Case Study

WASTE RECYCLING GROUP – TBOX

The Company

Waste Recycling Group - one of Europe's largest waste management organisations

The Problem

Working with the main contractor Graphite Ltd, Amber had to design, program, and commission a PLC solution for an existing leachate treatment plant in the midlands. There was a pre-installed redundant PLC with no remote connectivity and which was deemed as having reached its "end of life"

Amber had to deliver a solution which would satisfy the following requirements:

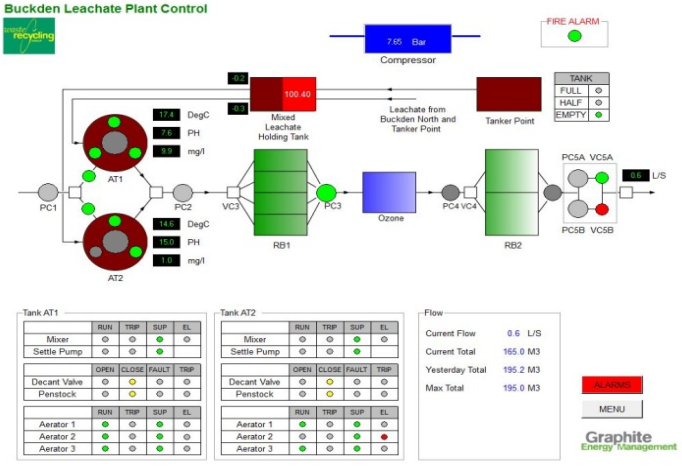
- Fully automate existing plant and equipment on site
- Allow for future planned expansion
- Provide "direct" remote access via integral web pages and a standalone GPRS connection
- Incorporate a radio modem link (circa 1.5km) to an on-site SCADA to allow remote configuration, monitoring and alarm handling
- Provide a daily log of system water delivery to satisfy an EA operations license
- Hardware to match existing cable footprint to make possible a <24hr system down time on install

The Solution

A TBOX MS modular RTU was installed containing 176 Digital Inputs, 64 Digital Outputs and 16 Analogue inputs. This was assembled on a custom back plate containing 260 interface SSR interface relays with a connection block designed to match the existing cabling. A GPRS modem was added for remote access and alarm handling along with two 458 MHz RF Modems with directional (Yagi) Antennas.

A Tview SCADA was installed on this site, a web SCADA system designed to support the TBOX range of controllers. This was installed on a dedicated PC to graphically display and logs the water treatment plant performance whilst managing alarms.

The integral web server on the TView SCADA enables any authorised user within the corporate intranet to view and control the plant.



Conclusion

The project has successfully delivered process visibility and data recording both locally on site and remotely throughout the organisation. The installation also has GPRS connectivity giving the management team the option of remote access from virtually any web enabled device!