IMPLEMENTATION PLAN

Muchea Water

Operational Audit Audit Observations

No.	Legislative Reference	Licence Condition	Description	Systems, Processes, Controls in Place to Comply with Licence (including any recommendations)	Management comments / actions proposed	Target Completion Date
198	Clause 10 (Applicable from March 2021)	Clause 4.1.1	A licensee must ensure that its website contains a link that provides access to the current version of the code as it appears on the website that is maintained by or on behalf of the Western Australian Government and that provides public access to electronic versions of Western Australian legislation.	The auditor sighted the Family Violence Policy on the website and noted that it includes the former link to the code of conduct on the Department of Communities website. A minor control issue is that the link needs to be updated to the new link on the WA Government central website. As the current version of the code was available on a website maintained by the WA Government, this obligation is rated as compliant. Muchea Water has updated the link prior to the final report being issued.	As noted by the Auditor, Muchea Water has already updated the link prior to the final report being issued.	Completed – July 2022

Asset Management System Review Review Recommendations

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)		Auditor's Recommendation	Management comments / actions proposed	Target Completion Date
1/2022	Asset Operations Operational policies and procedures are documented and linked to service levels required. Assets are documented in an Asset Register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition and accounting data. Operational costs are measured and monitored. An Operations and Maintenance Manual (draft Revision B1 dated March 2022) was provided for the Water Treatment Plant (WTP). This includes description of intended operation and instructions for routine operator tasks and special procedures (e.g. filter backwash). Occupational Health and Safety Risks, Hazards and Actions are also provided for the operations and maintenance tasks. Tables of scheduled Operations and Maintenance (O&M) tasks with assigned frequency are provided. A record keeping system is required to provide evidence that the O&M activities are being completed as scheduled. The asset register is in the form of an Excel spreadsheet. Condition information and accounting data/replacement value is not included in the current asset register. As the assets are still in their first year of operation, the condition assessment program has not commenced. An annual operating budget is prepared identifying monthly expenditure. There is evidence of comparison of the annual budget to the previous year's actuals. A brief description of the process	a) b) c)	While the operations practices discussed and observed are providing reasonable assurance of providing required service levels, the documentation of these practices and procedures requires improvement. The frequency of O&M tasks in the draft O&M manual need to be finalised and a method of recording the activities put in place. Procedures to act on the observations made from the Fortnightly Operations Report need to be documented. Response protocols to observing a water quality issue, such as low chlorine need to be documented and the response actions recorded to demonstrate the issues are addressed. The asset register needs to be updated to include information on assets' condition assessment in future years. While an annual Operations and Maintenance budget is prepared, the AMP should be updated to include a description of the process used to prepare the operations budget and how actual expenditure is measured and monitored.	 a) The Review was undertaken during the first year of operations – a period in which the plant, whilst operational, was in an optimising phase. During optimisation, equipment, processes and activities were being constantly reviewed for adequacy and improvement and a number of enhancements have been made Following optimisation, which is expected to be completed by the end of CY2022, the frequency of O&M tasks will be reviewed and finalised and recording monitored. As an initial step, the Fortnightly Operations Report has been enhanced and now records performance of daily, weekly and fortnightly activities. b) The asset register will be updated to include information on assets' condition assessment in future years as recommended. c) The AMP will be updated to include a description of the process used to prepare the operations budget and how actual expenditure is measured and monitored, as recommended. 	a) By 31/12/22 Completed - Implemented from 2/6/22 b) For FY22/23 year-end review (ie by 30/6/23) c) In Q1 FY22/23 (ie by 30/9/22)

Reference (no./year) Compliance rating	Asset System Deficiency (AMS Component/Effectiveness Criteria/Details)		Auditor's Recommendation	Management comments / actions proposed	Target Completion Date
	to prepare the operations budget, measure and monitor the actuals should be incorporated into section 6 of the AMP (Asset Operations).				
2/2022	 Asset Maintenance Maintenance policies and procedures are documented and linked to service levels required. Regular inspections are undertaken of asset performance and condition. Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule. Maintenance activities and frequency for the Water Treatment Plant are described in the Operations and Maintenance Manual (Revision B1 dated March 2022). The fortnightly operations report also provides input on observations requiring adhoc maintenance. It appears that the maintenance schedule in Section 6 is still in development. Some assets are not yet addressed in the maintenance schedule and the table of site checks refer to facilities that are not present at this site (e.g. Polymer Dosing, 		A maintenance plan for the WTP assets needs to be finalised and a procedure documented to describe how the annual plan is assembled, including clarifying how inputs such as condition assessment, failures and fortnightly observations are incorporated. Once the maintenance plan is in place, a recording system needs to be established to verify the completion of planned and unplanned maintenance.	 a) The plan is being finalised in parallel with the completion of the optimisation activities and will incorporate a description of how the annual plan is assembled, including clarifying how inputs such as condition assessment, failures and fortnightly observations are addressed, as recommended. b) A recording system will be established as part of the finalised maintenance plan, as recommended. As an initial step, the Fortnightly Operations Report has been enhanced and now records performance of daily, weekly and fortnightly activities. 	a) By 31/12/22 b) By 31/12/22 Completed - Implemented from 2/6/22
	Lime System and DAF). Procedures are yet to be developed that describe how the annual maintenance plan is assembled. The fortnightly operations report provides a basic checklist for observations about performance and condition. Procedures are yet to be developed that describe how these observations are acted on and feed into the maintenance planning activity. A plan for more detailed assessment of condition is also needed to deliver condition assessment against the detailed breakdown in the asset register and how this information will be used to inform maintenance planning and budgets. This will also				

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	need to extend to include the assets outside of the WTP site.			
	Maintenance plans are documented for the WTP in the O&M manual. However, documentation to demonstrate completion does not yet exist. As discussed during the site visit, while the WTP is still going through an optimisation phase the plant is being well attended and more routine maintenance plans can be developed once the current phase is completed.			