MID-TERM REVIEW OF THE

OPERATING LICENCES

FOR

(1) THE SYDNEY CATCHMENT AUTHORITY

(2) THE SYDNEY WATER CORPORATION

SUBMISSION

BY

THE NATURE CONSERVATION COUNCIL OF NSW

TO

THE INDEPENDENT PRICING AND REGULATORY TRIBUNAL

10TH May 2002

INTRODUCTION

The Nature Conservation Council of NSW (NCC) represents 120 non-government environmental organisations throughout the State. NCC has a long involvement in environmental issues relevant to the operations of the Sydney Catchment Authority (SCA) and the Sydney Water Corporation (SWC). We are pleased to comment in this submission on the operating licences of both these corporations' for the purposes of their mid-term licence reviews. The scope of the reviews is quite wide and as time and resources are limited NCC will try to highlight in this submission the particular area of water demand management. This is an extremely important area for both SCA and SWC operations and one where the SWC has already fallen substantially short of the targets set out in its operating licence.

PART (1) - COMMENTS ON SCA OPERATING LICENCE

DOES THE SCA LICENCE CURRENTLY REFLECT THE OBJECTIVES AND REQUIREMENTS OF THE SYDNEY WATER CATCHMENT MANAGEMENT ACT?

One of the special objectives of the SCA under its Act is stated to be:

> "to prevent the degradation of the environment".
> (section 14 (2) (b)):

The SCA is failing to meet this requirement of its Act in at least two respects.

The first involves long wall coal mining in a part of the catchment areas for which the SCA is responsible. This is causing subsidence and consequent cracking of stream beds at Native Dog and Wongawilli Creeks. Associated impacts include pollution of stream waters by escaping coal mine gases and by sediments.

The second area involves the protection of the SCA catchments from major environmental impacts that must occur if a major new water supply reservoir becomes necessary. Obviously, managing demand for bulk water from its customers (principally the SWC) must be a priority for the SCA under it s Act, a view that finds support in requirements of the operating licence (notably clauses 8.3.2 and 8.3.3 referred to below). As stated, the SWC is not

meeting the demand management targets set in its operating licence and as a result the SCA may be failing to meet its own statutory obligations.

Clause 8.3.1 of the operating licence merely requires the SCA to manage demand management consistent with the requirements in the water management licence issued to the SCA under Part 9 of the Water Act 1912. It is necessary as a legal formality for the SCA to hold a water management licence under the (now superseded) Water Act 1912, but NCC does not consider that this is the appropriate legislative framework for determining SCA demand management requirements and nor is it considered that the DLWC is the appropriate body to set demand management requirements for the SCA, or to act as a regulator of this aspect of its operations (due to the DLWC's conflicting role as the State's major supplier of rural water).

NCC Recommends that new demand management obligations on the SCA should be initiated through a process administered by the Minister for the Environment under the Sydney Water Catchment Management Act, and inserted into SCA's operating licence by the Government pursuant to the mid-term licence review process managed by IPART.

NCC recommends that the terms of the bulk water supply agreement between the SCA and the SWC be required to be renegotiated in accordance with the new demand management obligations inserted into the SCA operating licence.

NCC recommends that the SCA seek an amendment to its Act to make its inner catchment areas unavailable for coal mining.

IS THE SCA LICENCE FULFILLING ITS OBJECTIVES?

The SCA operating licence is failing to fulfil its objectives in important respects. The licence (cl. 8.3.2) requires the SCA, to the extent which it is able, to manage water conservation consistent with the demand management requirements in the SWC's operating licence. The SWC has failed to meet its demand management targets and the SCA is implicated in this failure.

The importance of the SCA's role in water demand management is highlighted in clause 8.3.3 of its operating licence which requires the SCA, in considering any augmentation of catchment infrastructure works, to consider as a priority, whether there exists any additional scope for cost-effective demand management strategies by the SWC. Obviously, this requirement cannot be left the last minute and must be addressed by the SCA even before the need for augmentation appears on the planning horizon.

NCC recommendations aimed at dealing with these issues are set out later in this submission.

WHAT IS THE APPROPRIATE ROLE OF MEMORANDA OF UNDERSTANDING (MOUs) WITHIN THE CONTEXT OF THE SCA'S OPERATING AND REGULATORY STRUCTURE?

