Aire Valley Against Incineration (AVAI) response to the Environment Agency Draft Decision Document

Water and Drainage

1.PROCESS WATER

The EA's 3rd Schedule 5 request dated 07.05.19 asked a number of questions relating to water:

Question 31 Clarify the storage arrangements for process water.:

The Applicants response was:

Process water is stored in a raw water tank of 100 m^3 in the Water Treatment Hall before being demineralised. Water used within the process falls to an industrial waste- water pit which provides water for use in the bottom ash quench

How does this relate to the information in the Operating Techniques Document, June 2019, section 2.6.1?

Recycled water and water drawn from the Yorkshire Water mains supply network feed the raw water tank at the Water Treatment Hall. The raw water tank feeds the demineralised water tank, provides cooling water for the flash tank and water for make-up. A dedicated tank will be used to store demineralised water at the Water Treatment Hall. The demineralised water will be used within the main steam /water cycle to provide feed for the boiler and associated processes.

In summary:

From the Schedule 5 responses:

The answer Question 31 states that there is a raw water tank, and an industrial waste-water pit.

In the Operating Techniques Document June 2019 there are additional references to a central tank, a flash tank and a holding tank.

Can the EA please confirm if it is their understanding that these are all separate entities?

Has the EA requested a plan of the process water system to include the route of the water, whether it is a closed system, how many tanks it goes through and what volume of water is involved?

2.SURFACE DRAINAGE

Quality of Surface Water

This text from the final Fire Prevention Plan V1.0 dated July 2019, describes the drainage of surface water:

Site Drainage

3.1.10 Clean roof water from the facility will flow into the rain-water pit, shown on drawing SH11087-026. Overflow from the rain-water pit will enter the attenuation tanks, part of the sustainable urban drainage system (SUDS). The attenuation tanks will initially store the water, prior to releasing the water into the surface water drain at a steady rate. This will prevent flooding of the surface water drain, which takes water from the roof of the facility and clean run-off from outdoor hardstanding. The surface-water drain passes through a hydrocarbon interceptor prior to exiting the site on Marley Road.

The Applicant has continued to assert that the surface drainage water will have minimal residual impact and that the roof drainage water will be clean.

During normal operations the Applicant states that the contents of this/these tanks will either be used for some form of process water or discharged to the River Aire.

Can the EA please describe the purpose and function of the attentuation tanks and how will their effectiveness be assessed?

In other previous permit applications where similar systems to the Applicant have been used a range of monitoring systems have been used to monitor the quality of any water discharged to any rivers. The measures used have included conductivity measurements, total organic carbon and temperature measurements. What quality control measures have the EA ensured are in place for any water discharged to the River Aire from the rain-water/attenuation tanks?

Management of Firewater

The Fire Prevention Plan V 1.0 states:

8.2.1 Firewater will be retained within the waste bunker. The bunker will be equipped with impermeable concrete walls which will provide complete containment. Water will be removed from the bunker using a pump, with water sent offsite for treatment at a permitted facility.

This statement makes an assumption that all the fire water will be contained in the bunker hall. As stated under section 8.2.1 all the drain covers will have been already be sealed.

Do the EA know what will happen to all the surface drainage water in the likely event that fire hoses had to be used on the external surfaces of the incinerator?

11 August 2020