



APPLICATION SPOTLIGHT

Marine Fuel Monitoring - EPA Required Reporting



Marine Fuel Monitoring - EPA Required Reporting



APPLICATION:

An operator of large dredging vessels is required in some areas of operation to measure, report, and limit hydrocarbon emissions from the marine diesels used to provide propulsion power, electrical power, and to power the dredge machinery. The company has installed several of these systems of differing measuring capacities on multiple vessels located all over the US.

PRODUCT SUPPLIED:

- FMP-60, FMP-80, or FMP-90 Fuel Metering panels
- FMP-60 – Two JVA-60KG flow meters and DH-BB sensors with bypass and cut-off valves and FEM-03E custom enclosure with 4-20mA output for flow A-B.
- FMP-80 – Two JVA-80KL flow meters and QUAD-4 sensors with bypass and cut-off valves and FEM-03E custom enclosure with 4-20mA output for flow A-B.
- FMP-90 – Two JVA-90KL flow meters and QUAD-4 sensors with bypass and cut-off valves and FEM-03E custom enclosure with 4-20mA output for flow A-B.

CHALLENGE:

The supply and return flow rates of fuel in the system are much higher than the actual fuel consumption rate. The flow meters used had to be rated for the maximum supply and return

flow rates, but have a great enough resolution to accurately measure the much smaller consumption rates. A custom panel mounted system was required for ease of installation and maintenance.

SOLUTION:

AW-Lake supplied custom metering panels with flow meters in the supply and return fuel lines with cut-off and bypass valves for all of the vessels' engines.

Also located on the metering panels, the FEM-03 flow monitors are used to locally monitor the flow meters and transmit flow consumption data via 4-20 mA signal to the vessels' main PLC where it is analyzed, stored, and prepared according to EPA requirements.