


Sydney Water Corporation Operational Audit 2005/06

Report to the Minister

Water - Compliance Report
May 2007

Sydney Water Corporation Operational Audit 2005/06

Report to the Minister



Water – Compliance Report
May 2007

Compliance Report No 30

ISBN 978 1 920987 96 1

This work is copyright. The *Copyright Act 1968* permits fair dealing for study, research, news reporting, criticism and review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

**The Tribunal members for this review are: Dr Michael Keating AC, Chairman,
Mr James Cox, Full Time Member and Ms Sibylle Krieger, Part Time Member**

Independent Pricing and Regulatory Tribunal of New South Wales

Level 2, 44 Market Street, Sydney NSW 2000

☎ (02) 9290 8400 Fax (02) 9290 2061

www.ipart.nsw.gov.au

All correspondence to: PO Box Q290, QVB Post Office NSW 1230

TABLE OF CONTENTS

1	INTRODUCTION AND OVERVIEW	1
	1.1 Overview of audit findings	1
	1.2 Tribunal's recommendations	2
	1.3 Structure of report	3
2	AUDIT SCOPE AND PROCESS	4
	2.1 Scope	4
	2.2 Process	4
3	WATER QUALITY	6
	3.1 Auditor's findings	6
	3.2 Auditor's recommendations	7
	3.3 Tribunal's comments	7
4	INFRASTRUCTURE PERFORMANCE	8
	4.1 Auditor's findings	8
	4.2 Auditor's recommendations	8
	4.3 Tribunal's comments	9
5	CUSTOMER AND CONSUMER RIGHTS	11
	5.1 Auditor's findings	11
	5.2 Auditor's recommendations	11
	5.3 Tribunal's comments	12
6	COMPLAINT AND DISPUTE HANDLING	13
	6.1 Auditor's findings	13
	6.2 Auditor's recommendation	13
	6.3 Tribunal's comments	14
7	ENVIRONMENT – INDICATORS AND MANAGEMENT	15
	7.1 Auditor's findings	15
	7.2 Auditor's recommendation	16
	7.3 Tribunal's comments	16
8	WATER CONSERVATION AND DEMAND MANAGEMENT	17
	8.1 Auditor's findings	17
	8.2 Auditor's recommendations	18
	8.3 Tribunal's comments	18
9	RESPONSIBILITIES FOR MAINTAINING MOUS	20
	9.1 Auditor's findings	20
	9.2 Auditor's recommendations	20
	9.3 Tribunal's comments	20

1 INTRODUCTION AND OVERVIEW

The Independent Pricing and Regulatory Tribunal of New South Wales (the Tribunal) has completed its audit of Sydney Water Corporation's (Sydney Water's) compliance with the requirements of its Operating Licence for the period 1 July 2005 to 30 June 2006. The purpose of this report is to inform the Minister for Water Utilities of the audit findings, and of the Tribunal's recommendations in response to these findings.

1.1 Overview of audit findings

In undertaking its audit review, the auditor examined Sydney Water's compliance with the obligations imposed on it through its Operating Licence, and with the Ministerial Requirements related to these obligations. The auditor also assessed Sydney Water's compliance with its responsibilities for maintaining Memoranda of Understanding with other government agencies, as set out in its Operating Licence.

Overall, the auditor found that Sydney Water had managed its resources to achieve predominately full compliance with its Operating Licence. However, for some obligations and Ministerial Requirements it achieved only high or moderate compliance. The auditor also identified a range of areas in which compliance could be improved.

More specifically:

- Sydney Water achieved full compliance with all licence obligations related to water quality. It continued to supply excellent quality treated drinking water through comprehensive water quality management, planning and monitoring systems, which fully comply with the Australian Drinking Water Guidelines and aesthetic requirements of NSW Health and the Minister.
- Sydney Water achieved full or high compliance with most of its system performance obligations. It achieved moderate compliance with the licence requirement to achieve specified response times for water mains breaks and moderate compliance with the Ministerial Requirement to install 18 flow meters in the water supply system. In achieving this compliance, Sydney Water made significant improvements in the efficiency and effectiveness of its resource management through a major reorganisation of its field staff.
- Sydney Water achieved full or high compliance with all obligations related to customer and consumer rights. During 2005-2006, it improved its customer management and increased the use and effectiveness of its Customer Council.
- Sydney Water achieved full or high compliance with all obligations related to complaint and dispute handling.
- Sydney Water achieved full compliance with all obligations related to environmental indicators and management. It has established an Environmental Management System that complies with AS/NZ ISO 14001, which should improve the management of its environmental risk. It has also established a comprehensive set of Environmental Performance Indicators and associated monitoring and reporting systems. However, the auditor identified a need to improve the integration of Sydney Water's Environment Plan with its Corporate and Divisional Business Plans.

