

**From:** [Humphreys, Clive](#)  
**To:** [Steve Spencer](#); [Overton, Michael](#); [Berman, Lucy](#); [Tom Boichot \(Guest\)](#); [Molyneux, Steve](#); [Hatch, Richard](#); [Eugenia Vela \(Guest\)](#); [Shaw, Cameron](#); [Gavin Yuill \(Guest\)](#); [Collins, Georgina](#); [Debenham, Jory](#); [O'Donovan, Christopher](#); [Amzour, Amira](#); [Cope, James](#)  
**Cc:** [Jonathan1 Read](#); [Angela Barugh](#); [Jonathan Hagan](#); [Tim Griffiths \(Guest\)](#)  
**Subject:** RE: IED/Defra Call Slides  
**Date:** 14 December 2023 19:15:00  
**Attachments:** [image001.gif](#)  
[image002.gif](#)  
[image003.gif](#)  
[image004.gif](#)  
[image005.gif](#)  
[image006.png](#)

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Thanks Steve I'll look into the references you've provided and get back to you as soon as I'm able.

Regards

Clive

**Clive Humphreys**

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**From:** Steve Spencer <[steve.spencer@thameswater.co.uk](mailto:steve.spencer@thameswater.co.uk)>

**Sent:** Thursday, December 14, 2023 5:31 PM

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**Subject:** RE: IED/Defra Call Slides

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Clive, many thanks for the clarification and feedback, which is extremely useful and will allow us to review our costs accordingly. I will discuss with our permitting and technical teams and if we have any follow up queries I will drop you a note.

We also promised to provide some information on the back of the workshop regarding secondary containment and clarity regarding the CIRIA C736 guidance – Containment systems for the prevention of pollution.

The document is over 17MB, so difficult to email. I have therefore extracted below the elements where we understood that undertaking a risk assessment and determining a credible failure scenario was an option when sizing the requirements for secondary containment. Primarily linked to the recommendations in “Section 4 – containment system capacity”.

Page 38 Under Section 4.2.1 – The “110 per cent” and “25 per cent rules”, the guidance suggests that *“The basis for much industry practice in the past has been the 110 per cent and 25 per cent rule. Although not following the risk based approach recommended in this guide, this practice has been in use for many years”*.

We interpreted this to suggest that the previous 110/25 percent rule was not recommended, but was recognised as an historically accepted practice.

Page 43, Section 4.3 Method for Assessing Containment Capacity then refers to a recommended approach which references *“...the containment should be capable of retaining:*

- *The total volume of inventory that could be released during a credible incident*
- *The maximum rainfall that would be likely to accumulate within the containment before, during and and/or after an incident.....”*

*“In determining containment requirements, the volume of substance should be based on the loss from a credible scenario.....”*

Hopefully, this provides context as to the further point of clarification I raised at the end of the meeting. In some cases the consideration of a “credible scenario” could reduce the scale of secondary containment and align more to a risk based approach. Given the CIRIA736 guidance document – we therefore wanted to explore whether the approach outlined in Section 4.3 was one that the EA would consider or whether we have previously misunderstood your references to the 110/25 percent rule.

Many thanks for your offer to look into this matter and provide clarification.

Regards

**Steve Spencer**  
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**From:** Humphreys, Clive <[clive.humphreys@environment-agency.gov.uk](mailto:clive.humphreys@environment-agency.gov.uk)>  
**Sent:** 14 December 2023 16:29  
**To:** Overton, Michael <[Michael.Overton@defra.gov.uk](mailto:Michael.Overton@defra.gov.uk)>; Berman, Lucy <[Lucy.Berman@defra.gov.uk](mailto:Lucy.Berman@defra.gov.uk)>; Tom Boichot (Guest) <[Tom.Boichot@ofwat.gov.uk](mailto:Tom.Boichot@ofwat.gov.uk)>; Molyneux, Steve <[steven.molyneux@environment-agency.gov.uk](mailto:steven.molyneux@environment-agency.gov.uk)>; Hatch, Richard <[richard.hatch@environment-agency.gov.uk](mailto:richard.hatch@environment-agency.gov.uk)>; Eugenia Vela (Guest) <[Eugenia.Vela@ofwat.gov.uk](mailto:Eugenia.Vela@ofwat.gov.uk)>; Shaw, Cameron <[Cameron.Shaw@defra.gov.uk](mailto:Cameron.Shaw@defra.gov.uk)>; Gavin Yuill <[Gavin.Yuill@ofwat.gov.uk](mailto:Gavin.Yuill@ofwat.gov.uk)>; Collins, Georgina <[Georgina.Collins@environment-agency.gov.uk](mailto:Georgina.Collins@environment-agency.gov.uk)>; Debenham, Jory <[Jory.Debenham@defra.gov.uk](mailto:Jory.Debenham@defra.gov.uk)>; O'Donovan, Christopher <[Christopher.O'Donovan@defra.gov.uk](mailto:Christopher.O'Donovan@defra.gov.uk)>; Amzour, Amira <[Amira.Amzour@defra.gov.uk](mailto:Amira.Amzour@defra.gov.uk)>; Cope, James <[james.cope@environment-agency.gov.uk](mailto:james.cope@environment-agency.gov.uk)>  
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**Subject:** RE: IED/Defra Call Slides

