the Regulators. Defra's stated position in 2012 had been that in its view was that the treatment of residual sludge was excluded from the scope of the IED. Ofwat's methodology for the 2019 price review was published on 13 December 2017. 'Bioresources control' was addressed at Appendix 6[11]. Unsurprisingly, the Industrial Emissions Directive is not mentioned.

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[9] TW2/9/518 – the spreadsheet shows several occasions where months have elapsed without any correspondence or input from the EA on the respective permit applications.
[10] Thames Water PR19 Business Plan
[11] Ofwat methodology 2019 price review and Appendix-6-Bioresources-FM-final.pdf

18. The first direct communication to the water industry was in a paper presented at the Strategic Steering Group meeting in April 2019[12]. This communication occurred two months after Ofwat's initial assessment of the industry's business plans in February 2019.

19. The EA accepted in that communication that it, the EA, had delayed the implementation of this aspect of the IED for over 5 years. The EA went on to state:

> *"Where additional measures are required we will use improvement conditions within permits to allow time to achieve the BAT standard."*[13]

20. Under next steps, the EA stated:

> *"The Environment Agency is developing a sludge strategy in order to plan and deliver clear and consistent regulation of sewage sludge treatment and use activities. It will be finalised by the end of 2019. The permitting of sewage sludge biological treatment activities is one element of that strategy. It will be delivered in parallel with the development of the strategy.*
>
> *We will use the Water UK waste and recycling network (WaRN) as the main forum to discuss IED and permitting arrangements. We therefore propose that the representatives who attend WaRN act as the main point of contact. We will also ensure that our water company account managers are kept fully informed of progress.*
>
> *On a practical level all internal resourcing and training needs are being addressed in preparation to support pre-application discussions and the receipt of permit applications later this year. Through WaRN we [will] be asking each company to provide a definitive list of all sites used to carry out biological treatment of sludge, and to provide a best estimate of the number of permit applications they anticipate making."*

21. In fact, a strategy for safe and sustainable sludge use was not published until 1 August 2023.

22. More importantly, the EA did not conduct a business impact assessment. The justification for this approach was that the IED was not 'new' legislation as the change in regulatory

[12] TW1/9/106
[13] There was no suggestion that environmental permits would be refused.

position had resulted from a re-interpretation by the EA of the ambit of the IED. No assessment was made by the EA how the proposed infrastructure changes would be funded.

23. There is no mechanism to add additional requirements into business plans after their submission to Ofwat.

24. Formal notice of the changes to IED regulation was received on 8 July 2019[14]. The letter from the EA read:

> *"At the last Strategic Steering Group meeting on 2 April 2019 we tabled a paper about implementation of the Industrial Emissions Directive (IED) for biological treatments of sewage sludge. The paper (enclosed) informed the group that the IED applies to the biological treatment of sewage sludge, and that we would be discussing the timetable and process for permit applications with the Water UK waste and recycling network. The meeting acknowledged the paper and its contents received some discussion.*
>
> *The purpose of this letter is to inform you that we are now implementing this aspect of the IED. This means that permits will be required for the biological treatment of sewage sludge above the IED thresholds. We will arrange for engagement and further communications to take place, principally through the Water UK waste and recycling network, and will be inviting applications for permits in accordance with a timetable to be agreed."*

25. The letter then asked water and sewerage companies to provide details of their various sites to the EA.

26. TWUL submitted a cost adjustment claim to Ofwat for approximately £38.7 million for IED improvements across its estate. This was rejected by Ofwat.

27. There was no possibility of properly scoping out the cost of required infrastructure improvements to achieve IED compliance at this time. This is reflected in the £38 million figure provided to Ofwat at this stage.