When a new agency is established it will be some time before its relationships with other players is settled either through legislative changes or through new administrative arrangements. In these circumstances a MOU can be a useful instrument.

NCC generally supports the position that MOUs assist working relationships between government agencies and ensure that their respective responsibilities and obligations are clearly defined.

MOUs should enhance certainty and transparency and be expressed in terms which allow the measurement of performance. Where there is a MOU between the SCA and some other agency its provisions should be open to performance audit in the same way as the operating licence.

The terms of an approved MOU should not be able to be altered at the will of the parties. The operating licence should prescribe the process to be followed and this should involve the regulator (IPART) and some form of public consultation.

MOUs should not try to take the place of legislation and nor should MOUs be used as a substitute for appropriate obligations securely embedded in an operating licence.

DO THE SCA'S MOUs ADEQUATELY DEFINE THE ROLES/RESPONSIBILITIES OF THE RELEVANT ORGANISATIONS?

Recent operating licence audits have criticised SCA's MOU with the EPA for its inadequacy in identifying the full range of cooperative arrangements which could be developed between the parties. Including such arrangements is expected to help to protect the catchment and to attain water quality objectives.

NCC recommends the insertion in the SCA's operating licence of a requirement that SCA finalise a new MOU with the EPA within six months. The new MOU should address the matters raised in operating licence performance audits.

ARE THERE OBLIGATIONS IN the SCA'S MOUs THAT SHOULD BE INCORPORATED INTO THE OPERATING LICENCE?

NCC supports the view that the operating licence should contain the major obligations, targets and timelines to be met by the SCA, as far as possible. Inevitably there will be significant requirements expressed in MOUs and their performance must be accessible to audit and they must be expressed in terms that are auditable. Over time, pursuant to licence reviews, the auditable requirements in MOUs should be placed in the operating licence proper. The former licence regulator for Sydney Water drew attention to the difficulties of auditing performance against MOUs due to their lack of targets and timelines and this was echoed in the report of the Sydney Water Inquiry following the 1998 water quality incident (McClellan, 1998).

NCC rejects suggestions in the SCA submission that auditing of MOUs amounts to regulatory duplication or that it confuses the distinction between the operating licence and a MOU. The operating licence will usually require a MOU to be finalised some time after the terms of operating licence are settled and approved. It is reasonable that when the terms of the MOU are settled that it should be treated as an extension of the operating licence and audited in the same way.

ARE THE WATER QUALITY OBLIGATIONS IN THE SCA OPERATING LICENCE ADEQUATE?

The water quality obligations in the SCA operating licence cannot be said to be adequate. The relevant standards are the 1996 Drinking Water Guidelines. These Guidelines were in force during the Sydney Water Quality incident in 1997 when high concentrations of the pathogens *Cryptosporidium* and *Giardia* passed through the Prospect water treatment plant and threatened the health of millions of the SWC's customers. During this incident at no time was there was any breach of the 1996 Drinking Water Guidelines, a fact which many people saw as a demonstration of the Guidelines' inadequacy.

However, it is accepted that it is not possible at present to set effective standards for *Cryptosporidium* and *Giardia* due to a universal lack of

knowledge and inadequately developed technical capacity in the management of these organisms.

The SCA is monitoring for *Cryptosporidium* and *Giardia* at a number of locations under its pathogen monitoring program.

NCC recommends that the SCA operating licence require SCA to meet world's best practice standards in dealing with the problem of *Cryptosporidium* and *Giardia* in drinking water. Requirements in the operating licence should be required to be upgraded in accordance with changes in world's best practice standards in the management of these pathogens.

NCC recommends that the SCA licence also require world's best practice standards to be met by the SCA in respect of endocrine disrupting chemicals in drinking water.

ADEQUACY, SCOPE AND EFFECTIVENESS OF THE SCA'S RISK MANAGEMENT PLAN.

The recent operational audit of SCA was critical of the narrow scope of its Risk Management Plan and recommended that it take a more holistic view of pollution sources and control measures. The licence should be amended to incorporate relevant Ministerial requirements arising from the audit.

ARE THE SCA'S CURRENT SECURITY CRITERIA APPROPRIATE?

