



# Assessment of Kyeema Wastewater Pty Ltd's network operator's and retail supplier's licence application for the Gundaroo scheme

**Prepared in accordance with the  
*Water Industry Competition Act 2006 (NSW)***

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# 1 Executive Summary

We recommend that the Minister for Water, Property and Housing<sup>1</sup> (**Minister**) grants Kyeema Wastewater Pty Ltd (**Kyeema**):

1. A network operator's licence<sup>2</sup> to construct, operate and maintain sewerage infrastructure for a new 51 lot subdivision,<sup>3</sup> subject to the conditions as set out in the attached draft licence.
2. A retail supplier's licence<sup>4</sup> to supply retail services, subject to the conditions as set out in the attached draft licence.

The scheme is located at Gundaroo in the Yass Valley Council local government area.

The application seeks to provide sewerage services by constructing and operating a sewage collection, treatment and irrigation disposal system that involves:

- ▼ Collecting sewage in septic tank effluent pumping (**STEP**) tanks located on each lot
- ▼ Transferring wastewater from each STEP tank to a main sewer line via service connections
- ▼ Treating the wastewater at a centralised sewage treatment plant
- ▼ Providing wet weather storage, and
- ▼ Irrigating the treated effluent on-site for pasture or a non-edible crop.

In assessing Kyeema's licence application, we considered the licensing criteria set out in sections 10(3) and (4) of the *Water Industry Competition Act (2006)* (**WIC Act**), and had regard to the licensing principles in section 7(1) of the WIC Act.

We have also recommended licence conditions for the Minister to consider when granting the licences.

A draft network operator's licence and retail supplier licence are included in **Appendix A**.

## 1.1 Kyeema application

Kyeema submitted the initial application for a network operator's and retail supplier's licence for the Gundaroo scheme on 13 September 2019. After an initial high-level review we requested further information. The additional information, including a revised application and amended Review of Environmental Factors (**REF**) was submitted on 13 November 2019.

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<sup>1</sup> The Minister for Water, Property and Housing administers the *Water Industry Competition Act 2006* (NSW).

<sup>2</sup> Licence number 20\_044.

<sup>3</sup> Kyeema submitted a DA modification request to Yass Valley Council on 1 March 2020. The DA modification requests, among other things, to increase the number of residential lots from 50 to 52. We understand that this was approved on 24 June 2020.

<sup>4</sup> Licence number 20\_045R.

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We consulted on the application from 11 December 2019 to 12 February 2020, and received 10 submissions. An eleventh submission from the Minister for Water, Property and Housing was received, after the submissions period closed, on 28 May 2020. We include a summary of submissions received in **Appendix D**.

## 1.2 The applicant

Kyeema is a privately owned company with all shares owned by its two directors. It has no parent company and no operating subsidiaries. Kyeema does not currently hold a WICA licence. Kyeema owns the Gundaroo property. As Kyeema has no employees it relies on the full support of Innoflow Australia Pty Ltd (**Innoflow**),<sup>5</sup> to provide technical, financial and organisational capacity.

## 1.3 The Gundaroo scheme

Kyeema proposes to construct and operate a sewage collection, treatment and irrigation disposal system in order to service a new subdivision approved by Yass Valley Council on 31 May 2019 for 50 residential lots (**Gundaroo scheme**). Kyeema submitted a development application (DA) modification request to Yass Valley Council on 1 March 2020. The DA modification requests, among other things, to increase the number of residential lots from 50 to 51.<sup>6</sup>

The sewage collection, treatment and disposal system is to consist of sewage collection tanks, a transfer network, a sewage treatment plant, wet weather storage, and an effluent irrigation area. The treated effluent is to be used to irrigate 6.5 ha of the site. The sewage treatment plant (STP) has been designed to treat sewage from 52 lots and consists of a recirculating (two stage) packed bed reactor plant with ultraviolet (UV) disinfection.

The original development consent from Yass Valley Council approved staging development of the Gundaroo scheme across five (5) stages. The DA modification also requested approval to reduce the staging from five to two to reflect creation of 21 lots in Stage 1 and 30 lots in Stage 2. Stage 1 will be undertaken in 2020 and Stage 2 works undertaken in 2021/22.

Kyeema has engaged Innoflow to construct, operate and maintain the sewerage scheme. Kyeema proposes to retail the sewerage services to the residents at the Gundaroo development. Customers for the Gundaroo scheme would all be small retail customers.

The proposed Gundaroo scheme will not supply drinking water. We understand each residential property owner will be responsible for meeting its drinking water needs.

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<sup>5</sup> Innoflow Australia Pty Ltd are specialists in sewage and greywater treatment and reuse schemes, having established schemes in NSW, Queensland, Victoria and New Zealand.

<sup>6</sup> We understand that this DA modification was approved by Yass Valley Council on 24 June 2020.



## 1.4 Environmental assessment

In determining whether to grant Kyeema the WIC Act licences for the Gundaroo scheme, the Minister is also a determining authority for the water industry infrastructure development under Part 5 of the EP&A Act<sup>7</sup>.

We have undertaken an environmental assessment of the scheme, having had regard to the environmental considerations required by the WIC Act,<sup>8</sup> and the requirements of sections 5.5 and 5.6 of the EP&A Act. We engaged an expert consultant to undertake a review of the *REF – Kyeema Wastewater Pty Ltd* (see **Appendix C**). Our consultant's assessment concluded that the REF has identified that the environmental impacts are within acceptable parameters, provided the mitigation measures outlined in the REF are effectively implemented.<sup>9</sup>

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<sup>7</sup> *State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)* provides that much of the infrastructure which requires a licence under the WIC Act is development which may be carried out **without development consent**. As a result, such development requires environmental assessment under Part 5 of the *Environmental Planning and Assessment Act 1979*.

<sup>8</sup> WIC Act, s 7(1)(a), s 10(4)(e) and clause 7 of the *Water Industry Competition Regulation 2008* (WIC Regulation).

<sup>9</sup> SLR Consulting, *IPART Gundaroo REF Review*, Report and Letter, 28 February 2020.

## 2 Recommendations

We recommend that the Minister for Water, Property, and Housing:

- 1 Grants a network operator's licence (licence number 20\_044) to Kyeema Wastewater Pty Ltd, for the Gundaroo scheme subject to the conditions as set out in the attached draft licence.
- 2 Grants a retail supplier's licence (licence number 20\_045R) to Kyeema Wastewater Pty Ltd, for the Gundaroo scheme subject to the conditions as set out in the attached draft licence.

The Minister must consider, but is not bound to accept, any advice or recommendation in this report in determining the licence application. The Minister may, if circumstances so require, seek further advice from us in relation to the licence application.<sup>10</sup>

The Minister is required to provide us with Notices of Decision and of the reasons for the decisions when deciding whether or not to grant the licences.<sup>11</sup> We would then publish the notices on our website, in accordance with the requirements of the WIC Act.<sup>12</sup>

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<sup>10</sup> WIC Act, section 10(2).

<sup>11</sup> WIC Act, section 10(5).

<sup>12</sup> WIC Act, section 10(6).

### 3 Consultation and submissions

On 11 December 2019, we provided the network operator's and retail supplier's licence application to, and invited submissions from, the following Ministers and their relevant departments:

- ▼ Minister administering the WIC Act and Chapter 2 of *Water Management Act 2000* (NSW) (Minister for Water, Property and Housing)
- ▼ Minister administering the *Public Health Act 2010* (NSW) (Minister for Health and Medical Research)
- ▼ Minister administering the *Protection of the Environment Operations Act 1997* (NSW) (POEO Act) (Minister for Energy and Environment), and
- ▼ Minister administering the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act) (Minister for Planning and Public Spaces).<sup>13</sup>

At the same time, we also provided copies of the licence applications to Yass Valley Council. Yass Valley Council is the relevant consent authority under Part 4 of the EP&A Act for the overall development, and the appropriate regulatory authority under the POEO Act.<sup>14</sup> Yass Valley Council approved with conditions an initial planning proposal to sub-divide the land in 2018. An additional development consent for the staged 50-lot residential sub-division was issued in 2019 with deferred commencement conditions, pending the outcome of the WIC Act licence assessments.<sup>15</sup>

We also called for submissions on the applications from the public.<sup>16</sup> We advertised in the Canberra Times and the Yass Tribune on 11 December 2019 for public submissions. The closing date for submissions was 12 February 2020.

#### We considered all submissions

We received 11 submissions in total, one each from the Minister for Water, Property and Housing, NSW Health, the NSW Department of Planning, Industry and Environment (DPIE), NSW Environment Protection Authority (EPA) and Yass Valley Council. We also received six submissions from the public.

We considered all the submissions against the licensing principles and the criteria as part of our assessment of the application. Where necessary we sought further information from Kyeema to satisfy ourselves that any issues raised in the submissions could be addressed and

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<sup>13</sup> WIC Act, section 9(1)(b) and *Water Industry Competition (General) Regulation 2008* (WIC Regulation), clause 17(1).

<sup>14</sup> Consent for the residential development is required under Part 4 of the EP&A Act. However, water industry infrastructure requires an assessment and determination under Part 5 of the EP&A Act as per clause 106 of ISEPP.

<sup>15</sup> Yass Valley Council issued development consent DA 190011 for the 50 lot subdivision, however the consent does not operate until several conditions have been satisfied – referred to as deferred commencement conditions. One of these conditions is the granting of licences required under the WIC Act.

<sup>16</sup> As required by the WIC Act, section 9(1)(c).

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where necessary, we have proposed that the Minister impose conditions of the licence to address any outstanding risk (should the licences be granted).

A summary of all the submissions we received is presented in **Appendix D**.

In addition to inviting submissions, we sought expert advice from:

- ▼ SLR Consulting to inform our environmental assessment (see section 5 and Appendix C)
- ▼ Insurance and Care NSW (**icare**) to inform our assessment of appropriate insurance arrangements (see section 4.3 and Appendix B).

## 4 Assessment of application

The WIC Act sets out licensing principles which the Minister must have regard to in considering whether or not to grant a licence.<sup>17</sup> The WIC Act also prohibits a licence from being granted to a disqualified corporation or related entity<sup>18</sup> and requires the Minister to be satisfied that the applicant meets specific criteria set out in the WIC Act or the regulations in order to grant a licence.<sup>19</sup> The Minister can consider other relevant matters, having regard to the public interest.<sup>20</sup>

This section of our report contains our assessment of the application for network operator's and retail supplier's licences against:

- ▼ The eligibility of the applicant (section 4.1)
- ▼ The licensing principles (section 4.2), and
- ▼ The licensing criteria (section 4.3).

This section also includes reasons for our recommendations.

### 4.1 The applicant is eligible for a licence

**We consider that Kyeema Wastewater Pty Ltd is not a disqualified corporation or a corporation that is a related entity of a relevant<sup>21</sup> disqualified corporation.**

We relied on the following information:

- ▼ ASIC reports that we obtained for Kyeema, and for any relevant related entities, confirmed that these companies are not disqualified nor are their directors or persons concerned in the management disqualified individuals.<sup>22</sup>
- ▼ Information provided by Kyeema regarding details of the:
  - Relevant related entities<sup>23</sup>
  - Names of the company Directors.
- ▼ Statutory declarations<sup>24</sup> signed by Kyeema's two directors, stating that:
  - Kyeema is not a disqualified corporation within the meaning of the WIC Act.

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<sup>17</sup> Section 7 of the WIC Act.

<sup>18</sup> Section 10(3) of the WIC Act.

<sup>19</sup> Section 10(4)(a) to 10(4)(e).

<sup>20</sup> Section 10(4)(f).

<sup>21</sup> A related entity that would have a direct or indirect interest in, or influence on, the carrying out of the activities that the licence authorises. WIC Act, section 10(3)(b).

<sup>22</sup> The relevant searches were completed on 3 June 2020.

<sup>23</sup> There were no related entities.

<sup>24</sup> Signed statutory declarations dated 10 June 2020.

- Kyeema is not a related entity of a disqualified corporation that would have a direct or indirect interest in, or influence on, the carrying out of activities that the licence would authorise if granted.<sup>25</sup>

## 4.2 The applications are consistent with the licensing principles

In considering whether or not to recommend that the Minister grants the licences, and the conditions to which the new licences should be subject (if granted), we had regard to the licensing principles set out in the WIC Act (refer Box 4.1).

### Box 4.1 Licensing principles under section 7(1) of the WIC Act

"In considering whether or not a licence is to be granted under this Part and what conditions are to be imposed on such a licence, regard is to be had to the following principles:

- a) the protection of public health, the environment, public safety and consumers generally,
- b) the encouragement of competition in the supply of water and the provision of sewerage services,
- c) the ensuring of sustainability of water resources,
- d) the promotion of production and use of recycled water,
- e) the promotion of policies set out in any prescribed water policy document,
- f) the potential for adverse financial implications for small retail customers generally arising from the activities proposed to be covered by the licence,
- g) the promotion of the equitable sharing among participants in the drinking water market of the costs of water industry infrastructure that significantly contributes to water security."

### 4.2.1 The application for a network operator's licence is consistent with licensing principles

We consider that the proposed scheme to construct and operate a sewage collection, treatment and irrigation disposal system is consistent with each of the licensing principles set out in the WIC Act.

We analysed the information in the application, and additional information received from Kyeema. Our analysis of the activities against the licensing principles are set out below.

#### Protection of public health, the environment, public safety and consumers generally (licensing principle (a))

We had regard to Kyeema's capacity to undertake the proposed activities in a manner that does not present a risk to public health, the environment, public safety and consumers generally.

We received seven submissions from local residents or local associations opposing the development on several grounds including impacts on the public, the environment and consumers. We have addressed each of the issues identified in these submissions in Appendix B and Appendix D and considered the potential for adverse impacts below.

<sup>25</sup> WIC Act, section 10(3)(b).

## Protection of public health

We assessed Kyeema's capacity to manage the key risks posed to public health by the new activities to be licensed, having regard to the protection of public health in section 4.3 of this report.

## Protection of the environment

In chapter 5 of this report we assess whether Kyeema has met the requirements for environmental assessment under the EP&A Act in relation to the proposed activities. Other aspects of our environmental assessment are:

### **i. Development approvals**

Kyeema obtained development consent, under Part 4 of the EP&A Act, to develop and sub-divide the property.<sup>26</sup> The environmental impacts from the development were considered by Yass Valley Council when Kyeema applied to sub-divide the property in question, and to develop the Gundaroo scheme. In addition, we considered the environmental impacts of the construction and operation of the sewage collection, treatment and irrigation disposal system, by undertaking an assessment under Part 5 of the EP&A Act. We provide the outcome of our assessment in Chapter 5.

### **ii. Enforcement actions**

In its submission on the application, DPIE confirmed that it found no record of enforcement action undertaken or carried out against Kyeema under the EP&A Act. Similarly, the EPA was not aware of any breaches of the POEO Act by Kyeema and it had not taken any actions against them.

In addition, we checked the EPA Public Register to see if Innoflow had any penalty notices, enforceable undertakings, or prosecutions against them.<sup>27</sup> No adverse findings were identified.

### **iii. Other approvals**

Kyeema provided information from the Natural Resources Access Regulator (NRAR) that a controlled activity approval (CAA) was not required for the scheme. We reviewed the information provided, and discussed with NRAR to understand their decision. After our discussion and providing additional information relevant to the scheme, NRAR amended its position, and confirmed<sup>28</sup> that a CAA was required for stream diversion works associated with isolation of the effluent storage dam. The requirement for a CAA was further confirmed in the late submission from the Minister for Water, Property and Housing. We also note that a condition of Kyeema's development approval issued by Yass Valley Council was the requirement for a CAA.