28. No funding provision existed for IED improvements in the 2020-2025 period.

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[14] TW1/10/108

29. The EA published 'Appropriate Measures for the Biological Treatment of Waste' in September 2022[15]. This is the first publication relevant to BAT published after the date that the EA concluded that the IED applied to anaerobic waste plants. It would not have been reasonable for water and sewerage companies to act prior to the publication of this guidance. There would have been a significant risk of wasted work as well as abortive spend. It is self-evident that the EA were still in the process of evaluating and determining what steps should be taken by operators as late as 2022. By way of example, consultation questions included:

> *"Q10. Do you think that the requirement to install secondary containment that is built to a recognised standards should be an appropriate measure?"*
>
> *Q11. Do you think the guidance is clear on the requirements to cover storage structures?"*

It is unrealistic to suggest that the regulatory position was settled when the principal relevant guidance was subject to consultation and finalisation over a two-year period.

30. The requirements of the Appropriate Measures guidance are greater than could have been foreseen in 2019. Earlier guidance was not intended to cover the water sector for anaerobic digestion. The guidance entitled 'How to comply with your environmental permit', published in 2013 was withdrawn on 1 February 2016. The withdrawal date predates when water companies were informed of IED changes.

31. Previous generic guidance is of no real relevance to sludge treatment centres.

32. Ofwat themselves have recognised the lack of certainty in the requirements imposed on WaSCs, as evident in the final determinations.

[15] TW2/8/355

Why funding provision is relevant to the Planning Inspector

33. The EA's approach to what factors should be properly taken into account in determining the relevant time periods for compliance is wrong and unreasonable. The EA, in their Permit Decision Document, have recorded[16]:

> *"We do not accept that deadlines for BAT compliance, required as a result of the already materially overdue national implementation of the IED, should be based on Water Company price review periods rather than a pragmatic, proportionate and reasonable timescale for completing an improvement condition taking into account the ongoing risks to the environment and human health. These are not new or innovative proposals or techniques. In this context, 'Best Available Techniques' means the economically and technically viable available techniques which are the best for preventing or minimising emissions and impacts on the environment as a whole. Availability is assessed on a sectoral basis, not on the claims of one WaSC. The fact that the rest of the WaSCs will implement these techniques, coupled with their specific inclusion in the BAT Conclusions documents, strongly indicates that they are indeed 'available'. In the absence of approved alternatives, they are a requirement of Article 11 IED which we must ensure compliance with under paragraph 5 of schedule 7 EPR. We do not consider reference to PR24 or subsequent price review discussions to be appropriate or relevant to this determination.*
>
> *We have therefore set a final deadline of 31 March 2025 for these ICs. It should be noted that the implementation date for operators to be compliant with the Waste Treatment BAT conclusions was 17 August 2022. We believe that the deadline specified in the improvement condition provides a sufficient timeframe in which the operator can produce and implement detailed plans to meet BAT. Where operators do not satisfy the requirements of the improvement condition by 31 March 2025, the Environment Agency may commence enforcement action for that failure [of] the WaSC. Failure of the operator to achieve BAT or failure to take steps to implement BAT by the backstop will be at the operator's risk.*
>
> *We consider the adoption of this more flexible approach to be pragmatic and proportionate, securing adequate progress towards, and delivery of, BAT within a reasonable timescale. Allowing a longer timescale would not, in our view, be acceptable because of the ongoing risks to the environment and human health. A stricter approach would most likely have meant that we would refuse the application."*

[16] TW1/1/13

34. Significant parts of this section are repeated at pages 5 and 17.

35. These paragraphs identify a number of relevant considerations:

i) The EA have stated that they consider the final deadline of 31 March 2025 to be "*a pragmatic, proportionate and reasonable timescale* ***__for completing__*** *an improvement condition*";
ii) The EA consider that the timescale provides sufficient time to "***__implement__***" BAT;
iii) A failure to meet the deadline may lead to enforcement action, effectively a criminal prosecution.

36. In fact, the final deadline of 31 March 2025 is not a pragmatic, proportionate or reasonable timescale for completion, just 13 months after the publication of the draft permit. The deadline is inherently unreasonable.

37. No regard has been had for the proper context in which water companies find themselves. The fact that the implementation of IED to WaSCs was delayed should not be held against TWUL.

