

DIVISION

BIOFOULING CONTROL

PROJECT NAME

SARAWAK PERMAS

OWNER

MURPHY SARAWAK OIL
CORPORATION



ABOUT THIS PROJECT:

PROJECT FACTS

The project scope consisted of a 2 x 100% electro-chlorination unit to generate hypochlorite for biofouling control in the platforms seawater cooling system. The cooling water flow is 25-85m³/h with a required dosing rate of 2ppm continuous and a 4ppm shock. The system includes an acid washing system to control scale formation in the EC cells. The package also includes a proportional dosing system to control the weight of hypochlorite delivered at the full range of cooling water flows.

CHALLENGE

For this project the platform is unmanned which required a high level of automation and ability for remote monitoring and control. There was a need for a separate control panel which would be mounted remotely from the hypochlorite generator skid. There were also several thousand pages of company engineering specifications to be considered.

SOLUTION

H2O's engineering department designed a package that met all client requirements and provided a fully compliant system along with all required vendor documentation. The remote control panel included a HMI and a fully redundant Allen Bradley ControlLogix PLC with MODBUS communication.

RESULT

The package was delivered and commissioned in Malaysia by the H2O field service team. Since H2O was able to fully test the system in our test bay the installation was simple. The client was very happy with the quality of equipment provided and their seawater cooling system remains free of biofouling organisms like barnacles and mussels which would otherwise severely impact the heat exchanger efficiency.

ELECTROCHLORINATOR