

ASSESSMENT REPORT

Section 75W Modification Wagga Wagga Remediation Project – Water Treatment Plant (10_0040 Mod 1)

1. BACKGROUND

Wagga Wagga City Council (Council) own and operate a public carpark on the corner of Tarcutta and Cross Streets in Wagga Wagga (the Project site, see Figure 1).

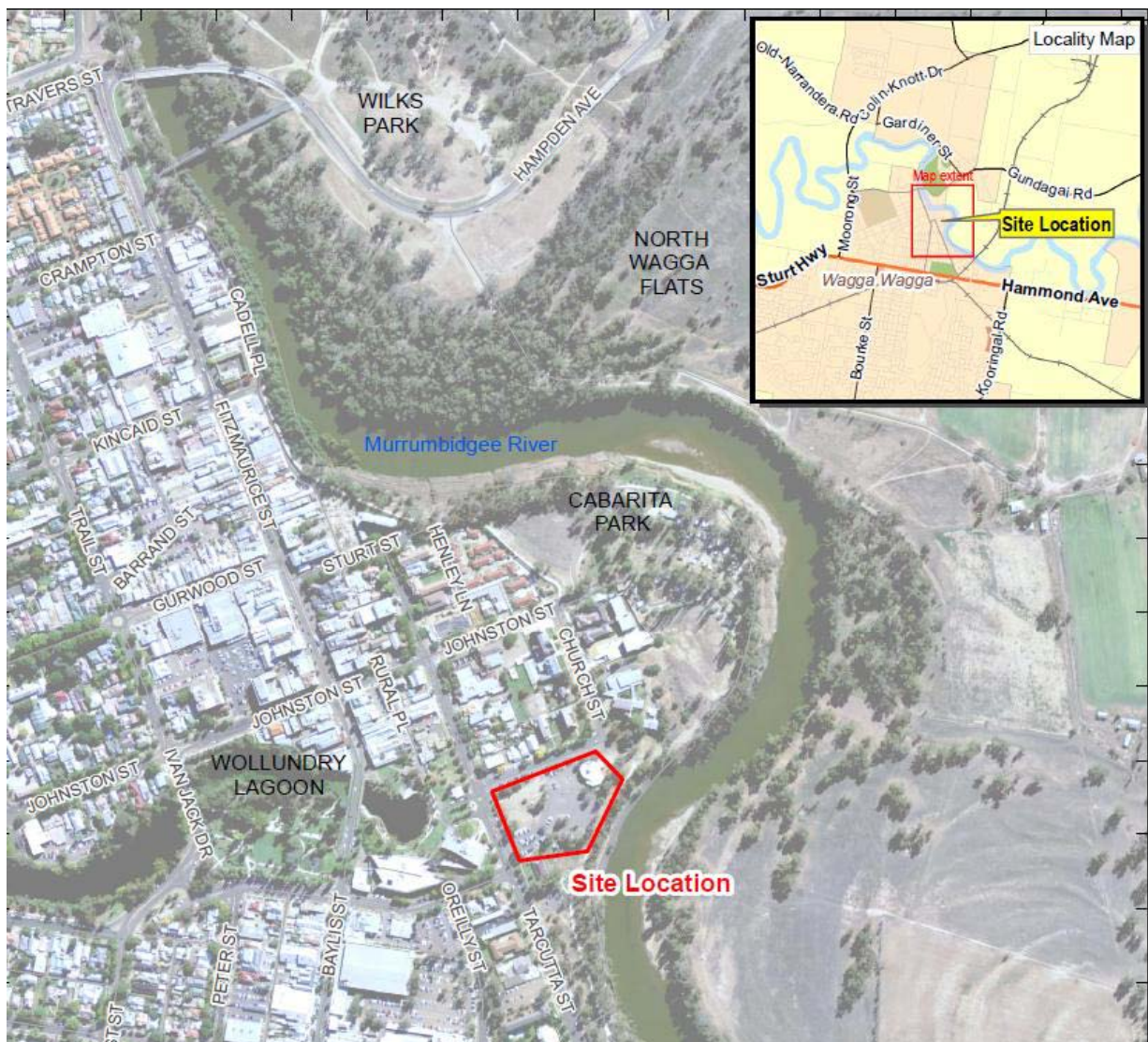
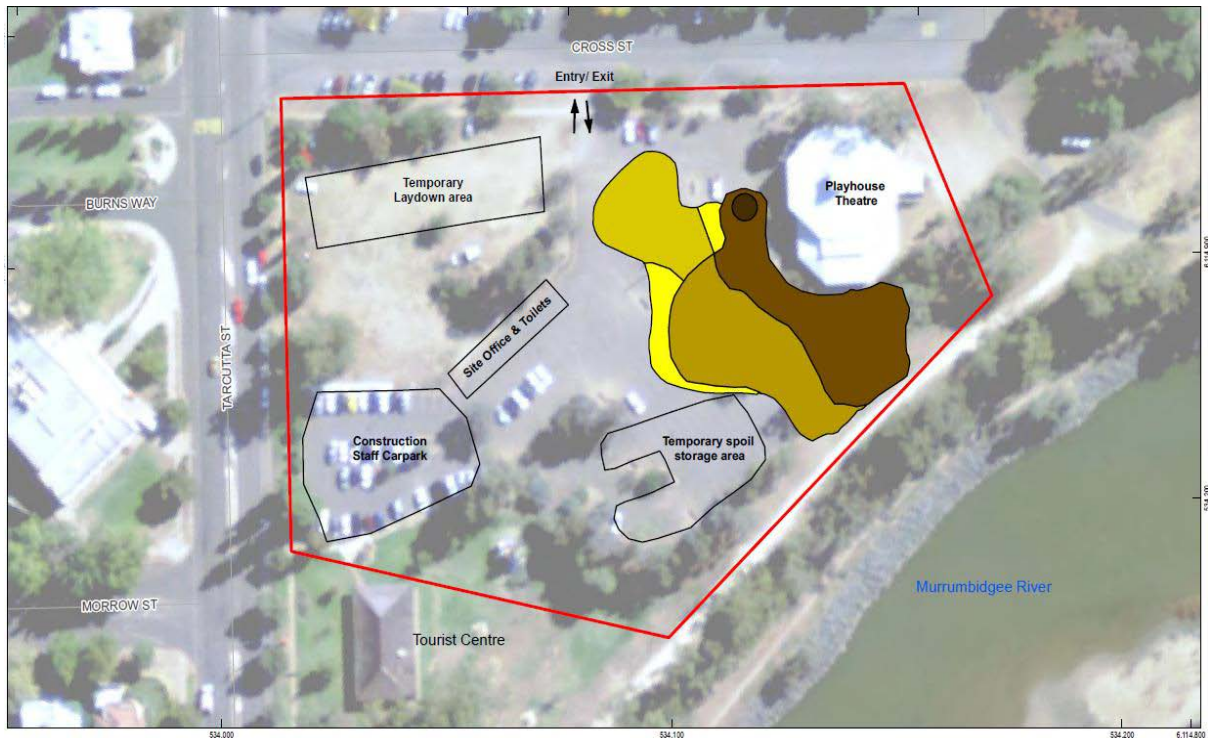


