

APPLICATION NEWSLETTER

PROBLEM: Calibration of Vapor Recovery Systems

A control systems engineer for a chemical company was looking for a calibration device. He needed to calibrate DP and pressure transmitters on vapor recovery systems at the loading terminals. The transmitters had been calibrated on the same schedule as the rest of the instrumentation in the plant. An EPA regulation (33CFR154.8), going into effect November 1994, changes the calibration schedule. Tanker facilities on inland or ocean waterways that load or unload combustible liquids have to calibrate the vapor recovery system within the 24 hours prior to loading or unloading a tanker. The regulation will be enforced by the U.S. Coast Guard.

These systems operate at low pressure or vacuum. Typically, the pressure is -1 PSIG to 3 PSIG. The engineer wanted the calibrator to have resolution of

0.01 PSI and required that the unit be intrinsically safe. He anticipated that the new regulation would increase calibrations at the plant to the point where his current stock of calibrators would not be sufficient to handle the work load.

SOLUTION: This engineer purchased several Meri-Cal DP200C units to meet the increased workload that the new CFR will bring. Resolution of .001 PSI easily satisfied that requirement for the engineer. The "C" designator at the end of the model number ensured that he received units that were CSA approved; meeting intrinsically safe requirements for use in class 1, div. 1, group A,B,C,D hazardous locations.

Many other calibration activities are supported. For pressure transducers and transmitters, the MeriCal will read out volts or mA with pressure on the same display.

