



# Environmental Defenders Office

27 January 2023

Development Assessment Team  
Department of State Development, Infrastructure,  
Local Government and Planning  
Queensland Government

Sent via email only: [RPIAct@dsdilgp.qld.gov.au](mailto:RPIAct@dsdilgp.qld.gov.au)

To whom it may concern,

## **Submission – RIDA Application RPI 22/004 Arrow – Kupunn Springvale CSG Deviated Well Paths**

- 1 We represent the following parties on whose joint behalf we provide these submissions (together **the Submitters**):
  - a. Shay Dougall;
  - b. Russell Young;
  - c. Doug Browne;
  - d. John ‘Kojak’ Karrasch;
  - e. Celia Karp;
  - f. Tabitha Karp;
  - g. Russell Bennie; and
  - h. Lock the Gate Alliance Limited (**Lock the Gate**).
- 2 We refer to the above regional interest development approval application (**RIDA Application**) under the *Regional Planning Act 2014* (Qld) (**RPI Act**) made by the following entities (together **the Applicant**):
  - a. Arrow Energy Pty Ltd ABN 73 078 521 936;
  - b. Arrow (Tipton) Pty Ltd – ABN 17 114 927 507;
  - c. Arrow (Tipton Two) Pty Ltd – ABN 36 117 853 755; and
  - d. Arrow CSG (Australia) Pty Ltd – ABN 54 054 260 65.
- 3 The RIDA Application should be refused as it does not demonstrate the required outcomes and prescribed solutions as provided under the RPI Act and *Regional Planning Interests Regulation 2014* (Qld) (**RPI Regulation**).
- 4 Further detail on the submissions with respect to the required outcomes and prescribed solutions, along with general comments about the RIDA Application are set out **below**.

- 5 Accompanying these submissions, we enclose the following Appendices:
- a. Appendix A: a Bundle of documents detailing views of the Submitters as to the inadequacy of consultation;
  - b. Appendix B: a Statement by Russel Young detailing loss of land area and productive capacity of Priority Agricultural Land Use;
  - c. Appendix C: a Bundle of document providing a case study of the impacts of subsidence; and
  - d. Appendix D: an Expert Report of Dr Steven Pells of Pells Consulting on matters relating to the effects of Coal Seam Gas extractions on groundwater and surface water.
- 6 The Appendices can be accessed [here](#).<sup>1</sup>

### **About the Submitters**

- 7 Shay Dougall, Russell Young, Doug Browne, John ‘Kojak’ Karrasch, Celia Karp, Tabitha Karp, and Russell Bennie represent 4 of the 6 properties the subject of the RIDA Application, neighbouring properties and/or interested persons.
- 8 Lock the Gate is a national grassroots organisation made up of over 120,000 supporters and more than 260 local groups who are concerned about the risks associated with coal mining, coal seam gas (**CSG**) and fracking. These supporters and groups are located in all parts of Australia, including the Surat Basin, the area over which the RIDA Application is made, and comprises farmers, First Nations Peoples, conservationists and urban residents.

### **Summary of submissions**

- 9 In summary, the key issues we raise in this submission are:
- a. The priority agricultural areas and strategic cropping areas on and surrounding the proposed activities are under serious risk of significant and largely irreversible impacts from these activities, along with the cumulative impacts of the Surat Gas Project throughout this region. If the RPI Act purpose is to be achieved, thorough assessment and adequate value of the short and long-term interests of protecting the agricultural value of these lands must be provided through the RPI Act RIDA assessment process;
  - b. The RIDA Application has not provided sufficient evidence that the proposed activities will not impact the priority agricultural area and strategic cropping area under risk, including on properties neighbouring the areas to be drilled;
  - c. The proposed development of baseline assessments and monitoring of subsidence proposed is not adequate in providing accurate assessment of subsidence from the activities at a localised level to protect the Priority Agricultural Land Uses under threat from these activities;
  - d. It is not possible to condition these activities in a way that will mitigate the impact of the activities such that the purpose of co-existence of the agricultural and resource activities under the RPI Act can be achieved;
  - e. In the face of lack of scientific certainty, the precautionary principle is required to be applied in the assessment of this RIDA Application where there is a lack of sufficient

---

<sup>1</sup> <https://www.dropbox.com/scl/fo/s2tgxk7pojmu470inyw9/h?dl=0&rlkey=u0xco826n7iqzdmn39y2sdgiq>

information as to the impacts of the activities on the values of the areas of regional interest;

- f. Given the serious risk to these areas of regional interest, the lack of adequate understanding or ability to avoid, mitigate or adequately monitor these risks, the RIDA Application should be refused.