38. The term 'available' has been confused with the entirely distinct issue of whether proper financial provision has been made. It isn't disputed that the techniques can amount to BAT. The point that is being made in this appeal is that the techniques are not funded and cannot be implemented without proper funding provision. Any timescale has to take account of these funding constraints. The reference to other WaSCs and availability of techniques is irrelevant and misleading.

39. Having taken the decision to grant the application, as was indicated would be done back in 2019, a number of consequences flow. One of them is to properly take into account the cost of the required improvements and whether or not those costs can be funded. Another is to consider the practicalities of the required improvements. None of this has been done by the EA.

40. Failure to comply with a permit condition is a criminal offence. Criminal liability is extremely serious. Compliance with the current deadlines is simply not feasible. The EA's

unreasonable approach will place specific individuals, as well as TWUL, at risk of criminal proceedings.

41. Ofwat has not stated that financial provision is an irrelevant consideration. Ofwat has only stated that the PR24 review itself is not a reason to delay compliance, but in this case TWUL is not seeking to delay compliance purely because there exists a price review process:

    i) TWUL does not rely on the existence of the process alone;
    ii) Funding provision and the availability of funds is distinct from fact of the process itself;
    iii) A realistic approach to any deadline must be taken, taking into account both funding provision and practicalities;
    iv) It is the duty of the EA to take proper account of site-specific compliance costs in determining any relevant permit condition;
    v) A failure to meet an improvement condition deadline results in a strict liability criminal offence.

42. Critically, Ofwat has stated:

> *"Some companies have said that their IED improvements cannot feasibly be delivered by the 2024 deadline. However, we expect companies to make every effort to have permits in place and to deliver the required improvement works by the December 2024 deadline. To encourage companies not to delay, we will consider whether to provide funding for costs incurred during the period 2020-2025."*

43. It is self-evident from the above quoted passage that it is acknowledged by Ofwat that it may not be feasible to meet the EA's deadline and that funding is directly relevant. Had the Maple Lodge permit been issued in March 2025, with the same deadline for compliance, it is inconceivable that such a deadline would not be considered unreasonable.

44. There is an inescapable and irreconcilable contradiction between the provision of funding for IED compliance within AMP8 (for which TWUL had none and for which there remains considerable uncertainty over the total costs, hence the cost delivery mechanism) and a requirement of compliance in AMP7.

The scope available to the EA to request further information

45. Where an issue is raised, such as funding, there is nothing to prevent the EA from requesting further information relevant to that issue. As can be seen from the attached spreadsheet, there have been numerous Requests for Further Information from the EA, as well as Schedule 5 requests[17].

46. Paragraph 4 of Schedule 5 to EPR 2016[18] states:

> *"(1) If the regulator considers that it requires further information to determine a duly-made application, it may serve a notice on the applicant specifying the further information and the period within which it must be provided."*

47. TWUL did specifically raise funding as an issue. TWUL's response to the EA's letter of 26 September 2023 states (by way of a single example)[19]:

> *"Thames Water is committed to meeting the requirements of BAT. A full BAT risk assessment is required to determine the potential need to cover open topped tanks. Thames is not able to commit covering tanks by the stated deadline of December 2024, delivery timescales will be subject to the outcome of PR24 and subsequent price review discussions."*

48. It is of note that TWUL has not sought to deviate from BAT.

49. Section 15(1) of the Water Resources Act 1991 reads:

> ***"15. – General duties with respect to the water industry***
>
> *(1) It shall be the duty of the Agency and the NRBW, in exercising any of their powers under any enactment, to have particular regard to the duties imposed, by virtue of the provisions of Parts II to IV of the Water Industry Act 1991, on any water undertaker or sewerage undertaker which appears to the Agency or the NRBW, as the case may be, to be or to be likely to be affected by the exercise of the power in question."*

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[17] TW2/9/518
[18] TW2/10/519
[19] TW1/12/128

