

WWTP Operator – The poor cousin?

Opportunities for Better Wastewater Plant Control Room Design

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FORMAT

6-12 page paper plus 35-minute presentation

KEYWORDS

Control Room, Control Desk, Human Factors, Wastewater, Ergonomics, SCADA, DCS

ABSTRACT

It is an unfortunate fact of life that plant areas that are not 'profit generating' are not afforded the same level of investment or attention as their more glamorous counterparts. Often waste water treatment or effluent treatment plants are viewed in this light. This is most evident in the control rooms used to house individuals working in these areas. They are often old shacks attached to chemical or equipment storage areas that combine the control room, break room, laboratory, SCADA rack room, MCC and general storage area into a single room! If they are lucky there will be a rest room somewhere close by. This used to be, and to a certain extent, still is also true of outside operator field stations, left behind after the console operator and controls have been moved to the sparkling new remote centralized control room (CCR). However, there is often a safety case to give them something better, such as more ergonomic work stations, more screens for better process visibility and better lines of sight to the plant itself. So what should we be providing our personnel in these often remote areas of the facilities? Let's not treat them as poor cousins making do with old stuff and hand me downs and provide an environment that supports the requirements of their jobs and adequately caters for their human needs.

This paper discusses opportunities for designers, engineers, operators and managers to learn from the experience gained in the design of similar multifunction buildings across a range of industries. In so doing the obvious parallel is drawn with the design of the central control room (CCR) and the use of standards such as ISO 11064.

About the Author



David Lee, MICHemE, CEng. is a Chemical Engineer from the UK. David spent 22 years in the Chemical industry as an Engineer and Manager before becoming a human factors consultant with User Centered Design Services in 2007. Since that time he has been involved in well over 100 projects, across multiple industry segments across the globe, working with clients to address all aspects of operator situation awareness. David is a senior member of ISA, ChemPID Safety and Human Factors Chair and VP of his local Section. David is also a clause leader and voting member on the ISA 101 committee and member of ISA 18 and ISA 106 committees.