Your ref WS010003
ARROW ref 10024954
Nicola Escott ref 10024302

ARROW 9 – Comments on issues relating to Need arising from the responses to the Second Round of Questions

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1. This note responds to some of the issues arising from comments sent to the ExA on 2nd September 2014 by MJCA on behalf of Whitemoss responding to the Second Round of question.

Trends in Hazardous Waste Landfill

Question 3.1 Asked the Applicant, EA:

"the NPS (Hazardous Waste 2010: England and Wales below para 3.2.7) indicates some 500,000 tonnes of hazardous waste being disposed of in landfill in 2010, following a significant fall in earlier years. In the applicant's planning statement at para 8.9 and Appendix PS A, hazardous waste deposited for England and Wales in 2012 is shown as being about 4.25 million tonnes, with 716,463 tonnes recorded for the North West region. Of this, 872,436 tonnes in England and Wales was sent to landfill, with 54,955 tonnes to landfill in the North West. Does the EA agree the applicant's figures? Can data be provided and agreed for hazardous waste for the last five years showing the amount disposed of in landfill in:

i. England
ii. North West
iii. Lancashire

2. Accordingly the Environment Agency response included trend data for hazardous waste landfilled in these areas (p6 of 2nd September response):

Trends data: hazardous waste landfilled in tonnes 2008-2012

Year	England	North West	Lancashire
2008	1,031,180	91,747	47,012
2009	554,328	64,194	27,041
2010	511,962	57,818	28,625
2011	910,640	69,542	22,851
2012	868,584	54,955	35,760

3. The MJCA response was consistent with this for Lancashire but different for the North West. The request by the ExA was for data to be provided

(and agreed) for hazardous waste for the last five years showing the amount disposed of in landfill in: i. England ii. North West iii. Lancashire

4. The MJCA data (2p15 is described in the text as relating to England but the heading in the table is for England and Wales whilst the Environment Agency data is specifically related to England. It is not clear why MJCA also included the data for Wales:

Year	Hazardous Waste Deposits in England & Wales (tonnes)	Hazardous Waste Deposits in North West England (tonnes)	Hazardous Waste Deposits in Lancashire (tonnes)
2008	1,093,576	110,841	47,012
2009	586,144	91,573	27,041
2010	542,638	86,168	28,625
2011	965,112	110,772	22,851
2012	907,333	89,852	35,760

5. In the case of the deposits in the North West the Environment Agency data is consistently and significantly lower than that provided by MJCA.

6. The Environment Agency also reported the annual input data supplied by the Whitemoss in the site returns but neither the Environment Agency nor the operator explain why these site specific input data are higher than the reported annual deposits for the whole of Lancashire supplied for 2009, 2011 and 2012, (copied above). The data for 2009 appears particularly anomalous as the total claimed for Lancashire is just 27,041 whilst Whitemoss reported landfilling 72,389 tonnes – more than the Environment Agency report landfilled for the whole of the North-West:

Year	Landfill	Treatment Plant
2013	76009.74	258.197
2012	37189.37	842.503
2011	27047.78	849.27
2010	26716.89	35.86
2009	72388.76	n/a
2008	35917.96	n/a
2007	71446.73	n/a
2006	95614.71	n/a

7. Clearly these anomalous data need to be reconciled and explained by the Environment Agency and Whitemoss. The actual fill rate for the site

should also be reconciled with the claimed remaining volumes as there are clearly discrepancies in the data provided to the Environment Agency as discussed in ARROW 1 at §15-19.

Annual Inputs to White Moss:

8. Table 3 of the Whitemoss submission shows the annual inputs into the site:

Table 3: Whitemoss Landfill Annual Hazardous Waste Deposits by Waste Category 2009 - 2013

Year	2009	2010	2011	2012	2013
Waste Categories					
Asbestos	2808.55	3349.70	3516.18	2882.23	3519.30
Chemical & Metallic	1317.16	2340.72	2264.44	1895.62	2552.28
Glass	492.08	570.22	884.38	4022.84	42411.10
APCs/ Incinerator Slag	883.20	347.68	163.96	981.76	4360.28
Mixed	30.38	42.70	181.72	22.40	3013.76
Packaging & Filters	420.80	342.00	289.68	226.74	224.76
Sludges & Filter Cake	8986.07	7516.87	4294.86	2910.26	1947.58
Soils & Construction	11457.86	11290.62	9862.88	23004.78	14828.84
Non Hazardous Soils	163.86	1202.56	1195.98	1242.74	3151.84
Total	**26559.96**	**27003.07**	**22654.08**	**37189.37**	**76009.74**

9. It can be seen from this table that the average input has been far below the projected fill rate upon which the application is founded. Even in the most heavily used year the fill rate is barely above half of that which it is claimed the site will average over it's operating life.

