



Memorandum of Understanding between the Department of Health and Water Corporation for Wastewater Services and Groundwater Replenishment

November 2018

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM is entered into on the 30th day of November 2018

BETWEEN THE WATER CORPORATION ("*the Corporation*")

OF THE ONE PART

AND THE DEPARTMENT OF HEALTH ("*the Department*")

OF THE OTHER PART

Table of Contents

- 1.0 Forward.....5
- 2.0 Interpretation.....5
- 3.0 Scope.....8
- 4.0 Background.....8
- 5.0 Intent.....9
- 6.0 Commitment to Wastewater Product Quality 10
 - 6.1. *Resource the Agreement*..... 10
 - 6.2. *Identify Responsible Officers* 10
 - 6.3. *Wastewater Services Health Committee*..... 10
 - 6.4. *Managing Wastewater Catchments* 10
- 7.0 Role of the Water Corporation 11
 - 7.1 *Role* 11
- 8.0 Role of the Department of Health 11
 - 8.1. *Role* 11
 - 8.2. *As Regulator*..... 11
 - 8.3. *As Advisor to the Corporation* 11
 - 8.4. *As Auditor* 11
 - 8.5. *As Adviser to the Public* 12
- 9.0 Administration of the Quality of Wastewater Services..... 12
 - 9.1. *Wastewater Services Quality Requirements*..... 12
 - 9.2. *Variations to Standard Quality Specifications* 12
 - 9.3. *Amendment to the Binding Protocols and Schedules* 12
 - 9.4. *Exemptions* 12

9.5.	<i>Schedules of the MoU</i>	12
9.6.	<i>Approval to Vary Policies and Guidelines</i>	12
9.7.	<i>Corporation Quality Obligations</i>	12
9.8.	<i>Safe Wastewater Services</i>	13
9.9.	<i>Contracts</i>	13
10.0	<i>Implementing the Guidelines</i>	13
10.1.	<i>Implementation of Wastewater Quality Framework</i>	13
10.2.	<i>Adoption of Guidelines</i>	13
10.3.	<i>Programs of work</i>	14
11.0	<i>System Analysis and Management</i>	14
11.1.	<i>Monitoring Programs</i>	14
11.2.	<i>Wastewater Management Processes and Procedures</i>	14
11.3.	<i>Wastewater Service Quality Performance</i>	14
11.4.	<i>Wastewater Quality Analysis</i>	15
12.0	<i>Data Exchange</i>	15
12.1.	<i>Corporation Data</i>	15
12.2.	<i>DoH Oversight of Other Data</i>	15
12.3.	<i>Information exchange</i>	15
12.4.	<i>Confidentiality</i>	15
12.5.	<i>Reporting formats</i>	15
13.0	<i>Non-compliances and exceptions</i>	15
13.1.	<i>Events</i>	15
14.0	<i>Emerging Issues</i>	16
15.0	<i>Public Education and Reporting</i>	16

15.1. <i>Public education</i>	16
15.2. <i>Corporation Annual Wastewater Services Quality Report</i>	16
16.0 Department Response to Annual Wastewater Services Quality Report.....	16
17.0 MoU Term Review and Amendment.....	16
17.1. <i>Term</i>	16
17.2. <i>Amendments to the MoU</i>	16
18.0 Endorsements.....	17

1.0 Forward

This Memorandum of Understanding is designed to establish and maintain a strong cooperative relationship between the Corporation and the Department for managing wastewater services and protecting public health associated with these services.

This Memorandum of Understanding is underpinned by the Corporation's Wastewater Quality Management Framework that aims to ensure wastewater outcomes of the Water Corporation's wastewater services meet health, environmental and social expectations. The Wastewater Quality Framework is a risk based approach to wastewater management aligned to the principles of the Australian Guidelines for Water Recycling and Australian Drinking Water Guidelines.

2.0 Interpretation

Biosolids	The product of wastewater treatment plant sludge that has undergone further treatment resulting in a stabilised product suitable for beneficial use.
Binding Protocol	Documents developed by both the Department and Corporation from time to time detailing processes and procedures to be followed for prescribed events or activities. These documents may not necessarily be publicly available as they may contain operationally sensitive details related to scheme security and intellectual property.
Catchment	The wastewater collection system that delivers inflows to wastewater treatment plants.
Corporation	Water Corporation.
Department	Department of Health.
Government Sewerage Policy	updated state-wide sewerage policy that supersedes the Country Sewerage Policy and the Perth Metropolitan Region Government Sewerage Policy.