- Sydney Water demonstrated a high level of commitment to water conservation and demand management, and achieved full compliance with its obligations in this area. This is a significant improvement over previous years' performance.
- Sydney Water fully implemented its Memorandum of Understanding (MoU) to achieve a "cooperative relationship" with NSW Health. However, its implementation of its MoUs with the Environment Protection Authority (now part of the Department of Environment and Climate Change) and the Water Administration Ministerial Corporation was moderate and low respectively.

1.2 Tribunal's recommendations

The Tribunal notes that the auditor made a number of recommendations for Sydney Water. It believes that Sydney Water should consider these recommendations and use them to guide its efforts to further improve its compliance performance over the next year.

The Tribunal considers that one of these recommendations warrants consideration by the Minister as a direction to Sydney Water. This is the recommendation that Sydney Water implement the revised flowmeter installation program set out in its letter of 8 August 2006 to the then Minister (see Attachment 1). The installation of flowmeters is important to enable Sydney Water to analyse trends in leakage from its systems.

In addition, the Tribunal considers that the Minister should clarify Sydney Water's obligations in relation to response times for leaks and breaks. For water loss events, such as leaks and breaks, the required response time depends on the priority given to the event. This priority depends on the initial assessment of the severity of the water loss involved. However, in some cases, the priority is later upgraded, based on further analysis of the water loss situation and the required response time is adjusted.

In such cases, it is not currently clear what start time Sydney Water should use to calculate its response and repair times for compliance reporting. The Tribunal supports the auditor's view that the response time relevant to the amended priority should commence when the further analysis has been undertaken. That is, it considers that Sydney Water should 'restart the clock' when calculating response and repair times for compliance reporting purposes where the priority of a leak or break is upgraded.

Recommendation 1

That the Minister direct Sydney Water to implement the revised flowmeter installation program, as advised to the Minister in Sydney Water's letter dated 8th August 2006.

Recommendation 2

That the Minister clarify the start time for the calculation of response times for leaks and breaks and direct Sydney Water to 'restart the clock' when calculating response and repair times for compliance purposes in cases where the priority of a leak or break is upgraded.

1.3 Structure of report

The following chapters explain the auditor's review, findings and recommendations in more detail, and provide the Tribunal's comments in response to these findings, based on its attendance at audit meetings and its understanding of the issues.

Chapter 2 explains the basis for and scope of the audit review, and the process followed in undertaking it. Chapters 3 to 9 focus on Sydney Water's compliance with the obligations set out within key sections of its Operating Licence, including:

- water quality
- infrastructure performance
- customer and consumer rights
- complaint and dispute handling
- environmental indicators and management
- water conservation and demand management
- responsibilities for maintaining Memoranda of Understanding with other government agencies.

Please note that the boxed sections in these chapters are direct quotes from the auditor's final report to the Tribunal. Further detail on the auditor's findings can be found in the auditor's report, which is attached for information.

2 AUDIT SCOPE AND PROCESS

Sydney Water is a State Owned Corporation, wholly owned by the NSW Government. Its primary role is to manage potable water supply and sewage treatment (including assets) to protect public health and the environment for the benefit of Sydney and surrounding urban areas. These roles and responsibilities are derived from the *Sydney Water Act 1994* (the Act) and the Operating Licence issued to Sydney Water pursuant to Part 5 of the Act.

Part 12 of the Operating Licence stipulates that the Tribunal (or its appointee) is to undertake an Operational Audit of Sydney Water's performance against the requirements of the licence each year, and report its findings to the Minister.

Accordingly, the Tribunal commissioned GHD Pty Ltd, in association with the Hunter Valley Research Foundation (HVRF), to undertake the 2005-2006 Operational Audit of Sydney Water covering the period 1 July 2005 to 30 June 2006.

2.1 Scope

In line with the scope defined in Part 12 of the Operating Licence, the auditor's review included assessing Sydney Water's:

- compliance with the obligations in each of Parts 3, 4, 5, 6, 7, 8, 9, 10 and 11 (and any Schedules referred to in those Parts) of its Operating Licence
- implementation of the Memoranda of Understanding it has with NSW Health, the Environment Protection Authority (now part of the Department of Environment and Climate Change) and the Water Administration Ministerial Corporation
- compliance with any other matter required by the Operating Licence, the Act or administrative direction to be assessed or considered as part of the Annual Audit
- compliance with the directions of the Minister responsible for administering the provisions of the Act, following the 2004-2005 Operational Audit (Ministerial Requirements).

