



Wetlands Operating Techniques

Below are the operational measures and emergency provisions in place to ensure that effluent held within the pond system cannot leave the site and cause environmental pollution.

1) Recirculation System

The site has a recirculation system designed to keep effluent within a closed loop unless intentionally removed via irrigation or tankering.

Key flows include:

Pond 9 to Pond 3: Pond 9 recirculates back into Pond 3, allowing the effluent to re-enter the biological treatment system.

- *Pond 9 also functions as the irrigation pond during summer months when ground and weather conditions require it, directing the effluent to our surrounding farms (all the plots shown in the Irrigation System Map with Valves).*

Pond 9 to Balance Tank / Recirculation: The effluent can also be diverted back into the Balance Tank through the wastewater treatment plant, where it is able to undergo the full physicochemical treatment process again.

2) Manual Isolation and Stop Controls

Slider gates (flow isolators) between ponds: Flow between ponds can be physically closed off using sliders. Even when closed, a reduced passive flow through banks may still occur but the primary route is fully isolatable.

Manual valves: These allow manual intervention to stop, direct, or divert flows, as shown in the Irrigation System Map with Valves. Please refer to the images and coordinates below.

Valve 1 - Redirect Flow to Top Orchard Pond for Irrigation
Coordinates: 51° 59' 53.2" N 2° 30' 37.7" W



7 Apr 2026 at 10:32:20
Ledbury
England
HR8
United Kingdom

Valve 2 - Recirculate Flow Back to Pond 3
Coordinates: 51°59'55.1"N 2°30'28.8"W



Valve 3 - Redirect Flow to Balance Tank WWTP
Coordinates: 51° 59'55.2"N 2° 30'28.0"W

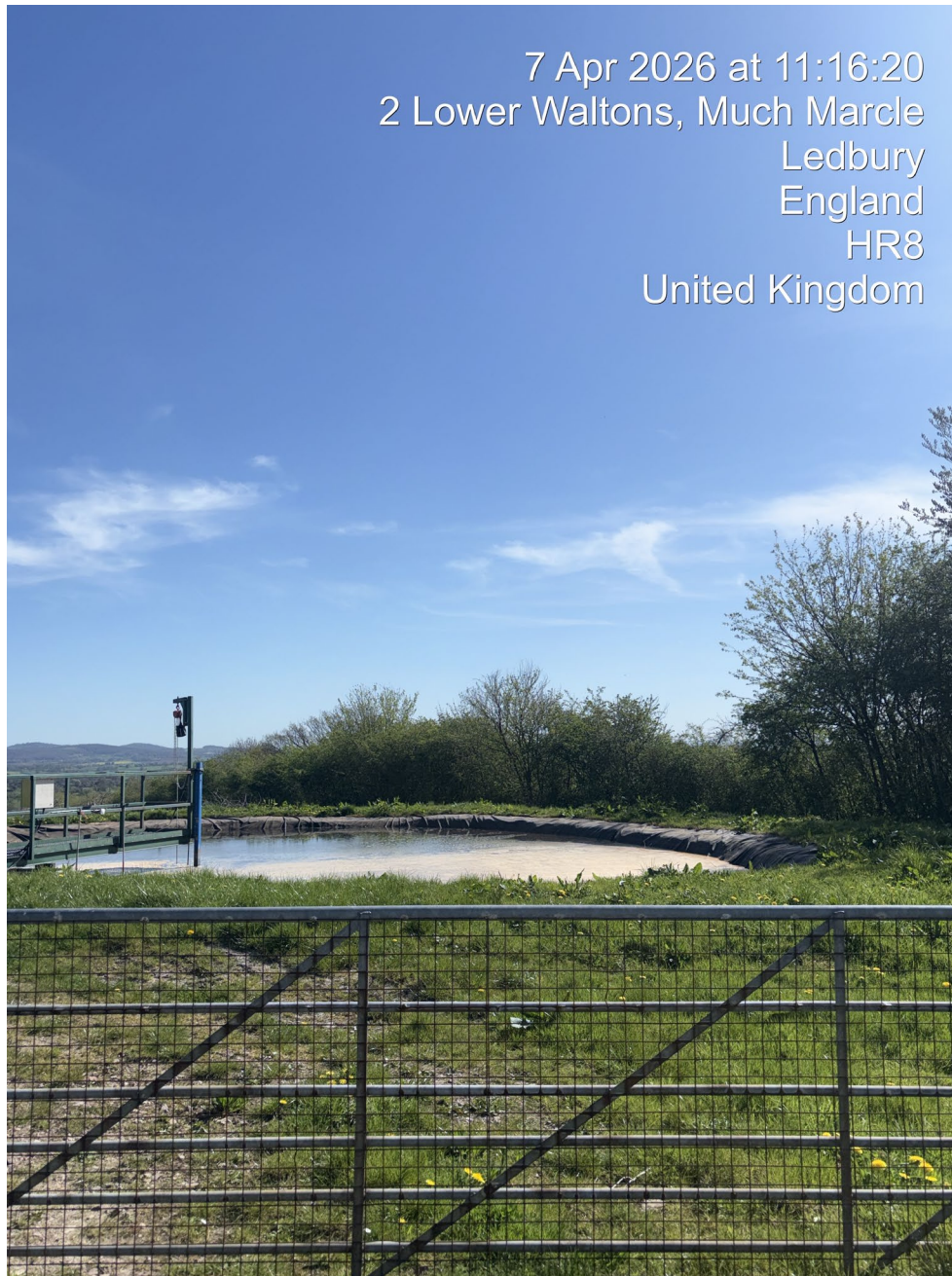


Valve 4 - Redirect Flow to Big Walta for Irrigation
Coordinates: 51° 59'56.1"N 2° 30'22.4"W



3) Emergency Pumping Situation

In an emergency, the effluent can be pumped to the Top Orchard pond, which is fully lined and provides easy access for road tankers. Although the pipework can be cut at various points along the system -e.g. at the valve near the reed beds- this is less preferable and only considered as a last resort.



4) Fortnightly Pond Level Monitoring and Reservoir Annual Checks

Pond levels are monitored every 2 weeks, allowing early identification of trends such as rising effluent levels in ponds or blockages or pump failures. Data from monitoring is

reported using the E13 Effluent Analysis Form and shared with the Leadership Team, to advice for proactive intervention before levels pose any environmental risk.

Additional monitoring is also carried out yearly by an external engineering firm in line with the Reservoir Act 1975.