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Dear Steve

I'm writing in relation to the action taken by the EA at our meeting yesterday.

**EA:** *By COP 14 Dec To confirm waste acceptance position to Thames in writing. Copy in Defra and Ofwat.*

## Waste Acceptance

Assumptions	Evidence
<ul style="list-style-type: none"><li>- Instructed to develop a proposal for a waste acceptance procedure that meets the requirements of Appropriate Measures</li><li>- Characterisation of wastes imported</li><li>- requirement to testing at MCERTS or UKAS accredited labs</li><li>- Visually inspect every load (to visually inspect, some sort of sample needs to be taken to visualise it)</li></ul>	<p>11) Final Opportunity Letter for Camberley from T Wager received 12th Oct 2022 to visually inspect every load, MCERT or UKAS accredited labs, inter[1]site to be subject to the same level of compliance as third-party wastes</p> <p>12) Final Opportunity Letter for Camberley from T Wager received 31/05/2023 – meet the requirements of 'Appropriate</p>

<ul style="list-style-type: none"> <li>- Every import to be sampled and analysed to confirm pre-acceptance checks</li> <li>- Procedure to be the same for inter-site as for third party imports</li> </ul>	Measures'. Key areas include but not limited to non-conformance/rejection, sampling, and visual assessment
--	--

Our response

Despite being given multiple opportunities you failed to provide information to demonstrate compliance with BAT 2. The sludge can be expected to be of reasonably consistent quality, and where this is the case we would normally expect the producer to characterise the waste and rely on this evidence for multiple loads. You claimed to have a cradle to grave knowledge of the inter-works sludges but could only provide analysis results dating back to 2000 and 2009. The Pre-acceptance and Acceptance Procedures available to us at the time (version 2) and your responses to questions were incomplete or otherwise inadequate. Despite requests we received no amended procedures in respect of operations at Camberley. Tommy's letters presented you with the default requirements which were considered necessary if you failed to present us with proposals for less onerous alternatives and supported this with evidence.

Comments in the 2 referenced letters have now been superseded by the requirements in the permit which was issued in early November. This references in *Table S1.2 'Operating Techniques'* an updated Pre-acceptance and Acceptance Procedure (version 3) originally received for your Reading sludge treatment facility. For clarity, this new procedure does not propose the sampling and analysis of each load. Instead and as recommended it commits you to conducting a sludge characterisation exercise, the results of which will form the basis for acceptance of inter-works sludges at Camberley. This exercise will need to be repeated periodically or when there is a significant change in operations likely to alter the nature of the sludge.

The cost of this periodic characterisation of sludge will be substantially less than the cost of sampling and analysing every load. You should therefore recalculate your costs against the permit requirements and apply this across each of your sludge sites.