In undertaking the audit review, the auditor examined Sydney Water's compliance with its requirements for the 2005-2006 audit period only. Requirements satisfied in earlier audit periods were not reassessed.

2.2 Process

The auditor adopted a methodology consistent with ISO 14011 *Guidelines for Environmental Auditing*. These guidelines set out a systematic approach to defining the requirements of the audit, which ensure that it is conducted in accordance with an established and recognised audit protocol.

The auditor held an inception meeting with Sydney Water's Managing Director and other representatives on 4 October 2006. This meeting developed mutual understanding and expectations of the requirements of the audit and protocols for the conduct of the audit. Both Sydney Water and the auditor generally adhered to the agreed protocols throughout the audit. The Tribunal's Secretariat was represented at most meetings between the auditor and

Sydney Water, which meant the Tribunal was able to gain first hand information on audit processes and outcomes.

The auditor provided Sydney Water with drafts of the audit report, and gave it an opportunity to provide the auditor and the Tribunal with its comments on these documents. The auditor considered these comments before finalising its report.

The auditor has assessed and rated Sydney Water's compliance with the requirements of the Operating Licence according the following schedule:

Compliance Grade	Description detail
Full Compliance	All requirements of the condition have been met.
High Compliance	Most requirements of the condition have been met with some minor technical failures or breaches.
Moderate Compliance	The major requirements of the condition have been met.
Low Compliance	Key requirements of the condition have not been met but minor achievements regarding compliance have been demonstrated.
Non Compliance	The requirements of the condition have not been met.
Insufficient Information	Relevant, suitable or adequate information to make an objective determination regarding compliance was not available to the auditor.
No Requirement	The requirement to comply with this condition does not occur within the audit period or there is no requirement for the utility to meet.

3 WATER QUALITY

3.1 Auditor's findings

Drinking Water Quality - Standards

Full compliance was achieved with respect to the quality drinking water to customers. The water quality is generally of an excellent standard and complies with the health related requirements of the Australian Drinking Water Guidelines (1996), the current Australian Drinking Water Guidelines (2004) and the aesthetic related requirements of NSW Health and the Minister.

Drinking Water Quality - Monitoring

Sydney Water prepared an Annual Drinking Water Quality Monitoring Plan for the water supply systems to monitor health-related and aesthetic-related water quality parameters and to demonstrate compliance with the Guidelines. The Plan was prepared in accordance with the Licence requirements and has been endorsed by NSW Health.

Full compliance was achieved regarding the inclusion of risk minimisation practices and systems management in the operation of its water supply.

Full compliance was achieved with respect to monitoring in accordance with the Annual Drinking Water Quality Monitoring Plan. Sydney Water maintains an effective system of quality assurance for monitoring, sampling, testing and reporting on the Plan.

Drinking Water Quality - Reporting

Full compliance was achieved for the preparation of reports on the results of water quality monitoring and improvement.

Drinking Water - Planning

Full compliance was achieved with respect to the preparation of a Five Year Drinking Water Quality Management Plan 2005-2010. The Plan has been prepared with reference to the concepts of good practice in the 2004 Australian Drinking Water Guidelines.

Drinking Water - Incident Management

Full compliance was achieved with respect to the preparation of a Drinking Water Quality Incident Management Plan.

Other Grades of Water

Full compliance was achieved with the requirements for supply of other grades of water.

3.2 Auditor's recommendations

<p>R3.1 The guideline level for water quality results should be included in the reporting tables for all water quality monitoring. This will assist the reader in achieving better understanding of Sydney Water's compliance with the guideline level.</p>
--

3.3 Tribunal's comments

Sydney Water achieved excellent water quality results and continued to meet excellent water quality standards throughout 2005-2006. The Tribunal notes that this is the fifth year in a row that Sydney Water has achieved full compliance with its water quality obligations. This performance is largely due to the organisation's comprehensive water quality management system, which ensures compliance with all relevant Australian standards (including monitoring, reporting, planning and incident management).

Sydney Water also has good risk management procedures in place to ensure this performance is maintained in the future. For example, it has developed a Five Year Drinking Water Quality Management Plan 2005-2010, which provides a comprehensive summary of the water quality issues facing Sydney Water and outlines strategies for addressing them.

The Tribunal notes that more than 91 per cent of customers were satisfied with the quality of water in 2005-2006, which is higher than in the previous 12 years. In addition, the number of customer complaints concerning water quality was at an all time low.