The security of supply criterion in the SCA operating licence is too conservative. It requires the SCA to ensure that the chance of running out of water is not greater than one month in 100,000 months. The SCA cannot meet this criterion without planning for the next water supply dam (at Welcome Reef on the Shoalhaven River). The criterion is much more conservative than security of supply criteria used by other water utilities in Australia.

NCC recommends that the security of supply criterion in the SCA operating licence be revised and set at a more realistic level.

Security of supply should allow for environmental flows in streams in the Hawkesbury-Nepean and Shoalhaven basins.

NCC recommends that the SCA operating licence be amended to require the SCA to produce data prior to the completion of the current licence to assist

the Hawkesbury-Nepean Forum and Water CEOs taskforce. Data on a range of environmental flow scenarios should be made available.

It is understood that IPART will engage a consultant to investigate and report on security of supply issues. NCC wishes to comment more fully on security of supply issues when the report becomes available.

IS THE SCA EFFECTIVE IN ENCOURAGING DEMAND MANAGEMENT?

The SCA is obviously failing to adequately manage demand for its water. Total volumes of water supplied by the SCA to SWC are trending upwards. There is an upward trend in per capita consumption. The SWC has failed to meet per capita water consumption reduction targets in its operating licence and the SCA is implicated in this failure. An increase in demand over the last two years suggests that the SWC may not achieve its 2005 demand management target.

It is noted that the SCA has taken steps to manage demand including a leakage assessment of the pipelines and the upper canal.
These programs are useful and should be continued, however, the role of the SCA in demand management ought to be considerably strengthened in this mid term review of its operating licence.

NCC recommends that the SCA's operating licence be amended to require the SCA to operate demand management and water efficiency programs amongst its customers other than the SWC (local councils, industry and stock and domestic users).

NCC recommends that the SCA operating licence be amended to require the SCA to undertake a major water conservation and demand management education program in accordance with its specific statutory functions under the Sydney Water Catchment Management Act (specifically the function described in section 16 (g)). This education program should be delivered to all water consumers in all areas serviced by the SCA catchments

NCC recommends that the SWC be penalised by the SCA for purchases of bulk water in excess of the SWC demand management targets set out in the SWC operating licence. The provisions of the SCA operating licence (and the terms of the bulk water supply agreement) should be amended to provide that such "demand management excess water" be sold to the SWC at a price per unit volume substantially higher than the normal price and that all extra

revenue received by the SCA as a result of this requirement be hypothecated to the SCA's own demand management programs and to its general water conservation and demand management education program.

PART (2) - COMMENTS ON SWC OPERATING LICENCE

DOES THE SWC LICENCE REFLECT THE OBJECTIVES AND REQUIREMENTS OF THE SYDNEY WATER ACT 1994?

The Sydney Water Act, 1994 obliges the SWC to meet environmental, social and business goals equally and to operate in accordance with the principles of ecologically sustainable development (ESD). The SWC operating licence either does not adequately reflect the Act or its is not producing the outcomes contemplated in the Act. The obvious failure is in the area of water conservation and demand management where the SWC has fallen substantially short of the per capita water consumption targets set for it in its operating licence.

IS THE SWC LICENCE FULFILLING ITS OBJECTIVES?

The SWC operating licence could not be said to be fulfilling its objectives in the area of water conservation and demand management.

COSTS AND BENEFITS OF SWC COMPLYING WITH AESTHETIC GUIDELINE VALUES OF AUSTRALIAN DRINKING WATER GUIDELINE

Some aspects of the aesthetic requirements for drinking water supplied by the SWC (notably the levels of chlorine and monochloramines) are not being met in accordance with the applicable drinking water guidelines. NCC understands that dealing with these issues involves significant cost. However these aspects of aesthetics in drinking water (especially chlorine) may be a factor in public confidence in, and acceptance of, drinking water supplied by the SWC and also a factor in the increasing consumption by the public of bottled waters. This should be a concern to the SWC and to the community generally.

NCC recommends that the SWC continue to address aesthetic issues in drinking water.

EFFECTIVENESS AND CONTINUED NEED FOR THE SWC ANNUAL DRINKING WATER IMPROVEMENT PLAN

NCC recommends that the SWC Annual Drinking Water Improvement Plan be maintained (a Plan recommended by the McClellan Inquiry following the Sydney Water Quality Incident).