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<sup>26</sup> Yass Valley Council granted deferred development consent to subdivide 4056 and 4078 Gundaroo Rd into 50 residential lots, subject to conditions, on 22 May 2019 (Consent no. DA 190011).

<sup>27</sup> NSW EPA, POEO Public Register, <https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers/about-prpoeo>, accessed on 1 July 2020.

<sup>28</sup> Confirmed by NRAR via email dated 19 May 2020.

## Protection of public safety

We assessed Kyeema's capacity to manage key risks with regard to public health specifically and public safety in general in section 4.3 of this report.

## Protection of consumers generally

We considered whether any consumers would be disadvantaged as a result of a decision by the Minister to grant Kyeema a licence.

We also assessed the financial capacity of the applicant and the scheme over the next 10 years. We consider consumers will remain protected against loss of essential services (see section 4.3).

If the Minister grants a licence, we consider that consumers generally will continue to be protected in relation to the activities licensed.

## **Encouragement of competition (licensing principle (b))**

There is currently no public water utility sewerage connection for the development. Without a WIC Act licence, we understand that the development would not go ahead, as the Local Environment Plan for the area requires residential lots less than 5,000 m<sup>2</sup> to have a sewer connection.

## **Ensuring the sustainability of water resources (licensing principle (c))**

The scheme will provide sewerage services only. As it will not provide drinking water or recycled water to the development, the scheme would have a neutral impact on sustainability of water resources. All residences will be self-sufficient for water, with rainwater tanks the main source of supply.

Based on the REF and Addendum 1 of the Sewage Management Plan (SMP), which detail the environmental mitigation measures to be implemented during construction and operation of the scheme, we consider that the below ground irrigation of effluent will not impact on the local groundwater or nearby waterways.

## **Promotion of production and use of recycled water (licensing principle (d))**

The scheme will provide sewerage services only. It will not provide drinking water or recycled water to the development. The effluent will be disposed of via irrigation to a dedicated irrigation area where pasture and non-edible crops will be grown for fodder.

## **Promotion of policies set out in any prescribed water policy document (licensing principle (e))**

The Metropolitan Water Plan is the only prescribed water policy document in the WIC Regulation. The Metropolitan Water Plan outlines strategies to secure Greater Sydney's water supply now and in the future. The plan is not applicable to the scheme as the scheme is not within the plan's area of operations.



### **Potential for adverse financial implications for small retail customers (licensing principle (f))**

We have not identified any adverse financial implications that may arise from the activities covered in the proposed network operator's licence. We also had regard to this principle in our assessment of Kyeema's application for a retail supplier's licence. We consider that the potential risks for adverse financial implications for small retail customers are low, and are adequately mitigated by the licence, insurances and the actions identified in Kyeema's risk assessment.

### **Promotion of equitable sharing of the costs of water industry infrastructure that significantly contributes to water security (licensing principle (g))**

Kyeema proposes that all participants in the development share the costs associated with the operation and maintenance of the infrastructure equally via an annual fee administered by Kyeema.

#### **4.2.2 The application for a retail supplier's licence is consistent with the licensing principles**

We consider that the proposed scheme to retail sewerage services is consistent with each of the licensing principles set out in the WIC Act.

We analysed the information in the application, and additional information from Kyeema. We note that the outcome of our assessment of the licensing principles for the application for a network operator's licence apply equally here. We will however address key issues for small customers below.

### **Protection of public health, the environment, public safety and consumers generally (licensing principle (a))**

We had regard to Kyeema's capacity to undertake the proposed new activities in a manner that does not present a risk to public health, the environment, public safety and consumers generally. Public health and safety issues are addressed in section 4.3 of the report. Protection of the environment is addressed in Chapter 5 of the report.

#### **Protection of consumers generally**

We consider that if the Minister grants Kyeema a licence, consumers generally will be protected for the activities licensed.

The Retail Supply Management Plan supplied with the application adequately addresses how Kyeema will supply customer services. Kyeema proposes to issue one bill each year to the

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scheme's customers and to appoint an experienced operations and maintenance provider to operate the scheme.

While Kyeema does not have retail experience in the water retail business, it has retail experience in non-water retail businesses<sup>29</sup>.

We also assessed the financial capacity of Kyeema and cash flow forecasts for the scheme over the next 15 years. We consider consumers will remain protected against loss of essential services (see section 4.3).

### **Encouragement of competition (licensing principle (b))**

Our assessment in section 4.2.1 on the network licence application equally applies to the retail application. The village of Gundaroo is currently not serviced by Yass Valley Council.

### **Ensuring the sustainability of water resources (licensing principle (c))**

Our assessment in section 4.2.1 on the network licence application equally applies to the retail application.

### **Promotion of production and use of recycled water (licensing principle (d))**

The scheme does not provide drinking water or recycled water to the development. The scheme will provide sewerage services only.

### **Promotion of policies set out in any prescribed water policy document (licensing principle (e))**

Our assessment in section 4.2.1 on the network licence application equally applies to the retail application. The village of Gundaroo is not within the Metropolitan Water Plan's area of operations.

### **Potential for adverse financial implications for small retail customers (licensing principle (f))**

Our assessment in section 4.2.1 on the network licence application equally applies to the retail application.

### **Promotion of equitable sharing of the costs of water industry infrastructure that significantly contributes to water security (licensing principle (g))**

Our assessment in section 4.2.1 on the network licence application equally applies to the retail application.

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<sup>29</sup> Kyeema's previous experience relevant to retail includes having a small business to manage the ACT Government's 17 horse agistment facilities and owning and operating the Gundaroo General Store and Post Office.

### 4.3 The applicant would continue to meet the licensing criteria

In making our recommendation that the Minister grant the licences, and the conditions to which these licences should be subject (if granted), we considered the licensing criteria set out in the WIC Act.

#### **Box 4.2 Licensing criteria under section 10(4) of the WIC Act**

“A licence may not be granted unless the Minister is satisfied as to each of the following:

- a) that the applicant has, and will continue to have, the capacity (including technical, financial and organisational capacity) to carry out the activities that the licence (if granted) would authorise,
- b) that the applicant has the capacity to carry out those activities in a manner that does not present a risk to public health,
- c) that the applicant has made, and will continue to maintain, appropriate arrangements with respect to insurance,
- d) in the case of an application for a licence to supply water, that, if such a licence is granted, sufficient quantities of the water supplied by the licensee will have been obtained otherwise than from a public water utility,
- e) such matters as are prescribed by the regulations,
- f) such other matters as the Minister considers relevant, having regard to the public interest.”

#### 4.3.1 Kyeema meets the licensing criteria

We consider that the application for network operator’s and retail supplier’s licences for the Gundaroo scheme meets the licensing criteria set out in the WIC Act. Our analysis of the proposed activities against the licensing criteria is set out below.

##### **Technical capacity (licensing criteria (a))**

**We are satisfied that Kyeema has the technical capacity to undertake the proposed activities.**

Kyeema relies on Innoflow to supply the technical capacity for the scheme, to construct, operate and maintain the network infrastructure. Therefore, we consider that Innoflow’s expertise is critical to Kyeema’s technical capacity and have included Innoflow as an Authorised Person on the network operator’s licence.

The retail licence application provides an adequate Retail Supply Management Plan, and is supported by the retail experience of the applicant.

##### **Evidence of technical capacity**

We assessed Innoflow’s technical capacity in relation to the network operator’s licence. We reviewed the plans and documents provided for similar sewerage treatment schemes undertaken by Innoflow both in Australia and New Zealand. The plans and documents show an understanding of design, operation and maintenance of non-potable water infrastructure.

We assessed Kyeema’s technical capacity in relation to the retail supplier’s licence. While the retail experience of Kyeema’s directors is outside of the water industry, we considered that



their small business experience was adequate given the scale and nature of the Gundaroo scheme.

We have included more detail of Kyeema's and Innoflow's technical capacity assessment in Appendix B.

### Relevant experience

Kyeema has no relevant experience to undertake the proposed activities under the network operator's licence. Rather, it relies on Innoflow for technical expertise and experience for those activities. While Innoflow is constructing, operating and maintaining the scheme infrastructure, Kyeema will continue to have sufficient technical capacity to carry out the activities to be licensed.

Kyeema has retail experience in a number of industries, operating various businesses. Since the scale of the scheme is relatively small, we consider that Kyeema's retail experience would adequately service these customers.

We assessed position descriptions and professional experience of both Innoflow and Kyeema personnel nominated in the application for the operator's and retailer's licences. We consider that the expertise of the relevant personnel is adequate for the activities to be licensed for both the network and retail operations.

### Financial capacity (licensing criteria (a))

**We are satisfied that Kyeema has the financial capacity to undertake the proposed activities.**

We have reviewed information provided by Kyeema. We conclude that Kyeema, has and will continue to have, financial capacity to carry out the activities that would be carried out under the proposed licences. In reaching our conclusion, we have relied on financial forecasts of both the development activities of Kyeema and the operations of the Gundaroo scheme.

We have included more detail of Kyeema's financial capacity assessment in Appendix B. We note that our financial assessment represents financial capacity at a point in time. Our recommendation to grant Kyeema a network operator's licence and retail supplier's licence should not be viewed as an endorsement of its future, ongoing viability. The assessment is based on a combination of information sources, none of which is to be regarded as individually determinative. We undertake this assessment for our own purposes and for the Minister's purposes in making a determination on the application. Our conclusion is not to be relied upon for any other purpose or by any other person.

We do not recommend additional licence conditions on financial capacity, should the Minister grant Kyeema a network operator's licence and retail supplier's licence. We consider that the existing condition in Schedule B, clause 1.1 adequately manages any risk on financial capacity.

## **Organisational capacity (licensing criteria (a))**

**We are satisfied that Kyeema has the organisational capacity to undertake the proposed activities.**

Our assessment is based on Innoflow being named as an authorised person on the network licence, to provide the operations and maintenance support for the activities to be licensed.

As noted above, the retail activities are supported by an adequate Retail Services Management Plan. The directors of Kyeema have relevant experience to undertake the retailing activities for the scheme.

Our detailed assessment of Kyeema's organisational capacity is in Appendix B.

## **Capacity to carry out those activities in a manner that does not present a risk to public health (licensing criteria (b))**

**We are satisfied that Kyeema has the capacity to undertake the proposed activities in a manner that does not present a risk to public health.**

We assessed Kyeema's capacity to manage key risks to public health posed by the construction, operation and maintenance of the sewage collection, treatment and irrigation disposal system.

We considered a range of information and evidence to establish Kyeema's capacity. Kyeema relies on Innoflow to supply the technical capacity for the scheme, to construct, operate and maintain the network infrastructure. Therefore, we considered Innoflow's technical capacity in relation to the network operator's licence. Our detailed assessment is in Appendix B.

### **NSW Health raised concerns on Kyeema's application**

We received a submission from NSW Health on Kyeema's capacity to protect public health. The submission is available on our website and discussed in the summary of submissions in Appendix D. NSW Health noted the following concerns:

- ▼ Kyeema applying and understanding the relevant guidelines in assessing and documenting residual risks. Kyeema addressed this concern by revising its preliminary risk assessment, to consider the requirements of the relevant guideline.<sup>30</sup>
- ▼ The inconsistencies in the SMP between sub-surface irrigation or spray irrigation, and how wet weather storage will operate to protect public health. Kyeema confirmed treated effluent would be irrigated using sub-surface irrigation only.
- ▼ The SMP referring to a 'flush and forget' service for households, but is unclear on the responsibility for infrastructure within each lot. Kyeema confirmed that homeowners would pay the initial cost of the STEP tanks and an annual connection fee into a sinking fund. Routine pump-outs will be paid for by Kyeema from the sinking fund whereas any additional pump-outs (due to inappropriate use) would be borne directly by the homeowner.

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<sup>30</sup> The detailed (final) risk assessment will need to meet the requirements of the *Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) (2006)* (AGWR), and NSW Health.

Kyeema's detailed response to these queries is summarised in Appendix D.

NSW Health also requested that IPART require Kyeema to undertake a detailed risk assessment with relevant stakeholders to ensure that public health risks, such as sewer overflows, are managed.

We raised these matters with Kyeema and received a revised preliminary risk assessment that largely addressed the concerns raised by NSW Health. We note however that, prior to commercial operation, the licensee will be required to undertake a detailed risk assessment in consultation with NSW Health and other relevant parties.

We are able to direct Kyeema and other licensees to undertake further consultation with NSW Health regarding their risk assessments, and incident management practices.<sup>31</sup> We will continue to engage with NSW Health on Kyeema's level of consultation with NSW Health.

On balance, we consider that Kyeema, through its arrangements with Innoflow, has the capacity to undertake the proposed activities in a manner that does not present a risk to public health through a combination of standard licence conditions and risk mitigation measures specified in the REF and Sewage Management Plan.

We recommend that Kyeema should be subject to the standard licence conditions in Schedule B, and special licence conditions in Schedule A of the proposed network licence. The special licence condition regarding notification, alteration and termination of agreement is presented in Table 4.2. This will capture any changes to the agreement with Innoflow and will enable us to monitor changes to the technical capacity of the applicant that may result. The full proposed licences are included as Appendix A.


**Table 4.2 Recommended new licence conditions for the protection of public health**

Clause number	Condition
Schedule A, clause 1.1	<p>If a party to an Agreement proposes to:</p> <ul style="list-style-type: none"><li>a) terminate the Agreement;</li><li>b) novate the Agreement;</li><li>c) assign or transfer any of its rights or obligations under the Agreement to any other person; or</li><li>d) alter the Agreement in any way that materially reduces the Licensee's technical, financial or organisational capacity to carry out the activities authorised by this Licence,</li></ul> <p>the Licensee must provide IPART with written notice of that fact as soon as practicable, but no later than 3 months before the time when the proposed action is to occur. The written notice must include details of how the services provided under the Agreement will be provided subsequent to the proposed termination, novation, assignment, transfer or alteration.</p>

### **Appropriate arrangements with respect to insurance (licensing criteria (c))**

We are satisfied that Kyeema has made, and will continue to maintain, appropriate insurance arrangements for the Gundaroo scheme.

<sup>31</sup> This arrangement is set out in condition B3.1 of the current standard network operator's licence.



We requested advice from Insurance and Care NSW (icare) on the adequacy of Kyeema's insurance arrangements. As a result of its review, icare concluded that Kyeema's proposed insurance arrangements should be sufficient for the proposed activities under the network operator and retail supplier licence application.<sup>32</sup> Based on the advice from icare, we consider that Kyeema has demonstrated that it has appropriate insurance arrangements for the scheme.

Further details of our assessment of Kyeema's insurance arrangements are in Appendix B.

We received no submissions regarding Kyeema's insurance arrangements.

We recommend no additional licence conditions on insurance, should the Minister grant Kyeema a network operator's licence and a retail supplier's licence. We consider that the existing conditions in Schedule B, clause 2 adequately manage insurance risks related to the Gundaroo scheme.