Groundwater Replenishment	Storing high quality recycled water in groundwater for future use including as a raw drinking water source.
Guidelines	National Water Quality Management Strategy; Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) (2006) and the Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2) Augmentation of Drinking Water Supplies (2008) published by the National Health and Medical Research Council (documents as printed on the 31 January 2014), The Western Australian Guidelines for Biosolids Management December 2012, The Guidelines for the Non-potable Uses of Recycled Water in Western Australia 2011, as those guidelines are amended from time to time.
GWR Scheme	The groundwater replenishment scheme to be undertaken by the Corporation and which involves the planning, approval, design, construction, commissioning, recharge, operation, sampling, monitoring and review of an advanced water treatment plant, generally consisting of membrane filtration, reverse osmosis and ultra-violet disinfection.
Health Act	Health (Miscellaneous Provisions) Act 1911 or subsequent amendment and revisions.
Health Regulations	Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974, as amended from time to time.
MoU	Memorandum of Understanding for Wastewater Services and Groundwater Replenishment between the Department and the Corporation.
Receiving Aquifer	The aquifer in which recycled water is recharged.

Recharge Management Zone	The minimum radial distance between the bores for recharge of recycled water and abstraction of groundwater for public drinking water supplies. For the Beenyup GWR Scheme, the recharge management zone is 250m.
Recycled Water	“Fit for purpose” water produced by wastewater treatment intended for beneficial use. This also includes water produced by groundwater replenishment schemes and recharged to the receiving aquifer.
Recycled Water Quality Parameters	Parameters specified by the Department as set out in Binding Protocol 2.
Recycled Water Quality Indicators	Chemicals or pathogens that best represent a larger group of chemical or microbiological hazards identified by the Recycled Water Quality Parameters. The indicators have been specified by the Department and are provided in Binding Protocol 2.
Residual waste	A product of the wastewater treatment process that does not have a beneficial use.
Schedule	documents prepared by the Department for general publication and application within the water industry.
Sewage	any kind of sewage, nightsoil, faecal matter or urine, and any waste composed wholly or part of liquid (Health Act).
Sewer Mining	A process of extracting un-treated wastewater directly from a sewer and treating it to a fit for purpose standard for use as recycled water.
Term	Is the term of this MoU as defined in Clause 17.1.

Wastewater	Is consistent to the definition of “sewage” under the Health Act which means any kind of sewage, nightsoil, faecal matter or urine, and any waste composed wholly or in part of liquid.
Wastewater overflow	The overflow, discharge or spillage of wastewater into/onto a waterbody, recreational waterway, land area, building etc, from a wastewater treatment plant (WWTP), sewer line, sewerage pump station, evaporation pond, sewage receptacle or any other liquid waste transporting or receiving receptacle.
Wastewater service	The systems, processes and assets used to manage wastewater and recycled water from collection to disposal or the point of beneficial end use.
Wastewater scheme	The collection, conveyance, treatment and disposal or recycling assets used to provide the wastewater service.

3.0 Scope

The scope of the MoU will cover the Corporation’s entire wastewater service from collection to disposal and/or beneficial use and includes all wastewater products up to the point where they are returned to the environment and/or incorporated into other products. It does not cover the water supply, irrigation and drainage classes of water services, defined by the Economic Regulatory Authority. The products generated by operation of the Corporation’s wastewater service include treated wastewater, recycled water, biosolids, gaseous emissions and residual wastes.

In terms of disposal, the MoU will include treated wastewater, recycled water, biosolids and residual waste discharged to the environment.

4.0 Background

The Corporation manages the wastewater service for many communities across Western Australia (WA). The Corporation is committed to the responsible management of all components of the wastewater services it operates and implements the Corporate Wastewater Quality Framework. The Framework utilises a risk-based approach to wastewater management aligned

to the Australian Guidelines for Water Recycling and is used to identify and manage all risks and hazards in the entire wastewater service to ensure the final products are of a defined quality and will be “fit for purpose” to protect human and environmental health.