Figure 1: Site location

The subject site was once occupied by a gas manufacturing plant or gasworks (Tarcutta Street Gasworks). Due to the operation of the former Gasworks, the site became contaminated with a range

As a result of the above actions, soil and groundwater beneath the site is significantly contaminated (see Figure 2). In 2007, the then NSW Department of Environment and Climate Change declared the site a remediation site under the *Contaminated Land Management Act 1997*.



On 9 March 2012, the Deputy Director-General (under delegation from the Minister for Planning and Infrastructure) granted approval for the remediation of the site, including the removal of the source of groundwater contamination, namely liquid tar, tar impacted material and the naptha oil injection. As part of the approval, contaminated groundwater encountered would be pumped out and classified prior to off-site treatment and disposal. Remediation works are expected to be undertaken over an approximate 9 month period.

During detailed design, Council's remediation contractor Enviropacific Services Pty Ltd (EPS), considered a number of methods to deal with the contaminated groundwater including containment and off-site removal. However, due to the potential volumes of water, EPS concluded that off-site disposal would be impractical.

2

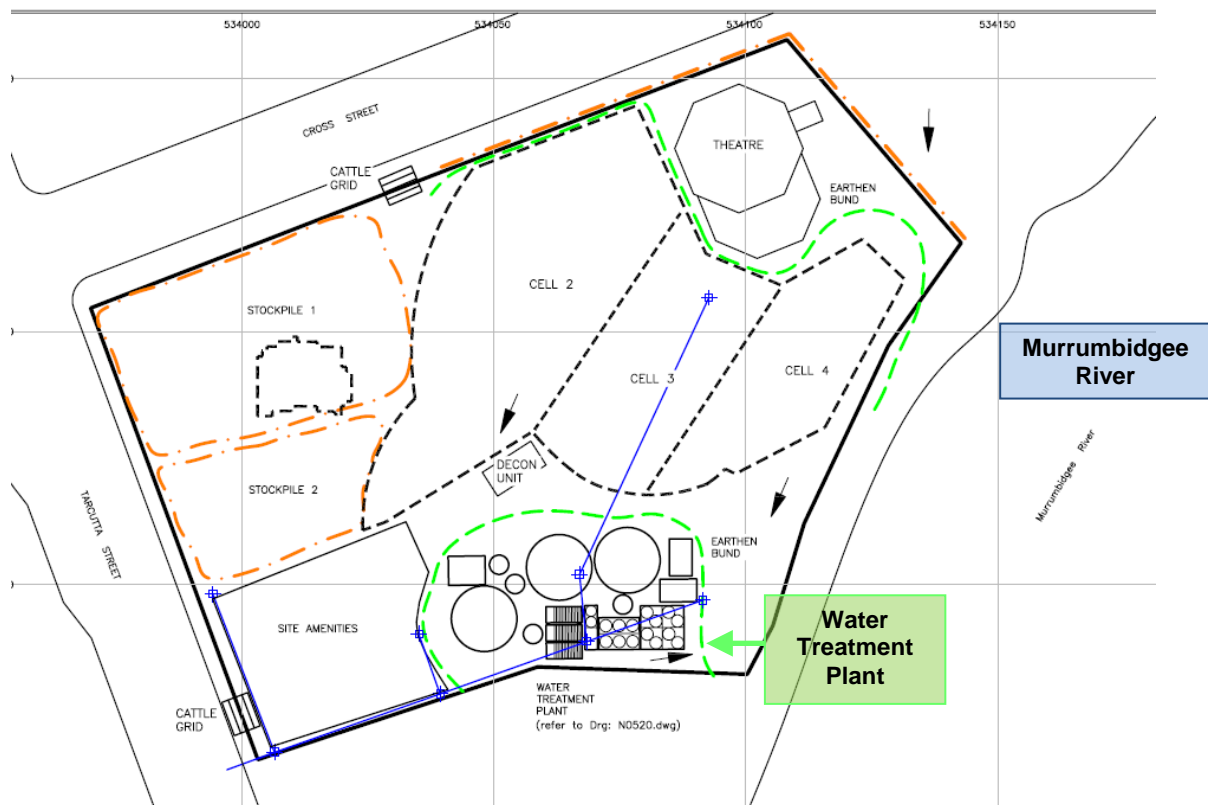


Figure 3: Subject site with proposed Water Treatment Plant

The WTP would operate on a semi-continuous basis, with a steady maximum flow rate of up to 10L/s during plant operation. The average daily discharge is estimated to be 26kL per day however 24 hour operation of the plant may be required during times of high flow, such as when the river is in flood conditions, which could result in a maximum daily discharge of up to 864kL. Discharge from the plant will be mainly between 7am and 5pm Monday to Friday, as the plant would generally not operate on weekends.