10. In that year, 2013, however, by far the major input (c56%) was glass. It is understood that this was the leaded glass from Cathode Ray Tubes which is not only recyclable but is also a waste stream with a particularly limited life due to the now practically completed transition from CRT computer monitors and televisions to flat screens.

11. Furthermore it has been shown previously (ARROW 1 §16) that even in 2013 the higher input was due to more activity in only two quarters (the second and third).

12. It is also notable that there is no evidence that there is any waste stream being landfilled which is not included within the permit conditions of other landfill sites in the North-West.

Mersey Gateway/Galligu Waste

13. It is suggested in the MJCA response at §3.13 that the waste stream from the Mersey Gateway project is a good example of a waste stream for landfill. It has to be recognized that the waste even from this very large project amounts to just 80,000 tonnes over 3 years and that there are very few other projects even approaching this scale in the pipeline. An element of that scheme which is typical of most modern projects is the enormous emphasis on treating waste on site so far as possible and the Environmental Statement cited by MJCA says (§14.8.29)

"Off-site disposal of contaminated material has become less favourable over the last decade due to increased environmental concerns over sustainability and significant increasing landfill costs".

14. *Furthermore the MJCA statement fails to report that the Environmental Statement also notes:*

15.8.12 The Concessionaire will be encouraged to engage early with the local waste management industry to identify alternative measures to manage wastes, other than landfill. Examples of this include:
a. Use of the Ellesmere Port EfW plant to treat galligu containing wastes (subject to WAC analysis). This will reduce both the volume and reactivity of the wastes, although the heavy metal content of the waste may still require it to be classified as contaminated;
b. Use of local remediation companies to recover products from groundwater, either using mobile treatment licenses or permanent facilities such as the Biffa/Biogene plant at Risley;
c. Use of local recycling facilities for unwanted non-hazardous waste topsoils, concrete and geological materials;
d. Use of local compost facilities for vegetation removed during site clearance; and
e. Recovery

And:

15.7.82 In fact, it is likely that the Concessionaire will chose to use landfills as close to the Project as possible, and it should be remembered that there is a hazardous waste landfill at Randle Island, inside the Project Corridor.

15. The waste stream for the Mersey Gateway is mainly the alkaline 'Galligu' from the LeBlanc alkali process. The Galligu was essentially a mixture of calcium sulphide and sulphate with fractions of unburnt coal, coal ash and sodium sulphate. The Leblanc process generated large volumes of this waste which were often deposited in an uncontrolled manner.

16. Galligu can, however, react on contact with rainwater to produce hydrogen sulphide gas. The fact that the company is considering landfilling such wastes after the previous odour incidents is bound to cause concern amongst local residents and the public.

Question 3.4

Applicant: at 8.25 of the Planning Statement accompanying the application it is stated that conclusions drawn from recent reports suggest that there is only a limited demand so far for particular technologies to treat hazardous waste due to a lack of confidence in the market...". Can details of these reports be provided?

17. The reports cited by the applicant were:

1. The State of the Nation - Waste and Resource Management, Institution of Civil Engineers, January 2011.

2. A Review of Hazardous Waste Management in England. Extended summary of a 2012 Environmental Engineering Masters thesis by Tecla Castella, Imperial College, London .

3. Nationally, Regionally and Sub-regionally Significant Waste Management Facilities – Final Report, undertaken by Urban Mines for 4NW (NW Regional Leaders Forum) October 2008.

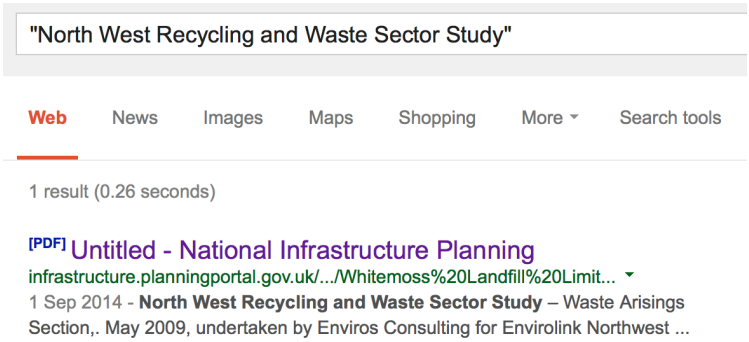
4. North West Recycling and Waste Sector Study – Waste Arisings Section, May 2009, undertaken by Enviros Consulting for Envirolink Northwest.

