

SUPPORTING INFORMATION SECTION 10

Material Safety Data Sheets



BT2013 MSDS.pdf

Sodium hydroxide solution



BT2072 MSDS.pdf

Sodium bisulphate solution

Discharge Consents



Foul Water
Discharge Consent.



Surface Water
Discharge Consent.

10.6.1 Blowdown calculator



Blowdown rate
calculator Q1000009

10.6.2 Alan Wood report



45670 - TEN001 -
Foul Water Drainage

The blowdown water component will be cooled below 40°C and have its pH level corrected as required, as such it will closely resemble the local raw water.

10.6.3 Blowdown water flow

The actual quantities and rates shown in section 10.6.1 above are the maximum perceived. The actual rate is likely to be rather less than 20m³ per day, but until the system is commissioned using the treatment regimen and the local towns mains the actual quantities are theoretical. In order to ensure that the temperature of the blowdown water does not exceed the regulation 40°C, towns mains water will be mixed in the pH correction tank as cooling water. This flow will be modulated as required for the varying amount of steam being generated.

10.6.4 Ph correction



pH correction Boiler
GA.pdf

The pH correction system shown above will ensure the pH of the blowdown water is controlled within the required limits (assumed to be between 6 – 9). The pathway will be via the stormwater system and full-flow interceptors before reaching W1. The operator is in the process of obtaining a consent to direct this flow to the public sewer. This requires consent from Yorkshire Water and wayleaves from several landowners over the 1,400 meter route. As things stand permission is not likely to be obtained before the permit is determined. Facilities to make the connection are already in place, so the operator will proceed given all the relevant consents.

10.6.5 Groundwater assessment

The site has a consent to discharge to the water course, the principal discharge is storm water from the roads and yards, with a smaller contribution of storm from the roofs. In addition this is the path for blowdown water from the steam boilers which is post treated by a pH correction system and air compressor condensate. The storm water discharge to the water course is controlled by a valve and there is a shut off valve in case of emergency such as fire water or spillage. The discharge is also controlled by accumulation tanks provided against a 30 year storm event. The water course is protected by full retention interceptors complete with high level silt and oil alarms. There will be no products, by-products, wash-down water or wastewater from the process. These latter discharges do not occur in animal feed production. The foul comprises water from a private Klargestar which processes the domestic waste. This effluent flow will be discharged by an industrial effluent consent to the water course. See section 10 and form B6. There are no pathways to groundwater as the site is robustly metalled with reinforced concrete.

A stage 1-3 assessment has been duly completed (as detailed within the EC Commission Guidance 2014/C 136/-3).

Stage 1 – Identify hazardous substance(s) used / stored on site.

In common with most if not all provender installations, no 'Relevant Hazardous Substances' are incorporated into the product. In addition, no 'Relevant Hazardous Substances', (as defined in Article 3

of Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures), are used or stored for any purpose on site.

Therefore, there is no realistic possibility that any substance could contaminate either the ground, ground water or the water course because there are no pathways.

10.6.6 Effluent monitoring plan

The effluent will be regularly monitored at W1 immediately prior to the final discharge to the existing chamber on the sewer pipe as per internal drainage board (IDB) consent. The effluent will be tested for outgoing temperature & pH level.