

Appendix 3 – Letters sent to government agencies



David Churchill

08/05/2008 01:20 PM

To: kaye.power@doh.health.nsw.gov.au

cc:

Subject: Rosehill Recycled Water Scheme - Project update

Kaye

Alinta is currently finalising an Environmental Assessment for the Rosehill Recycled Water Scheme for submission to the Department of Planning.

As part of the consultation process, details of the project are being provided to various government departments for comment.

The Rosehill Recycled Water Scheme is a major project as defined by the State Environmental Planning Policy (Major Projects) and will require approval from the Minister for Planning under Part 3A of the EP&A Act.

Initial assessment has indicated impacts can be managed by appropriate construction methodologies minimising environmental issues.

I have attached a copy of the recent newsletter that was distributed to 25,000 residents in the region of construction and a Preliminary Environmental Assessment Report.



PORRW - Community Newsletter 1 - File Copy.pdf Preliminary Environmental Assessment.pdf

Please review the documents and if you require further information or wish to provide a comment, please contact myself on 93979260.

Regards

David

David Churchill

Approvals Co-ordinator

Alinta Asset Management

100 Bennelong Rd

Sydney Olympic Park NSW 2127

PO Box 6507

Silverwater NSW 2128

tel: 9397 9260

fax: 9397 9998

email: david.churchill@alinta.net.au



Agility Management Pty Ltd
ABN 53 086 013 461

18 Huntley Road
Alexandria NSW 2015

Telephone 02 9565 7017
Facsimile 02 6565 7050
www.alinta.net.au

04 October 2007

Mr Mark Villa
Acting Head Metropolitan Infrastructure Unit
NSW Department of Environment & Climate Change
Level 7, 79 George Street
Parramatta, NSW 2124

Our Reference: CRWP_DECC_0001

Dear Mr Villa

RE: Camellia Recycled Water Project and licensing under the NSW *Protection of the Environment Operations Act 1997*

During the Planning Focus Meeting held on 28th August 2007 for the proposed Camellia Recycled Water Project, the need for licensing under the NSW *Protection of the Environment Operations Act 1997* (POEO Act) was briefly discussed. Alinta committed to investigate potential licensing requirements for the project and to engage in further discussions with the NSW Department of Environment & Climate Change (DECC) on the matter.

Alinta has undertaken an investigation concerning licensing requirements for the project. The conclusion Alinta has drawn from this investigation is that an environmental protection licence for the Camellia Recycled Water Project under the POEO Act is not required. A discussion paper detailing the Alinta position has been prepared on the matter, which is enclosed for your information. Alinta requests that DECC reviews the discussion paper and provides formal comments on licensing requirements under the POEO Act.

Alinta would welcome the opportunity to discuss the matter with DECC directly at your earliest convenience. If any additional information regarding the proposal is required, please do not hesitate to call.

Yours sincerely

JOHN FISHER
Environmental Engineer
Ph: (02) 9565 7163
Fx: (02) 9565 7063
Mb: 0448 514 073
Email: JFisher@alinta.net.au

DISCUSSION PAPER

TO: Mark Villa
Acting Head Metropolitan Infrastructure Unit
Department of Environment & Climate Change

**RE: THE CAMELLIA RECYCLED WATER PROJECT AND
LICENSING REQUIREMENTS UNDER THE PROTECTION OF
THE ENVIRONMENT OPERATIONS ACT (1997) NSW**

1. PURPOSE

Pursuant to *Protection of the Environment Operations Act* (1997) NSW (**POEO Act**), certain activities as set out in Schedule 1 of the POEO Act require licensing.

The purpose of this paper is to discuss why licensing under the POEO Act **is not** required for Alinta's proposed Camellia Recycled Water Project.

A description of the project is provided in Part 2.

In Part 3, the three main liquid streams into and out of the project are classified in accordance with the Department of Environment and Climate Change's waste classification guidelines.

Part 4 considers sections of the POEO Act that are potentially relevant to the project.

Following consideration of these sections of the Act, it is concluded that the project does not require an environment protection licence under the POEO Act.

This submission is prepared by Alinta AGN.