The key components that make up the WTP system include:

- settling and balance tanks;
- chemical dosing and flocculation systems;
- an air stripper;
- zeolite and carbon filters; and
- a contingency reverse osmosis unit if required.

All other aspects of the proposal, including the 9 month remediation period, remain unchanged.

3. STATUTORY CONTEXT

Approval Authority

The Minister was the approval authority for the original project approval, and is consequently the approval authority for this application.

The Minister has delegated his functions to determine Section 75W modifications to the Department where:

- the council has not made an objection;
- there are less than 25 public submissions objecting to the proposal; and
- a political disclosure statement has not been made in relation to the application.

There have been no submissions received from the public and council has not made an objection to the proposal. There has also been no political disclosure statement made for this application or for any previous related applications, and no disclosures made by any persons who have lodged an objection to this application.

Accordingly the application is able to be determined by the Executive Director, Development Assessment Systems and Approvals under delegation.

Section 75W

In accordance with Clause 3 of Schedule 6A of the EP&A Act, section 75W of the Act as in force immediately before its repeal on 1 October 2011 and as modified by Schedule 6A, continues to apply to transitional Part 3A projects.

Under Section 75W of the EP&A Act, the Minister is obliged to be satisfied that what is proposed is indeed a modification of the original proposal, rather than being a new project in its own right.

The Department has reviewed the scale and nature of the proposed modification, and is satisfied that it can be characterised as a genuine modification of the original project as:

- it involves only minor changes to the approved project to allow for the on-site treatment of contaminated groundwater; and
- the project as modified could be carried out with some minor amendments to the existing conditions of approval.

4. CONSULTATION

The Department made the EA of the proposal publicly available on its website and sought and received submissions from the Environment Protection Authority (EPA) and NSW Office of Water (NOW). A submission from NSW Fisheries was also provided. Consultation with other government agencies and neighbouring sites was considered to be unnecessary as the environmental impacts of the proposal would essentially remain unchanged.

The **EPA** initially raised concerns regarding some inadequacies in the proposed treatment and disposal method of the contaminated water and inconsistencies in the Environmental Assessment Report. The Proponent provided additional information which addressed the inconsistencies in their report and revised their WTP to include additional contingency filters. The additional information satisfied the EPA's concerns.

Fisheries NSW sought assurances that the advice on this application would be sought from the appropriate authority on whether the proposed discharges to the river from the WTP are acceptable under the *Protection of the Environment Operations Act 1997* (POEO). The Proponent's response indicated that the WTP would be licensed by the EPA under the POEO.

The **NOW** raised similar concerns as the EPA with regards to the proposed treatment and disposal method of contaminated water. In addition, NOW requested that the Proponent adopt the water quality guidelines established by the Australian and New Zealand Environment Conservation Council (ANZECC). The Proponent has since adopted the ANZECC water quality guidelines and revised their WTP which has satisfied the concerns raised by NOW.

5. ASSESSMENT

The Department has assessed the merits of the proposed modification. During this assessment, the Department has considered:

- the environmental assessments, and Director-General's assessment reports for the approved project
- existing conditions of approval;
- documentation supporting the proposed modification application;
- agency submissions;
- relevant environmental planning instruments, policies and guidelines; and

- the requirements of the EP&A Act, including the objects of the Act.

In regard to the proposed modification, the Department considers the key environmental issues to be associated with water and air quality, noise and traffic. The assessment of the environmental issues is outlined in Table 1.

