

**MID-TERM REVIEW OF THE OPERATING LICENCE FOR  
SYDNEY WATER CORPORATION**

**SUBMISSION BY TOTAL ENVIRONMENT CENTRE TO  
THE INDEPENDENT PRICING AND  
REGULATORY TRIBUNAL**

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## **INTRODUCTION**

Total Environment Centre (TEC) welcomes the opportunity to comment on the mid-term review of the Sydney Water Corporation (SWC) Operating Licence.

This submission presents recommendations for amending the current Operating Licence to address issues that have arisen since the grant of the licence and improve SWC's future environmental performance. It also discusses a key concern - the establishment of a 2014/15 demand management target and measures to improve the Corporation's demand management performance.

## **OPERATING LICENCE OBJECTIVES**

TEC believes that, for the most part, the objectives of the Operating Licence are appropriate and reflect the objectives of the *Sydney Water Act 1994*.

We believe however that an additional objective should be added to require SWC to conduct its operations in accordance with ESD principles as defined in the *Protection of the Environment Administration Act 1991*. This is a principal objective listed under *Sydney Water Act 1994*, however it is not explicitly listed in the licence objectives, apart from the requirement to generally meet the objectives and other requirements of the Act. A specific licence objective would provide an appropriate reflection of the importance adhering to ESD principles (a major influence on changing SWC culture). It would also ensure that SWC's performance in this regard can be examined in the Operational Audit.

We note that compliance with Operating Licence requirements has generally been good, with some major exceptions, such as demand management targets. Measures to rectify such problems are detailed later in this submission. For the most part, however, it may be concluded that the Operating Licence mechanism is fulfilling its objectives. The mid-term review provides a valuable opportunity to rectify those areas in which the Licence is not fulfilling its objectives.

## **COMPLIANCE WITH AESTHETIC DRINKING WATER GUIDELINES**

TEC supports the inclusion of a requirement for SWC to comply with the aesthetic guideline values of the *Australian Drinking Water Guidelines 1996* and any updates that may be issued from time to time. Such a requirement would ensure the maintenance of a high degree of amenity for customers and increase public confidence in the quality of drinking water supplies. We note that SWC generally meets the guideline values for all characteristics other than chlorine and monochloramine (IPART, 2002: SWC, 2002). A requirement to comply with guideline values for all other characteristics should not, therefore place an increased cost burden on the Corporation.

In relation to chlorine and monochloramine, TEC notes the Tribunal's comment that compliance with the guidelines for these characteristics would be likely to involve significant net cost to the community at this point in time (IPART, 2002). We also acknowledge the need to ensure that public health requirements in relation to disinfection are not to be compromised. For this reason, the licence should include a requirement to comply with the aesthetic guidelines, except those for chlorine and monochloramine. The licence should, however be amended to require SWC to complete investigations into the

possible use of pre-oxidation with Potassium Permanganate and Booster Chlorination as means of meeting those values. This information would then be available for consideration in the end of term review.

## **ANNUAL DRINKING WATER QUALITY IMPROVEMENT PLAN**

### ***Effectiveness of and continued need for Annual Drinking Water Improvement Plan***

TEC believes that the continuation of the Annual Drinking Water Quality Improvement Plan is an essential part of ensuring the maintenance and continuous improvement of drinking water quality. The annual plan is needed to drive the implementation of the Five-Year Drinking Water Quality Plan. In its absence there is a risk that the implementation of the Five-Year plan may fall behind schedule. The Annual Plan also provides greater flexibility than would be available only under the Five-Year Plan and thus serves as an effective tool for rapidly responding to drinking water quality monitoring results. Sydney Water's own submission supports this view, stating that the Five-Year Plan is not sufficiently flexible to accommodate improvements identified through ongoing activities (SWC, 2002).

We note the findings of the 1999 Operational Audit that the draft 2001/02 Improvement Plan was a worthwhile document but which identified the problem that it placed each delivery system in its most favourable light (IPART, 2002). This not only reinforces the fact that the plan itself is a useful tool but also highlights the need for annual plans to ensure that such deficiencies are rapidly corrected and do not compromise the effectiveness of the Five-Year Plan.

TEC does not accept the argument put forward by Sydney Water that the requirement for the Improvement Plan should be removed from the Operating Licence on the grounds that it is also audited by NSW Health. TEC strongly believes that it is essential that SWC's obligations relating to public health, water quality and environment protection be included in the Operating Licence. The Operating Licence provides a simple and transparent mechanism for ensuring the Corporation's operations are publicly accountable. It is essential that the Operating Licence be an overarching instrument that clearly sets out obligations and performance requirements. Allowing these obligations to rest solely within other instruments could lead to regulatory confusion and create barriers to review of performance by the Licence Regulator. The Operating Licence provides an integrating instrument that allows coherent management of SWC as a whole. No other regulatory agencies or instruments provide such a function.

SWC's argument that removing the Improvement Plan from the Operating Licence would not reduce public confidence because it is embedded as a requirement in the MOU with NSW Health is particularly unconvincing given the desire expressed in their submission to delete key requirements of MOUs from the licence and replace consideration of these requirements in the MOU with the report of the audit conducted by NSW Health (an internal government exercise).