Typically a wastewater scheme involves the collection of inflows from the surrounding catchment. The inflows are then conveyed to a wastewater treatment plant whereby the effluent is treated to remove hazards. Wastewater products such as biosolids and recycled water can then be utilised for a beneficial use or disposed of in a sustainable manner.

The use of recycled water in WA reduces the use of potable and other water sources. The use of biosolids improves soil condition and plant nutrient uptake, and is a sustainable alternative to other fertilisers.

5.0 Intent

The intent of this MoU is to ensure that the Corporation’s wastewater service meet required public health regulation and thus do not negatively affect public health standards across WA.

This MoU continues the strong co-operative relationship for managing wastewater services that exists between the Corporation and the Department.

The foremost role of the Department in this MoU is its role as a regulator of wastewater, biosolids and recycled water in the State. This MoU enables the Department to assess and audit the Corporation’s wastewater service and management systems to ensure ongoing satisfactory performance.

Both the Department and the Corporation recognise that it is important that the practices and processes used to establish and maintain quality wastewater products are open and transparent to the community. Both organisations commit to ensuring that performance will be reported in a timely manner and will be open to public scrutiny.

This MoU has been designed to respond to change, as health science, wastewater technologies and community expectations evolve.

Both the Department and the Corporation are committed to using a risk-based multiple barrier approach to managing the wastewater service. The identification of controls will be based on risk assessment from catchment to discharge and will be supported by proactive management from catchment to discharge. Risk based assessment will identify the key risks to be managed and may identify areas for further assessment or investigation.

The Department and the Corporation will work cooperatively to resolve strategic issues that sit outside the realm of the Corporation that may impact on the Corporation achieving desired wastewater service outcomes.

6.0 Commitment to Wastewater Product Quality

The Corporation and the Department are committed to ensuring that the Corporation's wastewater service is managed in accordance with State and National Guidelines to ensure public health is protected.

6.1. *Resource the Agreement*

The Corporation and the Department agree to use their best endeavours to provide adequate resources to meet the requirements of this MoU.

6.2. *Identify Responsible Officers*

An officer will be identified within each organisation who will be responsible for monitoring, facilitating and reporting to their relevant Chief Executive Officer on the implementation of this MoU. The responsible officers for the Corporation and the Department are identified in Binding Protocol 7.

6.3. *Wastewater Services Health Committee*

The Wastewater Services Health Committee consists of Water Corporation and Department of Health members. The Wastewater Services Health Committee set the minimum requirements, practices and procedures to ensure that the products of the Corporation's wastewater service meet public health expectations. The agenda of the Wastewater Services Health Committee will accommodate the scope of this MoU. The Corporation will chair and provide executive support to the Wastewater Services Health Committee. Both organisations are committed to the ongoing work of this Committee to deliver the objectives of this MoU.

6.4. *Managing Wastewater Catchments*

The Department and the Corporation will cooperate in areas of mutual interest to ensure adequate consideration is given to manage all wastewater catchments recognising that wastewater product quality may be dependent on the inflow into the wastewater scheme. Where unacceptable risks are identified, the Corporation and the Department will take action to reduce these risks.

The Department and the Corporation recognise their responsibility in source protection and will carry out hazard identification and risk assessments where required to ensure that the receiving aquifer is protected, including the continued use of the receiving aquifer to provide a drinking water source.

7.0 Role of the Water Corporation

7.1 *Role*

The Corporation's role is to:

- Provide wastewater services which meet public health, environmental, social and corporate expectations as detailed in agreements, licences, regulations and corporate standards;
- Provide sustainable management of Western Australia's limited water resources by maximising wastewater recycling.
- Regularly monitor wastewater schemes to provide confidence that the wastewater service is being delivered and managed effectively; and
- Develop the "Wastewater Quality Framework" to ensure the wastewater services are managed and continually improved.

8.0 Role of the Department of Health

8.1. *Role*

The Department's roles are to:

- Minimise human exposure to environmental health hazards that pose or have the potential to pose a health risk;
- Reduce the incidence and impact of communicable disease; and
- Provide approvals for wastewater services.

