

MAJOR WATER UTILITY SEWAGE PUMP STATION ELECTRICAL & ODOUR CONTROL UPGRADE

"My room isn't dirty, I just have everything on display" - *Every Teenager Ever*

Industry
Utilities

Sector
Water & Sewerage

Segment
Sewage



Project

The client is a water and sewerage utility responsible for managing over \$2bn worth of assets. They had identified that one of their key metropolitan sewage pump stations was the subject of numerous odour complaints. On investigation it was identified that there was a presence of Hydrogen Sulfide causing the odour and the electrical systems at the site had also reached end of life. The client then initiated a project to:

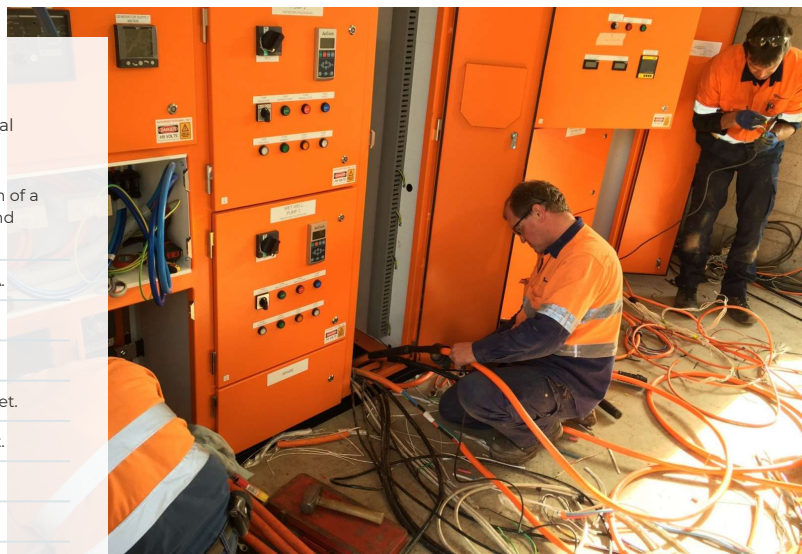
- install an odour control system and integrate it into the site control system;
- replace the motor control systems;
- upgrade the telemetry;
- install an emergency backup generator.

Cromarty Automation was engaged by the principal contractor to provide all electrical and automation services.

Solution

Cromarty Automation worked collaboratively with the client and the principal contractor to design and deliver the following:

- The entire electrical and control system including the supply and installation of a new motor control centre, backup generator, instrumentation, telemetry and SCADA.
- ClearSCADA development and integration into the client's head end SCADA.
- Pre-commissioning and final commissioning.
- In one day decommission the old and install the new MCC.
- Liaising with the principal contractor to ensure safety requirements were met.
- Co-ordinate with the supply authority for power isolation and reinstatement.
- Design of temporary control during the changeover.
- Working with the client to manage the effluent during the changeover.



Outcome

Due to the criticality of the site, the changeover needed to take place in one day. During the changeover, the pumps ran off a generator with a temporary control system installed. The legacy MCC was disconnected and removed and the new one put into position and then recommissioned. The client was delighted as the works commenced at 8am and the site was returned to full automatic operation and SCADA monitoring by 8pm the same day without any environmental issues or service interruptions.

Subsequently, the odour control system has resulted in a significant reduction of odour complaints. It now has enhanced Hydrogen Sulfide monitoring and alarming, a

