

Ofwat
Birmingham
B5 4UA

Yorkshire Water
Western House
Halifax Road
Bradford
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BD6 2SZ

By email:



05 March 2021

Dear Alex,

Re: Bioresources market development data request – updated 5 March 2021

*** Please note, the information below has been updated in response to your email of 2 March 2021 seeking further information on dewatering sites. Additional text is highlighted for ease with asterixis ***

Thank you for your request for bioresources market information, as dated 17 December 2020.

We provide with this response the spreadsheet completed as requested without alteration to its layout. On the following pages we provide a detailed commentary to accompany the data in the spreadsheet, and it is important that users of the data are aware of the points we make and any limits with the use of the data as a result.

We note Ofwat intends to publish the majority of this information (with the exception of operating cost data). Although we note much if this is not highly commercially sensitive or confidential, we believe it has value to Ofwat for its purposes only. The information should be used with caution by any external parties, especially information provided on potentially tradeable sludge capacities which we are at pains to point out is very indicative only.

Should you have any questions in relation to this response you can contact me by email at: [REDACTED]

Yours sincerely

[REDACTED]

Colin Fraser, Regulatory Strategy Manager

Explanatory notes for Yorkshire Water submission – Bioresources market development data request

The following important notes and commentary should be read when referring to any data provided within the MS Excel table titled:

“YKY Submitted_Bioresources market development data request – FINAL”

The data and notes are provided to Ofwat for its purposes and should any data from the table be published, the relevant notes would be useful to users of the data.

Table 1 – Company level bioresources information.

This table presents information on YW’s total raw sludge transport costs and work done. This table does not include disposal transport.

Sludge Liquid and Cake Transport Costs

The guidance provided by Ofwat says the sum of sludge transport costs across lines 1-3 should be equal data presented in the company APR table 4W line 11, plus any third-party costs.

The total of lines 1 to 3 does not reconcile to APR table 4W line 11, as this table 4W line 11 looks at sludge liquid movements, which is asked for on lines 1 and 2. Line 3 is requesting cake movements – if this is intersite movement then this will be classed as sludge treatment and if raw cake is leaving the business then this will be classed as sludge disposal.

- Line 1 – YW sludge liquid costs are those which are included as a total for sludge transport upstream service and do reconcile back to APR table 4W line 11.
- Line 2 – YW does not move any sludge liquid transported by pipeline and is all done by road.
- Line 3 – YW sludge cake movement costs by site (which is currently outsourced) and also sludge disposal where costs have been impacted due to asset outage.

Please note that the above costs and processes are subject to change going forward due to:

- a) Sludge liquid transport is now outsourced (was previously mainly handled by YW internally); and
- a) Sludge cake transports (██████) may increase in the future should digester sites be rationalised with some becoming dewatering sites, hence increasing the potential for additional cake transport. Also included in line 3 are costs which have been exceptional (██████), due to asset outage or assets under construction.

Table 2 - Transport

This table presents information on YW's main sludge transport destinations and patterns for 2019-20.

All YW sludge transport movements are delivered by commercial third-party providers. We have provided actual transport data for the majority of our sites. For a number of the smaller sites we have been unable to provide actual percentages of sludge transported due to a lack of WaSP loggers locally. We have made reasonable assumptions on percentages transported to destination sites in these cases. We believe this is not a material issue when looked at in aggregate in terms of development of the market.

Table 3 - Total Capacity

This table presents information on YW's current and forecast capacity by bioresources site. We include data for dewatering sites and sludge treatment centres only.

We have used "asset standard" assumptions for determining capacity on the sites.

It is important to note our forecast capacity figures have been retained at 2020-21 levels and therefore they are indicative only. This is because we have not included for any assumptions in respect to new investments or rationalisations in our sites. We have accounted for increased sludge inputs expected from the delivery of YW's WINEP programme in AMP7. We have provided the information

principally for Ofwat's purposes and hence capacity information provided for future years should be used with caution.

*** In relation to specific sites or site types:

- Staveley was a digester site. The digester capability has now been closed. This year we have had some temporary dewatering assets on the site, but this site will become a liquid sludge exporter with no thickening or dewatering this year. We are investigating whether a dewatering or thickening plant will be installed here. A decision will be dependent on other decisions across the bioresource investment programme and market activities. Therefore, we present Staveley as having no capacity beyond this financial year.
- It should be noted that dewatering capacity is a very different to treatment capacity and the two capacities cannot be simply added to give an overall capacity position. ***

Table 4 – Tradeable capacity

This table present information on YW's current and forecast ability to trade into each bioresources site. We include dewatering sites and sludge treatment centres only.

The 'tradeable capacity' provided is the capacity remaining after we have removed our own demand for our sludge from the 'total capacity' in Table 3 and the 'headroom' from Table 5. We have made a high-level estimate of how much of the capacity would be tradeable.

Some of our trade capacity forecasts relate to specific sites, such as Knostrop and Huddersfield. These are the sites most likely that we would be able to trade from. The remaining tradeable capacity estimates have been recorded as 'floating'; in that we may have capacity to trade volumes from a range of other sites.

In general, capacity is more complicated than singular numbers, as some of our sites can take liquid imports but not cake imports, and the market generally wants to export as cake (although not exclusively).

*** For dewatering only sites we have used the best information we have at the moment subject to a number of assumptions. There is essentially no tradeable

capacity at these sites. We have some headroom capacity in some assets dependent in part on what liquid imports from other YW sites these sites currently accept, which we flex routinely based on asset availability at a given time. As such, there is no capacity we would be able to guarantee to trade on a year or longer basis. The capacity in these assets has the potential to reduce over the AMP as sludge production increases due to WINEP schemes. ***

Providing notional tradeable capacity data ignores the practical complexities at some sites with a potential impediment to trade being the Wastewater Network Plus assets and their requirements. YW, as many other companies do, has a WINEP programme that would need to be safeguarded whilst seeking other trades. YW also faces increasing demands from IED regulations and increasingly tight monitoring of permits which could restrict imports into some of our permitted sites either in the short term or longer term.

Please note: We have provided the information principally for Ofwat’s purposes and hence tradeable capacity information presented for future years should be used with caution and not considered in any way as guaranteed.

We welcome entering into discussions on trades based on notional future tradeable quantities and we will continue to directly engage with sludge treatment and disposal market, including other water and sewerage companies.

Table 5 – Headroom capacity

This table presents information on YW’s current and forecast headroom.

The ‘headroom capacity’ provided is the capacity remaining after we have removed our own demand for our sludge from the ‘total capacity’ in Table 3 and the indicative ‘tradeable capacity’ from Table 4.

The headroom capacity is again recorded as ‘floating’. Where such future capacity may or may not appear will depend largely on the use of the outsourced transport service and which sludge assets require more extensive outage time for M&E issues, capital refurbishments, etc. The floating headroom data becomes negative from 2024–25 onwards and is too small to allow trades in 2023–24. This is on the assumption of our WINEP schemes deliver as planned, requiring greater volumes of sludge to be treated, whilst we exclude assumptions that investments

are made in additional sludge capacity or that any sites are closed or permanently lose significant capacity.

We have provided the information principally for Ofwat's purposes and hence capacity information provided for future years should be used with caution.

Table 6 – Site Opex

The commentary for Table 6 – Site Opex has been provided to Ofwat only for its' purposes.