8.2. *As Regulator*

The Department will regulate wastewater services to achieve health outcomes. During the Term, the Corporation and the Department will work together to develop health regulatory requirements associated with wastewater services.

8.3. *As Advisor to the Corporation*

The Department shall provide advice to the Corporation on matters regarding the management of wastewater services and the quality of its products.

8.4. *As Auditor*

The Department may audit the Corporation's systems and databases used to manage and report on its wastewater services no more often than every three (3) years.

The audit scope will be prepared by the Department and discussed with the Corporation. The audit report will include recommendations for improvements where appropriate. The responsible officers shall provide regular progress reports of improvements undertaken to the Department and the Corporation. The cost of the audit shall be borne by the Corporation.

8.5. *As Adviser to the Public*

In consultation with the Corporation, the Department will provide comment and advice to the public, including media, with respect to health issues associated with the Corporation's wastewater services.

9.0 Administration of the Quality of Wastewater Services

9.1. *Wastewater Services Quality Requirements*

The Department's current requirements for wastewater services are contained within Binding Protocol 1 and Binding Protocol 2.

9.2. *Variations to Standard Quality Specifications*

The Department specifies the quality criteria for wastewater services in accordance with Binding Protocol 1A and Binding Protocol 2 but may vary these where evidence from either research or literature provides cause to do so.

9.3. *Amendment to the Binding Protocols and Schedules*

The responsible officers can amend any Binding Protocol other than Binding Protocol 1A and 2 and any Schedule to this MOU at any time by agreement in writing.

9.4. *Exemptions*

The Department may grant exemptions for certain parameters and criteria as outlined in Binding Protocol 1 and Binding Protocol 2. Exemptions granted by the Department will be set out in Schedule 1.

9.5. *Schedules of the MoU*

The Department and Corporation shall regularly review the Schedules and will develop additional Schedules to this MoU on an "as needs" basis. The Schedules are intended to provide supporting information to this MoU.

9.6. *Approval to Vary Policies and Guidelines*

Variations, additions or exemptions to Binding Protocol 1A and Binding Protocol 2 shall be approved by the Minister for Health.

9.7. *Corporation Quality Obligations*

Under this MoU, the Corporation will provide Wastewater Services that comply with the Department's requirements in Binding Protocol 1 and Binding Protocol 2 prior to it being supplied to Customers or Recipients, recharged to the receiving aquifer or being returned to the environment.

9.8. Safe Wastewater Services

The parties agree that wastewater services that comply with Binding Protocol 1 and Binding Protocol 2 are safe from a health perspective for Customers and Recipients to use in an approved manner and/or discharge to the environment.

9.9. Contracts

From time to time the Corporation may enter into contracts with other parties. These may include:

- Engagement of subcontractors – the Department expects the Corporation to include reference to this MoU in the contract specifications.
- Corporation acting under a contract for service provision – the Department expects the Corporation to include reference to this MoU in the conditions of the contract.
- Corporation accepting wastewater products from another party under contract – the Department expects the Corporation as part of the contract of sale to require the provider of wastewater products to demonstrate compliance with the Corporation’s Wastewater Quality Framework.

The Corporation shall notify the Department in the event that a contract restricts the ability to respond to an issue of public health significance. The Department will seek to initiate remedial actions of all parties concerned and may require the other parties to comply with the Guidelines.

10.0 Implementing the Guidelines

10.1. Implementation of Wastewater Quality Framework

All health-based wastewater services guidelines incorporate an integrated quality assurance framework that is designed to manage wastewater services from catchment to discharge. This approach is consistent with the National Guidelines structure and requires the adoption of a multi-agency continual improvement system.

The Department and Corporation will work cooperatively with other stakeholders to implement the Guidelines during the Term of this MoU.

10.2. Adoption of Guidelines

The Corporation and the Department will work cooperatively to adopt Guidelines, as agreed to or amended over time.

The Corporation will routinely report to the Department on progress towards compliance of its wastewater services with the Guidelines.

The Department expects the Corporation to require all employees and alliance partners involved in the wastewater service from catchment to disposal to follow the standards, processes and procedures specified in the Guidelines.