Table 1 – Assessment of Issues

Issue	Consideration	Recommendation
Water Quality	<ul style="list-style-type: none"> ▪ The subject site is located adjacent to the Murrumbidgee River. ▪ The modification seeks to treat and discharge contaminated groundwater via the existing drainage system or directly into the River. ▪ Concerns were initially raised by the EPA and NOW, particularly with the projected ammonia levels in the treated water. ▪ In response, EPS provided additional information which clarified that the expected ammonia levels would be lower than first anticipated. ▪ EPS also proposed additional WTP filtration systems which would ensure optimum filtration of the wastewater is achieved prior to any discharge. ▪ The EPA and NOW are satisfied that the amendments would ensure that treated groundwater would meet the relevant ANZECC guideline criteria. ▪ The Department is satisfied that the on-site treatment and disposal of contaminated water is an appropriate method to manage the contaminated groundwater. ▪ Notwithstanding, the Department has recommended that the Proponent update the Water Management Plan to include discharge limits and water quality monitoring requirements associated with the discharge. 	Recommended conditions requiring the Proponent to update the existing Water Management Plan.
Air Quality	<ul style="list-style-type: none"> ▪ The proposed WTP includes an air stripping system designed to reduce ammonia levels and other volatile organic compounds (VOCs) in the contaminated groundwater. ▪ The EPA initially raised concern with the lack of information regarding air emissions associated with the air stripper and made some recommendations for air monitoring. ▪ In response, EPS clarified that the level of emissions from the air stripper would be based on Safe Work Australia's short term exposure limit of 10ppm. ▪ The EPA advised that it was satisfied with the response and that air emissions would be adequately managed. ▪ EPS has also committed to daily air monitoring for ammonia, VOCs and odour associated with the air stripper. ▪ As such, the Department is satisfied that the air quality impacts associated with the WTP would not cause offensive odours or introduce unacceptable levels of VOC emissions into the environment. ▪ Existing conditions require the Proponent to ensure no offensive odours are generated from the site and all measures are undertaken to manage odours to the satisfaction of the EPA. 	No recommendations.
Noise	<ul style="list-style-type: none"> ▪ The WTP would add an additional noise source to the remediation works. ▪ However, the Proponent indicated that the WTP is expected to increase noise emissions from the Project. ▪ Notwithstanding, EPS has committed to acoustically treat various components of the WTP which would reduce any noise emissions. ▪ The EPA raised no concerns in regards to noise. ▪ The Department is satisfied that noise associated with 	Recommended conditions require the Proponent to: <ul style="list-style-type: none"> ▪ ensure and implement all reasonable and feasible measures to prevent and/or minimise any noise impacts associated with the WTP,

Issue	Consideration	Recommendation
	<p>the modification would be negligible and adequately managed through some additional recommended conditions and the existing Project Approval.</p> <ul style="list-style-type: none"> In terms of additional conditions, the Department has recommended that the Proponent adopt the commitments made by EPS to manage noise emissions from the WTP. While existing conditions in the Project Approval require the Proponent to comply with specific hours of construction and ensure equipment associated with all construction activities are fitted with noise controllers. 	including enclosures and exhaust fan alignments
Traffic	<ul style="list-style-type: none"> The proposed modification would reduce traffic generation associated with the off-site removal of contaminated water. As such, the Department considers that impacts associated with traffic would be less than what was originally assessed and approved. 	No recommendations.

6. CONCLUSION

The Department has assessed the merits of the proposal in accordance with the requirements of the EP&A Act. This assessment has found that the proposed modification would have a negligible impact beyond those originally assessed and approved. The Department considered that any impacts can be managed by existing conditions of approval.

In addition, this assessment has found that the proposed modification would enable the treatment and disposal of contaminated water on site and allow for the progression of necessary remediation works at the site, reducing the risk of harm to human health and the environment.

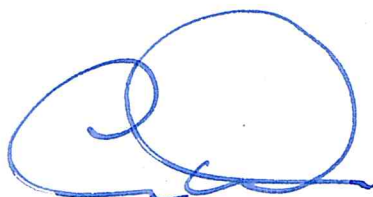
Consequently the Department believes the proposal should be approved subject to some minor amendments to the existing conditions of approval.

7. RECOMMENDATION

It is RECOMMENDED that, as delegate for the Minister, the Executive Director, Development Assessment Systems and Approvals:

- **consider** the findings and recommendations of this report;
- **determine** that the proposed modification is within the scope of section 75W of the EP&A Act;
- **approve** the application subject to conditions; and
- **sign** the attached notice of modification (see Tag 'A').


Chris Ritchie
Manager - Industry
Industry Projects
28/2/13.


Chris Wilson
Executive Director
Development Assessment Systems and Approvals
28.2.13