2. THE CAMELLIA RECYCLED WATER PROJECT

2.1 Description of the Project

The Camellia Recycled Water Project involves the construction and operation of a Recycled Water Treatment Plant (**RWTP**) at Fairfield and underground reticulation network for the distribution of recycled water from the RWTP to customers in Smithfield and Camellia. The Camellia Recycled Water Project is a project to which Part 3A of the NSW *Environmental Planning and Assessment Act 1979* applies. A Major Project Application has been submitted to the NSW Department of Planning.

Basically, the RWTP utilises secondary treated sewage effluent (input) and recycles it into a water product (output) for distribution and retail. As a by-product, it will also produce a concentrated waste stream (output).

The Liverpool-to-Ashfield Pipeline (**LAP**) is a sewer line currently under construction by Sydney Water Corporation (**Sydney Water**). The LAP originates from a sewage treatment plant at Liverpool and transports secondary treated sewage effluent from the treatment plant to Ashfield.

Sydney Water intends to make the contents of the LAP available for water recycling projects.

The RWTP will source the secondary treated sewage effluent directly from the LAP via an underground connecting main. By a process of ultra filtration and reverse osmosis, the treated effluent will be recycled into a water product, which will be distributed and retailed to customers via an underground reticulation network. The recycled water product will be used for many purposes including industrial process feedstock (for example paper production) and irrigation.

A concentrated waste water stream will be produced as a by-product of the recycling process. Alinta has entered into a formal arrangement with Sydney Water to discharge this waste water stream directly to the existing sewer network via a dedicated underground connection.

In the entire process of obtaining input for and discharging outputs from the RWTP, there will be no exposure or discharge of wastes to land or water. All liquid waste from the plant would be discharge directly to sewer.

2.2 Scour points

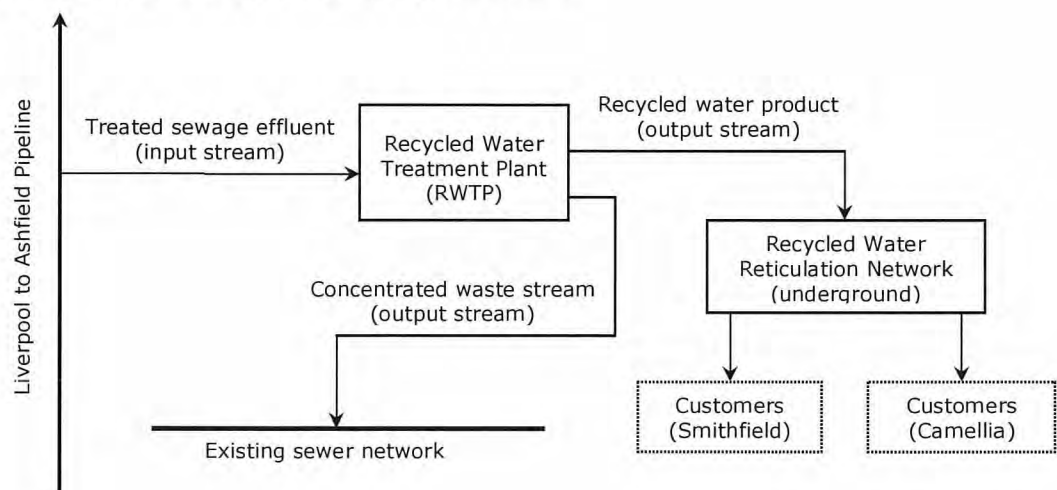
The design of the reticulation network for the distribution of recycled water features scour points from which the recycled water from within the network can be discharged if required. Such discharges would occur during dewatering for essential maintenance which would rarely be required.

All scour points except two have been located adjacent to and will be connected to an existing sewer network.

The remaining two scour points would discharge recycled water directly to land if required.

2.3 Schematic

A schematic of the project is provided below.



2.4 Definitions

All defined terms in this paper have the same meanings as in the NSW Waste Guidelines and the POEO Act.

