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| **REPORTS TO:** | **DIRECT REPORTS AND TEAM SIZE:** | |
| ETP Area Lead, Process & Plant Improvement | * Nil | |
| **THIS ROLE EXISTS TO: (PURPOSE)** | | |
| This role exists to provide process engineering knowledge and experience in process automation to support Eastern Treatment Plant business objectives. These objectives include; reduced treatment costs, improved customer service and meeting environmental obligations. The Process & Automation Engineer monitors process performance and helps direct operation of the plant. The engineer also conducts investigations that aim to improve plant performance and optimise operation. | | |
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| **Process Engineering**   * Demonstration of influence and efficient work environment within the ETP Process improvement, Operations and maintenance teams. * Continues identification and reporting of hazards and active involvement in process automation and improvement initiatives. * Review process control ,management of changes (MOC) and Control system safety within projects performed by Plant Improvement and Process Optimization team and demonstrate a clear commitment to achieving zero harm on the Plant. Ensuring that high safety standards are met, coaching and challenging others to work safely * Working closely with operators to provide guidance to meet ETP production objectives. * Contribute to root cause analysis process for stoppages related to process/production issues. * Contribute to scope definition and then integration on site of capital projects impacting process. * Utilize existing competencies to influence and assist operators and other support staff where required. * Ensure compliance with all Melbourne Water systems, policies and procedures and specifically Occupational Health and Safety, Environment, Product Quality Management Systems * Participate in sharing knowledge and lessons learnt with other colleagues.   **Operations**   * Monitor and to report on the performance of ETP operations in achieving key objectives including:   + Operational cost reduction   + Improvement of the customer service through recycled water supply and sewage treatment services   + Meeting environment obligations, in particular the EPA license. * Assist in broadening the skills of the team with control systems knowledge, positioning the team to have be able to take greater ownership of process operating control, aligned with skills of the future and operator asset care. * Working with multiple business teams to influence business outcomes at the team level and which may also benefit the group level.   **Continuous Improvement**   * Assist in the implementation of technical and safety improvement initiatives that reduce and or more effectively manage risk. * Identifying and and implementing opportunities for improvement in treatment plant operation and automation under general supervision. * Assisting to develop and deliver automation improvement roadmaps. * Performing various activities that contribute to optimization projects to improve plant performance where supervision is not immediately available. For example Process Control System changes and providing input into Low Risk Capital projects. * Identify and implement opportunities for plant optimization and improved reliability. * Working with multidisciplinary teams to influence business outcomes at the team and group level, which may also benefit other groups in Melbourne Water.   **Safety and Wellbeing**   * Taking responsibility for own and colleagues’ Safety and Wellbeing by demonstrating commitment to Melbourne Water’s safety commitments * Actively promote and foster constructive behaviors to enhance Melbourne Water’s generative safety culture. | | |
| **KEY RESPONSIBILITIES** | | **KPIs** |
| Develop and implement technical and safety improvement initiatives that reduce and or more effectively manage risk. This includes the oversight, development and review of ETP process control and automation following risk assessments , HAZOP , CHAIR and SID. | | Eastern Treatment Plant contribution to key health and safety metrics. |
| Demonstrate influence and a positive work environment within the Process Improvement and Operations teams. | | Eastern Treatment Plant contribution to engagement and alignment metrics. |
| Contribute to ETP process automation and process control improvement execution as appropriate.  Contribute to scope definition and then integration on site of capital or internal projects impacting process. Depending on projects, required to be in charge of the Operational changes, SOP preparation.  When require assist with process commissioning including FAT, SAT and handover to operation team.  Analyse plant technical information on a daily, weekly and monthly basis to advise production, quality, environment, systems and maintenance departments on improvement opportunities  Gather process data from PCS process and analyze all incidents, prepare plant performance reports on everyday/weekly basis.  Perform troubleshoot on all variable operating parameters and analyze plant performance.  Lead the sustainable implementation of the current program of Operations of the Future initiatives and develop a forward look program of future initiatives in collaboration with other Wholesale Services teams.  Develop process automation and control initiative to simplify operation and reduce operational cost  **Future Training Packages**   * Advanced PLC skills for Operations personnel   Process control and asset performance  Control and process simulation with mathematical modelling ;    **Activity review**   * Undertake review of all process improvements initiative and automation improvement * Deliver priority improvements from PCS review * Troubleshooting and system improvements   **Dashboards**   * Implement daily/weekly plant performance dashboards * Plant availability dashboard * Plant production and energy review   **Electronic Forms/Log Books**   * Electronic forms implemented as per program | | Projects and Initiatives delivered in accordance with the agreed high priority projects. |
| **SKILLS, KNOWLEDGE AND EXPERIENCE REQUIRED:** | | |
| * Knowledge of underlying principles of wastewater treatment processes and capability to apply that knowledge to solving difficult or abstract technical problems. * Experience with biological process modeling including but not limited BioWin/GPRX. * Proven experience in the development of Process Systems Dynamics. * Experience in developing control narratives and Process Functional descriptions. * Ability to draw on industry knowledge and other industry resources, for example by conducting independent literature reviews. * Experience and understanding of the Process Control Systems (PCS 7)/PLC and ability to understand PLC logic diagram. * Experience in analyzing plant technical performance on a daily, weekly and monthly basis this including process data gathering from data analysis tools. * Experience in preparation of plant performance reports (everyday/weekly basis). * Experience in systems troubleshooting on all variable operating parameters. * Ability to develop process control system narratives (e.g. Plain English Functional Specification – PEFDS) and process automation requirement. * Demonstrated ability to provide high quality reports and present written and oral responses to queries. * Excellent organisational skills with the ability to deliver outcomes within agreed timeframes under general supervision. * Good interpersonal skills including the ability to lead and coordinate diverse groups and communicate with stakeholders. * Ability to provide input into and influence decision making processes. | | |
| **KEY RELATIONSHIPS:** | | |
| All Melbourne Water employees are responsible for managing aspects of our customer/stakeholder relationships and service interactions, and will work proactively to deliver a consistent customer experience.  **INTERNAL**   * The Process Automation engineer works with people at all levels within the organization. In particular, they will need to work closely with the process and plant improvement team. ETP asset management, automation management and their respective team members. * Internal stakeholders also include Team Leaders and their team members from other Wholesale Services teams, Integrated Planning, Asset Management Services, Major Program Delivery, Safety, IT and People & Capability to achieve optimal outcomes for the Eastern Treatment Plant.   **EXTERNAL**   * Community members * Service delivery partners – ALS, WOOD * Synertec * Environmental Protection Authority * Emergency Authorities – Victoria Police, Local Councils and CFA | | |
| **SALARY RANGE:** | | |
| Melbourne Water reserves the right to remunerate people according to their ability to perform the functions of the role based on their qualifications, skills and experience. | | |
| **OTHER COMMENTS:** | | |
| This role requires the following:   * A relevant tertiary qualification/s and/or relevant workplace or operational experience * Criminal Records Check * Medical Assessment   Location: Eastern Treatment Plant, Thompson Road, Bangholme, Victoria | | |