

ITEM-19 LATE REPORT - OPER – 29/06/2015 – OPERATION & MAINTENANCE OF ULTRAVIOLET DISINFECTION AT THE LITHGOW & WALLERAWANG SEWERAGE TREATMENT PLANTS

REPORT BY: I STEWART – GROUP MANAGER OPERATIONS

SUMMARY

During the planning & construction stages for the new Sewerage Treatment Plants at Lithgow & Wallerawang, Council entered into an agreement with the Sydney Catchment Authority (SCA) regarding the installation, operation & maintenance of the UV Disinfection System at Wallerawang & Lithgow STPs.

This agreement provided that further negotiations would take place with a final 'one-off' payment to be made to Council.

COMMENTARY

In 2011 Council entered into an agreement with the SCA for the installation of Ultra Violet Disinfection systems at Council's two sewerage treatment plants (STP's) in the Sydney Catchment. The agreement indicated that the SCA would pay the full capital cost for installation of the systems, plus all associated maintenance and operational costs for a period of up to 2 years. Once the systems were installed, the agreement was extended to 16th January 2014 for Lithgow STP and 29th May 2014 for Wallerawang STP to allow for late completion of both projects.

Subsequent to the end of the agreement the SCA offered a lump sum of \$400,000 plus GST as a final contribution to the operation and maintenance of the Ultra Violet Disinfection systems at Lithgow & Wallerawang. Council responded to the offer from the SCA indicating that the annual operating costs would be significant and that the process provided minimal benefits to the Lithgow ratepayers.

Based on costs to date it is estimated that the annual operating costs including electricity costs, lamp replacement, lamp cleaning and routine maintenance for the UV systems would be \$100,000 at Lithgow and \$20,000 at Wallerawang.

In response to the SCA offer Council requested further negotiations in regard to longer term funding arrangements based on the expected costs and benefits to the Lithgow community. These costs were expected to be much more significant to the offer by the SCA.

In response to Council's concerns the SCA listed the following benefits to Council from the ongoing operation of the scheme:

- Reduced risk to recreational water users at Lake Lyell
- Improved quality of Farmers Creek
- Improved amenity for the local community
- Increased potential to use recycled water

If negotiations for long term funding between the SCA and Council were to be unsuccessful, Council has indicated that it could consider ceasing operation of the UV Disinfection Units.

To date the SCA, (now known as WaterNSW) have not changed their offer of \$400,000 and are requesting finalisation of the issue. WaterNSW have provided funds in the current budget to meet the payment commitment. Council's position has not changed in regard to the more than significant operating costs for the UV system and the dubious benefits to Lithgow's ratepayers.

Despite Council's assertions that the UV Disinfection is of little or no value to the Lithgow ratepayers, Council has been advised by the Environmental Protection Authority that the operation of the UV Disinfection at both plants will become a condition of the Licence Approval for both plants.

Lithgow STP operates under Licence No 236 and Wallerawang STP operates under Licence No 598.

The background rationale adopted by the EPA to support a variation to the current Operating and Maintenance licence conditions is based on the following:

Development within the Sydney Drinking water catchment requires concurrence from the SCA to ensure that any such development meets the neutral or beneficial effect requirement for drinking water quality;

The EPA requires that sewage treatment plants are operated to provide the level of treatment of sewage that they have been approved, designed and built to achieve;

The Licence conditions should be varied to include a requirement for on-going ultra violet treatment for both plants. This requirement is consistent with the planning approval for the upgrade to both plants and will ensure consistency with other environment protection licences at sewage treatment plants with similar treatment capabilities within the Sydney Drinking Water catchment.

WaterNSW have advised that all eleven STPs in the Sydney catchment have UV disinfection, and that all plants are required to have UV disinfection as part of their licence conditions.

Recent negotiations with the SCA (now referred to as WaterNSW) indicate that the offer of \$400,000 will not be reviewed and as previously indicated Council is now required to ensure that the UV Disinfection Equipment is operating as part of the EPA Licence Conditions for Lithgow & Wallerawang.

At present trials are being conducted in operating both STPs with significantly reduced chlorination levels which would, if successful, reduce the operation and maintenance costs of both plants. These savings in chlorination costs could offset the cost of operating the UV disinfection system. The results of these trials are due to be assessed in the next two weeks.

If Council is going to be required to continue to operate the UV disinfection system under licence conditions and achieve potential savings in chlorination costs, without long term funding for the operation and maintenance of the UV system, it may be appropriate to accept the once only lump sum payment of \$400,000 (less \$6803 being reimbursement for the period 16 January 2014 to 29 May 2014 due to the extension of the original agreement), to be used for the continued operation and maintenance of the UV disinfection units at the Lithgow and Wallerawang STPs.

POLICY IMPLICATIONS

NIL

FINANCIAL IMPLICATIONS

Assuming a design life of twenty years the cost of running the UV disinfection systems at Wallerawang and Lithgow is estimated at a nett \$2.0 million dollars. This does not include possible offsets from chlorine savings.

LEGAL IMPLICATIONS

NIL

RECOMMENDATION

THAT Council accept the offer from WaterNSW in an amount of \$400,000 plus GST (less \$6,803) as a contribution to the ongoing operation of the UV disinfection systems and Lithgow and Wallerawang Sewage treatment plants.