#### **About RIDA Application RPI 22/004 Arrow**

- 10 The present RIDA Application addresses one component of the larger Surat Gas Project, namely a proposal for 14 sub-surface well trajectories on six lots within Petroleum Leases 198, 238 and 252 (**Proposed Activities**),<sup>2</sup> being on (**the Subject Land**):
  - a. 1RP83755;
  - b. 55DY592;
  - c. 141AG4261;
  - d. 1RP78475;
  - e. 11SP191489; and
  - f. 56DY592.<sup>3</sup>
- 11 The Proposed Activities are to be undertaken on areas of regional interest mapped as Priority Agricultural Areas and Strategic Cropping Areas, triggering the need for a RIDA application.
- 12 The Proposed Activities are stated to comprise the following activities:
  - a. the drilling of the deviated well paths beneath the Subject Land;
  - b. extraction and transfer of gas and water beneath the surface; and
  - c. the abandonment of the well path infrastructure *in situ* completion of extraction.<sup>4</sup>
- 13 Contrasting to what is stated above as the Applicant's view of the Proposed Activities, the Submitters argue that the Proposed Activities should more broadly be characterised to include all activities that are proposed in relation to the construction, operation and abandonment of the entire well and associated activities relating to the deviated trajectory which will impact Priority Agricultural Land Uses and Strategic Cropping Land, including where that impact occurs outside of the Subject Land on to neighbouring properties.
- 14 The maximum depth of the sub-surface deviated well trajectories will range from approximately 190 m to 607 m.<sup>5</sup>
- 15 The Applicant asserts that the Proposed Activities will not involve any access to, or activities carried out on, the surface of the Subject Land. Instead, the Applicant states that the Subject Land will be accessed from below the surface, with the operation of the well path infrastructure carried out from neighbouring properties.<sup>6</sup>

---

<sup>2</sup> Arrow Energy, *Kupunn Springvale Coal Seam Gas (CSG) Deviated Well Paths Regional Interests Development Approval*, (**RIDA Report**), p 4. <https://dsdmipprd.blob.core.windows.net/general/RPI22-004-RIDA-supporting.pdf> Accessed 22 December 2022.

<sup>3</sup> RIDA Report, p 7.

<sup>4</sup> RIDA Report, pp 18 & 20.

<sup>5</sup> RIDA Report, p 7.

<sup>6</sup> RIDA Report, p 8.

- 16 The Applicant has not indicated consistently what the minimum depth for subsurface activities will be, rather it has variously noted the minimum depth to be 1m, 189m, 190m or 192m.<sup>7</sup>
- 17 The resource activities to take place on neighbouring properties that will also impact the subject properties will include:<sup>8</sup>
- a. constructing the well pads from where directional drilling will take place;
  - b. constructing and operating gas and water gathering lines;
  - c. installing access tracks;
  - d. spraying and other use of produced water;
  - e. workovers and other maintenance activities of the infrastructure;
  - f. intense movement of vehicles (including heavy vehicles) and people accessing the infrastructure and using the access tracks;
  - g. the development other associated infrastructure;
  - h. land clearing where required for the above works; and
  - i. the ongoing operation of the gas works.

### Assessment of the RIDA Application

- 18 In assessing the RIDA Application, the chief executive must consider the following matters:<sup>9</sup>
- a. the extent of the expected impact of the resource activity on the area of regional interest;
  - b. any criteria prescribed by regulation, namely the RPI Regulation;
  - c. for notifiable applications, all properly made submissions;
  - d. for referable assessment applications, any advice about the application;
  - e. any advice given by the Gasfields Commission;
  - f. any other matter considered relevant by the chief executive.
- 19 As noted above, the Subject Land is categorised as both a Priority Agricultural Area and a Strategic Cropping Area.<sup>10</sup> For Priority Agricultural Areas and Strategic Cropping Areas, the RPI Regulation sets out required outcomes and prescribed solutions for those required outcomes which the RIDA Application must demonstrate in order to be approved.<sup>11</sup>
- 20 The required outcomes and prescribed solutions, along with submissions addressing whether the RIDA Application sufficiently addresses those matters are set out **below**. We then set out general comments relating the RIDA Application further below.

---

<sup>7</sup> See RIDA Report, p 27, 29, 36, 38, 40, 60, 63, 64, 65, 71.

<sup>8</sup> RIDA Report, p 4.

<sup>9</sup> RPI Act, s 49.

<sup>10</sup> RIDA Report, p 7.

<sup>11</sup> RPI Regulation, Schedule 2.

