

Raw material Justification

The following table lists the raw materials used in the process, their uses and requirements.

Raw Material	Use	Justification
Water	Polymer dilution distributed from the sparge arm to prevent foam build-up.	The requirement to reduce foam build-up is necessary to ensure optimal operation of the AD plant??
Sodium Hydroxide (Caustic 32%)	pH balance within the digester.	Regulates the pH of the digester to ensure that the bacteria performs.
AE27 Anionic polymer	Flocculant for use in CAF D and P	This provides separation of the digestate to allow refeeding of the digester and producing a cleaner wastewater discharge.
C33 Cationic polymer	Flocculant for use in CAF T	This provides a second separation of the digestate to allow refeeding of the digester and producing a cleaner wastewater discharge.
Ferric Chloride	Used to reduce H ₂ S in the digester.	Safety measure to reduce the build-up of toxic gases within the digester.
ANTIPREX	Prevents the build-up of scale	Ensures that struvite does not form with the digester or associated pipework.
Kerosene	Fuel for boiler to heat digester.	Boiler only starts when CHP is off therefore now only used as a contingency.