10.3. Programs of work

The Corporation's objective is to progressively work towards compliance of its wastewater services with the Guidelines. To achieve this, the Corporation will use all best endeavours to improve its wastewater services to meet Guidelines by operational and capital improvement projects. These projects will be prioritised through risk assessment process and funding sought will be balanced against Corporate priorities.

The Corporation recognises that to achieve the above objective, key priorities for improvements requiring capital will be developed and incorporated into the Corporation's 5 year rolling program annually and tabled at the Wastewater Services Health Committee annually as part of the Wastewater Quality Improvement Plan.

11.0 System Analysis and Management

The Corporation and the Department shall maintain and apply an effective system to manage the quality of the wastewater service. To facilitate this, the Corporation and the Department will develop:

11.1. Monitoring Programs

The Corporation shall during the Term, develop, maintain and implement an appropriate sampling and monitoring program for wastewater quality as stipulated within the Process Control Tables for each of its wastewater and groundwater replenishment schemes.

11.2. Wastewater Management Processes and Procedures

In consultation with the Department, the Corporation shall develop, maintain and review its wastewater services quality management processes and procedures in accordance with the Guidelines. Processes and procedures that have been endorsed by the Department will be set out in Binding Protocol 1B.

11.3. Wastewater Service Quality Performance

The Corporation and the Department recognise the importance of risk management in the wastewater scheme from catchment to disposal in assuring the quality of wastewater services. The Corporation will develop agreed processes to carry out hazard identification, risk assessment and supporting operational control and monitoring programs to manage its wastewater schemes to ensure the quality of the wastewater service.

11.4. Wastewater Quality Analysis

Regulatory samples for analysis and testing shall be submitted to laboratories that are registered by the National Association of Testing Authorities unless otherwise agreed with the Department.

Regulatory samples tested shall use methods accredited by the National Association of Testing Authorities unless otherwise agreed by the Department.

12.0 Data Exchange

12.1. Corporation Data

The Corporation shall make available all relevant data associated with the Corporation's wastewater services to the Department.

12.2. DoH Oversight of Other Data

The Department will undertake all endeavours to ensure that all relevant data associated with the Corporation's wastewater services is provided to the Corporation in a timely manner, either directly from the laboratory or from the third party.

12.3. Information exchange

The Corporation will provide an annual program of public health related research and development activities associated with wastewater services.

The Corporation will provide access to reports and studies undertaken by the Corporation as part of its assessment of groundwater replenishment which are relevant to public health.

12.4. Confidentiality

Information provided by either party shall not be published without the approval of the information source.

12.5. Reporting formats

The Department and Corporation will work cooperatively to develop, establish and improve reporting formats.

13.0 Non-compliances and exceptions

13.1. Events

The Corporation and Department recognise that from time to time it may be necessary for the Corporation to notify the Department of events associated with wastewater services that may affect public health and safety.

Details of the types of events that require notification are detailed in Binding Protocol 3A (for Groundwater Replenishment) and 3B (for Wastewater Services).

14.0 Emerging Issues

The Department and the Corporation will monitor and consider emerging issues that are not currently addressed by the Guidelines or this MoU that may be of public health interest or significance.

15.0 Public Education and Reporting

15.1. Public education

The Department and Corporation shall develop and implement public education programs relating to wastewater services as required. Where appropriate the Department and the Corporation will jointly develop and/or support development of educational information and programs.

15.2. Corporation Annual Wastewater Services Quality Report

The Corporation will table an Annual Wastewater Services Quality Report to the Department.

16.0 Department Response to Annual Wastewater Services Quality Report

The Department shall prepare a response to the Corporation's Annual Wastewater Services Quality Report.

17.0 MoU Term Review and Amendment

17.1. Term

The term of the MoU will be five (5) years or such other period as may be agreed in writing. It is accepted that this MoU will evolve over time.

17.2. Amendments to the MoU

Subject to section 9.6 the CEO of the Water Corporation and the Director-General of the Department of Health can amend this MoU at any time by agreement in writing.

18.0 Endorsements

Signed



For

DIRECTOR-GENERAL

DEPARTMENT OF HEALTH

Date: *30 November 2018*

Signed



CHIEF EXECUTIVE OFFICER

WATER CORPORATION

Date: *30/11/18*