

Marine Fuel Monitoring — EPA Required Reporting



CUSTOMER

International Dredging Company
Oak Brook, IL

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. Company has installed several of these systems of differing measuring capacities on multiple vessels located all over the US.

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 Flow Meters 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.



AW products 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.