## The Surat Gas Project

- 21 The Applicant proposes to develop the Surat Gas Project (**the Project**), a ‘world-scale project’ commercialising most of the Surat Basin gas reserves, being around five trillion cubic feet.<sup>12</sup> The project life is anticipated to be 35 years.<sup>13</sup>
- 22 The projected infrastructure required over the life of the Project includes:
  - a. approximately 7,500 production wells;
  - b. approximately 18 production facilities across the project development area;
  - c. gathering lines for gas and water, and pipelines to transport gas from the wells to processing facilities and then on to the sales gas pipeline; and
  - d. gas powered generators to provide power for the project.<sup>14</sup>
- 23 To illustrate the significance of the Project on Priority Agricultural Areas in the region, the first image below depicts Priority Agricultural Areas in the Darling Downs Region.<sup>15</sup> The second image shows the Priority Agricultural Areas from Chinchilla to Millmerran, along with Petroleum Leases that the Applicant presently holds and the RIDAs which the Applicant has undertaken to date.

*Figure 1* Priority Agricultural Area showing in green in the Darling Downs (Source: Darling Downs Regional Plan).



<sup>12</sup> As described by the Applicant at: <https://www.arrowenergy.com.au/about-us/where-we-operate/surat-basin/surat-gas-project> Accessed on 22 December 2022.

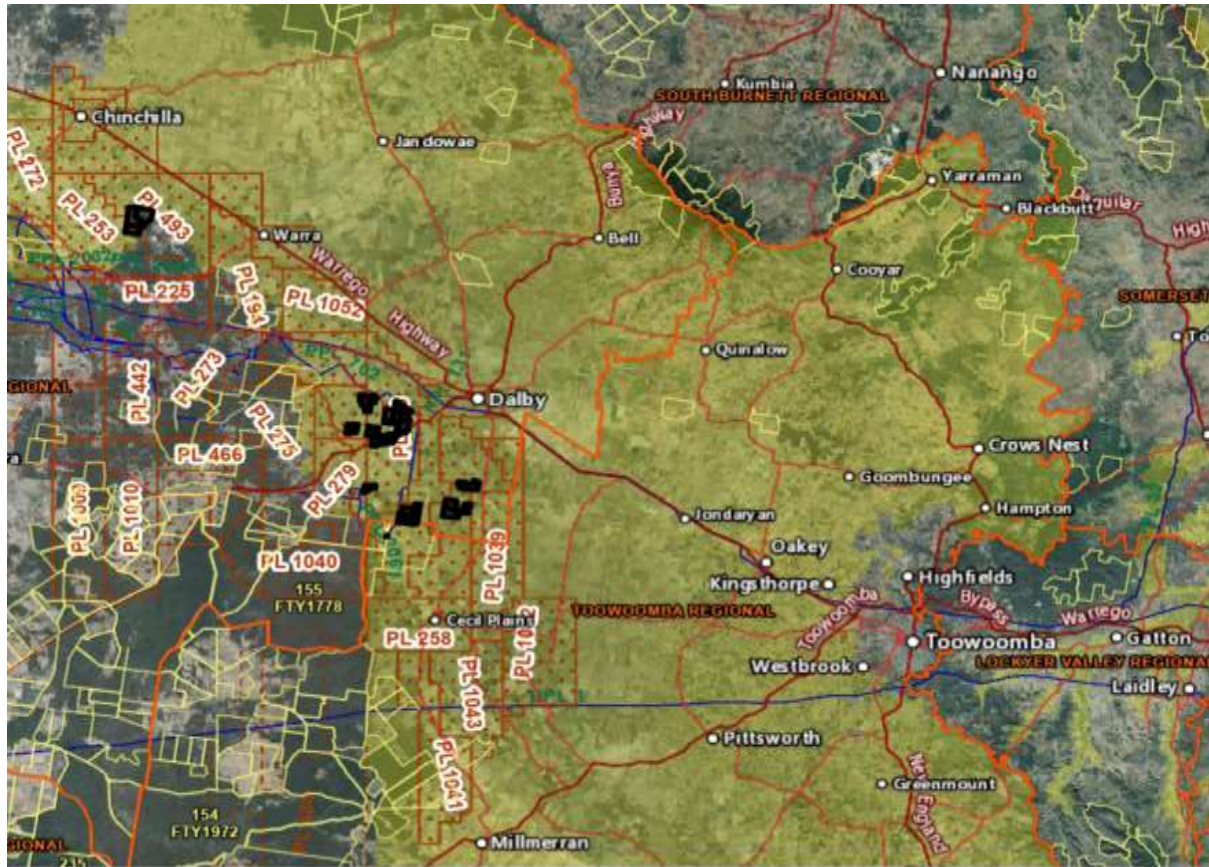
<sup>13</sup> Arrow Energy, Surat Gas Project EIS, Executive Summary, [1.3.3]. Accessed 14 December 2022: [https://www.arrowenergy.com.au/\\_data/assets/pdf\\_file/0006/28671/Executive20Summary.pdf](https://www.arrowenergy.com.au/_data/assets/pdf_file/0006/28671/Executive20Summary.pdf)

<sup>14</sup> Arrow Energy, Surat Gas Project EIS, Executive Summary, [1.3.3]. Accessed 14 December 2022: [https://www.arrowenergy.com.au/\\_data/assets/pdf\\_file/0006/28671/Executive20Summary.pdf](https://www.arrowenergy.com.au/_data/assets/pdf_file/0006/28671/Executive20Summary.pdf)

<sup>15</sup> Darling Downs Regional Plan, p 18.