Regards

Clive

**Clive Humphreys**

Senior Advisor, Environment and Business

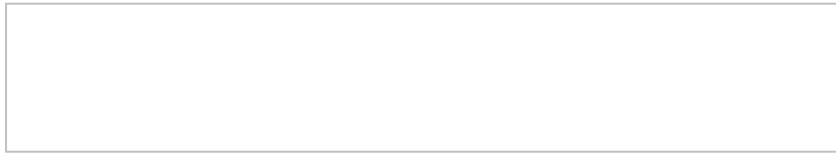
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**From:** Overton, Michael <[Michael.Overton@defra.gov.uk](mailto:Michael.Overton@defra.gov.uk)>  
**Sent:** Wednesday, December 13, 2023 10:05 AM  
**To:** Berman, Lucy <[Lucy.Berman@defra.gov.uk](mailto:Lucy.Berman@defra.gov.uk)>; Humphreys, Clive <[clive.humphreys@environment-agency.gov.uk](mailto:clive.humphreys@environment-agency.gov.uk)>; Tom Boichot (Guest) <[Tom.Boichot@ofwat.gov.uk](mailto:Tom.Boichot@ofwat.gov.uk)>; Molyneux, Steve <[steven.molyneux@environment-agency.gov.uk](mailto:steven.molyneux@environment-agency.gov.uk)>; Hatch, Richard <[richard.hatch@environment-agency.gov.uk](mailto:richard.hatch@environment-agency.gov.uk)>; Eugenia Vela (Guest) <[Eugenia.Vela@ofwat.gov.uk](mailto:Eugenia.Vela@ofwat.gov.uk)>; Shaw, Cameron <[Cameron.Shaw@defra.gov.uk](mailto:Cameron.Shaw@defra.gov.uk)>; Gavin Yuill <[Gavin.Yuill@ofwat.gov.uk](mailto:Gavin.Yuill@ofwat.gov.uk)>; Collins, Georgina <[Georgina.Collins@environment-agency.gov.uk](mailto:Georgina.Collins@environment-agency.gov.uk)>; Debenham, Jory <[Jory.Debenham@defra.gov.uk](mailto:Jory.Debenham@defra.gov.uk)>; O'Donovan, Christopher <[Christopher.O'Donovan@defra.gov.uk](mailto:Christopher.O'Donovan@defra.gov.uk)>; Amzour, Amira <[Amira.Amzour@defra.gov.uk](mailto:Amira.Amzour@defra.gov.uk)>  
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**Subject:** FW: IED/Defra Call Slides  
**Importance:** High

Please find the slides shared by Thames attached.

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**From:** Steve Spencer <[steve.spencer@thameswater.co.uk](mailto:steve.spencer@thameswater.co.uk)>  
**Sent:** 13 December 2023 09:56  
**To:** Overton, Michael <[Michael.Overton@defra.gov.uk](mailto:Michael.Overton@defra.gov.uk)>  
**Cc:** Shaw, Cameron <[Cameron.Shaw@defra.gov.uk](mailto:Cameron.Shaw@defra.gov.uk)>  
**Subject:** RE: IED/Defra Call  
**Importance:** High

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Michael, here are some introductory slides – if you can circulate to all attendees that would be great.

Our proposal is to talk through the assumptions on slide 3 – as it is our understanding of these assumptions that is driving the scope and costs.

During the session we have slides that will answer many of the questions you posed in your email – and we have site by site detail if required. (And will share a deep dive on Rye Meads).

PS Attendees at our end on the call – we are all in a single room at our Reading Offices.

- Myself
- Jonathan Hagan – PR24 Strategy & Planning Manager
- Angela Barugh – Head of Asset Strategy
- Andrew Hardman - Bioresources Strategy Manager
- Nicola Telcik – IED Programme Manager

Regards

## Steve Spencer

PR24 Wholesale Programme Director

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**From:** Overton, Michael <[Michael.Overton@defra.gov.uk](mailto:Michael.Overton@defra.gov.uk)>

**Sent:** 12 December 2023 15:34

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**Cc:** Shaw, Cameron <[Cameron.Shaw@defra.gov.uk](mailto:Cameron.Shaw@defra.gov.uk)>

**Subject:** RE: IED/Defra Call

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That's great – I look forward to seeing the materials you are pulling together. I will distribute these to those on the call if you can get them to me ASAP.

Kind Regards,

Michael

---

**From:** Steve Spencer <[steve.spencer@thameswater.co.uk](mailto:steve.spencer@thameswater.co.uk)>

**Sent:** 12 December 2023 15:18

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**Subject:** RE: IED/Defra Call

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Michael, thank you for the positive feedback. We also felt it was a successful meeting - between all parties, we identified actions that could make a material difference to the chemicals

programme.

We will be taking a similar approach to IED. We will be laying out the assumptions in our plan at a high level, and the rationale for those assumptions. To help ensure we can clear up any misunderstandings we will also identify the correspondence with the EA, that has led us to our conclusions.

We will then discuss options which could significantly reduce the investment requirements – subject to EA review and ensuring we have understood the BAT conclusions correctly.

We also have all the details available site by site, including a deep dive into Rye Meads.

We are aiming to try and get some information pulled together and distributed as soon as possible.

Regards

## Steve Spencer

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**Sent:** 12 December 2023 14:58

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**Cc:** Shaw, Cameron <[Cameron.Shaw@defra.gov.uk](mailto:Cameron.Shaw@defra.gov.uk)>; Amzour, Amira <[Amira.Amzour@defra.gov.uk](mailto:Amira.Amzour@defra.gov.uk)>; Berman, Lucy <[Lucy.Berman@defra.gov.uk](mailto:Lucy.Berman@defra.gov.uk)>

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Hi Steve,

You should have received an updated question sheet for tomorrow. The Chemicals call was successful today in large part because Thames identified flexibilities and any barriers ahead of time. Would you and your colleagues be able to replicate this format for IED tomorrow?

**Michael**

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