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<sup>32</sup> Email to IPART, icare Insurance and Reinsurance Strategy Manager, 20 December 2019. The advice noted, among other things, that Kyeema should be named in the contractor's insurances where appropriate, that insurances are in place from the time the activities commence, and that IPART should investigate the relationship between Kyeema and Innoflow to establish whether insurances need to be adjusted to respond to claims arising out of their relationship. IPART undertakes these activities prior to issuing approval to commence commercial operations.



## 5 Environmental assessment of the Gundaroo scheme

### 5.1 Part 5 of the EP&A Act

In addition to a licence application assessment, Kyeema's network operator's licence application requires a Part 5 infrastructure and environmental assessment to be undertaken.

### 5.2 Environmental assessment

We reviewed the REF provided with the application and assessed that it has addressed to the fullest extent possible all matters under Part 5 of the EP&A Act affecting or likely to affect the environment associated with the application for the Gundaroo scheme. We consider that it meets the requirements for determination under Part 5 of the EP&A Act.

Our assessment considered the following information:

#### **REF for the proposed water industry infrastructure at Gundaroo<sup>33</sup>**

Kyeema provided an REF which provides a full assessment of the works under the network operator's licence application. The report outlines Kyeema's assessment of the environmental impacts of the construction, operation and maintenance of the sewage collection, treatment and irrigation disposal system that forms the Gundaroo scheme. The REF concluded that the proposed activities, in conjunction with the proposed mitigation measures, are not likely to significantly affect the environment.

Our consultant reviewed the REF provided by Kyeema, and made several recommendations, which Kyeema subsequently incorporated into an amended REF.<sup>34</sup> The consultant subsequently found:

- ▼ The amended REF meets the requirements for determination under the EP&A Act and has taken into account to the fullest extent possible all matters affecting or likely to affect the environment associated with the proposed development.
- ▼ The proposed activities are not likely to significantly affect the environment or any protected biodiversity.
- ▼ The amended REF provides a range of mitigation measures to be implemented during construction that would adequately mitigate any environmental risks.
- ▼ Appropriately qualified and experienced personnel prepared and approved the amended REF.

<sup>33</sup> Nation Partners Pty Ltd, *Review of Environmental Factors – Part 5 EP&A Act 1979*, 12 November 2019

<sup>34</sup> Nation Partners Pty Ltd, *Review of Environmental Factors – Part 5 EP&A Act 1979*, 21 February 2020.



Based on our consultant's report, we are satisfied that the proposed activities can be carried out with acceptable risk to the environment, provided Kyeema implements the protection and mitigation measures specified in the REF.

We include the consultant's determination report and letter in Appendix C.

We recommend the inclusion of additional licence conditions to ensure mitigation measures identified in the REF are incorporated in the construction, operation and maintenance of the water industry infrastructure to be licensed at Gundaroo. The proposed new licence conditions are summarised in Table 5.1.

**Table 5.1 Recommended new licence conditions for protection of the environment**

Clause number	Condition
Schedule A, clause 2.1	Where the Licensee carries out any activities authorised by this Licence, the Licensee must: <ul style="list-style-type: none"> <li>a) implement environmental risk mitigation measures substantially consistent with the environmental risk mitigation measures identified in the REF; and</li> <li>b) specify, in any Plan or combination of Plans, how the Licensee will implement environmental risk mitigation measures substantially consistent with the environmental risk mitigation measures identified in the REF.</li> </ul>
Schedule A, clause 3.1	The Licensee must not commence, or authorise the commencement of, the construction of any Specified Water Industry Infrastructure until after the Licensee has provided a Construction Environmental Management Plan to IPART, and IPART has provided written approval of the Construction Environmental Management Plan to the Licensee.
Schedule A, clause 3.2	The Licensee must ensure that the construction of any Specified Water Industry Infrastructure is carried out in accordance with the approved Construction Environmental Management Plan.

**Note:** Schedule A of the proposed varied licence contains special licence conditions.





## Appendices



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## A Draft Licences



# **NEW SOUTH WALES GOVERNMENT**

***Water Industry Competition Act 2006 (NSW)***

**Network operator's licence**

Licence no. 20\_044

Kyeema Wastewater Pty Ltd

(ACN 635 577 105)

**PRELIMINARY**

## 1. Summary

- 1.1. This Licence is granted under section 10(1) of the Act.
- 1.2. The Act prohibits a person from constructing, maintaining or operating any water industry infrastructure otherwise than under the authority of a licence. This Licence authorises the Licensee and other Authorised Persons to carry out such activities that would otherwise be prohibited under the Act.

## 2. Outline

- 2.1. This Licence is divided into the following sections and schedules:

**Section 1** authorises the construction, maintenance and operation of water infrastructure for non-potable water (if applicable).

**Section 2** authorises the construction, maintenance and operation of water infrastructure for drinking water (if applicable).

**Section 3** authorises the construction, maintenance and operation of sewerage infrastructure (if applicable).

**Schedule A** sets out special Ministerially-imposed licence conditions that are specific to this Licence.

**Schedule B** sets out Ministerially-imposed licence conditions that generally apply to network operator's licences granted under the Act.

**Schedule C** sets out definitions and interpretation provisions.

**Schedule D** sets out the area of operations for the activities authorised under Section 3.

**Schedule E** provides indicative maps for reference only.

- 2.2. In addition to the conditions in Schedules A and B to this Licence, the Act and Regulation also contain conditions that apply to this Licence. Nothing in Schedules A or B modifies or affects the conditions imposed on this Licence by the Act or Regulation.
- 2.3. Where there is an inconsistency between Schedule E and Schedule D, Schedule D shall prevail over Schedule E to the extent of the inconsistency.

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## SECTION 1 – ACTIVITIES AUTHORISED: NON-POTABLE WATER

**Table 1.1 Authorised Persons**

[Not applicable]
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**Table 1.2 Water industry infrastructure and purposes for water industry infrastructure**

[Not applicable]
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**Table 1.3 Area of operations**

[Not applicable]
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**Table 1.4 Authorised purposes for non-potable water**

[Not applicable]
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## SECTION 2 – ACTIVITIES AUTHORISED: DRINKING WATER

[Not applicable]

**Table 2.1 Authorised Persons**

[Not applicable]

**Table 2.2 Water industry infrastructure and purposes for water industry infrastructure**

[Not applicable]

**Table 2.3 Area of operations**

[Not applicable]

### SECTION 3 – ACTIVITIES AUTHORISED: SEWERAGE SERVICES

Subject to the conditions imposed by the Act, the Regulation and Schedules A and B of this Licence, this Licence authorises the Licensee and any Authorised Persons specified in Table 3.1 to construct, maintain and operate the water industry infrastructure specified in Table 3.2:

- a) for one or more of the purposes for water industry infrastructure specified in Table 3.2; and
- b) within the area of operations specified in Table 3.3.

**Table 3.1 Authorised Persons**

Innoflow Australia Pty Ltd (ACN 119 991 954)
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**Table 3.2 Water industry infrastructure and purposes for water industry infrastructure**

- |  |
|--|
| <ul style="list-style-type: none"><li>1) A treatment plant for sewage and other sewerage infrastructure used, or to be used, in connection with the treatment plant, where components of the treatment plant or other sewerage infrastructure may be used for one or more of the following purposes for water industry infrastructure:<ul style="list-style-type: none"><li>a) production of treated non-potable water from sewage;</li><li>b) treatment of sewage;</li><li>c) filtration of sewage</li><li>d) storage of sewage; and</li><li>e) conveyance of sewage.</li></ul></li><li>2) A reticulation network for sewage and other sewerage infrastructure used, or to be used, in connection with the reticulation network, where components of the reticulation network or other sewerage infrastructure may be used for one or more of the following purposes for water industry infrastructure:<ul style="list-style-type: none"><li>a) production of treated non-potable water from sewage;</li><li>b) treatment of sewage;</li><li>c) filtration of sewage;</li><li>d) storage of sewage;</li><li>e) conveyance of sewage; and</li><li>f) disposal of treated non-potable water through the irrigation of land.</li></ul></li></ul> |
|--|

**Table 3.3 Area of operations**

Refer to Schedule D.
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## **SCHEDULE A – SPECIAL MINISTERIALLY-IMPOSED LICENCE CONDITIONS**

### **1. Notification of changes to Agreement**

1.1. If a party to an Agreement proposes to:

- a) terminate the Agreement;
- b) novate the Agreement;
- c) assign or transfer any of its rights or obligations under the Agreement to any other person; or
- d) alter the Agreement in any way that materially reduces the Licensee's technical, financial or organisational capacity to carry out the activities authorised by this Licence,

the Licensee must provide IPART with written notice of that fact as soon as practicable, but no later than 3 months before the time when the proposed action is to occur. The written notice must include details of how the services provided under the Agreement will be provided subsequent to the proposed termination, novation, assignment, transfer or alteration.

### **2. Review of Environmental Factors**

2.1. Where the Licensee carries out any activities authorised by this Licence, the Licensee must:

- a) implement environmental risk mitigation measures substantially consistent with the environmental risk mitigation measures identified in the REF; and
- b) specify, in any Plan or combination of Plans, how the Licensee will implement environmental risk mitigation measures substantially consistent with the environmental risk mitigation measures identified in the REF.

### **3. Construction Environmental Management Plan**

3.1. The Licensee must not commence, or authorise the commencement of, the construction of any Specified Water Industry Infrastructure until after the Licensee has provided a Construction Environmental Management Plan to IPART, and IPART has provided written approval of the Construction Environmental Management Plan to the Licensee.

3.2. The Licensee must ensure that the construction of any Specified Water Industry Infrastructure is carried out in accordance with the approved Construction Environmental Management Plan.

## SCHEDULE B – GENERAL MINISTERIALLY-IMPOSED LICENCE CONDITIONS

### 1. Ongoing capacity to operate

- 1.1. The Licensee must have the technical, financial and organisational capacity to carry out the activities authorised by this Licence. If the Licensee ceases to have this capacity, it must report this to IPART in accordance with the Reporting Manual.

### 2. Maintaining appropriate insurance

- 2.1. The Licensee must hold insurance that is appropriate for the size and nature of the activities that the Licensee is carrying out under this Licence.
- 2.2. The Licensee must provide a copy of each certificate of currency of the insurance maintained by the Licensee to IPART in accordance with the Reporting Manual.
- 2.3. Before commencing to commercially operate the Specified Water Industry Infrastructure under this Licence, the Licensee must demonstrate that the insurance held is appropriate for the size and nature of those commercial operation activities, by providing a report to IPART from an Insurance Expert that:
- a) certifies that in the Insurance Expert's opinion, the type, scope and limit of the insurance held by the Licensee is appropriate for the size and nature of those commercial operation activities; and
  - b) is in the form prescribed by the Reporting Manual.
- 2.4. [Not applicable]
- 2.5. If, in relation to the activities authorised by this Licence, there is, or is to be, a change in either of the following, the Licensee must provide a report to IPART in accordance with the Reporting Manual:
- a) the insurer or underwriting panel in respect of an insurance policy held by the Licensee; or
  - b) the type, scope or limit on the amount of insurance held by the Licensee.
- 2.6. From time to time when requested in writing by IPART, the Licensee must provide a report to IPART, in the manner and form and within the timeframes specified by IPART, from an Insurance Expert certifying that in the Insurance Expert's opinion the type, scope and limit on the amount of insurance held by the Licensee is appropriate for the size and nature of the activities that the Licensee is carrying out under this Licence.

*[Note: The circumstances in which IPART may request a report under clause 2.6 include (but are not limited to) the following:*

- *where IPART considers that there may be a change in the type, scope or limit on the amount of insurance held by the Licensee in relation to activities that the Licensee is carrying out under this Licence;*
- *where there is a change in the type or extent of activities authorised by this Licence; or*
- *where IPART or an approved auditor considers that the type, scope or limit on the amount of insurance held by the Licensee may not be appropriate for the size and nature of the activities that the Licensee is carrying out under this Licence.]*

### **3. Complying with NSW Health requirements**

- 3.1. The Licensee must carry out the activities authorised by this Licence in compliance with any requirements of NSW Health that:
- a) IPART has agreed to; and
  - b) are notified from time to time to the Licensee by IPART in writing.

### **4. Complying with Audit Guidelines**

- 4.1. The Licensee must comply with any Audit Guidelines issued by IPART.

### **5. Reporting in accordance with the Reporting Manual**

- 5.1. The Licensee must prepare and submit reports in accordance with the Reporting Manual.

### **6. Reporting information in relation to the register of licences**

- 6.1. The Licensee must notify IPART, and provide IPART with details, of any change in relation to the following, in accordance with the Reporting Manual, within 14 days of the change:
- a) [Not applicable]
  - b) [Not applicable]
  - c) [Not applicable]
  - d) [Not applicable]
  - e) the identity of each licensed retail supplier or public water utility that has access to infrastructure services provided by the Specified Water Industry

Infrastructure for the purpose of providing sewerage services to its customers;

- f) any other sewerage infrastructure to which the Specified Water Industry Infrastructure is connected; and
- g) the arrangements for the disposal of waste from the water industry infrastructure specified in section 3, Table 3.2.

## **7. Monitoring**

7.1. The Licensee must undertake any monitoring that is required for the purposes of this Licence, any Plan, the Act or the Regulation in accordance with this clause 7.

7.2. The Licensee must keep the following records of any samples taken for monitoring purposes specified in the Water Quality Plan:

- a) the date on which the sample was taken;
- b) the time at which the sample was collected;
- c) the point or location at which the sample was taken; and
- d) the chain of custody of the sample (if applicable).

7.3. The Licensee must ensure that analyses of all samples taken for the purposes of Verification Monitoring are carried out by a laboratory accredited for the specified tests by an independent body that is acceptable to NSW Health, such as the National Association of Testing Authorities or an equivalent body.

## **8. Delineating responsibilities**

[Not applicable]

## **9. Notification of changes to end-use**

9.1. [Not applicable]

## **10. Notification of commercial operation**

10.1. Each time the Licensee has brought any new Specified Water Industry Infrastructure into commercial operation, the Licensee must:

- a) notify IPART in accordance with the Reporting Manual that it has brought the relevant Specified Water Industry Infrastructure into commercial operation; and

- 
- b) provide such notification within 10 days after it has brought the relevant Specified Water Industry Infrastructure into commercial operation.

## **11. Notification of non-compliant Plumbing**

- 11.1. If the Licensee becomes aware that a customer's Plumbing is not Code Compliant, the Licensee must, within 10 days, notify the customer and the Plumbing Regulator, in writing, of that fact.

## SCHEDULE C – INTERPRETATION AND DEFINITIONS

### 1. Interpretation

1.1. In this Licence, unless the context requires otherwise:

- a) the singular includes the plural and vice versa;
- b) headings are used for convenience only and do not affect the interpretation of this Licence;
- c) a reference to a document includes the document as modified from time to time and any document replacing it;
- d) a reference to a “person” includes a natural person and any body or entity whether incorporated or not;
- e) a reference to a clause is to a clause in this Licence;
- f) a reference to a section is to a section in this Licence;
- g) a reference to a schedule is to a schedule to this Licence;
- h) a reference to a law or statute includes regulations, rules, codes and other instruments under it, and consolidations, amendments, re-enactments or replacements of them; and
- i) explanatory notes do not form part of this Licence, but in the case of uncertainty may be relied on for interpretation purposes.

### 2. Definitions

2.1. Expressions used in this Licence that are defined in the Act or the Regulation have the meanings set out in the Act or the Regulation.

2.2. In this Licence:

Act means the *Water Industry Competition Act 2006* (NSW).