Figure 2: A map of Priority Agricultural Areas from Chinchilla to Millmerran, and the Petroleum Leases that the Applicant holds over along with RIDAs that have been undertaken by the Applicant to date. (Source: Qld Globe)



- 24 The Project is one of five separate projects that comprise the Applicant's proposed coal seam gas (**CSG**) development in Queensland to produce gas for domestic and export liquified natural gas (**LNG**) markets. Those other related projects are:
- the Arrow Surat Pipeline, a 470-km-long pipeline for gas between Kogan and Gladstone;
  - the Arrow Surat Header Pipeline, a 106-km-long, gas pipeline which is proposed to deliver gas from the southern part of the Project to the above Arrow Surat Pipeline;
  - the Arrow LNG Plant, comprised of marine and ancillary infrastructure on Curtis Island near Gladstone;
  - the Bowen Gas Project, involving a proposed 6,625 production wells over a 40-year project life; and
  - the Arrow Bowen Pipeline, extending from Glenden in the north to Blackwater in the south.

### Background to the RPI Act and context to RIDA Application

- 25 The RPI Act was introduced to balance the competing interests between protecting priority land uses and supporting the coexistence of land holders in these areas with mining and petroleum activities.<sup>16</sup>

<sup>16</sup> Regional Planning Interests Bill 2013, Explanatory Notes, p. 1.

- 26 The purposes of the RPI Act are to:
- a. identify areas of Queensland that are of regional interest because they contribute to Queensland's economic, social and environmental prosperity;
  - b. give effect to policies about matters of State interests stated in regional plans; and
  - c. manage the impact of resource activities and other regulated activities on areas of regional interest and enable to coexistence of those resource activities with other activities such as agricultural activities.<sup>17</sup>
- 27 To achieve these purposes, the RPI Act aims to provide an accountable and transparent process for the impactful activities to be assessed and managed.<sup>18</sup>
- 28 In relation to the Project, the Applicant has already obtained three other RIDAs, namely:<sup>19</sup>
- a. RPI 16/007 Arrow Energy Tipton, which was approved on 14 February 2017;
  - b. RPI 18/011 Arrow Glenelg which was approved on 26 November 2018 that included a well that was planned for under one of the subject farmers, and is the subject of a complaint from the subject farmer in relation to Arrow failing to notify him; and
  - c. RPI 18/012 Arrow Tipton CGPF which was approved on 5 July 2018.
- 29 The Applicant also has a further RIDA Application, RPI21/028 Wells and gathering lines, which is yet to be determined.<sup>20</sup>

---

<sup>17</sup> RPI Act, s 3(1)(b).

<sup>18</sup> RPI Act, 3(2).

<sup>19</sup> For more information on these RIDAs see: <https://planning.statedevelopment.qld.gov.au/planning-issues-and-interests/areas-of-regional-interest/regional-planning-interests-applications>

<sup>20</sup> <https://planning.statedevelopment.qld.gov.au/planning-issues-and-interests/areas-of-regional-interest/regional-planning-interests-applications>

### Priority Agricultural Areas – Required Outcome 1

- 30 The Applicant does not own the Subject Land and has not entered into a voluntary agreement with the relevant owners of each of the properties where the Applicant proposes to undertake activities across the properties,<sup>21</sup> accordingly, the Applicant must demonstrate that required Outcome 1 and associated Prescribed Solutions are satisfied for each property within the Priority Agricultural Area.<sup>22</sup>
- 31 Required Outcome 1 is that the activity will not result in a material impact on the use of the property for a Priority Agricultural Land Use.<sup>23</sup> **This Required Outcome has not been demonstrated by the Applicant and there remain serious and unacceptable risks that the activity will result in a material impact on the use of the property for a Priority Agricultural Land Use.**
- 32 The prescribed solutions in relation to Outcome 1, along with our submissions in response to the RIDA Application are outlined in the table **below**.