3. CLASSIFICATION OF LIQUID STREAMS

3.1 Three liquid streams – 1 input and 2 outputs

The process of recycling water involves three main liquid streams:

- (a) secondary treated sewage effluent – input
- (b) recycled water product for distribution and retail – output
- (c) a concentrated waste stream (liquid) – output

The POEO Act and *Environmental Guidelines: Assessment, Classification & Management of Liquid & Non-liquid Wastes*¹ (**NSW Waste Guidelines**) each provide classifications of wastes and the appropriate disposal and handling of such wastes. Understanding the nature of each stream and how they are classified in the POEO Act and the NSW Waste Guidelines is essential in evaluating licensing requirements for the RWTP under the POEO Act.

3.2 Secondary treated sewage effluent: non-controlled aqueous liquid waste

Effluent is defined as:

'waste water from sewage collection or treatment plants'.

The **treatment of waste** is defined as:

'the processing of waste into a different type of waste'.

As such, the secondary treated sewage effluent is a liquid waste product of the Liverpool sewage treatment plant.

Waste is also defined as:

'any discarded, rejected, unwanted, surplus or abandoned substance or any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling'.

As the LAP has been built to transport the treated effluent away from the sewage treatment plant, and also that Sydney Water intend to make the treated effluent within the LAP available for recycling projects such as this, this is another reason that the treated effluent can be classified as a waste.

As the treated effluent does not have the characteristics of a non-liquid waste, it is therefore a liquid waste.

¹ Dept. of Environment & Conservation, 1999

Based on definitions provided in Tables 4 & 5 of the NSW Waste Guidelines, the treated effluent **does not** fall within the classifications of Hazardous or Group B wastes.

Group C waste is defined as:

'liquid waste from Human Storage facilities or waste treatment devices'.

A **human waste storage facility** is defined as:

'a device for holding or disposing of human waste, such as a cesspit, pan, septic tank, septic closet, water closet, chemical closet, humus closet and combustion closet'.

A **waste treatment device** is defined as:

'a device for treating human waste and/or sullage on the site of its generation (for example, a septic tank or aerated wastewater-treatment system'.

As neither of these definitions describes the Liverpool sewage treatment plant, the treated effluent is not Group C waste by definition.

This leaves the **Group A waste**, in particular, whether it is:

- (a) non-aqueous liquid waste; or
- (b) controlled aqueous liquid waste.

The treated effluent stream is predominantly water and therefore it is aqueous.

Table A1 of Technical Appendix A of the NSW Waste Guidelines (pages 51 - 52) describes contaminants and maximum specific concentrations that define controlled aqueous liquid wastes. The contaminants outlined are typically from industrial processes. Given that the treated effluent is derived from a sewage treatment plant, it is considered highly unlikely that any of the contaminants referred to in Table A1 would be present in the treated effluent in concentrations anywhere near the maximum specific concentrations provided. As such, the treated effluent would not be classified as controlled aqueous waste.

Therefore, treated effluent is not classified as a Group A waste in accordance with Table 5 of the Waste Guidelines.

Based on this discussion, the treated effluent to be used as feedstock for the recycling process would be classified as non-controlled aqueous liquid waste.

3.3 Recycled water product for distribution and retail: non-waste product

Recycling of waste is defined as:

'the processing of waste into a similar non-waste product'.

As described in Part 2.1, the RWTP would process the treated effluent (being non-controlled aqueous liquid waste) into recycled water. By this definition, the recycled water product is not a waste.

Furthermore, as described in Part 3.2, waste is described as an unwanted or discarded substance. The recycled water would be processed to sufficient quality to allow distribution and retail for use in industrial processes (such as paper production) and for irrigation. As the recycled water product will be purchased and used in commercial processes, it is not considered to be unwanted or discarded.

Therefore, recycled water is not classified as waste for the purposes of the POEO Act.

3.4 Concentrated waste stream: non-controlled aqueous liquid waste

As described in Part 2.1, the concentrated waste stream from the RWTP is a by-product of the recycling process. As this stream is a discarded, unwanted or surplus substance, therefore it is classified as waste.

Similarly as for the treated effluent feedstock (see Part 3.2), the concentrated waste stream is not within the definitions of Hazardous, Group B and Group C wastes.