50. Chris Weston sought to highlight this to the EA in his letter of 1 March 2024[20]:

> *"Although the IED was transposed in England and Wales by amendments to the Environmental Permitting Regulations in February 2013, there was initial uncertainty surrounding the applicability of this directive to sewage sludge treatment and management. The EA carried out a review to determine the applicability of the IED to Sewage Treatment Works ('STWs') undertaking the biological treatment of sewage sludge and set out an interim position which deferred the need for water companies to apply for IED-EPR permits. Subsequently, on 9 July 2019, Water and Sewerage Companies received an official letter from the EA formally confirming the requirement to apply for permits. Although we received notice to apply for permits, it was unclear what investment would be required at sludge treatment centres ('STCs'). As such, any request to Ofwat at PR19 for funding to implement IED permits was rejected. The industry subsequently received notification from the EA that full compliance was expected by December 2024, despite the standards having not been finalised nor funding being allowed by Ofwat. Even though no funding was agreed, during AMP7 the industry has applied for permits and worked with the EA to establish the standards required at STC's. These requirements have only just been finalised through Water UK and the permitting process.*
>
> *We now find ourselves in a position where permits are being issued requiring full compliance by March 2025 – irrespective of the scale of investment required. For Thames Water the overall programme is estimated between £500 million - £600 million and we believe will take between 5 and 10 years to fully implement. In the meantime, we await Ofwat's decision on funding as part of PR24 (with final determinations expected in December 2024). Furthermore, the EA has started inspections against the new standards issuing non-conformances and requesting compliance by 2025, reserving the right to take enforcement action. Given we have not yet secured the funding, and practically it will take years to deliver all the investment, we currently have no option but to appeal all permits and potentially consider legal challenges."*

51. Water UK have also raised the issue directly with the EA[21]:

> *"We note your position with regards to funding, namely, that this is a matter for the industry to discuss with Ofwat. Ofwat have maintained that they are unable to fund activity that does*

[20] TW1/5/49
[21] TW1/7/54

not have a regulatory driver in AMP8, and this continues to be incompatible with the Environment Agency's position that IED must be delivered in AMP7. As an industry we request the EA to consider a staged approach to implementation with the investment associated with secondary containment and covering of tanks, moved to circa 2027"

52. In spite of their legal obligations, the EA accept that they have not considered available funding as part of the determination of the permit[22]:

"We do not consider reference to PR24 or subsequent price review discussions to be appropriate or relevant to this determination."

53. The EA's denial of funding provision as a relevant issue is in breach of the EA's duty as well as the spirit of the permitting scheme and what is required. This is not a one-way process. The consequence has been the imposition of arbitrary deadlines, without proper regard for those factors that the EA is required to take into account.

Additional practical difficulties in meeting the IC deadlines

54. The Maple Lodge IED permit has identified the most interventions of any of TWUL's sludge treatment centres, with 8 floating roof digesters, 14 open secondary digestors and 4 pre-anaerobic digestion tanks. Even if TWUL had had the funding available and able to commence work in 2019, Maple Lodge would still not have been able to meet the relevant deadlines. The primary digester programme alone laid end-to-end would take in the order of 9 years to complete.

55. By way of example, an existing uncovered tank will not have considered these additional loads in its design. It is also possible that the effect of vapour arising from the contained liquor has a different impact on the durability of a covered tank. The construction material of the tank will be a factor for both loads and durability. Factors that can complicate the retrofitting of a cover to an existing tank include:

    i) No design information existing for the tank. It is often the case that either very limited information or no information at all will be available for a particular tank.

[22] TW1/1/14

ii) No design information existing for the tank foundation slab and foundation design. It is very often the case that foundation details do not exist.

iii) Assumptions on the construction details associated with the above, either need to be validated by onsite testing or a designer either chooses to take a risk that reasonable assumptions are correct or has to make very conservative design proposals based on the lack of information. It is unlikely that any party can guarantee these proposals due to limits of professional indemnity.

iv) Even if accepted, the subsequent design proposal for covering a tank may result in a highly inefficient construction approach.

v) The design life of an existing tank can be nearing its end.

vi) Contractual responsibility for the integrity of a retrofitted structure is a risk that has to be appropriately managed.

vii) The impact on downstream existing process trains may be adverse where magnitude of gas captured exceeds capacity of those units. The resulting increase in capacity may be a significant impact in asset investment and operation of the site. Although the health and safety risks of this can be managed, the practicability of the approach may not be justifiable.