TABLE 1: Priority Agricultural Areas – Required Outcome 1	
Prescribed Solutions <sup>24</sup>	Response
<b>(2) The application demonstrates the activity will not be located on land that is used for a priority land use.</b>	<p>As identified by the Applicant, all parcels of the Subject Land are identified as being of Priority Agricultural Land Use.<sup>25</sup></p> <p>Within a Priority Agricultural Area, high value intensive agricultural land uses are recognised as the priority land use over other proposed land uses.<sup>26</sup></p> <p>The Proposed Activities are to take place on these parcels and are connected to activities on neighbouring parcels, which will impact these parcels further, and therefore the Applicant has failed to demonstrate this prescribed solution.</p>

---

<sup>21</sup> RIDA Report, p 14 & p 61.

<sup>22</sup> RPI Regulation, Schedule 2, s 2.

<sup>23</sup> RPI Regulations, Schedule 2, s 2(2).

<sup>24</sup> RPI Regulation, Schedule 2, ss 2 & 3.

<sup>25</sup> RIDA Report, p 25.

<sup>26</sup> RPI Act, Statutory Guideline 02/14, p 4.



	<p>The Applicant implies that as the Proposed Activities are to be subsurface, they will not impact the surface land. This assumption is not satisfactorily proven, and we contend subsurface activity will impact surface Priority Agricultural Land Use as addressed further in these submissions below.</p>
<p><b>(3) The application demonstrates all of the following:</b></p> <p><b>(i) If the applicant is not the owner of the land and has not entered into a voluntary agreement with the owner:</b></p> <p><b>a. the applicant has taken all reasonable steps to consult and negotiate with the owner about the expected impact of carrying out the activity on each priority agricultural land use for which the land is used; and</b></p>	<p>The Applicant relies on Part 6 and Appendix 10 of the Arrow Energy, Kupunn Springvale Coal Seam Gas (CSG) Deviated Well Paths Regional Interests Development Approval Report, (<b>RIDA Report</b>) in demonstrating whether this prescribed solution has been satisfied.<sup>27</sup></p> <p>The claims of the Applicant that this consultation has occurred adequately to meet this prescribed solution are strongly disputed by the Submitters.</p> <p>The Applicant has failed to provide details relating to the actual impacts of the Proposed Activities on each of their specific land uses and farming operations.</p> <p>The Submitters were further not provided with any support in relation to undertaking consultation such as financial or other in-kind assistance to allow landholders to meaningfully participate in negotiations. The Applicant did not provide financial assistance to obtain independent expert advice on the expected impacts of the Proposed Activities on the land use, or to interpret the limited information provided by the Applicant. Specific details of the failure to consult and negotiate with the owners about the expected impact of carrying out the activity on Priority Agricultural Land Use is provided at <b>Appendix A</b>.</p> <p>The Submitters approached by the Applicant are of the view that the Applicant did not negotiate with them transparently and in good faith. The RPI Act does not provide landholders with a right to veto resource activities and therefore landholders are not in a strong position to negotiate, particularly, as in this instance, where other major approvals in relation to the activities have already been granted.</p> <p><b>From the Applicant's materials</b></p> <p>Part 6 of the RIDA Report addresses the Applicant's consultation policies generally, however, does not set out specific consultation with each of the Submitters about the expected impact of carrying out the</p>

<sup>27</sup> RIDA Report, p 63.

	<p>Proposed Activities.<sup>28</sup> It is therefore unclear what steps, if any, the Applicant has taken to consult with each of the property owners of the Subject Land.</p> <p>The Applicant notes that (emphasis added) ‘[c]onsultation with the <i>majority</i> landowners regarding the deviated well paths the subject of this application commenced in 2021 and will continue throughout the duration of the project’ which implies that not all landowners have been consulted.<sup>29</sup></p> <p>Appendix 10 of the RIDA Report is confidential and therefore the makers of this submission, some of whom were those landholders which the Applicant alleges it has adequately consulted, are not able to provide detailed comments in response to the RIDA Application.<sup>30</sup> Throughout the course of consultation and negotiations, the Submitters have requested this information be made available.</p> <p>We request that Appendix 10 be disclosed to the landholders to which it relates so that they may be in a position to provide meaningful submissions on the veracity of the Applicant’s claims as to the extent of consultation.</p> <p>The scope of consultation by the Applicant is limited to the Proposed Activities, being the 14 deviated sub-surface wells. Resource activities on adjacent land and the installation of other infrastructure associated with the Project within the region will also impact the Priority Agricultural Land Use of the Subject Land. Consultation and negotiation with landholders on these issues is reasonably expected by the landholders, and by failing to engage with landholders on these matters, the Applicant has not demonstrated this prescribed solution. Where the Applicant seeks to rely on an exemption under section 22 of the RPI Act, it may only do so where the proposed activity is not likely to have an impact on land owned by a person other than the land owner.<sup>31</sup> The Applicant has not demonstrated this requirement, including in relation to activities on land neighbouring some of the Submitters properties.</p>
--	--

---

<sup>28</sup> RIDA Report, p 41.