Agreement means any agreement or deed provided to IPART in connection with the Licensee's application for this Licence, or any application to vary this Licence.

Audit Guidelines means the document titled “*Audit Guideline – Water Industry Competition Act 2006*”, which is prepared by IPART and is available on IPART's website at [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au), and any other guidelines issued by IPART in relation to audits under the Act.



Authorised Person	means each person specified in, as applicable: <ul style="list-style-type: none"> <li>a) section 1, Table 1.1;</li> <li>b) section 2, Table 2.1; and</li> <li>c) section 3, Table 3.1.</li> </ul>
Construction Environmental Management Plan	means a site or project specific plan which: <ul style="list-style-type: none"> <li>a) complies with the basic structure detailed in the Environmental Management Plan Guidelines; and</li> <li>a) identifies how the Licensee will implement the environmental risk mitigation measures identified in the REF to the extent they relate to construction.</li> </ul>
Code Compliant	has the meaning given to that term under section 7 of the <i>Plumbing and Drainage Act 2011</i> (NSW).
Environmental Management Plan Guidelines	means the document titled “ <i>Guideline for the Preparation of Environmental Management Plans</i> ”, prepared by the Department of Infrastructure, Planning and Natural Resources.
Insurance Expert	means an insurance broker which holds an Australian financial services licence under Part 7.6 of the <i>Corporations Act 2001</i> (Cth) that authorises the broker to provide financial product advice for, and deal in, contracts of insurance within the meaning of Chapter 7 of that Act.
IPART	means the Independent Pricing and Regulatory Tribunal of New South Wales established under the <i>Independent Pricing and Regulatory Tribunal Act 1992</i> (NSW).
Licence	means this network operator’s licence granted under section 10 of the Act.
Licensee	means Kyema Wastewater Pty Ltd (ACN 635 577 105).
Licensee’s Code of Conduct	has the meaning given in Schedule B, clause 8.1.

Minister	means the Minister responsible for Part 2 of the Act.
NSW Health	means the Water Unit of NSW Ministry of Health and any of the local health districts as defined by the NSW Ministry of Health.
Plan	means any infrastructure operating plan, water quality plan or sewage management plan that the Licensee is required to prepare under the Regulation.
Plumbing	means any pipe, fitting or apparatus that is situated: <ul style="list-style-type: none"> <li>a) downstream of the customer's connection point to a water main, where the water main is Specified Water Industry Infrastructure;</li> <li>b) upstream of a customer's connection point to a sewer main, where the sewer main is Specified Water Industry Infrastructure; or</li> <li>c) upstream of a customer's connection point to a stormwater drain, where the stormwater drain is Specified Water Industry Infrastructure.</li> </ul>
Plumbing Regulator	has the meaning given to that term under section 3 of the <i>Plumbing and Drainage Act 2011</i> (NSW).
REF	means the document titled "Review of Environmental Factors – Part 5 EP&A Act 1979 – Kyeema Wastewater Pty Ltd", Version 2, prepared by Nation Partners Pty Ltd and dated 21 February 2020 and does not include any modified version of that document or any document replacing it.
Regulation	means the <i>Water Industry Competition (General) Regulation 2008</i> (NSW).
Reporting Manual	means the document titled "Network Operator's Reporting Manual", which is prepared by IPART and is available on IPART's website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> .

Specified Water Industry Infrastructure	<p>means the water industry infrastructure specified in, as applicable:</p> <ul style="list-style-type: none"> <li>a) section 1, Table 1.2;</li> <li>b) section 2, Table 2.2; and</li> <li>c) section 3, Table 3.2.</li> </ul>
Verification Monitoring	means verification monitoring as described in the document titled " <i>Australian Drinking Water Guidelines</i> " or the document titled " <i>Australian Guidelines for Water Recycling</i> " as the case may be.
Water Quality Plan	means the water quality plan that the Licensee is required to prepare under the Regulation.

## SCHEDULE D – AREA OF OPERATIONS – SEWERAGE SERVICES

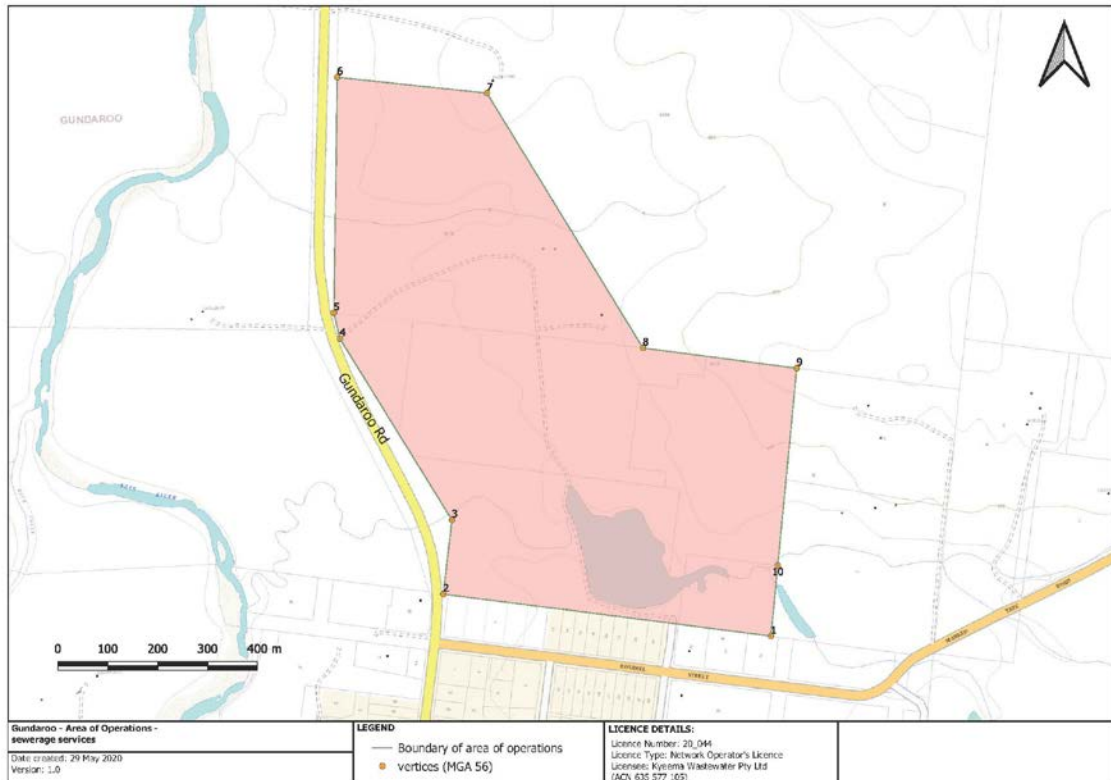
**Table D.1 Vertices for area of operations**

<b>Vertex</b>	<b>Easting</b>	<b>Northing</b>
0	160039.2	6118454
1	160025.5	6118313
2	159369	6118397
3	159386	6118546
4	159161.6	6118909
5	159149.5	6118961
6	159156.4	6119432
7	159456.4	6119401
8	159769	6118890
9	160077.3	6118850
10	160039.2	6118454

Note: Coordinate reference system is MGA 56.

## SCHEDULE E – AREA OF OPERATIONS – MAPS

Schedule E contains a map showing the area of operations for sewerage services.





# **NEW SOUTH WALES GOVERNMENT**

***Water Industry Competition Act 2006 (NSW)***

**Retail supplier's licence**

Licence no. 20\_045R

Kyeema Wastewater Pty Ltd

(ACN 635 577 105)

## PRELIMINARY

### 3. Summary

- 3.1. This Licence is granted under section 10(1) of the Act.
- 3.2. The Act prohibits a person from supplying water, or providing a sewerage service, by means of any water industry infrastructure, otherwise than under the authority of a licence. This Licence authorises the Licensee and other Authorised Persons to carry out such activities that would otherwise be prohibited under the Act.

### 4. Outline

- 4.1. This Licence is divided into the following sections and schedules:

<b>Section 1</b> authorises the supply of non-potable water (if applicable).
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<b>Section 2</b> authorises the supply of drinking water (if applicable).
---

<b>Section 3</b> authorises the supply of sewerage services (if applicable).
--

<b>Schedule A</b> sets out special Ministerially-imposed licence conditions that are specific to this Licence.
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<b>Schedule B</b> sets out Ministerially-imposed licence conditions that generally apply to retail suppliers' licences granted under the Act.
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<b>Schedule C</b> sets out definitions and interpretation provisions.
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<b>Schedule D</b> sets out the area of operations for the activities authorised under Section 3.
--

<b>Schedule E</b> provides indicative maps for reference only.
--

- 4.2. In addition to the conditions in Schedules A and B to this Licence, the Act and Regulation also contain conditions that apply to this Licence. Nothing in Schedules A or B modifies or affects the conditions imposed on this Licence by the Act or Regulation.

- 
- 4.3. Where there is an inconsistency between Schedule E and Schedule D, Schedule D shall prevail over Schedule E to the extent of the inconsistency.



## SECTION 1 – AUTHORISATION TO SUPPLY NON-POTABLE WATER

[Not applicable]

**Table 1.1 Authorised Persons**

[Not applicable]

**Table 1.2 Person or classes of persons**

[Not applicable]

**Table 1.3 Area of operations**

[Not applicable]

**Table 1.4 Authorised purposes for non-potable water**

[Not applicable]

## SECTION 2 – AUTHORISATION TO SUPPLY DRINKING WATER

[Not applicable]

**Table 2.1 Authorised Persons**

[Not applicable]

**Table 2.2 Person or classes of persons**

[Not applicable]

**Table 2.3 Area of operations**

[Not applicable]

## SECTION 3 – AUTHORISATION TO PROVIDE SEWERAGE SERVICES

Subject to the conditions imposed by the Act, the Regulation and Schedules A and B of this Licence, this Licence authorises the Licensee and any Authorised Persons specified in Table 3.1 to provide sewerage services:

- a) to the persons or classes of persons specified in Table 3.2; and
- b) within the area of operations specified in Table 3.3.

**Table 3.1 Authorised Persons**

None.
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**Table 3.2 Person or classes of persons**

Small Retail Customers.
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**Table 3.3 Area of operations**

Refer to Schedule D.
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## **SCHEDULE A – SPECIAL MINISTERIALLY-IMPOSED LICENCE CONDITIONS**

No special Ministerially-imposed licence conditions apply to this Licence.

## SCHEDULE B – GENERAL MINISTERIALLY IMPOSED LICENCE CONDITIONS

### 5. Ongoing capacity to operate

- 5.1. The Licensee must have the technical, financial and organisational capacity to carry out the activities authorised by this Licence. If the Licensee ceases to have this capacity, it must report this to IPART in accordance with the Reporting Manual.

### 6. Maintaining appropriate insurance

- 6.1. The Licensee must hold insurance that is appropriate for the size and nature of the activities that the Licensee is carrying out under this Licence.
- 6.2. The Licensee must provide a copy of each certificate of currency of the insurance maintained by the Licensee to IPART in accordance with the Reporting Manual.
- 6.3. Before commencing any of the activities authorised by this Licence, the Licensee must demonstrate that the insurance held is appropriate for the size and nature of the activities, by providing a report to IPART from an Insurance Expert that:
- a) certifies that in the Insurance Expert's opinion, the type, scope and limit of the insurance held by the Licensee is appropriate for the size and nature of the activities; and
  - b) is in the form prescribed by the Reporting Manual.
- 6.4. [Not Applicable]
- 6.5. If, in relation to the activities authorised by this Licence, there is, or is to be, a change in either of the following, the Licensee must provide a report to IPART in accordance with the Reporting Manual:
- a) the insurer or underwriting panel in respect of an insurance policy held by the Licensee; or
  - b) the type, scope or limit on the amount of insurance held by the Licensee.
- 6.6. From time to time when requested in writing by IPART, the Licensee must provide a report to IPART, in the manner and form and within the timeframes specified by IPART, from an Insurance Expert certifying that in the Insurance Expert's opinion the type, scope and limit on the amount of insurance held by the Licensee is appropriate for the size and nature of the activities that the Licensee is carrying out under this Licence.

*[Note: The circumstances in which IPART may request a report under clause 2.6 include (but are not limited to) the following:*

- *where IPART considers that there may be a change in the type, scope or limit on the amount of insurance held by the Licensee in relation to activities that the Licensee is carrying out under this Licence;*
- *where there is a change in the type or extent of activities authorised by this Licence; or*
- *where IPART or an approved auditor considers that the type, scope or limit on the amount of insurance held by the Licensee may not be appropriate for the size and nature of the activities that the Licensee is carrying out under this Licence.]*

## **7. Complying with NSW Health requirements**

- 7.1. The Licensee must carry out the activities authorised by this Licence in compliance with any requirements of NSW Health that:
- a) IPART has agreed to; and
  - b) are notified from time to time to the Licensee by IPART in writing.

## **8. Complying with Audit Guidelines**

- 8.1. The Licensee must comply with any Audit Guidelines issued by IPART.

## **9. Reporting in accordance with the Reporting Manual**

- 9.1. The Licensee must prepare and submit reports in accordance with the Reporting Manual.

## **10. Reporting information in relation to the register of licences**

- 10.1. The Licensee must notify IPART, and provide IPART with details, of any change in relation to the following, in accordance with the Reporting Manual within 14 days of the change:
- a) [Not applicable]
  - b) [Not applicable]
  - c) whether or not any of the Licensee's customers are Small Retail Customers;
  - d) any order under section 54 of the Act by which the Licensee is declared to be a retailer of last resort; and

- e) any licensed network operator or public water utility by means of whose sewerage infrastructure the Licensee provides sewerage services to its customers.

## **11. Delineating responsibilities**

[Not applicable]

## **12. Infrastructure to be used**

12.1. [Not applicable]

12.2. The Licensee must only provide sewerage services by means of water industry infrastructure, if that water industry infrastructure is maintained and operated by a licensed network operator or public water utility.

## **13. Notification of supply of water or provision of sewerage services**

13.1. [Not applicable]

13.2. Each time the Licensee commences to provide sewerage services under this Licence, the Licensee must:

- a) notify IPART in accordance with the Reporting Manual that it has commenced to provide sewerage services to customers by means of the relevant Licensed Water Industry Infrastructure; and
- b) provide such notification within 10 days after such commencement.

## SCHEDULE C – INTERPRETATION AND DEFINITIONS

### 14. Interpretation

14.1. In this Licence, unless the context requires otherwise:

- a) the singular includes the plural and vice versa;
- b) headings are used for convenience only and do not affect the interpretation of this Licence;
- c) a reference to a document includes the document as modified from time to time and any document replacing it;
- d) a reference to a “person” includes a natural person and any body or entity whether incorporated or not;
- e) a reference to a clause is to a clause in this Licence;
- f) a reference to a section is to a section in this Licence;
- g) a reference to a schedule is to a schedule to this Licence;
- h) a reference to a law or statute includes regulations, rules, codes and other instruments under it, and consolidations, amendments, re-enactments or replacements of them; and
- i) explanatory notes do not form part of this Licence, but in the case of uncertainty may be relied on for interpretation purposes.

### 15. Definitions

15.1. Expressions used in this Licence that are defined in the Act or the Regulation have the meanings set out in the Act or the Regulation.

15.2. In this Licence:

Act means the *Water Industry Competition Act 2006* (NSW).