The Tribunal believes that Sydney Water's most important function is to provide drinking water of an extremely high quality. It applauds Sydney Water's ongoing compliance with the water quality requirements of the Operating Licence. The Tribunal will continue to strictly monitor this area in future audits.

The auditor's recommendation is essentially a reporting issue. The Tribunal intends to discuss this matter with Sydney Water with a view to addressing it through the Monitoring and Reporting Protocol. The Tribunal does not consider that this matter warrants a Ministerial Requirement.

4 INFRASTRUCTURE PERFORMANCE

4.1 Auditor's findings

Full compliance was achieved with Standards for Water Pressure, Water Continuity and Sewage Overflows on Private Property and requirements concerning Priority Sewerage.

Full compliance was achieved with the requirement for reporting on System Performance Standards and maintaining records, reporting and access to Service Quality and System Performance Indicators.

Full compliance was achieved with the calculation and reporting requirements for levels of Water Leakage

Moderate compliance was assessed for achieving specified Response Times for Water Main Breaks.

Moderate compliance was achieved with the Ministerial requirement that eighteen flow meters be installed in the water supply system in 2005-2006. Sydney Water had installed (but not commissioned) ten flow meters by June 2006.

High compliance was achieved with the Ministerial requirement that six water pressure control zones be established in 2005-2006. Sydney Water successfully demonstrated that the same number of customers could be incorporated into only four pressure control zones to achieve the same net result.

The auditor also noted that Sydney Water undertook a major reorganisation of its field resources during 2005-06, to help it meet its higher, ongoing workload due to the carry-over of work and new licence requirements. This reorganisation resulted in significant improvements in the efficiency and effectiveness of its resource management, which the auditor considers was a key factor in Sydney Water's high level of compliance with obligations related to infrastructure performance.

4.2 Auditor's recommendations

- R4.1** Implement the revised flowmeter installation program, as advised to the Minister in Sydney Water's letter dated 8th August 2006 – copy attached.
- R4.2** Implement a reporting process/protocol for delays from consent authorities.
- R4.3** Report to the Tribunal by 30 June 2007 on options for improving methods of assessing and validating connectivity of customer properties in order to improve the accuracy of its counting of properties affected by water continuity events;
- R4.4** Modify the reporting process and practice to clearly identify and count individual customer service outage periods where multiple outage events are caused by single asset failure events.

R4.5 'Restart the clock' for calculating response and repair times for compliance reporting purposes where the priority of a break, leak or blockage is upgraded.

R4.6 Review and advise the Tribunal, by 30th June 2007, on the original project delivery plan and timetable for the "Priority Sewerage Program", including:

- The impact of any delays experienced, to date or anticipated, by consent authorities in the planning process; and
- The actions Sydney Water has undertaken, or proposes to undertake, to meet the programs requirements.

4.3 Tribunal's comments

Sydney Water continued to achieve full compliance with system performance standards related to water pressure, continuity and sewerage overflow.

The 2005-2006 audit assessed compliance with a new licence requirement to achieve specified response times for water mains breaks. The auditor rated Sydney Water's compliance with this requirement as moderate, even though it did not meet the target requirements set out in its licence. This assessment reflected the substantial effort Sydney Water made to achieve the best result possible given the circumstances, and the fact that improvement in response times is likely to adversely affect its performance in other areas of operations such as water continuity. The Tribunal acknowledges the Sydney Water's efforts to achieve an optimum result and approves the assignment of moderate compliance.

The 2005-2006 audit also assessed compliance with two Ministerial Requirements imposed on Sydney Water in response to the 2004-2005 audit. The auditor rated Sydney Water's compliance with the first of these requirements - to install 18 flow meters in the water supply system during 2005-2006 - as moderate, as it had only installed 10 meters by June 2006. The Tribunal notes that Sydney Water provided the Minister with timely advice that it would not meet this requirement. The auditor benchmarked Sydney Water's performance against a similar task undertaken by another water utility. This exercise suggested that Sydney Water's result was consistent with good practice. The auditor took these factors into account when rating Sydney Water's compliance.

The auditor rated Sydney Water's compliance with the second Ministerial Requirement - to establish six water pressure control zones in 2005-2006 - as high. Pressure zone analysis is used to identify areas in which system water pressure, and consequent leakage from the system, may be reduced. Sydney Water established four pressure zones which achieved the same coverage of properties, and consequent water savings from leakage reduction, as the original requirement for six zones. Thus, while the number of properties and the resultant water savings under the new pressure regulation regime will be the same, fewer zones will need to be created. This, in turn, will provide financial efficiencies.

