## Navigating Capital Upgrades from an Operational Perspective

Scott Collis Veolia - Wastewater Supervisor – Hunter Water scott.collis@veolia.com 0447 504 244

Delivering capital upgrades at wastewater treatment facilities, whilst maintaining production and regulatory compliance, poses a range of operational challenges. In response to these challenges an 'operator-centric' approach is required. One which emphasises the critical role of operations personnel in Construction Hazard Assessment Implication Review (CHAIR) and Hazard and Operability (HAZOP) workshops.

This paper provides some practical insights from frontline operational teams on identifying potential hazards and operability issues often overlooked in theoretical engineering designs. Effective participation from operators in detailed design reviews, bridges the gap between engineering concepts and practical implementation. Thus enabling a focus on managing active construction sites, while simultaneously ensuring the uninterrupted performance of existing infrastructure, to meet stringent regulatory requirements.

Technical documentation, such as operation and maintenance manuals and drawings, often contain unfamiliar terminology and concepts outside basic daily operational experience. However, there are methodologies for operations staff to interpret these documents, provide feedback to design teams, and translate technical specifications into practical operational procedures, which are presented in this paper.

Finally, there must be consideration made in capital delivery projects for comprehensive staff training during transition phases, as well as communication frameworks that facilitate productive collaboration between operations and design teams. This approach ensures capital upgrades not only meet engineering standards but also achieve long-term operational targets and maintenance efficiency.

I Scott Collis give permission for WIOA to publish this abstract online