Audit Guidelines means the document titled “*Audit Guideline – Water Industry Competition Act 2006*”, which is prepared by IPART and is available on IPART’s website at [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au), and any other guidelines issued by IPART in relation to audits under the Act.



Authorised Person	means each person specified in, as applicable: <ul style="list-style-type: none"> <li>d) section 1, Table 1.1;</li> <li>e) section 2, Table 2.1; and</li> <li>f) section 3, Table 3.1.</li> </ul>
Insurance Expert	means an insurance broker which holds an Australian financial services licence under Part 7.6 of the <i>Corporations Act 2001</i> (Cth) that authorises the broker to provide financial product advice for, and deal in, contracts of insurance within the meaning of Chapter 7 of that Act.
IPART	means the Independent Pricing and Regulatory Tribunal of New South Wales established under the <i>Independent Pricing and Regulatory Tribunal Act 1992</i> (NSW).
Licence	means this retail supplier's licence granted under section 10 of the Act.
Licensed Water Industry Infrastructure	means the water industry infrastructure by means of which the non-potable water, drinking water and/or sewerage services (as applicable) under this Licence are supplied.
Licensee	means Kyeema Wastewater Pty Ltd (ACN 635 577 105).
Licensee's Code of Conduct	has the meaning given in Schedule B, clause 7.1.
Minister	means the Minister responsible for Part 2 of the Act.
NSW Health	means the Water Unit of NSW Ministry of Health and any of the local health districts as defined by the NSW Ministry of Health.
Regulation	means the <i>Water Industry Competition (General) Regulation 2008</i> (NSW).

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Reporting Manual means the document titled “Retail Supplier’s Reporting Manual”, which is prepared by IPART and is available on IPART’s website at [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au).

Small Retail Customer has the meaning given to that term in the Regulation.

## SCHEDULE D – AREA OF OPERATIONS – SEWERAGE SERVICES

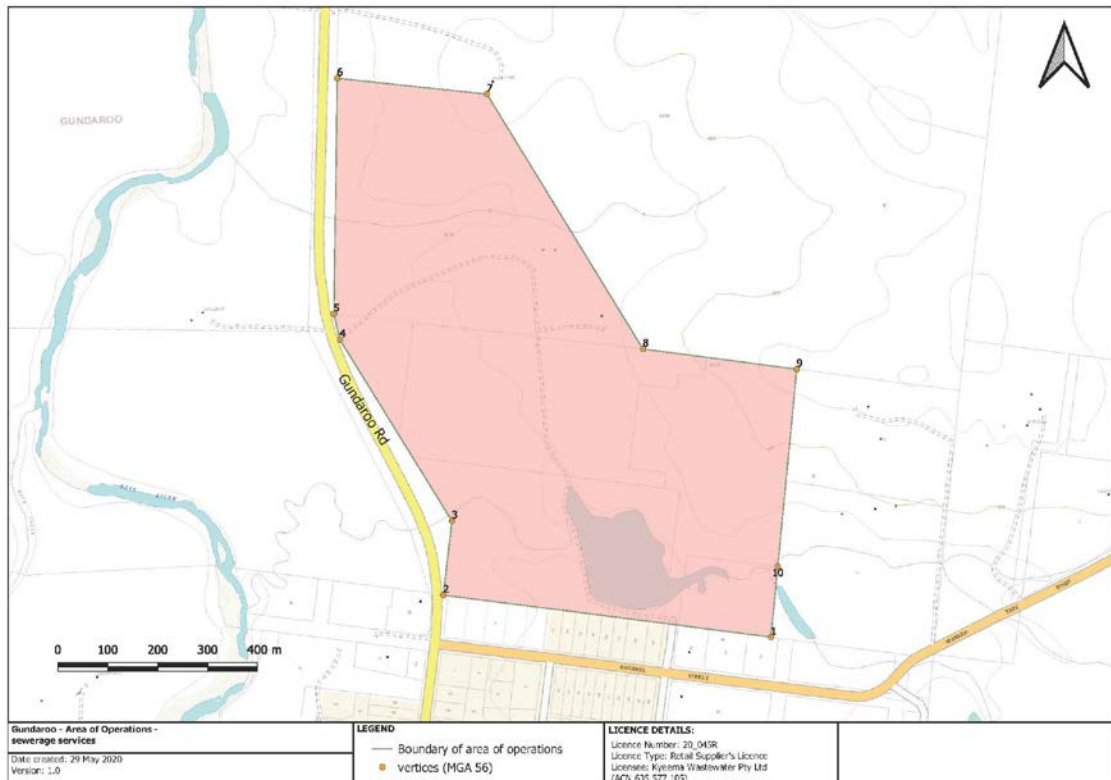
**Table D.1 Vertices for area of operations**

<b>Vertex</b>	<b>Easting</b>	<b>Northing</b>
0	160039.2	6118454
1	160025.5	6118313
2	159369	6118397
3	159386	6118546
4	159161.6	6118909
5	159149.5	6118961
6	159156.4	6119432
7	159456.4	6119401
8	159769	6118890
9	160077.3	6118850
10	160039.2	6118454

Note: Coordinate reference system is MGA 56.

## SCHEDULE E – AREA OF OPERATIONS – MAPS

Schedule E contains a map showing the area of operations for sewerage services.



## B Kyeema's application detailed capacity analysis

As part of our assessment, we considered:

### Evidence of technical capacity

- ▼ **Reports, plans and procedures that Innoflow<sup>35</sup> prepared for similar projects it had undertaken:** These documents demonstrated that Innoflow has a technical understanding of design, operation and maintenance of sewage reticulation and treatment infrastructure.
- ▼ **Process flow diagrams for the sewage treatment and effluent disposal systems:** The diagrams identify the relevant processes, influent and effluent streams, and remedial options for off-specification flows. In addition, information on removal efficiencies for key pathogens (ie, virus, protozoa and bacteria) for the proposed end-use was provided.

This is evidence of Innoflow's capacity to design an effective multi-barrier treatment system for constructing each stage of the proposed scheme that is consistent with the *Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) (2006)* (AGWR).<sup>36</sup>

- ▼ **Preliminary risk assessment for the sewerage infrastructure:** The assessment demonstrates Innoflow's and Kyeema's technical capacity to identify hazards and risks related to the scheme's sewerage infrastructure and its business systems, and to develop control measures to manage these risks. Following our initial review and request for information, Kyeema was able to amend the initial risk assessment, and demonstrate its technical capacity to understand and implement the requirements of AGWR.
- ▼ **Innoflow's Design Proposal:**<sup>37</sup> This document and accompanying design drawings,<sup>38</sup> demonstrate Innoflow's technical capacity to design sewerage infrastructure in accordance with the future project demands and staging requirements.
- ▼ **The water balance calculations** <sup>39</sup> **include forecasts for wastewater production at each stage of the development:** The water balance report demonstrates Kyeema's technical capacity to forecast demand and usage parameters (eg, sewage production, storage and irrigation volumes), and to consider key information such as weather conditions and system losses.

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<sup>35</sup> Innoflow would be undertaking these activities on behalf of Kyeema, and will be named as an authorised person on the network operator's licence.

<sup>36</sup> WIC Regulation, Sch. 1 cl. 7(1)(b) and 7(3).

<sup>37</sup> Decentralised Water Consulting, *Kyeema Subdivision: Sewage Management Plan, Revision 2, Appendix A - Design Proposal from Innoflow*, 18 January 2019, Appendix C1 of Kyeema's application.

<sup>38</sup> Decentralised Water Consulting Pty Ltd, *Proposed Wastewater Treatment*, 20 August 2019, Appendix C1 of Kyeema's application.

<sup>39</sup> Water balance calculations are included as Appendix C of *Land Capability Assessment – Kyeema, version 4, July 2018*, Franklin Consulting Australia Pty Ltd, Appendix C1 of Kyeema's application.

- ▼ **Kyeema's sewage management plan:**<sup>40</sup> The plan describes the conceptual basis of the sewerage system, how the system would be operated and maintained, details of the proposed effluent management strategy, and ongoing monitoring for environmental and health impacts. We would audit the adequacy of the sewage management plan in relation to consistency with the AGWR prior to Kyeema commencing commercial operation of the scheme.<sup>41</sup>
- ▼ **Kyeema's infrastructure operating plan:**<sup>42</sup> This plan outlines the asset lifecycle planning, system redundancy and condition monitoring for water industry infrastructure, amongst other infrastructure management considerations.
- ▼ **Kyeema's Irrigation Management Strategy:** The proposed disposal strategy is a full irrigation scheme with provision for wet weather storage. The treated effluent will be irrigated onsite via a sub-surface irrigation system. The proposed end-use is pasture for fodder, or some other non-edible crop.<sup>43</sup>

The SMP provides an overview of how Kyeema would manage the irrigation of treated effluent in Effluent Irrigation Area<sup>44</sup> to maintain its responsibilities on public health and the local environment. Kyeema confirmed that irrigation will only occur under a 7mm soil water deficit and will not occur after 5mm of rain has fallen, using soil moisture sensors. Further, Kyeema confirmed that tankers will take the treated effluent off-site in the unlikely event of full storages.

## Evidence of financial capacity

We concluded that the licensee and the scheme are forecast to have financial capacity to carry out the licensed activities, that the forecast was based on reasonable assumptions and included an appropriate level of contingency for unexpected circumstances.

As Kyeema is a newly formed corporation we based our assessment on financial forecasts provided by the applicant. We note cash flow projections are dependent on variables including the rate of lot sales and estimates of future revenue and costs. Evidence supporting actual lots sales for the next two years have been provided.

In assessing the financial forecasts we considered:

- ▼ Bank statements, loan agreements and Deeds of Sale to verify levels of cash, business activity and amounts already received and forecast to be received
- ▼ Financial model assumptions including a review of supporting evidence and reasonableness

<sup>40</sup> Prepared by Decentralised Water Consulting, *Kyeema Subdivision: Sewage Management Plan*, Revision 2 18 January 2019.

<sup>41</sup> WIC Regulation, Sch. 1 cl. 3 and cl. 6(1)

<sup>42</sup> Prepare by Whitehead and Associates, *Infrastructure Operating Plan- Kyeema subdivision*, Revision 2, 29 August 2019.

<sup>43</sup> According to the applicant, animals will not graze the irrigated land which will be fenced to restrict access. Fodder, including meadow hay and lucerne produced from the irrigated areas, should be consumed by horses, cattle, sheep & goats (not pigs).

<sup>44</sup> As defined in Figure 2 of the SMP, p 23.

- ▼ Financial ratios from financial models including sensitivity testing of revenue and expenses
- ▼ Forecast ongoing costs to consumers.

### **Evidence of organisational capacity**

- ▼ **The organisational structure:** Kyeema will manage Innoflow to deliver the proposed works based on contractual arrangements and agreements. Innoflow will be added to the network operator's licence as an Authorised Person to operate and maintain the plant. Kyeema has sufficient retail experience to undertake the retail activities associated with the scheme.
- ▼ **An outline of the experience of key personnel:** namely the Directors of both Kyeema and Innoflow, and Innoflow's technical staff which matched the role descriptions.
- ▼ **Curricula vitae of its key personnel:** provided to us in the licence application which outlines previous experience (within Australia) in the water industry and the specific personnel nominated to the Gundaroo scheme.
- ▼ **The risk assessment** provided to us in the licence application, and subsequently amended following our request for further information demonstrated that business risks have been identified and would be managed.
- ▼ **Evidence of Innoflow's experience** providing similar services to several similar schemes in Australia and New Zealand using the technology to be used in the Gundaroo scheme.

### **Capacity to carry out those activities in a manner that does not present a risk to public health**

- ▼ **Source water quality:** Sewage will be sourced from up to 51 residential lots in the Kyeema development. Fluctuation of the quality of source water from residential lots is expected to be minimal. Log reduction values for the treatment system and irrigation strategy are adequate for the intended end-use.
- ▼ **Fit for purpose end-use quality:** Innoflow has demonstrated its capacity to treat sewage and provide fit for purpose non-potable water for the proposed uses across several similar schemes in Australia and New Zealand.
- ▼ **Sewerage service interruption:** Kyeema has demonstrated its capacity to mitigate this risk through its preliminary risk assessment, sewerage network design and sewerage management plan. Kyeema has indicated that should short term interruption to sewerage services occur, storage would be available within the on-site STEP tanks, the system tanks recirculation and treated effluent tank, as well as the effluent storage dam. The treatment system will also have system redundancy (duty/standby equipment). For larger interruptions, a tankering company on an emergency callout contract and skilled operators would manage the situation.
- ▼ **Risk management method:** we reviewed Kyeema preliminary risk assessment<sup>45</sup> and consider that Kyeema has demonstrated its capacity to identify and manage hazards

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<sup>45</sup> Amended Kyeema Risk Assessment Table, 27 April 2020.

and risks regarding the sewage treatment and effluent irrigation system to acceptable levels of risk, and would have in place reasonable control and mitigation measures.

### **Appropriate arrangements with respect to insurance**

We requested advice from Insurance and Care NSW (icare) on the adequacy of Kyeema's proposed insurance arrangements. As a result of its review, icare concluded that Kyeema's insurance arrangements would be sufficient for the proposed activities under the retail and network licences, subject to review of the final certificates of currency conditions relating to descriptions and time periods within each policy.<sup>46</sup> We will review these conditions when certificates of currency become available and before an approval to commence operations is made.

▼ **icare review:** As part of its review, icare examined:

- Kyeema's licence application
- The preliminary risk retail assessments for network and retail activities
- Insurance experts insurance proposal
- Kyeema's corporate structure
- Regulatory approvals for the Kyeema scheme.<sup>47</sup>

▼ **Insurances included in insurance proposal:**

- Professional indemnity (design and construct)
- General liability and Environmental liability
- Workers compensation
- Cyber insurance
- Machinery and electronic equipment breakdown
- Risk management assessment and control plan.<sup>48</sup>

▼ Before an approval to commence operations is made certificates of currency will be reviewed by IPART based on icare's advice.

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<sup>46</sup> Email to IPART, icare Insurance and Reinsurance Strategy manager, 20 December 2019.

<sup>47</sup> Kyeema Application appendices A6, A8, C8, C12 and E3.

<sup>48</sup> Insurance proposal prepared by PSC Insurance Brokers Canberra, dated 5 September 2019, Kyeema Application Appendix A8.



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C    Assessment of Kyeema's Review of Environmental Factors for the Gundaroo scheme – Letter and Report

28 February 2020

630.12985-L01-v1.0.docx

Independent Pricing and Regulatory Tribunal  
Level 15,  
2-24 Rawson Place  
SYDNEY NSW 2000

**Attention: Robert Aposhian**

Dear Robert

### **Review of revised REF for proposed Water Industry Infrastructure at Kyeema Estate**

This letter provides the findings of the review of the Review of Environmental Factors (REF) titled:

**Review of Environmental Factors – Part 5 EP&A Act 1979 (21 February 2020), prepared by Nation Partners Pty Ltd on behalf of Kyeema Wastewater Pty Ltd.**

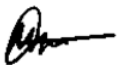
The works covered by the REF are referred to in this assessment as ‘the project’.

A previous version of the REF, dated 12 November 2019, has been reviewed by SLR Consulting Pty Ltd (SLR) who provided comments on the REF to IPART on 16 January 2020.