The Tribunal acknowledges that several factors made Sydney Water's performance in relation to some aspects of infrastructure performance more difficult in 2005-2006 - including the ongoing drought conditions, the impact of urban consolidation and high rise development on sewerage overflow figures, and the time taken by consent authorities to provide approval for priority sewerage programs.

The Tribunal notes the auditor's comments about improvements Sydney Water has achieved in efficiency and effectiveness as a result of reorganising its field resources.

The Tribunal supports the auditor's recommendations. It suggests that recommendation R4.1 be imposed as a Ministerial Requirement, and it has sought clarification from the Minister in regard to recommendation R4.5. With regard to the remaining recommendations, the Tribunal will continue to strictly monitor these areas in future audits but does not consider that they warrant Ministerial Requirements.

5 CUSTOMER AND CONSUMER RIGHTS

5.1 Auditor's findings

Customer Contract

Performance in relation to all of the relevant clauses was rated as high compliance or full compliance.

Consumers

Full compliance was achieved in relation to Sydney Water's dealing with complaints under the Customer Contract as if the complainants are consumers.

Debt and Disconnection

Full compliance was achieved with all requirements relating to the Code of Practice and Procedure on Debt and Disconnection, and the dissemination of information regarding the Code.

Customer Councils

In compliance with the 2004-2005 audit recommendations, Sydney Water has made real efforts to more actively involve the Council and full compliance was achieved. Full compliance was also achieved regarding the membership and operations of the Council and terms of the Council Charter. The issue of dual representative roles of Council members was addressed, late in the audit period resulting in a high compliance rating.

Customer Service Indicators

Detailed evidence of the establishment, maintenance and implementation of systems to enable accurate measurement of performance against a set of indicators was provided by Sydney Water. High compliance was awarded in this area, acknowledging the quality of the computer and management systems introduced, and the importance of continual improvement, especially in the area of integrated training systems and systematic checks to ensure the effectiveness of the training given to all staff.

5.2 Auditor's recommendations

- R5.1** Conduct an annual customer survey of industrial and commercial customers to provide feedback on the performance of Sydney Water.
- R5.2** Continue to implement programs for the improvement of the skills assessment and training of relevant staff in the use and application of the records and complaint handling computer systems (Customer View, Access and WAMS) and systematically check the effectiveness of this training.
- R5.3** Conduct detailed analysis of the underlying causes of billing and account complaints and meter misread complaints and take steps to reduce the incidence of these complaints.

- R5.4** Continue to implement programs for the improvement of skills assessment and training of service staff and repair crews in order to address issues raised in the Emergency Contact Survey Report and conduct assessments of the effectiveness of that training.
- R5.5** Inform members of the Customer Council, in writing, about the customer groups that they are expected to represent at the commencement of each financial year, and inform any new members in this regard at the time of their appointment to the Council.
- R5.6** Invite the Chairman of Sydney Catchment Management Authority, or his delegate, to participate in the Customer Council.

5.3 Tribunal's comments

Sydney Water achieved full to high compliance with all requirements related to customer and consumer rights, which is an improvement since the 2004-2005 audit. In addition, there were no clauses in the Customer Contract where Sydney Water's performance was rated as less than high compliance. However, the Tribunal notes that the number of properties affected by interruptions to their water supply and dry weather sewerage overflow events increased over 2005-2006. The overall number of complaints also rose, compared with the last two audits. This underlies the importance of having refined and effective emergency response and complaint handling mechanisms that complement asset management programs in the resolution of these issues.

In addition, the auditor noted that Sydney Water did not conduct a survey of commercial and industrial customers on customer satisfaction and the performance of the organisation. As this was a key recommendation from the 2004-2005 audit, the auditor has made this recommendation again.

The Tribunal acknowledges that Sydney Water has achieved good compliance with its Operating Licence requirements for Customer and Consumer rights. However, it agrees with the auditor's view that there is room for improvement. It recommends that Sydney Water address the auditor's recommendations to further enhance its compliance with the Customer and Consumer Rights section of the Operating Licence.

The Tribunal also recommends that Sydney Water implement programs for the improvement of the skills assessment and training of relevant staff in the use and application of the record and complaint handling computer systems (Customer View, ACCESS and WAMS) and systematically check the effectiveness of that training.

The Tribunal does not recommend any Ministerial Requirement for this area of the Operating Licence.

6 COMPLAINT AND DISPUTE HANDLING

6.1 Auditor's findings

Internal Dispute Resolution

Sydney Water has established and maintained complaint handling procedures and obtained full compliance in this regard.

