

# **Water Corporation**

**Memorandum of Understanding for Drinking Water**

**Abridged report - Summary of 2022 Drinking Water  
Quality Management Audit**

**13 September 2023**

## Purpose

On 28 November 2017 the Department of Health (**the Department**) and the Water Corporation (**the Corporation**) entered into a Memorandum of Understanding for Drinking Water (**MoU**), with the Department as the Regulator of drinking water quality and the Corporation as a supplier of drinking water in accordance with its Water Services Licence. This MoU replaced the previous MoU signed in November 2007.

Section 3.5 of the MoU states that the Department may conduct an audit of the Corporation's systems and databases used to manage and report on drinking water quality in relation to certain sections of the MoU. The Department commissioned this audit to cover the period 1 July 2017 to 31 December 2021.

This report is an abridged version, which presents the purpose, scope and results, of the full report regarding the audit.

## Scope

The audit was conducted in accordance with the Audit Objective and Scope Statement (refer to Appendix A). This report presents the results and conclusions of the assignment performed.

This report should be read in the context of the "Inherent Limitations" and "Restricted use" detailed on page 4 of this report.

## Terms of Reference

The was conducted engagement by AAG on behalf of the Department and the Corporation in accordance with the requirements of the Objective and Scope Statement (refer to Appendix A) accepted by the Department's Managing Scientist Water and the Corporation's Head of Water Quality, and as set out below.

- A. For those elements of this engagement where a determination of compliance was required (Objective 1), we conducted our work to provide limited assurance in accordance with Australian Standard on Assurance Engagements ASAE 3100 Compliance Engagements issued by the Auditing and Assurance Standards Board (**the Standard**).
- B. For those elements of this engagement where an assessment of adequacy and effectiveness was required (Objectives 2, 3, 4 and 5), the procedures we performed did not constitute an assurance engagement in accordance with Australian Standards for Assurance Engagements, nor did they represent any form of audit under Australian Standards on Auditing and consequently, no assurance conclusion or audit opinion is provided.

## Results

### **Objective 1: Primary compliance obligations**

*S010's interpretation and application of Australian Drinking Water Guidelines 2011 and the Department's directions*

*Compliance with S010, Drinking Water Sampling Procedures, Source Protection Operations Manual (SPOM) and Binding Protocols 2, 3 and 4 of the MoU*

Through our examination of key documents, discussions with key stakeholders, examination of the Corporation's Water Quality Management System (**WQMS**), observations of related processes, procedures and operations, and sample testing:

- i. Except for the effects of two matters noted below, nothing came to our attention to indicate that nominated regions had not complied with Binding Protocols 2, 3 and 4 of the MoU as appropriate, in all material respects, during the period 1 July 2017 to 31 December 2021:
  1. **Compliance with Binding Protocol 3 – JACP validation**
  2. **Compliance with Binding Protocol 4 – Event notifications.**

Both exceptions relate to administrative obligations, which are unlikely to have a direct or significant impact on customers. However as they are breaches of the MoU, we consider them to be material. The Corporation has an opportunity to better recognise and manage its administrative compliance obligations within the MoU. There may also be benefit in establishing stronger reporting protocols with the Department for reporting and resolving such administrative breaches.

- ii. Nothing came to our attention to indicate that the Corporation had not achieved the following results, in all material respects, during the period 1 July 2017 to 31 December 2021:
- The “Drinking Water Quality Performance” Standard S010 accurately interprets and applies the combined requirements of:
    - Australian Drinking Water Guidelines, 6, 2011, Version 3.5, Updated August 2018
    - Any additional directions given by the Department of Health
  - Nominated regions comply with the directions contained within S010 to a locality or zone level
  - Nominated regions comply with the Drinking Water Sampling Procedures Manual
  - Nominated regions comply with the requirements of the SPOM.

This audit identified a further opportunity for the Corporation to further strengthen the effectiveness of its processes for demonstrating compliance with the MoU in relation to Source Protection. This opportunity was presented to management for consideration and action.

### **Objective 2: Adequacy and effectiveness of WQMS**

Through our examination and testing of WQMS and the key components of the Corporation’s drinking water quality management processes as described at Objective 1 above, we observed that during the period 1 July 2017 to 31 December 2021, WQMS appears to have been adequately and effectively maintained to:

- Manage and report on the requirements within S010, Drinking Water Sampling Procedures and Binding Protocols 2, 3 and 4 of the MoU as appropriate
- Enable the Corporation to monitor compliance in the regions with these requirements, as appropriate
- Enable the Corporation to monitor compliance of the Mundaring Water Treatment Plant processes with these requirements as appropriate.