56. Garry Strange, Technical Director at Atkins Realis, has produced a Technical Note[23] on the practical impacts of attempting to comply with the requirements of the EA at Maple Lodge specifically. Key points are:

i) The process for taking a primary digester out of operations at Maple Lodge and undertaking the necessary improvement works is extremely complex. It is calculated that the refurbishment and roof replacement of a primary digester at Maple Lodge will take in the region of 15 months.

ii) Only 1 primary digester may be taken out of operations at any one time, in order to ensure that the site remains in compliance and is operationally effective. Taking more than one digester out at any one time would result in the site not being able to process the incoming sludge to the required standard to allow the sludge to be satisfactorily recycled. There are 8 primary digester tanks at Maple Lodge. It is calculated that the total amount of time required to put covers on the primary digesters amounts to 2400 working days (approximately 9 years).

[23] TW2/13/525

iii) Four secondary digesters may be taken out of service and refurbished at any one time. Taking any more out than this would result in the secondary digesters being overloaded, resulting in a failure of the required treatment standards. As with primary digesters, the process of refurbishment and installation of covers is extremely complex. It is anticipated that four tanks would take 16 months to complete following design and procurement. Analysing the site, it is calculated that the total amount of time required to put covers on the secondary digesters is 1240 working days (between 4 and 5 years).

iv) Secondary containment must follow completion of tank covers. Due to the length, height and location of the bund walls to enable the appropriate containment volume, this will hinder the ability to site the crane in the required locations to be able to access each of the tanks to allow tank covers to be safely installed. As a consequence, secondary containment must be completed in phases, the last phase surrounding the second set of primary digesters.

57. Funding for this activity will commence in 2025. It has been calculated that to complete the works as required by the EA through the use of improvement conditions will take approximately 9 years.

58. It was identified to the EA on 16 January 2024[24] that TWUL was developing an integrated delivery plan for tank covers, to allow TWUL to share a "deliverable/best endeavours" investment programme. The EA dismissed this proposition. The approach of the EA was to impose the deadline of 31 March 2025 without any regard to what might be proposed as deliverable. This is inherently unreasonable.

Specific issues with the EA's Statement of Case

A local enforcement position

59. Paragraph 7: this is not a local enforcement position. The permit has been issued with improvement conditions, with discretionary deadlines for compliance. TWUL operates in accordance with terms of the permit as they apply.

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[24] TW2/12/523

The interpretation of CIRIA

60. Paragraph 32 implies that CIRIA mandates a 110/25% rule. It does not. This fact was the subject of the Reading appeal and determined in that appeal. However, the interpretation of CIRIA is irrelevant to the determination of the issues before the Planning Inspector in this case. Paragraph 113 identifies that the EA does not agree with the findings of the Planning Inspector in the Reading appeal. However, that is also irrelevant to this appeal.

61. Furthermore, it is not permissible to admit into evidence extrinsic evidence, not known to those affected by that evidence and not plain on the face of the public document itself, in order to determine the meaning of guidance (see *Slough Estates Ltd v Slough Borough Council & others* (1970) 21 P.&C.R. 573). Reference to the email of Michael Nicholas is not permitted and it would be wrong in law for the Planning Inspector to have any regard to it.

The interpretation of guidance relevant to the sludge treatment process and indirect emissions to water

62. This is not relevant to the determinations that the Planning Inspector will be required to make in this case.

The use of improvement conditions

63. Paragraph 101: the EA had always determined that permits would be granted and use made of improvement conditions. This was communicated to all WaSCs in April 2019[25].

The reason for the appeal

64. Paragraphs 129, 161 and 176: cost and the requirement for available funding have been unreasonably ignored by the EA. Practicalities have not been properly taken into account by the EA. It is clear why TWUL states that the deadline is unreasonable.