The purpose of this letter is to confirm that the revised REF (dated 21 February 2020) is considered to have adequately addressed the issues raised and recommendations made in our previous review. SLR therefore considers the revised REF to meet the requirements for determination under the *Environmental Planning and Assessment Act 1979* (EP&A Act) and have taken into account to the fullest extent possible all matters affecting or likely to affect the environment associated with the project.

If you have any queries about this, please contact me on 02 4037 3200.

Kind Regards



MEGAN CROWHURST  
Senior Project Consultant - Environmental & Social Impact Assessment

# IPART GUNDAROO REF REVIEW

**Prepared for:**

Independent Pricing and Regulatory Tribunal  
Level 15,  
2-24 Rawson Place  
SYDNEY NSW 2000

## PREPARED BY

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## BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Independent Pricing and Regulatory Tribunal (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

## DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
630.12985-R02-v1.0	28 February 2020	Megan Crowhurst	Renae Gifford	Renae Gifford
630.12985-R01-v1.0	16 January 2020	Megan Crowhurst	Renae Gifford	Renae Gifford

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# 1 Introduction

## 1.1 Report Purpose

Kyeema Wastewater Pty Ltd (Kyeema Wastewater) has submitted an application under the *Water Licencing Competition Act 2006* (WIC Act) for a network operator's licence to construct and operate a sewage treatment system on a site known as the Kyeema Estate off Gundaroo Road, Gundaroo in the Yass Valley region of NSW.

The application was supported by a Review of Environmental Factors (REF) dated 12 November 2019 (v.1), an assessment of the proposed against relevant environmental legislation and environmental planning instruments. The proposed works are referred to as 'the project' in this report.

Due to recent changes to *State Environmental Planning Policy (Infrastructure) 2007*, the Independent Pricing and Regulatory Tribunal (IPART) requires the REF to be assessed against environmental assessment requirements relevant to Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

## 1.2 Part 5 of the EP&A Act

Part 5 of the EP&A Act provides for the assessment of activities that do not require development consent. Such activities are typically undertaken by, or on behalf of, public authorities or private operators of water industry infrastructure.

Key considerations for whether a project is suitable for assessment under Part 5 of the EP&A Act are that the project:

- must not be prohibited or exempt development;
- may be carried out without development consent; and
- is carried out by or on behalf of a determining authority or requires the approval of a determining authority.

The Minister for Energy and Environment (the Minister) is a determining authority and may determine relevant applications under Part 5 of the EP&A Act.

## 1.3 Matters for consideration by determining authority

A network operator's licence must not be granted under the WIC Act unless the Minister is satisfied that the proponent has given adequate regard to the protection of public health, the environment and public safety.

Section 5.5 of the EP&A Act specifies that a when considering an activity under Part 5, a determining authority must '*examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity*'.

Clause 228 of the Environmental Planning and Assessment Regulation 2000 defines the factors that must be considered when determining if an activity assessed under Part 5 of the EP&A Act may have a significant impact on the environment.

This report reviews the adequacy of the REF submitted in identifying and assessing the potential environmental impacts of the project and advises IPART whether adequate consideration has been given to the environment, and whether the project should be approved under Part 5 of the EP&A Act.

## 1.4 Subject Site

Approximately 32 km north-west of Canberra and 50 km south-west of Goulbourn, the residential subdivision known as Kyeema Estate (the site) is located on the northern fringe of the Yass Valley town of Gundaroo and features lots less than 5000m<sup>2</sup> in size. Historically the site has primarily been subject to farming and grazing. The REF states that the project is proposed in order to service a subdivision approved by Yass Valley Council under DA 190011, which was granted on the 31 May 2019 for 50 residential lots.

## 2 Potential Impacts

Impacts identified within the REF were classified as minor and separated into construction and operation impacts. A high-level summary of the more notable potential impacts is listed below.

### Construction impacts, including:

- Erosion and sediment run off;
- Dust generation;
- Construction noise and vibration;
- Unexpected heritage finds during construction;
- Visual construction impacts including large equipment and machinery;
- Construction equipment and machinery emissions;
- Construction traffic; and
- Construction waste generation.

### Operation impacts, including:

- Increased salinity, alteration of soil pH levels, structural degradation and waterlogging;
- Odour; and
- Operational chemical storage and handling.



## 3 Assessment of Review of Environmental Factors

### 3.1 Key Findings

The review found that the REF does not adequately identify and assess all the potential environmental impacts associated with the project. The key issues identified include:

- Use of maps and plans is limited, the ones used aren't clearly effective in outlining the proposed works (construction footprint, earthworks and/or site clearing required would be easier to distinguish if represented visually on a figure), lack the basic elements of a map (scale, legend, orientation marker etc.) and no figures are used to show impacts spatially;
- The introduction lacks a brief description of the region or locality including any points of interest or defining environmental features;
- Ecological Sustainable Development principles are not considered or discussed throughout any section of the REF;
- Selection criteria and methodology is not outlined in regard to assessing project options and as such options are not considered against a presented selection criteria;
- Project operational details are only brief, with the project description not providing a high-level summary of the operational management requirements or key operational environmental risks;
- The WIC Act is not discussed in the legislation section of the REF;
- The consultation section of the REF doesn't outline if any issues have been raised by the community or agencies, or what these issues were if applicable;
- Socio-economic effects are not considered;
- There is no evidence within the REF main document that several environmental searches were completed;
- The study area appears to be inconsistent across the speciality studies, for example Appendix F and Appendix I aren't constant with each other and appears to not be consistent with the REF main text figures; and
- Environmental performance criteria, such as noise and vibration, heritage, air quality, water quality has not been outlined.

Other issues have been identified in the REF which are considered to be of lower risk, but should be addressed in any further revisions of the REF. The following sections provide more detailed findings of the review of the REF.

## 3.2 REF Review Checklist

The following table outlines the adequacy of the REF in identifying and addressing potential environmental risks associated with the project.

**Table 1 REF Adequacy Checklist**

Gundaroo REF		
Presentation and communication of the information		
1. Is the REF in accordance with the REF template?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
2. Is the REF correctly dated and titled?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
3. Is there a document controls page?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
4. Is plain English used throughout with the use of technical terms kept to a minimum?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
5. Are all relevant terms and acronyms included in the Abbreviations and Glossary terms table?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6. Is the REF capable of being understood by a non-specialist?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
7. Is the contents page up to date?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
8. Are the footers and page numbering correct?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
9. Are maps and plans used to assist understanding of the locations of impacts?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
10. Do all maps have a scale, north point and the source acknowledged?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
11. Are all references included and are they in an acceptable style (e.g. Harvard)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Comment</b> (use this section to provide any additional information):		
<ul style="list-style-type: none"> <li>Abbreviations and Glossary of terms tables have not been provided – <b>now provided</b>; and</li> <li>Use of maps and plans is limited, the ones used aren't clearly effective in outlining the proposed works, lack the basic elements of a map (scale, legend, orientation marker etc.) and no figures are used to show impacts spatially – <b>figures have been updated to clearly show the works, features have been added such as scale, legend and orientation maker and extra figures have been added to show environmental impacts spatially.</b></li> </ul>		
Introduction		
1. Is a succinct and accurate description of the proposal provided?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
2. Is the strategic and/or operational need for the proposal explained?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Gundaroo REF		
3. Does this chapter identify who has prepared the REF, who it was prepared for, as well as the proponent and determining authority of the proposal?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
4. Is the purpose of the REF clearly defined?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
5. Are key elements of the proposal, including major design and structural features, and operational activities outlined?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
6. Is the location of the proposal identified and mapped as an overlay on an aerial photograph?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7. Is there a brief description of the region and locality and of any special or defining environmental features and points of interest? (e.g. land uses, waterways, conservation reserves, heritage or geological features, schools, hospitals)	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>Comment</b> (use this section to provide any additional information):		
<ul style="list-style-type: none"> <li>Are the works proposed for Lots 1 and 2 DP850916 or Lot 5 of Lots 3, 5, 11, 12 and 13 of DA185092? The introduction is not clear regarding where the works are proposed – <b>amended sufficiently to make it clear where works are proposed</b>;</li> <li>Supporting maps are unclear when it comes to identifying what is proposed where – <b>amended sufficiently to make it clear where works are proposed</b>; and</li> <li>The introduction doesn't give a brief description of the region or locality including any points of interest or defining environmental features – <b>amended to provide brief description of local and regional locality</b>.</li> </ul>		
Needs and options considered		
1. Does Chapter 2 generally explain the objectives of and justification for the proposal?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
2. Is the strategic and/or operational need for the proposal adequately identified?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
3. Does the justification for the proposal show consideration of the principles of ecologically sustainable development?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
4. Are all relevant NSW and local government plans and strategies referenced?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
5. Does Chapter 2 describe the alternatives considered for the proposal (either design or location), the method for evaluating options and the reasons for rejecting these alternatives over the preferred option?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
6. Is the methodology and the selection criteria used to assess the alternatives to arrive at the preferred option described adequately?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7. Are genuine alternatives to the proposal adequately described, including key features and advantages and disadvantages of each alternative?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
8. Is the do nothing or 'base case' option described including the positive and negative consequences of not proceeding?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Gundaroo REF			
9. Is a balanced and convincing comparative analysis of the options against relevant selection criteria presented?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
10. Is the preferred option identified and is it justified when compared to the alternatives?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
<b>Comment</b> (use this section to provide any additional information):			
<ul style="list-style-type: none"> <li>Justification for the project doesn't consider ecological sustainable development principles or a reference down to a section in the REF that explains ecological sustainable development principles – <b>now provided</b>;</li> <li>Selection criteria and methodology not outlined in regard to assessing options – <b>extra detail added is appropriate to say this has been completed to a sufficient level</b>; and</li> <li>Options are not considered against a presented selection criteria – <b>extra detail added is appropriate to say this has been completed to a sufficient level</b>.</li> </ul>			
Description of the proposed			
1. Does Chapter 3 describe the proposal and associated construction methods in non-technical terms, using figures to assist the reader to visualise the proposal?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
2. Is the site plan provided as an overlay of an aerial photograph in the REF or its appendices, indicating the layout of the proposed activity, access routes, existing structures and infrastructure, environmentally sensitive areas, topographic contours, Lot/DP numbers and boundaries and scale and orientation?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
3. Is the design of a suitable scale to understand the extent of impacts?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
4. Does Chapter 3 fully describe the concept design, including any temporary works or structures or relocations associated with the proposal?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
5. Does the description identify the footprint of all works? Is it flexible where required?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
6. Are all major design and operational features of the project adequately described?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
7. Are construction activities adequately described, including:			
a. Work methodology, describing pre-construction, construction and remediation activities	<input checked="" type="checkbox"/>	b. Construction footprint, earthworks and/or site clearing required (including extent and area of vegetation to be removed)	<input checked="" type="checkbox"/>
c. Construction methods, materials and equipment	<input checked="" type="checkbox"/>	d. Any earthworks or site clearing, including extent and area of vegetation to be removed and rehabilitated	<input type="checkbox"/> N/A
8. Has the REF identified aspects of the proposal that have not yet been fully resolved and may require further refinement and assessment? (e.g. temporary or initial waste water storage, utility adjustments, staging etc.)	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Gundaroo REF			
9. Does Chapter 3 describe the preparation and recommended content of a Construction Environmental Management Plan (CEMP) that will demonstrate how commitments made in the REF will be adhered to?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
10. Are any operational related management requirements, maintenance or inspection activities, future extensions or additions adequately described?	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
11. Has the REF provided details of how operational risks to the environment will be managed?	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
12. Are you satisfied that the description of the proposal and the construction methodology is sufficient to enable an assessment of all potential direct and indirect impacts of the proposal?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
13. Does the REF clearly state the proposed construction timetable and staging and construction hours?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
14. Does the REF provide information regarding proposed ancillary facilities needed to support the construction of the proposal, if relevant?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Comment</b> (use this section to provide any additional information):			
<ul style="list-style-type: none"> <li>No figures are used to help the reader justify the proposal – <b>extra figures added throughout and figures amended to improve understanding of the project and impact spatially;</b></li> <li>No site plans have been provided – <b>noted that proposed works are shown in Figure 2 and construction drawings will be finalised;</b></li> <li>Construction footprint, earthworks and/or site clearing required would be easier to distinguish is represented visually on a figure – <b>figures now provide enough detail;</b></li> <li>Operation details are only brief and does not provide a high-level summary of the operational management requirements – <b>extra operational details have now been provided to a sufficient level;</b> and</li> <li>Key operational environmental risks have not been identified – <b>now identified.</b></li> </ul>			
Statutory and planning framework			
1. Are the environmental planning instruments (i.e. SEPPs and LEPs) relevant to the proposal identified and discussed?	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
2. Does the Sydney Drinking Water Catchment SEPP apply to the proposal? If yes, ensure that a NorBE assessment has been completed.	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Is relevant legislation identified and discussed?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
4. Has consideration been given to whether consent from council and concurrence from OEH is required for the proposal due to it being within a coastal management area (i.e. coastal wetland, littoral rainforest area, coastal vulnerability area, coastal environment area or coastal use area)? If consent/concurrence is required provide details:	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Gundaroo REF			
<p>5. Does the proposal affect any Aboriginal Places or heritage items listed on LEPs, State Agency Heritage Registers (s170 registers), the State heritage register, the National heritage list or items subject to an interim heritage order?</p> <p>If yes, has the approval and/or consultation process required been identified? (e.g. s60 approval required under the <i>Heritage Act 1977</i> for State listed item or item subject to Interim heritage order, notice to Heritage Branch for transfer of ownership or demolition of s170 register item).</p> <p>If permits/consultation is required provide details:</p>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6. Have the relevant zoning(s) for the site, the objectives and how the proposal complies with the LEP requirements been identified?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<p>7. Does the proposal have the potential to significantly impact on Matters of Environmental Significance or the environment of Commonwealth land, and therefore require a referral to the Australian Government?</p> <p>If yes, provide details of significant impacts.</p>		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
8. Does Section 4.3 outline how the proposal complies with the principles of ecologically sustainable development as described in Section 6(2) of the <i>Protection of the Environment Administration Act 1991</i> ?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
9. Are details (including timing) of required permits, licences, other approvals and notifications required under other legislation included and discussed in Section 4.4?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10. Is the statutory position confirmed as being under Part 5 of the EP&A Act?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
11. Have you reviewed the statutory section and separately formed the opinion that the proposal does not require development consent, is not State significant development or State significant infrastructure and can be assessed under Part 5 of the EP&A Act?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<p><b>Comment</b> (use this section to provide any additional information):</p> <ul style="list-style-type: none"> <li>WIC Act is not discussed in this section of the REF – <b>now discussed</b>;</li> <li>The REF states that the proposed work will not affect recorded AHIMS sites known as PAD 1, PAD 2 and PAD 3, however the location of works and the location of these sites aren't shown on the same figure in order to spatially understand the separation between the works and the site (Figure 8 of Appendix H shows the sites in relation to a subdivision plan but it is not clear where works are proposed under this proposal, and figures in Appendix appear to have a different study area shown) – <b>amended to provide sufficient clarity around where each study focuses on, showing each site specially in relation to works</b>;</li> <li>Land zoning has been dismissed due to a clause that applies to public authorities only, however as the proponent is not a public authority, land zoning objectives should be discussed (including the link to clause 106 of the ISEPP and the compliance to the prescribed zone part of this clause) – <b>now considered</b>; and</li> <li>No discussion has been provided on how the proposal complies with the principles of ecologically sustainable development – <b>now discussed</b>.</li> </ul>			