<sup>29</sup> RIDA Report, p 41.

<sup>30</sup> RIDA Report, Appendix 10.

<sup>31</sup> RPI Act, s 22.

	<p>The Applicant has established a number of community forums including the Arrow Surat Community Reference Group and Intensively Farmed Land Committee.<sup>32</sup> These community forums should not be considered as contributing to consultation and negotiation as they:</p> <ul style="list-style-type: none"> <li>• are hierarchical in nature and established by invitation only, meaning the forums do not facilitate an opportunity for all landholders affected by the Proposed Activities and the Project to participate or be represented, including those making this submission;</li> <li>• are convened with employees of the Applicant, meaning are not independent;</li> <li>• are limited in their terms of reference to address the Applicant's priorities, rather than the interests of affected landholders;</li> <li>• are established without structures in place to ensure those landholders participating in the forums communicate and consult with those who are not; and</li> <li>• do not provide compensation or training for those participating or attending meetings and are therefore limited to those with the capacity to participate.</li> </ul> <p>See <b>Appendix A</b> for further details on consultation failures in relation to the Surat Stakeholders Advisory Group facilitated through GasFields Commission Queensland.</p> <p><b>Deficiencies of Area Wide Planning</b></p> <p>The Area Wide Planning undertaken by the Applicant was flawed and those in the community including the Submitters are not satisfied with the Applicant's Area Wide Plan. These farmers that attended the meetings the Applicant refers to in its Response to Requirement Notice were publicly dissatisfied with the meeting and its content.<sup>33</sup> The map provided by the Applicant at Appendix I to the Response to Requirement Notice is inadequate as any evidence of any engagement, as merely listing an average number of engagements does not substantiate quality engagement as required in this prescribed solution.<sup>34</sup></p>
--	--

---

<sup>32</sup> RIDA Report, p 10.

<sup>33</sup> Response to Requirement Notice, pp 8-9, [3].

<sup>34</sup> Response to Requirement Notice, p 256, Appendix I.

<p><b>(ii) Carrying out the activity on the property will not result in a loss of more than 2% of both:</b></p> <ul style="list-style-type: none"> <li><b>a. the land on the property used for a priority agricultural land use; and</b></li> <li><b>b. the productive capacity of any priority agricultural land use on the property;</b></li> </ul>	<p>The Applicant has not made any attempt to assess the current productive capacity of each of the properties and therefore has failed to demonstrate an understanding of the activities carried out on the Subject Land. Without undertaking this enquiry, it is difficult to understand how the Applicant can demonstrate this criterion is satisfied. See Mr Russel Young's account in <b>Appendix B</b>.</p> <p>Further, the Submitters hold that landholders would only be able to contribute to an assessment of the impact of the Proposed Activities if they were first provided with sufficient information relating to the Proposed Activities which would allow landholders to determine the loss of land and productive capacity. The information needed to make an adequate case by case assessment was not provided, see Table 1, (3)(i) above.</p> <p>The Requirement notice requires the Applicant to '[u]pdate the Supporting report to detail the production and productive capacity of the lots subject to the proposed activity'.<sup>35</sup></p> <p>In its Response to the Requirement Notice, the Applicant asserts that the lots the subject of the RIDA Application are characterised as Class 1 capability class.<sup>36</sup> This does not adequately satisfy this requirement. The response is further concerning as the Applicant has not established how this conclusion was reached. This assertion is particularly concerning as the Applicant has not obtained information from the landholders as to the productive capacity of their properties, nor did the Applicant provide landholders with the opportunity to review data relied on in making this assessment. It is therefore unclear from the materials provided with the RIDA Application how the Applicant has assessed how the land on the property is used for Priority Agricultural Land Uses and any subsequent estimation of loss.</p> <p>The Applicant has improperly assumed that the subsurface activity on the Subject Land will not occasion a loss of the land for a Priority Agricultural Land Use. Instead, the Applicant indicates that no surface disturbance would take place, though does not provide evidence of how this claim is made.<sup>37</sup></p>
---	--

<sup>35</sup> Requirement Notice, p 8, [19].

<sup>36</sup> Response to Requirement Notice, p 31, at [19].

<sup>37</sup> RIDA Report, p 13.

