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Unit 7
Water End Barns Water End
Eversholt
Milton Keynes
MK17 9EA

Our ref: AC/2010/111182/01-L01
Your ref: AJC/AJC/316441/3
Date: 17 March 2010

FAO: Rachel Ness

Dear Sir/Madam

**PROPOSED APPLICATION FOR A DEVELOPMENT CONSENT ORDER.
ROOKERY SOUTH PIT, NEAR STWARTBY, BEDFORDSHIRE.**

Thank you for your letter regarding the above mentioned site, which was received on 25 February 2010. We have reviewed the information as submitted and wish to make the following comments. Further technical comments are included in a separate appendix.

Flood Risk

The Preliminary Environmental Report produced deals satisfactorily with all issues pertaining to fluvial and surface water flood risk at this stage.

Section 12.8 states that a FRA will be prepared prior to submission. We are aware that Peter Brett Associates are undertaking this work and that it is well on its way to completion. We will provide further comments on this once it is received.

Groundwater

Please note our concerns raised in our previous letter, dated 19 January 2010, reference AC/2010/1105811 have not been adequately addressed.

Evidence is required to show that the Incinerator Bottom Ash (IBA) will not produce potential polluting fines / dust that will blow off the 10m height storage heaps, impacting soil and surface water. Please provide confirmation of the dust control and mitigation strategy.

Evidence is required to show that all IBA contaminated water will remain on site or disposed under consent to foul main sewer, or be taken to a other appropriate permitted facility.

The EIA for the Energy from waste (EFW) plant is fundamentally dependent on the Low Level Restoration scheme (LLRS). The LLRS is likely to have conditions for surface water disposal (quality consents), contaminated land investigation and

remediation of the former landfill, stability assessment and remedial design of the pit walls to ensure prevention of harm to human health (See our letter 19 January 2010).

Piling needs to comply with our guidance to prevent creating pollution pathways, from the secondary aquifers to the Blisworth limestone principle aquifer.

The Ash settlement lagoon design must demonstrate that the liner will not fail due to heave, and have an adequate liner in order to prevent the risk of pollution of the Kellaways sand aquifer.

Analysis results for background levels in soil and water of Waste Incinerator Directive (WID) metals are required as noted in the scoping.

Further work is required on the LLRS, with: a scheme to dispose of surface water to provide appropriate quality control via the consents to discharge; a scheme to deal with contamination risks from the former landfill; a scheme to ensure the stability of the pit sides, to ensure stability in the short medium and long term. The existing slope shows various significant failures and need regarding to less steep gradients with adequate drainage to maintain stability in the long term.

The IBA storage area will need to support the load on impermeable pavement with sealed drainage. The clean water needs to be kept separate from any water contaminated with IBA.

Please see technical appendix (enclosed).

Ecology

Potential impact of the proposed facility on stoneworts as well as on statutory and non-statutory sites should be assessed (as highlighted in our scoping opinion response, letter dated 19 January 2010). Further ecological surveys may be required (also as highlighted in the scope), to update the baseline data.

Waste

These types of facilities are important to provide recovery needs for waste disposal, in so doing reducing a need for landfill while producing an energy without detriment to the environment.

The importance of the waste hierarchy should not be diluted. Commercial and Industrial (C&I) Waste, that is accepted at the facility, should have been subject to pre-treatment, so that some recyclables should be removed to be recycled. This is adherence to the Landfill Directive and is a requirement for companies to ensure that their disposal of waste includes waste being sent for recycling. This has not been spelt out for C&I wastes, whilst municipal waste will be due to fixed recycling target rates set down by government.

If Covanta are unable to secure contracts with local authorities for their residual waste, how is it proposed to supplement the quantity throughput of waste? Would there be a requirement for such a size plant considering the fact that there is another Energy from Waste project on the adjacent site from the Local Authorities in Bedfordshire?

The Bottom Ash is subject currently to regulation as it is still considered a waste and it will be sometime before we produce a Bottom Ash position statement.

There does not seem to be any consideration given to contaminated waste that may need to be quarantined on site and how they propose to deal with such waste so as not to be harmful to the environment.

Before construction stage a Site Waste Management Plan must be completed as this is a requirement under the Site Waste Management Plans (2008) for sites with a value in excess of £300,000. It is noted that this is mentioned within the statement under item 4.11.9 of the Non-Technical Summary.

Water Resources

It is the responsibility of the applicant to ensure that the development will not affect any water feature (ie. wells, boreholes, springs, streams or ponds) in the area, including licensed and unlicensed abstractions

We have no further comments to make at this stage. We look forward to providing further comments on this scheme as subsequent submissions are received.