Gundaroo REF			
Consultation			
1. If there is a communication strategy, plan or process, has it been adequately summarised?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Do the sections of Chapter 5 describe how stakeholders affected by the proposal were reviewed and identified if relevant?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
3. Do the sections of Chapter 5 describe how stakeholders have been consulted?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
4. Do the sections of Chapter 5 indicate what issues have been raised by the community or agencies and how the REF has been written to meet their needs?	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5. Where issues raised identified and considered in the REF, is a reference provided to the correct section of the REF?	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
6. Have unresolved or contentious issues that have been raised by the community or agencies been detailed adequately?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7. Has the process of consulting the Aboriginal community been appropriately described?	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
8. Does the REF demonstrate that the Aboriginal community consultation process has been consistent with OEH guidelines?	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
9. If ongoing consultation is proposed, is the purpose, audience and timing described in the REF?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Comment</b> (use this section to provide any additional information):			
<ul style="list-style-type: none"> <li>This section of the REF doesn't outline if any issues have been raised by the community or agencies, or what these issues were if applicable – <b>now provided, along with further details around Aboriginal community consultation undertaken as part of an AHIP application process.</b></li> </ul>			
Environmental Assessment			
1. Has the potential for the proposal to impact on all relevant environmental aspects been adequately assessed?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
2. These may include (but not be limited to):			
a. Landforms, geology and soils	<input checked="" type="checkbox"/>	b. Water quality	<input checked="" type="checkbox"/>
c. Hydrology and flooding	<input checked="" type="checkbox"/>	d. Air quality	<input checked="" type="checkbox"/>
e. Biodiversity	<input checked="" type="checkbox"/>	f. Noise and vibration	<input checked="" type="checkbox"/>
g. Landscape and visual amenity	<input checked="" type="checkbox"/>	h. Aboriginal cultural heritage	<input checked="" type="checkbox"/>
i. Non-Aboriginal heritage	<input checked="" type="checkbox"/>	j. Socio-economic effects	<input checked="" type="checkbox"/>
k. Waste management	<input checked="" type="checkbox"/>	i. Contaminated land and hazardous materials	<input checked="" type="checkbox"/>
m. Traffic and access	<input checked="" type="checkbox"/>	n. Cumulative impacts	<input checked="" type="checkbox"/>

Gundaroo REF			
Other (provide details):			<input type="checkbox"/>
3. Have relevant databases been recently searched, search dates provided and results summarised?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
4. These may include (but not be limited to):			
a. Australian Heritage Database	<input type="checkbox"/>	b. National weeds lists and NSW WeedWise	<input checked="" type="checkbox"/>
c. State Heritage Register and Inventory	<input checked="" type="checkbox"/>	d. NSW EPA list of contaminated sites and Record of notices	<input checked="" type="checkbox"/>
e. National Native Title Tribunal	<input checked="" type="checkbox"/>	f. NSW OEH Air quality records	<input checked="" type="checkbox"/>
g. NSW OEH AHIMS	<input checked="" type="checkbox"/>	h. Acid sulphate soils risk map	<input checked="" type="checkbox"/>
i. NSW OEH BioNet Atlas of NSW Wildlife	<input checked="" type="checkbox"/>	j. DEE National pollution inventory	<input type="checkbox"/>
k. NSW OEH Biobanking public register	<input checked="" type="checkbox"/>	l. DEE Protected matters (EPBC Act) database	<input checked="" type="checkbox"/>
m. NSW DPI Threatened aquatic species records	<input type="checkbox"/>	n. Other (provide details)	<input type="checkbox"/>
5. Have appropriate specialist studies been prepared? <i>e.g. consider the nature and scale of the potential impacts, the sensitivity of the affected environment and the level of existing information.</i>		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, provide details:			
<ul style="list-style-type: none"> <li>Land Capability Assessment Report</li> <li>Sewage Management Plan</li> <li>Schematic of STP</li> <li>McLeods Creek Flood Study Report</li> <li>Biodiversity Development Assessment Report</li> </ul>		<ul style="list-style-type: none"> <li>Biodiversity Management Plan</li> <li>Archaeological Due Diligence Report</li> <li>Aboriginal Archaeological Report</li> <li>Protected Matters Search Report</li> </ul>	
6. Is the description of the existing environment and the extent of the study area sufficient to assess the potential impacts?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7. Where necessary has the following information been included:			
<ul style="list-style-type: none"> <li>Site history (e.g. heritage, contaminated land etc)</li> </ul>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
<ul style="list-style-type: none"> <li>Policy settings (e.g. noise, climate change etc)</li> </ul>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
<ul style="list-style-type: none"> <li>Criteria (e.g. noise and vibration, heritage, air quality, water quality etc)</li> </ul>	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
8. Are the appropriate standards/procedures followed in assessing impacts or reasons provided for any departure from recognised standards?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
9. Have the receptors that will potentially be impacted been identified?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No



Gundaroo REF			
10. Are the potential impacts adequately characterised e.g. the type, extent, intensity, duration and expected timing of the impacts?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
11. Is the nature of potential impacts considered? <i>e.g. consider the level of confidence in the prediction, the resilience of the environment, whether the impacts are reversible, how adequately impacts can be managed or mitigated, compliance with performance criteria, need for additional investigations, public interest.</i>		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
12. Are all the potential impacts of the proposal adequately assessed including direct and indirect impacts, long-term and short-term impacts and impacts during construction and operation?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
13. Where negligible environmental impact have been identified, has this been described?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
14. Are any uncertainties in impact assessment identified with an explanation of how these uncertainties have been managed in the REF? (e.g. worst case scenario, assess different options, sensitivity analysis)	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
15. Does the assessment discuss how design has been modified to avoid or minimise impacts?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
16. Have issues raised in the consultation process been appropriately addressed in the assessment section where relevant?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
17. Has there been an adequate assessment of whether or not any impacts are likely to be significant?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
18. Do safeguard and mitigation measures relate directly to the identified potential impacts?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
19. Are safeguards and mitigation measures aimed at avoiding, minimising or mitigating the identified potential impacts?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
20. Do the safeguards and mitigation measures identify performance outcomes for the proposal?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
21. Are safeguards and mitigation measures feasible and reasonable and SMARTA? <ul style="list-style-type: none"> <li>• Specific</li> <li>• Measurable</li> <li>• Achievable</li> <li>• Realistic</li> <li>• Time driven</li> <li>• Auditable</li> </ul>		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
22. Where monitoring is proposed are the purpose, criteria, timeframes and responsibilities identified?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

## Gundaroo REF

**Comment** (use this section to provide any additional information):

- Contamination discussed under 'land use and utilities' heading (along with protected matters search results, mine subsidence board mapping etc.), which might need revising to ensure it reflects what is discussed – **noted that this hasn't been updated but does not affect the assessment undertaken, impacts considered etc;**
- Socio-economic effects are not considered – **now considered;**
- There is no evidence within the REF main document that the following searches were completed – **now completed where applicable:**
  - Australian Heritage Database;
  - State Heritage Register and Inventory;
  - NSW EPA Record of notices;
  - NSW OEH Air quality records;
  - National Native Title Tribunal; and
  - DEE National pollution inventory.
- NSW EPA contaminated sites were stated as being searched by no date was provided for when this search occurred – **date now included;**
- It is unclear when the AHIMS search was undertaken as the REF main body text indicates 'at the time of the report' which is assumed to be February 2014 when Appendix H was written – **date now included for clarity;**
- Appendix F states the date an NSW Bionet search was undertaken, and contains details around Biobanking and weed significant classification however it should also be noted within the REF main text – **now included in REF main body text;**
- The study area appears to be inconsistent across the speciality studies, for example Appendix F and Appendix I aren't constant with each other and appears to not be consistent with the REF main text figures – **additional figures have been added to the REF main body for spatial clarity;**
- Environmental performance criteria, such as noise and vibration, heritage, air quality, water quality has not been outlined – **this has now been outlined where relevant;**
- Issues raised in the consultation process were not explained so therefore they haven't been addressed in the assessment section – **this has now been updated sufficiently;**
- Safeguards and mitigation measures do not identify performance outcomes for the proposal – **this has now been included sufficiently;**
- Monitoring is not discussed in detail in most cases, with no details on the criteria, timeframes and responsibilities, instead the REF refers to this being explored further in the CEMP and OEMP – **now included;** and as such
- The safeguards and mitigation measures aren't considered 'SMARTA' as they wouldn't be easily auditable with a lack of detail around criteria, timeframes and what personnel are responsible for these – **further information provided to support that measures are SMARTA.**

## Consideration of State and Commonwealth Environmental Factors

1. Has the Clause 228 table been completed with information supported in the body of the REF? Are the findings in the table consistent with those in the REF and no additional impacts identified?

☒ Yes

☐ No

Gundaroo REF			
2. Has the MNES table been completed with information supported in the body of the REF? Are the findings in the table consistent with those in the REF and no additional impacts identified?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Comment</b> (use this section to provide any additional information):			
<ul style="list-style-type: none"> <li>Refer to table A-1 for 'Consideration of factors under Clause 228(2) of the EP&amp;A Regulation'; and</li> <li>Refer to table 6.2 for 'Consideration of Matters of National Environmental Significance'.</li> </ul>			
Summary of Mitigation Measures			
1. Have future environmental management plans been identified where relevant?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
2. Has use of an environmental management system been identified if necessary?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Have the safeguards and management measures described in the assessment sections of the REF been transcribed accurately?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Comment</b> (use this section to provide any additional information):			
Conclusion			
1. Does the conclusion section adequately outline the benefits of the proposal compared against the do-nothing option and outline how the proposal meets strategic, operational and/or safety needs?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
2. Does the ecologically sustainable development section demonstrate how the proposal is consistent with, or furthers the aims of, the principles of ESD?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
3. Is the conclusion concise and based only on information already presented in earlier chapters of the REF?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
4. Does the conclusion consider whether beneficial outcomes outweigh adverse outcomes?		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5. Does the conclusion address whether there would be a significant environmental impact with reference to Section 5.7 of the <i>Environmental Planning &amp; Assessment Act 1979</i> and the matters of national environmental significance listed under the <i>Environmental Protection and Biodiversity Conservation Act, 1999</i> ?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Comment</b> (use this section to provide any additional information):			
<ul style="list-style-type: none"> <li>No reference in the conclusion or otherwise regarding ESD principles – <b>now included</b>;</li> <li>The conclusion does not reinforce the beneficial outcomes of the project – <b>now completed</b>.</li> </ul>			

## 4 Conclusions

The REF for a proposed sewage treatment system on a site known as the Kyeema Estate has been assessed against environmental assessment requirements relevant to Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The review has determined that the REF does fully not demonstrate that potential environmental impacts associated with these proposed works, and that several unacceptable risks to the environment could remain if the REF was approved in its current state.

It is recommended that the REF is revised in order to satisfactorily address the issues identified within this review to ensure appropriate consideration of the impacts of the proposed development.

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## D Summary of submissions

**Table D.1 Kyeema application for a network operator's licence for the Gundaroo scheme – Comprehensive summary of stakeholder submissions**

Summary of Submission		Our response
<b>Environment Protection Authority (EPA)</b>		
1.	EPA is not aware of any breaches of the <i>Protection of Environment Operations Act 1997</i> (POEO Act) and has not taken any regulatory action against Kyeema.	Noted
2.	No further approvals are required under POEO Act. The capacity of the sewage treatment plant is below the Schedule 1 threshold and does not trigger the need for an EPL.	Noted
<b>Friends of Gundaroo</b>		
3.	The Friends of Gundaroo raised concerns in relation to population growth indicate that it would be in the public interest to limit the increase in block sizes in this development to 5000m <sup>3</sup> (as opposed to the planned 2000m <sup>3</sup> lots) and noting that this would make reticulated sewerage unnecessary under the current land zoning.	Yass Valley Council has considered the matter of block size and already issued a development consent (deferred) for the development.
4.	The Friends of Gundaroo claim that Yass Valley Council documents show that surface water and groundwater supplies in Gundaroo are highly stressed, and that limited future development is recommended based on water constraints and the community's desire to retain its existing village character. Whilst the application concentrates on protection of surface and groundwater supplies from contamination, their submission focuses on its impact on water quantity due to an increase in number of houses proposed for the new development.	IPART has assessed the proposal to collect, treat and dispose of sewage (through irrigation) to a dedicated effluent management area to service the proposed housing development for which Yass Valley Council has issued consent. We consider the impacts on surface water and ground water from the infrastructure and its operation to be minimal if proposed mitigation measures are applied. Impacts on surface water and ground water resulting from the housing development and impacts on the existing village character are matters for Yass Valley Council under its planning role.

	Summary of Submission	Our response
5.	<p>The Friends of Gundaroo raised concerns with the potential physical and financial failure of the system and/or the company in the future with no backup. The submission is critical of the application only supporting the scheme for 5-years under contract to Innoflow. It states that a longer-term guarantee is required.</p> <p>The Friends of Gundaroo note that Yass Valley Council has refused to take over a ROLR in the event of the scheme owner becoming unable to continue operation of the scheme. Additionally, the submission does not support Yass Valley Council taking on the role of ROLR, as it was found to be 'financially unfit' in the recent Yass Valley Council amalgamation assessments.</p>	<p>The applicant has provided evidence that it is developing a 5 year operate and maintain contract with the design and construct provider (Innoflow Australia Pty Ltd). The applicant has also noted that it intends to follow-up the initial agreement with another 5+5 year agreement with Innoflow to operate and maintain the system. If granted the licences, the applicant will be required to maintain technical capacity.</p> <p>While we acknowledge Yass Valley Council's view that it will not take on the role of last resort operator, we note that the Minister can require a utility to undertake this role if the need arises. Since the scheme is not part of Yass Valley Council's reticulated network, we do not anticipate costs associated with the role of operator of last resort to be passed through to other ratepayers.</p>
6.	<p>The Friends of Gundaroo state the scheme impacts on ratepayers by having additional traffic on poorly-maintained roads, with no significant contribution to Yass Valley Council by the developer, and impacts on local amenity to local residents by the increase in traffic.</p>	<p>These are issues for Yass Valley Council as the appropriate consent authority for the proposed housing development.</p>
7.	<p>The Friends of Gundaroo are concerned about the lack of competition – the proposed system will be a single large-scale operation, and be anti-competitive for other local small businesses that provide similar services to the region.</p>	<p>We note that the provision of sewage services to the development by a single provider, whether a WIC licensee or local water utility may have the practical effect of 'locking' alternative providers of sewage services out of the development. Yass Valley Council has considered the provision of sewerage services by a WIC Act licensed provider as a condition of the development consent.</p>



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## Gundaroo Community Association