	<p>On completion of each well, the associated infrastructure will be capped and then left <i>in situ</i>, leaving a permanent impact on the Subject Land. These wells will also restrict and constrain landholders' capacity to place bores which will have to be drilled in a manner which avoids the subsurface wells. The Applicant places the burden of ensuring CSG infrastructure is avoided on the landholders who are then required to contact Before You Dig Australia (formerly Dial Before You Dig).<sup>38</sup> The Applicant does not provide information relating to the surface area which will be affected in this manner and has improperly asserted that it is not a relevant consideration.<sup>39</sup></p> <p>The Applicant's assessment presents a best-case scenario, and therefore does not properly account for risks associated with the Project and how these risks will impact on properties used for Priority Agricultural Land Uses. There is also a real threat of loss of capacity and land use of greater than 2% being affected due to these risks. The risks include subsidence, impacts to groundwater and surface water caused by depressurisation of coal seams and related CSG activities, changes in production methods resulting from neighbouring activities and biosecurity impacts. These impacts are already being experienced by landholders within the region in relation to CSG activities.<sup>40</sup> The risks also include increased flood risk, well integrity failures or other forms of contamination which have historically occurred to devastating effect as a result of CSG activities in Queensland.<sup>41</sup></p> <p>The Applicant has not, in the materials accompanying the RIDA Application, demonstrated a detailed risk assessment including the likelihood of an event occurring, and its potential severity, so as to justify excluding the impacts of these risks from the assessment of the impacts of the Proposed Activities. This information was requested by landholders but not provided by the Applicant. In order to demonstrate this criterion, the Application should reasonably be expected to provide information outlining how risks are managed and contingency plans should one of the risks manifest. The Submitters have not been</p>
--	---

<sup>38</sup> Response to Requirement Notice, p 15, [10].

<sup>39</sup> Response to Requirement Notice, p 15, [10].

<sup>40</sup> See Queensland Government, *Underground Water Impact Report 2021 for the Surat Cumulative Management Area*, December 2021, Chapter 7, pp 99 – 112. [https://www.rdmw.qld.gov.au/\\_data/assets/pdf\\_file/0008/1584728/uwir-2021-report.pdf](https://www.rdmw.qld.gov.au/_data/assets/pdf_file/0008/1584728/uwir-2021-report.pdf) accessed 21 December 2022.

<sup>41</sup> <https://www.agl.com.au/content/dam/digital/agl/documents/about-agl/investors/2011/2011-agl-annual-report.pdf> at p 47; <https://www.brisbanetimes.com.au/national/queensland/gaping-holes-in-csg-wells-safety-procedures-20110625-1gk3k.html>; <https://www.theaustralian.com.au/news/arrow-energy-fined-for-qld-gas-leak/news-story/212271bea72a344fa73da56476974ca1>. All accessed 21 December 2022.

	<p>acknowledged as experts in their own right in relation to their properties, their businesses and the resources it relies upon.</p> <p>We note the Applicant's 'Co-existence Commitments' including its proposal 'to minimise operational footprint to less than 2%'.<sup>42</sup> While we encourage the Applicant to abide by this commitment to minimise the impact of the Project on landholders, this and other commitments do not go beyond indicating the Applicant's general intention. The Co-existence Commitments in and of themselves, do not afford landholders and the public enforceable legal rights to ensure the commitments are upheld. Further, there has been inadequate explanation of how the Applicant is going to determine what 2% of the operational footprint is.</p> <p>The Applicant's assessment inappropriately only considers the impact of the Proposed Activities in terms of surface disturbance.<sup>43</sup> The Applicant relies on the premise that deviated wells reduce the 'footprint' but does not provide evidence that deviated wells will reduce or mitigate impacts of the Project and Proposed Activities on Priority Agricultural Land Use. Subsurface activities will have impacts on crop yields and the Applicant has failed to provide evidence that this will not occur as a result of the Proposed Activities.</p> <p>The Applicant has not assessed how activities other than the Proposed Activities will impact land use and productive capacity. For example, for one of the Submitters, the Applicant proposes to construct an access track on the boundary of his property. This will affect the way he and his neighbour farm cooperatively. Previously the landholders used a shared access route down the boundary of their respective farms for machinery. This meant that rather than having roads on both properties they were able to co-operatively use the one thereby maximising the productive capacity of their properties. With the installation of the Applicant's access track, these co-operative farming practices will not be possible. The landholders will need to use more of their own land for machinery which reduces the productive capacity. Further, the access track proposed by the Applicant to service the eight well heads on the well pad is to be just 200 metres from the subject farmer's house and office and 10 metres from his intensive</p>
--	---

---

<sup>42</sup> RIDA Report, p 9.

<sup>43</sup> RIDA Report, p 63.