The Operating Licence states that the complaints handling procedures must comply with the Australian Standard, which was, for the majority of the audit period, AS 4269-1995 Complaint Handling. The Australian Standard was changed in April 2006, to the International Standard ISO 10002:2004 MOD. Reporting for this audit period was carried out against the prior Standard, with reporting to the new standard to commence in 2006-2007. Sydney Water obtained high compliance with the requirements of the clause regarding adherence to the Australian Standard. The majority of the issues raised in the 2004-2005 audit have been addressed and a further qualitative customer satisfaction survey had been prepared on Sydney Water's behalf.

The need for a more comprehensive skills assessment and training program for staff in complaint handling and dispute resolution, including face-to-face complaints handling and a formal assessment of the program's effectiveness, had also been addressed.

External Dispute Resolution

The Energy and Water Ombudsman NSW (EWON) continues to be the mechanism adopted for the independent review of customer complaints. This meets the external dispute resolution scheme requirements as set out in the Operating Licence. Full compliance was achieved with respect to all aspects of the scheme, including its operation, dissemination of information and reporting.

Complaints to Other Bodies

Two complaints fell into this category in the audit period: one to the Consumer, Trader and Tenancy Tribunal (CTTT); and another to a Civil Court. The report required in relation to the CTTT obtained a full compliance rating while the report regarding the court matter obtained a high compliance rating.

6.2 Auditor's recommendation

- R6.1** Refine the reports regarding 'complaints to other bodies' to include when claims are commenced, the clause of the customer contract to which they relate and the court in which they are commenced.

6.3 Tribunal's comments

Sydney Water achieved full or high compliance with licence requirements in relation to complaint and dispute handling, and demonstrated improved transparency in reporting related to complaints to other bodies.

The Tribunal notes that Sydney Water has made considerable improvements to its complaints handling system since the last audit, including moving towards integrating its three record management and complaint handling systems.

The Tribunal also notes that the auditor assessed Sydney Water's complaints procedure against the Australian Standard (AS 4269-1995 Complaint Handling) even though this standard was replaced by a new standard during the audit period. The Tribunal appreciates the auditor's rationale for using the old standard; however it recommends that Sydney Water uses the new standard for future monitoring and reporting for compliance purposes.

The Tribunal supports the auditor's recommendation R.6.1, but believes Sydney Water can address this issue without a Ministerial Requirement. The Tribunal will closely monitor compliance with this recommendation in future audits.

7 ENVIRONMENT – INDICATORS AND MANAGEMENT

7.1 Auditor's findings

Environmental Indicators

Full compliance was achieved for the monitoring, recording, compiling of data and reporting of Environmental Performance Indicators (EPIs).

Sydney Water has in place a comprehensive system to ensure that the EPIs are monitored and reported and achieved full compliance for the requirement to report the EPIs to the Tribunal by 1 September 2006.

Sydney Water received full compliance for the requirement to provide a year-to-year comparison of EPIs and high compliance was achieved for comparing the 2005-2006 monitoring result with comparable values obtained over the previous 10 years. The requirement to make the report publicly available was awarded full compliance.

Environmental Management

Full compliance was achieved for having an Environmental Management System (EMS) that has been certified to AS/NZS ISO 14001 by an accredited certifier as of 3 May 2005.

Full compliance was achieved for the requirements to prepare an Environment Plan 2005-2010 by 30 September 2005, update the Plan annually and engage in consultation for the preparation and review of the Plan.

Full to high compliance was achieved for the requirements to include specific strategies, objectives, targets and timetables in the Environment Plan. Full compliance was also awarded for the requirement that the Environment Plan endorse ESD Principles and to be integrated into its Business Plans, although there was scope to improve the transparency of this aspect of the requirement.

Full compliance was awarded for the requirement for the Environment Plan 2005-2010 to be available on Sydney Water's website for downloading, free of charge.

Sydney Water prepared the Environment Plan 2005-2010 Progress Report to describe its achievements in meeting the Environment Plan. A provisional Progress Report was provided to the Tribunal on 1 September 2006. It has been agreed with the Tribunal that the final Progress Report will be provided by this date each year, and therefore high compliance was awarded.

Full compliance was awarded for the requirement to review the Environment Plan, annually. Sydney Water wrote to DECC, the Department of Planning, and peak environmental non governmental organisations and invited comment on the Environment Plan in December 2005 and subsequently produced an amended draft Plan by the end of the audit period.

Potable water use at Sewerage Treatment Plants (STPs)

Full compliance was achieved for reporting to the Tribunal on its progress in relation to replacing the use of potable water at its STPs with recycled water for treatment processes.