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| 8. | <p>The Gundaroo Community Association raised two matters in relation to water scarcity and population growth / public interest</p> <p><b>Water Availability</b></p> <p>Concerns were raised over under sizing of rainwater tanks on Yass Valley Council's requirements and viability of scheme in terms of future water scarcity. It notes that greywater forms a significant part of local garden watering systems, and this source will not be available to these new lots. This will increase the need for water, heighten fire risks and often result in the need to truck in water. They consider that <i>future water scarcity is going to make the scheme non-viable.</i></p>   | <p>We note that the proposed sewage services will not provide greywater disposal within the residential lots. The effluent will be disposed of via irrigation to a dedicated irrigation area where pasture and non-edible crops will be grown for fodder.</p> <p>Residents will continue to rely on rainwater tanks and carted water for alternative water supplies.</p> <p>Yass Valley Council has considered the provision of sewerage services and drinking water. The proposed scheme is consistent with Council's development consent.</p> |
| 9. | <p><b>Population Growth</b></p> <p>Concerns were raised on population growth in the area resulting in 30% population growth in the immediate term and further growth ahead with another planned development in the district. This would result in more than doubling of the district's population which is inconsistent with The South East and Tablelands Regional Plan (SETRP) of July 2017 which states that the villages of Gundaroo, Sutton and Wee Jasper are expected to retain their small village character and only accommodate minimal growth, and the Yass Valley Settlement Strategy budgets a 35% growth for "Gundaroo and district" between 2016 and 2036.</p> <p>The submission considers it would be in the public interest to limit the increase in block sizes in this development to 5000m<sup>3</sup> and this would make reticulated sewerage unnecessary under the zoning of the relevant land.</p> | <p>We note that concerns regarding the effect of development in the region were expressed during the planning process undertaken by Yass Valley Council. Yass Valley Council has considered the matter of block size and issued a development consent (deferred) for the development, including a condition that a WIC Act licence is issued to provide sewage services for the development.</p>  |

## NSW Health

10.	<p>NSW Health notes that the scheme should be consistent with the requirements of AGWR, and has concerns with Kyeema's application and understanding of the relevant guidelines.</p> <p>The risk assessment does not include the residual likelihood and consequence to justify the residual risk being assessed as 'low'. There is also inconsistency in the terminology used in the application with reference to both water recycling and effluent disposal.</p>	<p>A revised preliminary risk assessment was submitted largely addressing these concerns. We note however that, prior to commercial operation, the licensee will be required to undertake a fuller risk assessment in consultation with NSW Health and other relevant parties.</p>
11.	<p>The SMP refers to sub-surface irrigation when determining the pathogen log reduction values for the scheme but then states that heavy droplet spray irrigation may be used.</p> <p>The SMP notes the diversion of an intermittent watercourse to ensure wet weather storage (subject to approval). NSW Health requests the applicant clarify the proposed end use, whether irrigation will be sub-surface and how wet weather storage will function to protect public health if approvals are not obtained.</p>	<p>The applicant confirmed that effluent would be irrigated using sub-surface irrigation only. The SMP noted that heavy drop irrigation was an option, but it is not the preferred disposal option for the scheme.</p> <p>The applicant confirmed that a controlled activity permit from NRAR is not required. NRAR has indicated to IPART that a permit is in fact required however while this would affect the progress of the scheme overall, it is an approval process that can occur in parallel with the WIC licensing process.</p>
12.	<p>The SMP refers to a "flush-and-forget" service, however NSW Health is unclear about the responsibility for infrastructure including wall mounted panels on each allotment and manholes. NSW Health requests the applicant clarify who is responsible for inspections, maintenance and repairs for this infrastructure and how this will be undertaken. NSW Health also recommends that the applicant ensure users are aware of, and agree to, any requirements to manage the risk. This could include providing information to home owners as misuse can result in system failure.</p>	<p>Kyeema confirmed that:</p> <ul style="list-style-type: none"><li>▼ Homeowners will pay an annual connection fee to be indexed annually in line with the consumer price index.</li><li>▼ The cost of interceptor tanks will be borne by the homeowners at an agreed cost for supply and installation by Kyeema at the time of lot purchase.</li><li>▼ Routine pump out of the STEP tank, typically every 8-12 years, will be paid by Kyeema from the sinking fund.</li><li>▼ Non-routine pump out, for example due to inappropriate use by the homeowner, will be at the cost of the homeowner.</li><li>▼ This information is provided to purchasers at time of sale, along with a draft copy of the agreement between the homeowner and Kyeema.</li></ul>

13.	NSW Health requests that IPART require a risk assessment with relevant stakeholders to ensure that public health risks, such as sewer overflows, are managed. The risk assessment should consider the potential impact to residents, including odour, if the irrigation system became clogged and the potential for effluent to resurface or run-off during wet-weather. It is also noted that sheep may be grazed in the irrigated area which could damage fittings.	A revised risk assessment was submitted and assessed. We note that the revised risk assessment will need further review once all necessary approvals have been finalised to ensure controls reflect regulatory approval conditions.  The applicant has clarified that no animals will graze the irrigation area.
14.	NSW Health notes that Innoflow will be contracted to design, construct, operate and maintain the sewage system for the first five years. NSW Health recommends that Kyeema ensure that Innoflow staff have appropriate expertise for the ongoing management of the scheme.	We have assessed the CVs of the relevant Innoflow personnel for ongoing management of the scheme.

#### **Ryans Barristers and Solicitors**

15.	<p>The following issues of concern were raised:</p> <ul style="list-style-type: none"> <li>▼ Licensing principle of <i>protection of public health, the environment and public safety and consumers generally</i></li> <li>▼ Licensing principle of <i>ensuring sustainability of water resources</i>:</li> <li>▼ <i>E. coli</i> contamination of surface and groundwater table in the area (and potential grounds for future class action by locals). This submission suggested that there had already been an unrelated <i>E.coli</i> contamination event in the Gundaroo village.</li> <li>▼ The potential for water pollution and biosecurity risk for residents and agriculture, including plants and livestock, from slow release of sewage contaminants.</li> </ul>	<p>We have assessed the proposed treatment of effluent and note that the highly treated effluent from residential sources does not pose an increased risk of pollution of groundwater with biological or chemical contaminants.</p> <p>Kyeema has confirmed that irrigation will only occur under a 7mm soil water deficit and will not occur after 5mm of rain has fallen. Kyeema has also confirmed that irrigation will be monitored with soil moisture sensors to ensure that these triggers will be maintained.</p> <p>Kyeema has also confirmed with their tanker contractors that tankers will take the treated effluent to off-site facilities at Yass or Canberra in the unlikely event of full storages and unsuitable irrigation conditions. Kyeema has confirmed with ICON Water in Canberra that capacity would be available to accept effluent at the Lower Molonglo Wastewater Treatment Plant during storm events.</p>
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16.	<p>The submission also noted:</p> <ul style="list-style-type: none"> <li>▼ The licensing principle of <i>potential for adverse financial implications for small retail customers arising from the activities proposed to be covered by the licence</i>.</li> <li>▼ The technical and financial capacity of Kyeema as it is a relatively new and small shareholding of 100 shares held equally by the two company directors.</li> <li>▼ Who would pay for restoration if contamination enters the water table/ wider financial implications for the broader community beyond the small retail customers of the proposed scheme</li> <li>▼ Concerns that the small company has no safeguards in the proposal for bank guarantees or fidelity funds to fall back on should the company fail, and concerns that ultimately the costs will be borne by ratepayers of the Yass Shire.</li> </ul>	<p>We have reviewed financial and insurance information provided by Kyeema. Our recommendation to the Minister relating to the licence application includes our conclusions that:</p> <ul style="list-style-type: none"> <li>▼ The potential for adverse financial implications for small retail customers is minimal (section 4.2.1)</li> <li>▼ Kyeema has the financial capacity to undertake the activities relating to the proposed licence (section 4.3.1)</li> <li>▼ Insurance arrangements adequately cover potential costs relating to environmental risks (section 4.3.1)</li> <li>▼ Proposed financial contingencies are adequate and that bank guarantees, fidelity funds or similar financial arrangements are not required.</li> </ul>
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#### Yass Valley Council

17.	Council noted it had issued a deferred development consent contingent on the applicant getting a WICA Licence for the sewage treatment plant.	While we acknowledge Council's comment on the retailer of last resort, we note that the Minister could declare a specified person (whether a licensed retail supplier or a public water utility) as the retailer of last resort for the supply of water or f sewerage services.
18.	Council further noted that it is opposed to being named a retailer of last resort for the scheme and is included in the conditions of consent.	We note Council's comments regarding the conditions of their consent and responsibility for restoration of damaged roads and road reserves.
19.	Council also noted that, if a public road or reserve is damaged by burst infrastructure or during installation and maintenance, the licensee is responsible for restoration.	

### **Individual (Flanery)**

20. The submission noted:
1. The applicant's lack of experience in managing sewage treatment and effluent irrigation systems. This means there is a high risk they will not be able to identify issues quickly and respond appropriately.
  2. Risk of financial failure and the resultant liability, including clean-up and ongoing operation.
  3. Lack of local experience by the infrastructure provider. Risk of contamination of ground and surface waters.
- Innoflow would design, construct, operate and maintain the STP and effluent irrigation system for the 10 years under a 5+5 year contractual agreement with Kyeema. Innoflow are specialists in sewage and greywater treatment and reuse schemes, having established schemes in NSW, Queensland, Victoria and New Zealand. Kyeema will be required to maintain technical capacity for the life of the scheme.
- We have assessed the applicant as having financial capacity to undertake the activities and will monitor ongoing financial capacity. Our financial assessment for this application can be found in section 4.3.1 of this report.
- We have assessed the proposed treatment of effluent and note that the highly treated effluent from residential sources, combined with the irrigation strategy proposed, do not pose an increased risk of pollution of groundwater with biological or chemical contaminants.

### **Individual (Sweeney)**

21. The submission noted risks to quality of surface and groundwater, and consequent effects on surrounding agricultural properties.
- The applicant has confirmed that irrigation will be monitored and managed through a deficit irrigation strategy and, in the event of full storages and unsuitable irrigation conditions, tankering of excess treated effluent to off-site facilities.
- The applicant has expanded the preliminary risk assessment to consider risks to ground and surface water quality. The design of the effluent storage dam is considerably in excess of a 1 in 100 year storm event, with capacity to expand storage if needed.
- Further, diversion drains will be constructed to prevent runoff from entering the waterways.

22.	<p>The submission also asks whether:</p> <ul style="list-style-type: none"> <li>a. there is assurance for adequate expertise and funds available to attempt rectification of contamination</li> <li>b. the company directors are required to provide personal guarantees</li> <li>c. the company directors are required to have a fidelity fund in which money is held and added to each month.</li> </ul>	These issues are addressed above (Item 16).
23.	The submission queries the economic consequences and ability of the proponent to fund any costs of restoration should water contamination occur	These issues are addressed above (Item 16).
24.	This submission suggested that there had already been an <i>E.coli</i> contamination event in the Gundaroo village related to use of septic tanks.	We note that the off-site treatment and disposal of effluent does not pose an increased risk of <i>E.coli</i> contamination.
25.	The submission notes that the rain event of 10 February 2020 showed that runoff from the proposed development site entered the Yass River 300 metres away and requests that the consequences of such rainfall events be taken into account	<p>The applicant has advised that in the unlikely event of full storages and unsuitable irrigation conditions, excess treated effluent will be tankered to off-site facilities.</p> <p>Further, the applicant has advised that diversion drains will be constructed to prevent irrigation runoff from entering the waterways.</p>
26.	The submission notes that a dedicated sewage treatment plant would be a better investment for the growing Gundaroo population	Noted. This issue is beyond the scope of IPART's assessment.

### Individual (Ryan)

27.

This submission notes:

- ▼ Concerns regarding runoff from the proposed effluent irrigation area into the Yass River following rain events, noting that such runoff events could further exacerbate poor quality drinking water in Yass.
- ▼ Concerns that the sub-divisions and property development is for private profit, with no greater benefit to the area, and the wastewater management solution is the cheapest option.
- ▼ Concerns that the wastewater management system will ultimately become the responsibility of the Yass Valley Council and the local ratepayers will have to pay.

The applicant has advised that in the event of full storages and unsuitable irrigation conditions, excess treated effluent will be tankered to off-site facilities.

Further, the applicant has advised that diversion drains will be constructed to prevent runoff from entering the waterways.

Yass Valley Council has considered the sub-division and issued a development consent (deferred) for the development, including a condition that a WIC Act licence is issued to provide sewage services for the development.

We have concluded that Kyeema has the financial capacity to carry out the activities of the proposed licence. This provides assurance that the scheme is unlikely to become the responsibility of Yass Valley Council.

Our financial assessment for this application can be found in section 4.3.1 of this report.

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**Individual (Anonymous – Confidential)**

28. This submission noted:
- ▼ Concerns over risk to public health, the environment, public safety, consumers generally and agricultural production in the Yass Valley. The risk assessment should be challenged for accuracy and completeness. A number of examples were provided that were considered to be questionable in how they address risk and mitigation measures.
  - ▼ Concerns in regards to the proposed system – use of septic tanks already linked to contamination in the area. Risk and responsibility for resultant contamination not addressed.
- A revised preliminary risk assessment was submitted largely addressing these concerns. We note however that, prior to commercial operation, the licensee will be required to undertake a fuller risk assessment in consultation with NSW Health and other relevant parties.
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29.	<p>Other issues noted in this submission include:</p> <ul style="list-style-type: none"> <li>▼ Concerns with the technical and financial capacity of the applicant, and Yass Valley Council's reluctance to step in as last resort provider.</li> <li>▼ Concern about maintenance of driplines - Concerns that drip irrigation systems will block and fail, resulting in effluent concentration in some areas and consequent contamination of surface and/or groundwater.</li> <li>▼ Groundwater contamination resulting from the scheme.</li> <li>▼ Lack of information on how the Yass River and a local bore are impacted by the proposed effluent disposal area that is adjacent to a stream that runs through the effluent disposal area.</li> </ul> <p>The submission noted:</p> <ul style="list-style-type: none"> <li>▼ An EIS is required given the proximity to the Yass River.</li> <li>▼ An alternative proposal provided by NSW Public Works in 2017 would have been a better solution for the village.</li> </ul>	<p>Our assessment of technical and financial capacity can be found in Chapter 4.</p> <p>Ongoing and regular maintenance will address the drip irrigation issue.</p> <p>An EIS is not required because there is no significant environmental impact from the scheme. An REF was provided by Kyeema with the application, and subsequently revised following review by our consultant. Our consultant subsequently concluded that the Amended REF identified that the environmental impacts are within acceptable parameters, provided the mitigation measures outlined in the REF are effectively implemented.</p> <p>The 'local bore' is located more than 290 metres from the site boundary. The Land Capability Assessment report considers the risk of contamination to be low.</p> <p>The rules contained in the Water Sharing Plan for the local aquifer requires that bores be located 250 m from any potential source of contamination.</p>
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#### NSW Minister for Water, Property and Housing

30.	<p>This submission noted:</p> <ul style="list-style-type: none"> <li>▼ For construction of infrastructure in a location within 40 metres of a watercourse, a controlled activity approval under s.91(2) of the <i>Water Management Act 2000</i> (WM Act) is required.</li> <li>▼ A water supply work approval under s.90(2) of the WM Act will be required for any dewatering used during construction, to approve the pump. Depending on the estimated volume of groundwater required to be extracted, a water access licence pursuant to s56 of the WM Act may also be required.</li> </ul>	<p>Kyeema provided information from the Natural Resources Access Regulator (NRAR) that a controlled activity approval (CAA) was not required for the scheme. We corresponded with NRAR to confirm their decision and we provided additional information relevant to the scheme. NRAR amended its position, confirming that a CAA would be required for stream diversion to isolate the effluent storage dam. Notwithstanding the application and assessment process yet to be undertaken with NRAR, it is an approval process that can occur in parallel with the WIC licensing process.</p>
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