The concentrated waste stream is predominantly water and therefore considered to be aqueous liquid waste. As with the treated effluent described in Part 3.2, it is highly unlikely that the contaminants described in Table A1 of Technical Appendix A of the NSW Waste Guidelines would be present in the concentrated waste stream given the nature of source of the treated effluent. If these contaminants were present, again it is unlikely that they would be present at concentrations above the specific maximum concentrations described in Table A1. As such, the concentrated waste stream is not considered to be Group A waste.

Therefore, the concentrated waste stream is most likely classified as 'non-controlled aqueous liquid waste' for the purposes of the POEO Act.

4. SCHEDULE 1 OF THE ACT

4.1 Application

Under Chapter 3 of the POEO Act, environment protection licences may be issued:

- (a) to authorise the carrying out of scheduled development work at any premises;
- (b) to authorise the carrying out of scheduled activities at any premises;
- (c) to authorise the carrying out of scheduled activities not related to premises; and,
- (d) to control the carrying out of non-scheduled activities for the purpose of regulating water pollution resulting from any such activity.²

² section 43, the POEO Act

Schedule 1 of the POEO Act contains definitions of premise-based activities and non premise-based activities that require licensing under the POEO Act. The following are activities to be carried out by the Camellia Recycled Water Project which the definitions in Schedule 1 may be applied to:

Activities carried out by RWTP	Schedule 1 definition
- recycling treated effluent at RWTP	- sewage treatment systems (premise-based activities)
- recycling treated effluent at RWTP	- waste activities (premise-based activities)
- recycling treated effluent at RWTP	- waste facilities (premise-based activities)
- reticulation of recycled water to customers and discharge of the concentrated waste stream to the sewer	- transporting of waste (non premise-based activities)

All other activities in Schedule 1 are not activities undertaken by the RWTP.

4.2 Recycling treated effluent and the RWTP as a 'sewage treatment system'

Schedule 1 describes **sewage treatment systems** that:

'have an intended processing capacity of more than 2,500 persons equivalent capacity or 750KL/day and that involve the discharge or likely discharge of wastes or by products to land or waters'.

The RWTP process capacity will be more than 750KL per day.

However, the by-product of the RWTP, being a concentrated waste stream, will be discharged directly into the sewer, not to land or water. The sewer is owned and operated by Sydney Water, and Alinta has a formal arrangement in place for the discharge of the concentrated waste stream into the said sewer. There is no possibility that the concentrated waste stream would be discharged directly to land or waters.

As outlined in Part 3.3, the recycled water is not a waste or a by-product.

Therefore, the RWTP is not a sewage treatment system by this definition and is not a Schedule 1 activity under the POEO Act. No licensing is required in this regard.

4.3 Recycling treated effluent and the RWTP as a 'waste activity'

Schedule 1 defines a **waste activity** as any activity that:

'is carried on for business or other commercial purposes, and ... involves the generating or storage of hazardous waste, industrial waste, or Group A waste'.

The RWTP is carried on for a commercial purpose as the sale of recycled water is intended to be a viable operation.

As explained in Part 3.1, there are two outputs from the RWTP, being recycled water and the concentrated waste stream.

As outlined in Parts 3.3 the recycled water product is not a waste. Furthermore, as outlined in Part 3.2 and 3.4, the treated effluent feedstock and the concentrated waste streams are non-controlled aqueous liquid wastes and not hazardous, industrial, nor Group A wastes.

Therefore, the water recycling process is not a waste activity by this definition and is not a Schedule 1 activity under the POEO Act. No licensing is required in this regard.

4.4 Recycling treated effluent and the RWTP as a 'waste facility'

Schedule 1 defines waste facilities as facilities that:

'treat, process or reprocess hazardous waste, industrial waste, or Group A waste or Group B waste'.

As concluded in Part 3.2, the treated effluent that is feedstock to the RWTP is classified as a 'non-controlled aqueous liquid waste' and therefore is not a hazardous waste, industrial waste, or Group A waste or Group B waste.

Schedule 1 also defines **waste facilities** as facilities that:

'dispose of hazardous waste, industrial waste, or Group A waste or Group B waste, ... except those:
(i) that only lawfully discharge waste into a sewer
(ii) ...'.

As explained in Part 3, none of the streams are classified as hazardous waste, industrial waste, Group A waste or Group B waste.