TEC is also at a loss to understand why the Corporation would seek deletion of the requirement for the plan from the Operating Licence given the acknowledgment of the effectiveness and need for continuation of the plan in its own submission (SWC, 2002). This appears to be part of a disturbing trend in their submission to seek the removal of key

accountability measures from the Operating Licence and narrow the scope of the Operational Audit. The need for an overarching and inclusive Operating Licence and audit process was highlighted by the recommendations of the Sydney Water Inquiry (McClellan, 1998). The Tribunal should not countenance any measures that would reverse the important reforms made to the Operating Licence following the 1998 water crisis. These reforms have been an essential part of restoring public confidence and ensuring accountability in relation to drinking water quality (perhaps in the absence of such accountability measures SWC believes that public confidence could be promoted by an advertising campaign highlighting the fact that there have been no water quality crises for almost five years. A PR consultant might suggest an advertising slogan such as *Sydney Water - delivering disease free drinking water since 1998*).

***Is the Five-Year plan sufficient to ensure that strategies to improve water quality are implemented?***

As noted above, the Five-Year Plan lacks sufficient flexibility to incorporate the most recent water quality monitoring results and improvements identified through SWC's ongoing activities. There is also a danger deletion of the Annual Plan would cause a loss of impetus to implement the Five-Year Plan. Key water quality improvement programs could thus fall behind schedule. The Five-Year Plan is thus insufficient on its own to ensure that strategies to improve water quality are implemented and must be supported by the Annual Plan.

**MINIMUM STANDARDS FOR NON-DRINKING WATER**

TEC strongly supports the promotion of effluent recycling as a means of reducing demand on potable water supplies. SWC's extremely poor performance in meeting current Operating Licence demand management targets (discussed in more detail below) makes it imperative that substantial progress be made in promoting effluent reuse.

A key barrier to increased effluent reuse is the lack of public confidence in the safety and quality of other grades of water that may be supplied to customers for reuse applications. The inclusion of minimum standards in the Operating Licence would assist in overcoming these concerns by making it clear to potential customers that the quality of non-potable water supplied to them is required to meet defined standards and that the Operational Audit provides a high level of accountability in meeting these standards. Clearly, the required minimum standards will vary according the type of reuse and the capacity of the recipients of recycled water to treat effluent to the standard required for their own purposes. As an example, Eraring Power Station in Lake Macquarie currently receives untreated effluent from Hunter Water Corporation and treats it to beyond drinking water standard for use in the power station boilers. In contrast, water supplied for irrigation of golf courses and playing fields or agriculture would obviously need to be of a higher standard to ensure the protection of the environment and public health.

TEC believes that in the absence of direct agreements with individual customers, the Operating Licence should require other grades of water supplied to customers to adhere to the NSW EPA guidelines for *The Utilisation of Treated Effluent by Irrigation*, the NSW RWCC's *NSW Guidelines for Urban and Residential Use of Reclaimed Water* and National Water Quality Management Strategy *Guidelines for Sewerage Systems - Reclaimed Water*. These standards should be codified in the licence and performance in meeting them should

be examined as part of the Operational Audit. Where agreements with customers exist to supply water of particular quality that may need to conform to these standards (for instance industrial customers who are able to treat effluent to their own required standards) the Licence should require that appropriate measures are in place to ensure the protection of the environment and public health. It should also make performance in meeting the water quality standards specified in the agreements subject to examination in the Operational Audit.

## **DEMAND MANAGEMENT AND 2014/15 WATER CONSERVATION TARGET**

### ***Effectiveness of Sydney Water's Demand Management Strategy in reducing water consumption***

TEC is extremely disturbed by current trends in demand which have seen an increase in both the total volume of water supplied to SWC and per capita consumption since 1999 (SCA, 2002; SWC, 2002). We are particularly concerned and disappointed to note an increase in demand over the last two years which sees SWC well short of achieving its 2005 demand management target of 364 lcd. It is also disappointing to note, from SWC's submission, that a large number of the individual programs which form the Demand Management Strategy have not achieved forecast water savings.

It is clear from this that Sydney Water's Demand Management Strategy is not being sufficiently effective in reducing water consumption to meet Operating Licence targets. It is equally clear that immediate action is required to reverse this trend and meet current demand management targets, particularly if the NSW Government policy of permanently deferring Welcome Reef dam is to be achieved. This is discussed in more detail below.

TEC does not suggest it is an easy task to sustainably reduce demand, but unless there is persistent and sustained pressure - a breakthrough is unlikely.

### ***Improving Sydney Water's Demand Management Strategy***

Sydney Water's submission to the Tribunal (SWC, 2002) indicates that many aspects of its Demand Management Strategy have failed to achieve forecast water savings. TEC strongly supports the improved communication strategies and targeting of different stakeholders as measures to improve demand management. One way of achieving this would be a requirement in the licence that any future increase in price should be used to fund positive non-price demand management programs. As detailed below we would also support the establishment of water savings targets for each major water consumption area.