Metering of individual units (multi-unit dwellings)

Full compliance was achieved with the requirement to conduct at least one trial to determine the costs and benefits and to identify any impediments in providing an individual meter to each unit in new multi-unit buildings, which is read on a quarterly basis.

7.2 Auditor's recommendation

R7.1 Improve the integration of the Environment Plan with the Business Plans of the Divisions and the Corporation.

7.3 Tribunal's comments

Sydney Water achieved full compliance with its requirements related to environmental indicators. This pleasing performance is largely due to the comprehensive system it has in place to monitor and review its EPIs. For example, its Environmental Performance Indicators Compliance Report provides information that enables it to make a year-to-year comparison of its performance over the previous 10 years, to assess any trends in performance.

Sydney Water also achieved almost full compliance with requirements related to environmental management. The Corporation has implemented and maintains an EMS accredited to ISO 14001 standards. This helps to ensure that Sydney Water's environmental performance has a sound basis.

The auditor also awarded Sydney Water full compliance with requirements to use recycled water rather than potable water in sewage treatment processes and full compliance with the licence requirement to determine the costs and benefits of providing separate meters to each unit in new multi-unit buildings.

The Tribunal considers that maintenance of the EMS and continual reporting and review of the EPIs are critical to the ongoing success of Sydney Water's environmental initiatives. Therefore these initiatives should not be conducted independently of other areas of Sydney Water's business. The Tribunal recommends that Sydney Water actively seek to integrate its environmental plan with the business plans of the divisions and the corporation. Continual reviews and trend analysis of EPI results will also improve environmental reporting.

The Tribunal supports the auditor's R.7.1, but believes Sydney Water can implement this recommendation without a Ministerial Requirement. The Tribunal will closely monitor compliance with this recommendation in future audits.

8 WATER CONSERVATION AND DEMAND MANAGEMENT

8.1 Auditor's findings

Water Conservation Target

Full compliance has been awarded for action taken to reduce the quantity of water (other than re-use water) drawn from all sources to meet the water conservation target of 329 litres per capita per day by 2011. Climate corrected demand is reported to be 335 litres per capita per day (LCD) for 2005-2006.

There is some risk regarding the dependence on significant ongoing water savings for some major programs. However Sydney Water has identified a range of contingency measures to be implemented, if required, to reduce the risk of not achieving this target. New programs and pilot studies have identified an additional 28 LCD of savings that could be implemented before 2011, if required.

Demand Management Strategy

Overall, a high level of commitment was demonstrated towards water conservation and demand management, with implementation and continued planning of programs and activities of a high international standard. Water conservation and demand management have been well integrated into the Corporation's business processes and work practices, as evidenced through the assessment of a number of the Corporation's plans.

Reducing Discharges

Sydney Water has undertaken actions to reuse sewage effluent by intercepting or otherwise preventing the discharge of effluent into the ocean and other waterways, achieving full compliance for this requirement.

Water Conservation rating and labelling

Sydney Water has encouraged manufacturers of water appliances to improve the water use efficiency of these appliances through continuing support for the Water Efficiency Labelling and Standards (WELS) scheme as reported to the Tribunal by 1 September 2006, achieving full compliance for this condition.

Minister's Requirements - Industrial and Domestic Reuse

The Report on Recycled Water Implementation was submitted to the Minister by 1 September 2006, achieving full compliance for this condition. The report describes actions taken by Sydney Water during 2005-2006 and in the future to implement new recycled water opportunities, undertake reuse trials as part of the Every Drop Counts Business Program, identify advancements in recycling technology and assist development of recycling opportunities by third parties.

The Sewer Mining Policy was released in May 2006, achieving full compliance for this condition.

8.2 Auditor's recommendations

- R9.1** Undertake additional reviews of water savings associated with demand management programs covering a longer period of time to provide improved confidence in estimated versus actual water savings and changes over time.
- R9.2** Investigate the use of a consistent set of end use and other demand side planning assumptions in its reporting, including use of utility levelised cost (\$/kL or \$/ML saved) to further aid comparison between water demand management and/or alternative supply options.
- R9.3** Investigate development of a register of Models that describes the name/version, areas of application, level of calibration and expected accuracy/limitations for all of its relevant modelling tools.
- R9.4** Investigate recording and reporting on itemised costs associated with rainwater tank installations involving internal plumbing connections (for toilet flushing and/or laundry use) to improve planning assumptions.
- R9.5** Investigate recording an estimate of the roof area for rainwater tank installations to improve its planning assumptions.

