MHL, also known as ‘Milk of Magnesia’, is a critical product added to raw sewage by Unitywater to reduce odour and protect underground assets against corrosion.

After two years of careful development with local experts, Wise Waste Solutions, Unitywater now has the ability to cheaply manufacture MHL directly on site using recycled water. This innovative and efficient approach is creating significant savings for Unitywater in chemical costs.

**Batching plant process**

**Magnesium Hydroxide Liquid (MHL)**

Recycled water is supplied to the plant hot water tank where it is heated and stored, ready for use in the batching process.

1. **HOT WATER TANK**
   - Stores and heats up to 4000L of recycled water ready for use in the batching process.

2. **HOT MIXING TANKS**
   - The 2000L hot mixing tanks mix and emulsify the additive B and Magnesium Oxide agents together with the heated water.

3. **COOLING TANK**
   - The emulsified solution passes through a heat exchanger to be cooled and is then transferred to the 2000L cooling tank, for further cooling and mixing. The hot mixing tanks can also be programmed to act as cooling tanks.

4. **STORAGE TANK**
   - The MHL solution is transferred from the cooling tank (or hot mixing tank) to the storage tank.

5. **STORAGE TANK**
   - The 20,000 litre storage tank receives the final MHL product. Two mixer devices (agitators) fitted inside the storage tank rotate to maintain the MHL composition while it’s in storage.

When required, the MHL solution is transferred from the storage tank to a truck and transported to a Sewage Pump Station for further storage and dosing of the sewage system.