### **Objective 3: Adequacy and effectiveness of implementation of SPOM**

Through our examination of key documents, examination of WQMS, field visits to a sample of catchments in the Perth and South West regions, discussions with key stakeholders including WQBU source protection staff, catchment management staff and rangers in Perth, South West and Goldfields & Agricultural regions, and walkthroughs and observations of source protection operations, we observed that during the audit period 1 July 2017 to 31 December 2021, the Corporation appears to have adequately and effectively maintained the SPOM requirements within the catchment areas of the nominated regions to:

- Manage and report on the requirements of the SPOM
- Enable the Corporation to monitor activities within each catchment area.

This audit identified two opportunities for the Corporation to further strengthen the effectiveness of its implementation of SPOM. These opportunities were presented to management for consideration and action.

### **Objective 4: Adequacy and effectiveness of the management framework employed by WQBU**

Through our examination of key documents, discussions with key stakeholders, examination of WQMS, observations of related processes, procedures and operations, and sample testing, in relation to the management framework, we observed that the Corporation:

- Maintained a resourced management structure and assigned responsibilities to staff for managing drinking water quality
- Established and/or maintained processes and procedures that are designed to facilitate its compliance with the requirements of the MoU in relation to drinking water
- Maintained (with continuous enhancements) its reporting and monitoring mechanism for its drinking water quality obligations
- Continued to demonstrate a strong commitment to monitoring and achieving its compliance with the requirements of the MoU in relation to drinking water
- Continued to demonstrate a strong commitment to continued learning and improvement.

This audit identified an opportunity for the Corporation to strengthen the effectiveness of its drinking water quality management framework. This opportunity was presented to management for consideration and action. Note that each of the improvement opportunities referenced at Objectives 1 and 3 above will also further strengthen the Corporation’s drinking water quality management framework.

### **Objective 5: Follow-up on previous audit recommendations**

Through discussions with key stakeholders and review of documentation, we observed that four of the five recommendations from the 2017 audit had been addressed and closed out by the Corporation by 30 June 2022. Action to address and close out the remaining recommendation was scheduled for completion and subject to tracking and reporting until close-out.

### **Inherent limitations**

- Because of the inherent limitations of an assurance engagement, together with the inherent limitation of any system of controls there is an unavoidable risk that fraud, error or non-compliance with the requirements of the MoU may occur and not be detected. We cannot, in practice, examine every activity and procedure, nor can we be a substitute for management’s responsibility to maintain adequate controls over all levels of operations and its responsibility to prevent and detect irregularities, including fraud. Accordingly, readers of our reports should not rely on the report to identify all potential instances of procedural deficiencies, which may occur
- Our procedures were not designed to detect all weaknesses in control procedures as they were not performed continuously throughout the period and the tests performed are on a sample basis
- The matters raised in this report are only those which came to our attention during the course of performing our procedures and are not necessarily a comprehensive statement of all the weaknesses that exist or improvements that might be made
- Suggestions for improvement should be assessed by management for their full commercial impact before they are implemented
- Any projection of the evaluation of the control procedures to future periods is subject to the risk that the systems may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

### **Restricted use**

This report has been prepared for use by the Corporation for the purpose of the satisfying its reporting requirements of its MoU with the Department. This report is not intended to be, and should not be, used by any other person or entity. No other person or entity is entitled to rely, in any manner, or for any purpose, on this report. We accept no duty, responsibility or liability to any party, other than the Corporation, in connection with the report or this engagement.

## Appendix A – Objective and Scope Statement



Government of **Western Australia**  
 Department of **Health**  
 Public Health

### Background

On 28 November 2017 the Department of Health and Water Corporation entered into a Memorandum of Understanding for Drinking Water (MoU).

Section 3.5 of the MoU states that the Department may conduct an audit of the Corporation's systems and data bases used to manage and report drinking water quality in relation to the following sections of the MoU:

- Section 6.0 Administration of Drinking Water Quality
- Section 8.0 Systems Analysis and Management
- Section 9.0 Materials and Chemicals
- Section 10.0 Data Exchange
- Section 11.0 Events of public health significance
- Section 14.0 Implementing the ADWG
- Section 17.0 General Administration

The audit report should include recommendations for improvements where appropriate.