As explained in Part 4.2, the concentrated the concentrated waste stream would be disposed to sewer under a formal arrangement with Sydney Water.

Schedule 1 also defines **waste facilities** as facilities that:

'store or transfer, or recover by way of separating or processing, more than 30,000 tonnes of waste per year'.

The RWTP will process more than 30,000 tonnes of waste (being the treated effluent as described in Part 3.1) per year. However, by clause (2)(c) of the description of waste facilities requiring licensing, effluent is not taken to be waste for the purpose of this definition.

Therefore as set out above, the RWTP is not a waste facility by this definition and hence is not a Schedule 1 activity under the POEO Act. No licensing is required in this regard.

4.5 Recycled water reticulation network and connecting lines as non-premise based 'transporting of waste'

Schedule 1 defines **transporting of waste** as a **not premise-based activity**. **Transporting of waste** is further defined as activities of:

'persons who transport ... for fee or reward ... hazardous waste, industrial waste, or Group A waste, Group B waste or Group C Waste ... in loadings exceeding 200 kilograms ...'

The following substances will be transported as part of the Camellia Recycled Water project:

- (a) reticulation network carrying recycled water;
- (b) the connecting line between the LAP and the RWTP carrying the treated effluent feedstock; and,
- (c) the connecting line between the RWTP to the sewer carrying the concentrated waste stream.

As outlined previously, the recycled water is not considered as a waste. The treated effluent feedstock and the concentrated waste stream are classified as 'non-controlled liquid wastes'.

Therefore, the network and connecting lines for the discharge of recycled water and concentrated waste stream as proposed are not transporting waste by description and as such are not a Schedule 1 activity under the POEO Act. No licensing is required in this regard.

4.6 Water pollution

Section 43 of the POEO Act provides that licences may be issued to control the carrying out of non-scheduled activities for the purpose of regulating water pollution resulting from any such activity.

The recycled water reticulation network has been designed so that there will be no direct or indirect discharge of any substance to waters. The majority of scour points along the network have been positioned at suitable points of the existing sewer network. Any discharges of recycled water from these scour points will occur directly to the sewer network.

As set out in Part 2.2, two of the scour points will not have a direct connection to the sewer. However, any recycled water discharge from the network at these locations will occur to land and not water. In the event that the recycled water did enter waters (i.e. via overland flow paths), it would be unlikely this would constitute pollution of waters given the high quality of the recycled water.

As set out in Part 3.3, for the purposes of the POEO Act, waste from the RWTP (i.e. the concentrated waste stream) would be discharged directly to a sewer. No discharge of the concentrated waste stream to water would be possible.

Therefore, as there would be no direct discharge of any of the output streams to water, the RWTP and reticulation network would not require licensing under the POEO to regulate pollution of water.

5. CONCLUSION

Based on the above discussion, no environmental protection licence is required for the Camellia Recycled Water Project under the POEO Act.



David Churchill

08/05/2008 01:20 PM

To: kaye.power@doh.health.nsw.gov.au

cc:

Subject: Rosehill Recycled Water Scheme - Project update

Kaye

Alinta is currently finalising an Environmental Assessment for the Rosehill Recycled Water Scheme for submission to the Department of Planning.

As part of the consultation process, details of the project are being provided to various government departments for comment.

The Rosehill Recycled Water Scheme is a major project as defined by the State Environmental Planning Policy (Major Projects) and will require approval from the Minister for Planning under Part 3A of the EP&A Act.

Initial assessment has indicated impacts can be managed by appropriate construction methodologies minimising environmental issues.

I have attached a copy of the recent newsletter that was distributed to 25,000 residents in the region of construction and a Preliminary Environmental Assessment Report.



PORRW - Community Newsletter 1 - File Copy.pdf Preliminary Environmental Assessment.pdf

Please review the documents and if you require further information or wish to provide a comment, please contact myself on 93979260.

Regards

David

David Churchill

Approvals Co-ordinator

Alinta Asset Management

100 Bennelong Rd

Sydney Olympic Park NSW 2127

PO Box 6507

Silverwater NSW 2128

tel: 9397 9260

fax: 9397 9998

email: david.churchill@alinta.net.au