

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

**HEARING REGARDING
ADMINISTRATIVE CIVIL LIABILITY COMPLAING
NO. R9-2010-0085
ISSUED TO**

**EASTERN MUNICIPAL WATER DISTRICT,
TEMECULA VALLEY REGIONAL WATER RECLAMATION FACILITY**

SCHEDULED FOR OCTOBER 13, 2010

DECLARATION OF

JOHN JANNONE

I, JOHN JANNONE, declare:

Until my retirement (my the last day at work was September 17), I had served as Director of Operations and Maintenance of EMWD's four state of the art wastewater reclamation facilities ("facilities") following ten years' service as a Plant Operator.

Each of the facilities is operated through a SCADA (Supervisory Control and Data Acquisition) System; the first of these was an upgrade of a pre-existing system by Beavens Systems, Inc., which later designed and installed the SCADA Systems at the other three facilities operated by EMWD. Beavens has been upgrading and/or designing, and installing and maintaining the SCADA Systems for the District for over 20 years.

In upgrading or designing the systems, Beavens has been given the facilities design specifications, including a description of the treatment processes involved and the electrical drawings. Beavens then customizes the particular system for implementation at each plant.

Although there are elements common to all the systems, each is really unique; as a result, there is no "standard" SCADA System at EMWD.

Beavens Systems work product has always been excellent; EMWD has never used anyone else for recommendations or to do work in connection with design, installation or maintenance of its SCADA Systems.

I am generally familiar with industry standards for wastewater treatment facilities and believe that the Temecula Valley facility represents the "state of the art." Over the last ten years, EMWD has spent about 3.2 million dollars upgrading the Headworks facilities at the Temecula Valley facility and has spent another \$120,000.00 on the Temecula Valley SCADA System since 1997. Beavens Systems did all the SCADA work but did not suggest any changes that would have changed the design of the SCADA System involving the clearance or overriding of alarms.

We had never experienced a problem with the SCADA System at Temecula Valley in that regard (clearance or overriding of alarms), and it took considerable investigation and analysis following the spill on December 25, 2009, to determine that the spill resulted from a very unique set of circumstances that could not have been anticipated and not from a "defective" SCADA System.

Those circumstances included the fact that the intermittent arc'ing of the wiring supplying power to PLC 12 (formerly YIC 12) caused it to "lock up" or stop communicating with the "watchdog" PLC 10 which functioned to monitor the operations of the other 13 PLC's at the Temecula Valley facility and caused it to stop sending "run commands" to the bar screens in the Headworks; if PLC 12 had experienced a total power failure and had totally shut down, the SCADA screen for the Headworks would have shown the bar screens in red, indicating that they were not running. Because PLC 12 "locked up" rather than shut down completely, PLC 10

continued to report the last information it had received from PLC 12 which was that the bar screens were operating, and that, in turn, caused the SCADA screen to show the bar screens in green, indicating to an operator viewing the screen that the bar screens were in fact operating.

Typically, an operator viewing the SCADA screen of the Headworks would be able to determine therefrom whether there were any alarms being reported or any other problem in the operation of the Headworks, and the operator would rely on that information in making any appropriate decisions. If the operator in this case had looked at the third enunciator screen, he would have seen that the "communication failure of YIC 12" was still in effect, but it is understandable that he could have concluded from viewing the first enunciator screen which showed the Headworks in full operation and without alarm, that there were no unresolved problems.

I declare under penalty of perjury that the foregoing is true and correct.

DATED this 17 day of September, 2010, at PERZIS, California.



JOHN JANNONE

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