Schedule 1 of the MoU sets out the Drinking Water Quality Requirements that the Water Corporation is formally required to meet in its Operating Licence with the Economic Regulation Authority. This audit should in part aim to fulfil this requirement.

Binding Protocol 2 of the MoU lists the Water Quality Management Processes and Procedures that enable the Water Corporation to demonstrate compliance with Schedule 1 and any additional direction given by the Department of Health.

The principal drinking water quality management manuals, processes and procedures used by the Water Corporation are:

- S010 Drinking Water Quality Performance
- Drinking Water Sampling Procedures Manual
- Source Protection Operations Manual (SPOM)

A computerised Water Quality Management System (WQMS) is used throughout the Water Corporation to apply the requirements prescribed by Standard S010 Drinking Water Quality Performance.

The Chief Executive Officers shall endorse the audit report and timetable for improvements. The responsible officers (Executive Director Environmental Health, Department of Health and Head of Water Quality Business Unit, Water Corporation) shall provide regular progress reports.

### Objectives

1. To determine whether:
  - the "Drinking Water Quality Performance" Standard S010 accurately interprets and applies the combined requirements of:
    - Australian Drinking Water Guidelines, 6, 2011, Version 3.5, Updated August 2018;
    - Any additional directions given by the Department of Health
  - nominated regions comply with the directions contained within S010 to a locality or zone level;
  - nominated regions comply with the Drinking Water Sampling Procedures Manual;

- nominated regions comply with the requirements of the SPOM,
  - nominated regions comply with Binding Protocols 2,3 and 4 of the MoU as appropriate.
2. To assess the adequacy and effectiveness of the Water Quality Management System (WQMS) to;
    - manage and report on the requirements within S010, Drinking Water Sampling Procedures and Binding Protocols 2, 3 and 4 of the MoU as appropriate;
    - enable the Corporation to monitor compliance in the regions with these requirements, as appropriate;
    - enable the Corporation to monitor compliance of the Mundaring Water Treatment Plant processes with these requirements as appropriate.
  3. To assess the adequacy and effectiveness of the Water Corporation's implementation of the SPOM within the catchment areas of the nominated regions to:
    - manage and report on the requirements of the SPOM;
    - enable the Corporation to monitor activities within each catchment area.
  4. To assess the adequacy and effectiveness of the management framework employed by the Water Corporation's Drinking Water Quality Process Manager, the Water Quality Business Unit (WQBU)
  5. To follow-up on the implementation of the previous audit recommendations.

## Scope and Focus

The scope of the audit covers:

- the "Drinking Water Quality Performance", S010 manual;
- the Source Protection Operations Manual (SPOM);
- visits to the Goldfields and Agricultural Region (GAR), South West Region (SWR) and Perth Metro (T&RR, Operations Centre),
- testing transactions over the period 1 July 2017 to 31 December 2021;
- testing the reliability and integrity of Binding Protocol 2 reporting over the period 1 July 2017 to 31 December 2021;
- the computerised Water Quality Management System (WQMS);
- the management framework administering:
  - S010 "Drinking Water Quality Performance";
  - the Water Quality Management System (WQMS); and
  - Drinking Water Sampling Procedures within the Water Corporation Water Quality Business Unit (WQBU) Central Office, the GAR, SWR and Perth Metro;
- the implementation of the 2017 Drinking Water Quality Management Audit recommendations.

The audit will test whether:

- Under S010 and Binding Protocol 2:
  - sampling programs are consistent with S010,
  - samples are taken in accordance with the sampling programs,
  - remedial actions are taken when samples exceed guidelines,
  - sampling locations are appropriate,
  - samples are handled correctly,
  - reporting is complete and accurate.
  - appropriate quality management protocols with the Mundaring PPP (Public Private Partnership) have been established and are in effect.
- Under Binding Protocol 3:

- the coordination plan is up to date and tested.
- Under Binding Protocol 4:
  - exception protocols are followed
- Under Source Protection:
  - Demonstrated commitment to source protection
  - Catchment Management Strategies are consistent the SPOM requirements
  - Surveillance functions have taken place
  - by-law enforcement has taken place in accordance with the SPOM
  - Sampling programs are consistent with the SPOM
  - Reporting is complete and accurate
- The management framework administering:
  - water quality management performance is subjected to continual review,
  - water quality exceptions are adequately identified and evaluated,
  - remedial plans are appropriate and timely; and
  - communication between the Water Quality Business Unit and Department of Health is aligned with Binding Protocol 4.