8.3 Tribunal's comments

Sydney Water achieved full compliance with all its water conservation and demand management requirements for 2005-2006. This represents a significant improvement since the last audit. The Tribunal notes that Sydney Water's demand management strategy, which includes a continuous improvement planning cycle, is considered to be in line with world's best practice. It also notes that Sydney Water demonstrated a high level of commitment to water conservation and demand management during 2005-2006, implementing and continuing to plan programs and activities to a high international standard.

The improvement in Sydney Water's performance in this area is partly attributable to a change in the method used to calculate the water conservation saving (to include the savings attributable to the drought-related water restrictions). In particular, Sydney Water improved on clause 8.1 from the 2004-2005 audit (now Operating Licence clause 9.1.1), from low compliance to full compliance.

In previous years, auditors have been critical of Sydney Water in the area of water conservation and demand management, and have stated that the Corporation has had difficulty meeting targets. The 2005-2006 audit demonstrates that Sydney Water has taken further actions to enhance its water conservation and demand management techniques. The Tribunal is satisfied that Sydney Water has acted on the recommendations of the 2004-2005 audit.

The programs recommended in the 2004-2005 audit are considered a proactive, practicable and beneficial initiative towards mitigating earlier concerns. The auditor acknowledged that it is difficult to assess compliance in 2005-2006 against 2011 targets, but nevertheless found that Sydney Water is on track to achieve targets under the existing programs and regulatory regimes. The Tribunal agrees with the auditor, and also recommends Sydney Water implement the identified water conservation projects in order to meet 2011 targets.

While the auditor made no significant recommendation directly affecting compliance with this section of the Operating Licence, the Tribunal will continue to monitor this area closely.

9 RESPONSIBILITIES FOR MAINTAINING MOUS

Sydney Water is required to maintain Memoranda of Understanding (MOUs) with the Water Administration Ministerial Corporation (WAMC), NSW Health and the Environment Protection Authority (EPA), now part of the Department of Environment and Climate Change (DECC), for the term of its Operating Licence. The Operational Audit is to report on Sydney Water's "implementation" of any MOU.

9.1 Auditor's findings

Sydney Water exhibited full implementation of its MOU with NSW Health, which continues to provide a sound model, moderate implementation of the MOU with EPA; and low implementation of the WAMC MOU.

MoU implementation is to similar levels in previous years. During the year the EPA and WAMC MOUs did not reflect the changed roles and functions of DECC or the Department of Water and Energy (formerly DNR, the administrator of WAMC). However, a new MoU was signed with EPA on 30 June 2006 and evidence of an intention to update the MoU with WAMC was presented.

Overall, Sydney Water's implementation of its Memoranda of Understanding was rated as moderate implementation.

9.2 Auditor's recommendations

- R2.1** Actively pursue the participation of EPA and WAMC to achieve the cooperative relationships, and benefits, evidenced through the MoU with the NSW Health.
- R2.2** Update the MoU with Department of Health to reflect the role and involvement that the SCA is playing under the MoU.

9.3 Tribunal's comments

Sydney Water continued to fully implement its MoU with NSW Health, which continued to provide an excellent model for cooperative relationships. However, it achieved only moderate and low implementation for implementing its MoUs with the EPA and WAMC respectively.

The Tribunal notes that the MoU with NSW Health was implemented in a strategic manner through both the Strategic Liaison and Joint Operational Groups. Current activities under this MoU are largely tripartite, with Sydney Water, NSW Health and the Sydney Catchment Authority being active participants in both groups. The participation of the three agencies provides a robust framework for the efficient achievement of health outcomes, generally, especially water quality.

The MoU with the EPA was also implemented at both strategic and operational levels, but the auditor's rating for this implementation was lower than in previous years. A new MoU, signed at the end of the most recent operating year, may encourage better performance in this area in the coming years.

The degree of cooperation in Sydney Water's relationship with WAMC was rated as low, and was generally restricted to NSW Government state-wide initiatives.

The current MoUs with EPA and WAMC were introduced in 2002. Since then significant changes have occurred within these regulatory agencies which have impacted their regulatory activities. Updates are required to re-establish the formal relationship in the context of the current regulatory framework. The Tribunal notes that initial steps have been taken to update Sydney Water's MoU with WAMC to reflect organisational reforms. The effectiveness of this effort will depend on the response from DWE.

The auditor commented that Sydney Water's MoU with NSW Health represents the best example of an MoU that it has seen. The Tribunal agrees, and recommends that Sydney Water implement the auditor's recommendation to actively pursue the participation of the EPA and WAMC so it can achieve similar cooperative relationships and benefits as it has through its MoU with NSW Health. However, it does not consider that this matter warrants a Ministerial Recommendation.

The Tribunal will continue to strictly monitor this area in future audits.

