Our Reference: EXF24561

Dr T Parry Chairman Independent Pricing and Regulatory Tribunal of NSW 44 Market Street SYDNEY NSW 2000

Director General

Dear Dr Parry

Thank you for your letter of 27 March 2002 inviting submissions on IPART's mid-term review of Sydney Water Corporation's (SWC) and Sydney Catchment Authority's (SCA) operating licences.

From an environmental perspective, the most important improvements that could be made to the licences are to ensure that they provide a clear framework and incentives to conserve and recycle water. Current water storages provide a finite supply for both environmental flows and use by SWC and irrigators. This means that over time anticipated population growth must be offset by success in demand management. Alternatively, plans for other sources of supply such as desalination must be investigated. Managing water demand effectively in the future is a key need in restoring the health of the Hawkesbury-Nepean river system. The EPA believes that the operating licences have an important part to play in ensuring we achieve this. To this end, the EPA offers the following recommendations (further details are attached):

SYDNEY WATER CORPORATION LICENCE:

- The EPA supports a water conservation or maximum use target for 2014/15 as this will help SWC to consider long-term options and an integrated approach to meeting the water needs for new development and environmental flows.
- The EPA believes that the principal target should be maximum water use, expressed in absolute annual volumetric terms. This would reflect the finite nature of current supply sources. SWC could then pursue a range of strategies to contain demand within the available amount, or identify any need for alternative water sources at an early stage. The current per capita usage target could be a useful but subordinate indicator of the success of demand management programs.
- The EPA supports analysis on the effectiveness of a multi-tiered pricing system to help communicate the scarcity of water in order to encourage conservation – particularly to ensure readily affordable access to meeting basic household needs while encouraging moderation of high volume discretionary use.

Facsimile 61 2 9995 5999

PO Box A290 Sydney South NSW 1232 Australia

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SYDNEY CATCHMENT AUTHORITY LICENCE:

 Pending the finalisation of the Regional Environmental Plan (REP), the Risk Management Plan has a useful role to play. The EPA believes that greater focus on identifying specific potential pollution sources and planning to address these is desirable. The EPA agrees, however, that duplication with the contents of the future REP should be avoided. This could be checked once the REP is finalised.

 The EPA believes that the MOU adequately serves its purpose in its current form (ensuring clear understanding of respective responsibilities and structures for interaction). As it does not specify environmental standards or requirements it should not be included in the operating licence.

If you would like to discuss any of these issues further please do not hesitate to contact Natasha Lee, ph 9995 6030.

Yours sincerely

LISA CORBYN Director General

MID-TERM REVIEWS OF SYDNEY WATER CORPORATION'S AND SYDNEY CATCHMENT AUTHORITY'S OPERATING LICENCES

SYDNEY CATCHMENT AUTHORITY:

Risk Management Plan. (Section 2.5)

The issues paper discusses the relevance of the Risk Management Plan once the Regional Environment Plan is finalised. The EPA agrees that the relevance of the Risk Management Plan will depend on the final content of the Regional Environmental Plan and that duplication should be avoided between the Plans. There is a role for the Risk Management Plan to help SCA to focus both strategically and operationally on where remedial action should be taken.

MOU Obligations. (Section 2.3)

IPART has asked whether the obligations of SCA's MOU should be incorporated into the licence. IPART states that "The recent 2000/01 Operational Audit deemed the existing MOU with the EPA to be inadequate ...". The EPA's view is that the main purpose of the MOU is to clarify the regulatory relationship and responsibilities of agencies and to provide the mechanisms for a cooperative interaction. The EPA believes that the MOU adequately serves its purpose in its current form, and believes that the MOU should not be included in the operating licence since it does not set environmental standards or requirements.

SYDNEY WATER CORPORATION:

Water Demand Management. (Section 3.6)

The EPA supports the adoption of water conservation targets, including the setting of a water conservation or maximum use target for 2014/15. The establishment of a longer term target will help SWC to better consider alternatives that meet the longer term strategy when considering their capital works requirements.

It is clearly recognised that an integrated range of approaches is essential to meeting the water needs for new development and environmental flows within water supply constraints. Water reuse and returning water to rivers for environmental flows need to be carefully examined to ensure that opportunities to conserve water are maximised and the most cost effective combination of approaches is chosen. Demand management, water sensitive urban design, recycling, harvesting stormwater, and fixing system leaks are all likely to contribute.

Targets.

The Operating Licence does not explicitly link the water conservation target with the demand management strategy. It will be important for the operating licence to encourage an integrated water management strategy recognising that water extracted and water discharged are linked. Options for achieving the targets include demand management, urban design features to reduce water use, replacement of potable water with effluent or rainwater where appropriate, use of suitable quality effluent for environmental flows, leakage control, education and incentive programs and water pricing.

For clarity and to produce the necessary strategic signals, the water use targets should be expressed in absolute volumetric terms. The EPA understands that currently water extraction to meet the demands of residential and industrial water customers, environmental flows, and distribution losses through the system is at or close to the estimated maximum level for present supply security. Focusing on total extraction from the storages is necessary since water demands of new customers and meeting environmental flows must also be met from the total supply. That is, the supply is finite and a focus on per capita consumption may mean the "big picture" is lost.

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The EPA recommends a target for Sydney Water's total annual demand be set to ensure that water use from existing storages can be managed within sustainable levels. The SCA's operating licence performance criteria of meeting Sydney Water's forecast average annual demand should be revised to reflect this new approach.

SWC estimates that daily water consumption is 506L per capita per day and with best management practices this could be reduced to 364L per capita per day by 2011. However, reductions in per capita use will be offset by population increases. For example, in the South Creek catchment total water consumption in homes is expected to increase 2.5 times from 140 ML/day to 354 ML/day. The Government recently approved a program for managing Sydney's urban growth, releasing about 84,000 lots over the 15 years. The majority of this land release is earmarked for, and currently occurring in, the South Creek Catchment involving 30,000 hectares of new development (70,000 lots) housing for over 200,000 people. Since planning and development of these areas is presently underway, SWC will need to consider how to sustainably provide water services for these new developments. Therefore a water target for extraction from storages will provide the objective framework to assess the options.

Pricing Policy.

Hunter Water has achieved considerable success in reducing water consumption through pricing mechanisms. The demand for water is relatively inelastic at lower levels but, demand appears more price responsive at higher levels. Obviously affordably meeting basic household needs is essential. However, some portion of use by high consuming households is discretionary, and it is important to communicate the scarcity of water to these households in order to encourage conservation. Analysis of the price elasticity of urban water would help to examine the effectiveness of introducing a multi-tiered pricing system so that households that are very water efficient (meet a defined target) will be rewarded for this behaviour, while households that consume large volumes of water will be encouraged by price to reduce.

Pricing is only one part of the program needed to encourage water conservation behaviours. SWC should therefore continue with and expand the range of non-price mechanisms such as education programs and incentive schemes.

Minimum standards for non-drinking water. (Section 3.5.1)

SWC's Operating Licence presently requires that non-potable grades of water meet the relevant guidelines and requirements prescribed by other agencies including the EPA and NSW Health. Requirements for other grades of water can change depending on the type of reuse and as new information on health or environmental impacts becomes available and guidelines are updated or superseded by other publications. Therefore the EPA does not support the listing in the operating licence of specific requirements or publications. You should note that the NSW Recycled Water Coordination Committee has completed its work and the NSW Guidelines for Urban and Residential Use of Reclaimed Water can be used as a reference.