5. A Survey of North West Recyclers and Re-processors, April 2007, undertaken by Urban Mines, for Envirolink Northwest.

6. CIWM Report 2013 – Commercial and Industrial Waste in the UK and Republic of Ireland, prepared by Ricardo-AEA Ltd for the Chartered Institution of Wastes Management, October 2013

18. These reports do not provide the support claimed by the applicants. Indeed it is only the second of these which relates specifically to hazardous waste and it appears that of that thesis only the 'extended summary' has been seen. Neither the full MSc nor the extended summary appear to be available on the internet.

19. I also note that reports numbered 4 and 5 above are no longer available on the web as Envirolink went into liquidation in 2013. Indeed for the report reference 4 above the citation by MJCA is the only hit found by Google for the string "North West Recycling and Waste Sector Study":



20. In practically all the cases where the reports are cited by MJCA the extracts relied upon refer to non-hazardous waste streams rather than being references specific to hazardous waste.

21. The only reference to hazardous waste in the main body of the ICE report, for example, (1 above) is:

"The government's commitment to maintaining a fast-track system for Nationally Significant Infrastructure Projects (NSIPs) is welcome but currently will only affect a small number of larger EfW and hazardous waste projects."

22. Whilst it is true that the report did emphasise some uncertainty in the collection of waste data (including remaining landfill life) it did not examine the capacity or data for hazardous waste and so it is misleading to draw conclusions based on this report as the applicant did at, for example, para 3.9 and it is simply wrong to conclude that the report supports the statement that hazardous waste "resource infrastructure will need improvement, to avoid capacity gaps". The report is silent on the issue of hazardous waste capacity and needs.

23. Another example is report 3, where the extract cited by the applicant says:

"3.27 The viewpoints given by the WPAs in the Nationally, Regionally and Sub- Regionally Significant Waste Management Facilities Report acknowledged the requirement for regionally and indeed nationally strategic waste management facilities in relation to particular types of wastes. The requirement for such facilities is also acknowledged by the WPAs including in their development plans some additional landfill capacity given that alternative waste management facilities may fall short (capacity gaps) in providing the alternative recycling/treatment required. It was also pointed out that the Metropolitan Authorities recognise that they may have severe practical difficulties in securing additional landfill capacity in their own planning areas and may therefore need to plan for export to regional or national facilities".

24. Yet the report makes no reference to the need for further hazardous waste landfill capacity and so the references to any possible difficulties in securing additional capacity are irrelevant for this waste stream.

25. Furthermore the report was based on the (now extended) term consent which required Whitemoss should stop operating in 2013 and in spite of this simply acknowledges the increasing importance of Minosus for dealing with air pollution control residues as the main hazardous waste streams requiring landfill:

> "The White Moss site in Lancashire is time limited by planning permission to 2013 whilst the Minosus deep mine disposal site has long term capacity but is restricted in the types of waste it can accept. The deep mine disposal site is particularly significant with respect to future changes in hazardous waste disposal requirements as it is able to accept hazardous residues from thermal treatment and air pollution control technologies. It is these wastes that are most likely to increase as energy recovery from waste becomes more established and it is likely that this facility will increase in importance as a nationally significant facility."

26. Minosus is entirely capable of handling any increase in this waste stream without additional landfill capacity.

27. As a final example I note how, at § 3.17 MJCA seeks to rely on the same report (ref 3 above) to show "There are factors which could delay the potential for reducing reliance on landfill disposals. Failure or slippage in the development of alternative waste management services and facilities may result in a continuing landfill disposal activity. Future volatility on recyclate commodity prices could result in a demand for revision to landfill if systems and waste management provision are not sufficiently flexible to cope with potential peaks and troughs."

28. It is clear from the original report, from which this was included in the executive summary that the quotation relates to non-hazardous waste. It is quite misleading to infer that conclusions about the provision of capacity from the more specialist markets for hazardous waste can be drawn from the confidence or otherwise in the market for non-hazardous domestic and commercial waste streams.