### ***Are current incentives for Sydney Water to reduce demand for water adequate?***

It is clear from Sydney Water's abject failure in reducing demand for water since 1999 that current incentives to reduce demand are inadequate. While the current demand management targets provide a strong regulatory driver for reducing consumption, they are insufficient on their own to ensure the achievement of the required water savings. A critical problem is an inherent incentive for failure to meet demand management targets. We note the failure to meet demand management targets results in increased revenue for the Corporation through increased water sales.

### *Alternative incentive measures*

In order to remove incentives for failure to meet demand management targets and to provide greater impetus to achieve required savings, TEC urges the Tribunal to recommend the introduction of severe financial penalties for failure to meet targeted per capita demand reductions. Such financial penalties should include penalty pricing for any water supplied by the Sydney Catchment Authority in excess of demand management forecasts. In addition, the Operating Licence should include a requirement that any profits resulting from the sale of water in excess of Operating Licence targets are hypothecated into a dedicated fund and used to improve demand management programs. This would not only remove the financial benefits of failure to achieve demand management targets, but help address the causes of that failure.

Establishment of a 2014/15 Demand Management Target would also provide increased incentive for Sydney Water to improve current demand management programs. The existence of such a long term target would make it clear that immediate improvements are required to set the foundations for achieving a challenging 2014/15 figure.

### *Need for 2014/2015 Demand Management Target*

TEC strongly supports the establishment of a 2014/15 demand management target in the mid-term review. The establishment of such targets is a key driver of water conservation and the prevention of supply augmentation. There is no question that the present targets have locked Sydney Water in the direction of demand management. As discussed above, such targets must be supported by other incentive measures in order to be truly effective. It is extremely unlikely, however, that any programs or gains in water conservation would have been achieved in the absence of the current Operating Licence Demand Management targets.

TEC totally rejects the argument put forward in SWC's submission (SWC, 2002) that setting demand management requirements as targets in the Operating Licence in order to avoid the requirement for a new dam calls into the question how the targets were set. On the contrary, it provides a clear, transparent rationale for the targets chosen and highlights the enormous benefits of achieving them. The public and environmental benefits of targets based on avoiding the need for a new dam are more obvious and logical than arbitrarily chosen figures, or worse, ones based merely on what SWC believes it may be able to achieve easily. The fact remains that avoiding the need for a new dam is NSW Government policy. As a NSW Government agency SWC should accept the need for Operating Licence targets that ensure the successful implementation of that policy.

We also totally reject SWC's view that the problem with setting water conservation targets is that they set arbitrary deadlines and attract severe penalties and consequences if not met. As detailed above the targets are far from arbitrary. The existence of penalties and consequences for non-compliance are the very rationale for establishing the targets in the licence and provide the strongest incentive for implementing demand management. Without them, the targets would be meaningless and unenforceable.

SWC's argument that there should be no 2014/15 target at this point in time appears to be another example of SWC seeking to avoid as much accountability and regulatory oversight

in the licence as possible. TEC opposes this approach and urges the Tribunal to reject SWC's argument.

### ***Level and form of target***

The NSW Government Policy of permanently deferring the construction of a new dam provides an obvious and logical basis for establishing a 2014/15 demand management target. As is the case for current 2004/5 and 2010/11 targets the 2014/15 target should be set at the level of per capita consumption required to prevent augmentation, based on the best available population projections. To ensure consistency with current targets the figure should be expressed in litres per capita per day (lcd). The percentage reduction compared to 1990/91 consumption should also be stated to provide a clear baseline and show the extent of the achievement that meeting the targets would represent.

There can be quite large discrepancies between actual and underlying (weather-adjusted) per capita consumption figures. Sydney Water appears to base their consumption trends on actual, rather than adjusted, consumption figures (NCC et al, 1998). It is therefore recommended that the targets be expressed in terms of underlying (weather-adjusted) consumption.

TEC also supports the inclusion of individual water conservation targets for each major sector as a means of further reducing demand and achieving the overall demand management target. The failure of SWC to achieve the savings forecast for many individual programs in the Demand Management Strategy (SWC, 2002) highlights the need for subsidiary targets for each major water consumption sector.

## **OTHER MATTERS FOR REVIEW**

### ***Memoranda of understanding***

TEC notes with concern that SWC has argued against including provisions of MOUs in the Operating Licence (SWC, 2002) on the basis that such an approach would amount to regulatory duplication and blur the distinction between the role of the Operating Licence and an MOU.

TEC strongly opposes this view. As discussed in relation to the Annual Drinking water Quality Improvement Plan, we believe that, in the interests of transparency and accountability, the licence should include the key obligations, targets and timelines of MOUs and make performance against them subject to consideration in the operational audit. It is in the public interest to avoid cosy bureaucratic relationships, for such a critically important utility. The report of the Sydney Water Inquiry following the 1998 water crisis highlighted limitations in auditing performance against MOUs due to a lack of targets and timelines (McClellan, 1998). Placing key obligations, targets and timelines of MOUs in the Licence ensures that performance against MOUs can properly be assessed as part of the Operational Audit.

## **REFERENCES**

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