Should you wish to discuss this matter further please do not hesitate to contact me.

Yours faithfully

Mr Neville Benn
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(enclosed)

Technical Appendix – Groundwater

The risk to groundwater and surface water from the IBA appears not to have been fully addressed. Section 6.1.8 states dust from IBA has been scoped out. **Please provide confirmation of the percentage of fines that are present in the raw bottom ash and in the processed (washed) bottom ash and how this dust is to be scoped out.**

We require confirmation that all IBA contaminated waters will be retained on site prior to consented disposal to sewer or other permitted facility.

The EIA for the EFW plant is fundamentally dependent on the LLRS. The LLRS is likely to have conditions for surface water disposal (quality consents), contaminated land investigation and remediation of the former landfill, stability assessment and remedial design of the pit walls.

Section 11.2 clearly shows that the EFW plant will be piled through the Kellaways and Cornbrash secondary aquifer, and be founded in the Blisworth limestone principle aquifer. This could create a pollution pathway. **Please provide confirmation that the piling will be constructed in accordance with our guidance** (Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention National Groundwater & Contaminated Land Centre report NC/99/73). This is in order to prevent the linking of the aquifers and the risk of contaminants impacting the aquifers.

Section 11.2 of the EIA also shows the Ash settlement lagoon excavated down into the Kellaways sand secondary aquifer. The report states that the base of the pit is approximately 28maod. This lagoon will need the appropriate lining system with protection against heave (Kellaways sand groundwater levels are noted as being 28 to 29maod in the pit and up to 31maod at the pit edge). This is necessary to prevent the risk of heavily contaminated ash water leaking into the Kellaways sand secondary aquifer. Failure of the Ash lagoon containment could impact the Kellaways sand, and via any pathways created by piles impact the Blisworth limestone principle aquifer. **Please provide confirmation of the intended type of lining system for the ash lagoon.**

As noted in the scoping response, it is necessary to establish the background levels of the WID metals (cadmium, thallium, mercury, antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel, vanadium, and dioxins and furans), in both the soils and the groundwater. The open storage of large quantities of Bottom Ash is likely to lead to emissions of some of these metals as dust to land or via surface water or groundwater.

The EIA should comment on the risk to soil, surface water and groundwater from these metals. Section 11.5.26 of the EIA indicates that metals are not elevated, except antimony in the additional samples taken in the Kellaways sand. **Please provide supporting data for the remaining WID**

metals. Surface water and groundwater needs analysis for the WID metals to confirm the background levels before the IBA is stored in 10m high heaps in the open. The area outlined on Figure 2.8 could contain up to a maximum of 200,000 m³. The unwashed Municipal Solid Waste (MSW) IBA is likely to have approximately 8% passing the 200# size 0.074 mm. **Please provide information on how the ash will be washed, and what the residual dust levels (percentages) are likely to be.** It is understood that the Ash handling will be subcontracted. **Please provide confirmation of the dust mitigation strategy.**

Section 11.7.1 states

- a) ground investigations have shown that significant contamination is not present. Therefore no mitigation is proposed for the existing site. **Further work is required in response to the LLRS on site investigation of the former landfill.**
- b) contaminative releases will not occur in construction due to following industry code of practice, This is acceptable.
- c) There may be potential for release of accumulated surface water from the Ash storage area. **The design of the impermeable pavement will need to support the IBA load without cracking to prevent leakage.**
- d) **The water from the IBA storage area needs to be kept separate from water, from clean areas of the site.**
- e) Water from construction activities will be routed via the attenuation lake. Which is good practice.
- f) The fresh waste will be contained within the incinerator building, so not an issue.
- g) The storage of hazardous materials such as the air pollution waste will be in appropriate closed containers until disposal to permitted Hazardous waste facility off site.
- h) The risk of slope stability impacting the incinerator building will in part be dealt with under the LLRS. **Further work is required on this aspect of the LLRS**
- i) Risk of inflow of ground water during construction will be addressed by pumping. **The risk of heave needs to be addressed during the design with a factor of safety against heave of 1.5. The risk of linking potential contaminated water from the ash lagoon to the Kellaways sand needs to be addressed further.**

The risk of mixing groundwaters and causing contamination due to piling through the Kellaways sand aquifer, Cornbrash limestone aquifer and the into the Blisworth limestone principle aquifer needs to be addressed in accordance with our Piling guidance.