Section 15 of the Water Resources Act 1991[26]

65. Paragraph 134 is fundamentally wrong in law. Section 15(1) of the Water Resources Act 1991 mandates that the EA must have particular regard to the duties imposed on TWUL by virtue of the provisions of Parts II to IV of the Water Industry Act 1991 in exercising any of its powers under any enactment, which includes permitting decisions made pursuant

[25] TW1/9/106
[26] TW2/11/520

to EPR 2016. It is plain that those responsible here for the imposition of specific conditions in the Maple Lodge permit have had no regard for s.15(1).

Financial Competence

66. Paragraph 140: at no stage has TWUL made any suggestion that it is "*not financially competent*". This aspect of the EA's Statement of Case is a mischaracterisation by the EA of the nature of the argument advanced by TWUL as part of its appeal and reflects a failure by the Environment Agency to properly recognise key financial constraints that are placed on the water industry. The existence of such constraints has been raised repeatedly by TWUL, the wider industry and Water UK. Financial competence is entirely irrelevant to any decision that the Planning Inspector will be required to make. The Planning Inspector is not being asked to make an adjudication based on an assessment of operator competence, nor has this been raised at any stage as part of the permitting process.

67. For the avoidance of any doubt, TWUL's position is that a lack of funding from Ofwat does not render TWUL financially incompetent, but that the lack of available funding for specific improvements is a practical obstacle that the Environment Agency is obliged to properly take into account in determining the timescales that are achievable for improvements at an existing site, particularly in light of the fact that a failure to comply with an environmental permit condition is a strict liability criminal offence.

Best endeavours

68. Paragraph 145: 'Best endeavours' is irrelevant to the decision before the Planning Inspector. Deadlines set by improvement conditions should be realistic.

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69. It is of note that the EA's Statement of Case makes no proper reference to the need for a risk assessment and for the appropriate decisions to be based on that risk assessment. However, this is not an issue that is relevant to this appeal.

Stability of digestate

70. The stability or otherwise of digestate is not a matter for this appeal. The fact that this has been the subject of significant debate and uncertainty supports TWUL's position that these are not straightforward matters and that solutions will require time.

<u>The use of biogas</u>

71. Paragraph 239 and those that immediately follow are not applicable to Maple Lodge. Maple Lodge is currently unable to collect and utilise any more biogas. The CHP engines are already delivering the maximum energy demand for the surrounding network and to increase biogas, a methane study has shown that the gas grid would need a 3 kilometre connection through environmentally sensitive land. Any more biogas collected at Maple Lodge would require the gas to be flared.

<u>Conclusion</u>

72. £28.8m of funding for IED improvements at the Maple Lodge site has now been made available in PR24, coupled with a cost sharing mechanism should actual costs exceed this amount.

73. The practicalities of the required improvements, which are themselves highly complex works that will require considerable time and resources, are such that they could not feasibly be completed by the deadline of 31 March 2025.

74. The current environmental permit makes no allowance for funding provision or practicalities. Such an approach is inherently unreasonable.

75. It is no answer to suggest that TWUL has had since 2019 to implement site improvements. Appropriate measures guidance was not published until September 2022, having been subject to consultation and change prior to this point. The draft permit was not issued until February 2024, finalised in March 2024. No provision for funding for any IED improvements existed for TWUL in AMP7.

76. By virtue of this appeal, TWUL has raised legitimate concerns that it has with unilaterally imposed and arbitrary deadlines. In circumstances where improvements are being required of an existing site and where the deadline for compliance is discretionary, it is entirely reasonable for those concerns to be taken into account.

77. At no stage should it be considered that TWUL has suggested that it is not financially competent. A lack of funding provision is a practical obstacle that the EA is obliged to properly take into account in determining the timescales that are achievable **<u>for an existing</u>**

site, particularly in light of the fact that a failure to comply with an environmental permit condition is a strict liability criminal offence.