IS THE FIVE YEAR PLAN ADEQUATE TO ENSURE THAT STRATEGIES TO IMPROVE WATER QUALITY ARE IMPLEMENTED?

NCC recommends that both the annual and five year plans be maintained at least for the remainder of this operating licence.

WHAT MINIMUM STANDARDS AND GUIDELINES SHOULD BE APPLIED TO OTHER GRADES OF WATER?

Minimum standards and guidelines for water others than drinking water should be set according to their proposed use.

NCC recommends that other grades of water should meet the criteria in the EPA recycled water guidelines. Where there is an agreement between the SWC and a customer for the supply of non-drinking water, the agreement should (subject to Health Department and EPA requirements), determine the minimum standards and guidelines for that water.

EFFECTIVENESS OF SWC'S DEMAND MANAGEMENT STRATEGY IN REDUCING WATER CONSUMPTION.

The SWC's Demand Management Strategy has helped to drive reductions in water consumption, however the reductions are substantially short of the targets set out in the operating licence.

HOW CAN THE DEMAND MANAGEMENT PROGRAM BE IMPROVED?

The per capita water consumption reduction targets in the SWC operating licence are not driving down water consumption sufficiently. Part of the problem is that the targets are not taken sufficiently seriously by the SWC, the SCA, IPART or the Government. There was an obvious opportunity to signal

that these operating licence targets are to be taken seriously, but it was missed when IPART did not recommend a penalty for the SWC's failure to meet this critical requirement of its operating licence. Although the SWC operating licence provides for penalties to be imposed on the SWC for a failure to comply with its licence requirements, no penalty has ever been recommended or imposed.

The NCC supports the suggestions in the issues paper for an improved SWC communication strategy on water conservation and for targeting of different stakeholders.

However, these measures are not likely to be sufficient. What is needed are definite programs for SWC works aimed at achieving water conservation and reducing demand from SCA reservoirs.

One of these programs must be a major SWC water conservation fit-out program targeted at homes, commercial premises and industry. Under this program the SWC should be required to invest in a substantial subsidy for residential fit outs and a cost neutral position for commercial and industry fit outs.

The latest iteration of WaterPlan 21 sets out the SWC's 20 year program for achieving its environmental goals. It is understood that WaterPlan 21 accepts SWC responsibility for stormwater management in accordance with a recent Government decision. However there seems to be little indication that the SWC is planning pro-actively to use this new role to plan a program for major stormwater capture, treatment and distribution facilities at the sub-catchment level. Such a program should be developed by the SWC.

NCC recommends that the SWC operating licence be amended to require that the SWC:

(a) In co-operation with the SCA, devise and implement an effective water conservation and demand management communication strategy targeting different sectors;

(b) devise and implement major water conservation and demand management fit-out programs for residential, commercial and industrial customers with appropriate levels of subsidy;

(c) devise and implement a major water stormwater program involving the provision of appropriate-scale works at the sub-

catchment level for the capture, treatment and supply of drinking water.

NCC recommends that the SWC operating licence be amended to make the SWC liable to automatic penalty for a failure to meet its next demand management target, the amount of the penalty to be recommended by IPART with the penalty funds to be hypothecated to demand management programs as may be recommended by IPART.

ARE THE CURRENT INCENTIVES FOR SWC TO REDUCE DEMAND FOR WATER, SUFFICIENT?

The SWC has only a weak incentive to reduce demand for water. Indeed, as a business the SWC has a greater incentive to sell more water.

NCC recommends that the SWC operating licence be amended to introduce a regime designed to discourage the SWC from selling water in excess of its demand management target. Under this regime, SWC revenue for water sold in excess of the operating licence target would be hypothecated to SWC water conservation and demand management programs.

NCC recommends that the operating licences of both the SWC and the SCA be amended to require that a least cost planning approach be implemented by each of them which takes into account the relevant operations of both organisations.

APPROPRIATE LEVEL AND FORM FOR SWC'S WATER CONSERVATION TARGET?

NCC recommends that a 2014 / 15 water conservation /demand management target for the SWC be set pursuant to this operating licence review.

NCC recommends that the SWC water conservation/demand management target in its operating licence be set at the level of per capita consumption that will definitely preclude any need or justification for the SCA to plan for augmentation of its supply. The target should indicate sub-targets by sector.

ENDS.