	<p>farming activities. The farmers productive capacity will therefore be impacted by dust, traffic, potential trespass into cropped areas, biosecurity incursions, and changes to overland flow relating to the use of the access track.</p> <p>The Applicant has obtained an Environmental Authority (<b>EA</b>) for activities proposed to be undertaken within PLs 198, 238 and 252 (which includes the Proposed Activities) being EA EPPG00972513.<sup>44</sup> Under that EA, the Applicant is authorised to use produced water in drilling and well hole activities, for dust suppression and construction and operation purposes.<sup>45</sup> The use of produced water can increase soil salinity which will negatively impact productive capacity of the land.<sup>46</sup></p> <p>The Applicant has provided no evidence of an adequate and specific risk assessment of the impact of this activity on Priority Agricultural Areas and Priority Agricultural Land Uses.</p> <p>The assessment made by the Applicant does not account for the cumulative and long-term effects of the Project. The infrastructure associated with the Project can diminish or increase both the volumes and quality of water used for Priority Agricultural Land Use, increase erosion, and dust from the clearing and installation of infrastructure and subsidence.</p> <p>The Applicant proposes accessing the Subject Land ‘remotely’ from adjacent properties, however the Applicant has failed to acknowledge these activities have the capability to negatively impact land use of productive capacity, through for example, negative impacts stemming from noise, traffic, dust.<sup>47</sup></p>
--	---

---

<sup>44</sup> RIDA Report, p 4.

<sup>45</sup> RIDA Report Appendix 1, EA Conditions, Schedule G.

<sup>46</sup> See the following instances for example: <https://countrycaller.com.au/2020/08/30/exclusive-coal-seam-gas-water-spills-into-farmland-as-condamine-river-tributary-charleys-creek-bubbles/>; <https://www.brisbanetimes.com.au/national/queensland/origin-energy-pleads-guilty-to-releasing-contaminated-coal-seam-gas-water-20220906-p5bfpg.html> <https://www.afr.com/companies/energy/santos-fined-for-pilliga-coal-seam-gas-spills-20140110-iyanc> <https://countrycaller.com.au/2021/08/02/shell-qgc-fined-60k-for-coal-seam-gas-water-spill/> <https://www.couriermail.com.au/news/queensland/chinchilla/qgc-pleads-guilty-to-two-charges/news-story/e2c74c1dd043ac390018f68e79861cc0>

<sup>47</sup> RIDA Report, pp 8 and 20.

	<p>The Applicant has advised that it will be required to undertake workover activities from adjacent properties for operational management.<sup>48</sup> While no surface access is required by the Applicant to the Subject Land. This is not accurate as subsurface access is still required and workover activities on adjacent properties will result in impacts to the Subject Land by virtue of the workover activities accessing the deviated wells, including noise, vibration, traffic, risk relating to failure of the wells, spills, dust, and biosecurity issues.</p> <p>Tangible impacts are already being experienced by landholders, including one of the Submitters who has experience a loss in productive capacity due to changes in the road levels made in relation to the Project which cause inundation over 20 hectares of his property and subsequent crop loss.</p> <p>The productive capacity of Priority Agricultural Land is also dependent on other factors relating to the operation of farming practices, other than mere analysis of surface disturbance. The Proposed Activities will have flow on impacts to the financial viability of businesses through impacting the capacity of landholders to obtain comprehensive insurance and a decrease in property value which in turn can impact the ability of landholders to leverage the value of their property as security for their ventures.</p> <p><b>Biosecurity</b></p> <p>A very significant impact which the Applicant has failed to address is biosecurity. The CSG industry has historically had a negative impact on agricultural land uses in the area through a failure to ensure biosecurity measures are maintained. This has had a major impact on Priority Agricultural Land Uses and productivity.</p> <p>The short comments regarding biosecurity in the RIDA Report is an entirely inadequate assessment of the impact that the Proposed Activities have on biosecurity for Priority Agricultural Land Uses.<sup>49</sup> The Subject Land is currently parthenium free, and the introduction of parthenium (and other pests or pathogens) can destroy the ability of some businesses to trade on being weed free. See <b>Appendix B</b> for further details.</p>
--	---

<sup>48</sup> Response to requirement notice, p 16, [11].

<sup>49</sup> RIDA Report, p 50.

	<p>The vague unsubstantiated statement that ‘[c]omprehensive biosecurity measures will be introduced’ indicates the poor consideration the Applicant has given to this issue. This is further evidenced by the Applicant’s comments in relation to not requiring access to the Subject Land, which demonstrate an underlying lack of understanding of the cumulative impacts of movement by the Applicant in and around Priority Agricultural Areas. Biosecurity risks that do not respect property boundaries and landscape features such as wind, overland flow and movement by wildlife mean that any biosecurity impacts caused by the Applicant accessing neighbouring properties will likely impact the Subject Land.</p> <p>Further, the generalised statements about the measures the Applicant proposes to take are not sufficiently detailed to account for the specific biosecurity concerns raised by the Submitters.</p> <p>For example, the Applicant proposes ‘pre and post construction monitoring and control as required’.<sup>50</sup> The Applicant does not specify who would undertake these monitoring and control activities. In the Submitters view this would most appropriately be undertaken by an independent third party at the expense of the Applicant, and to the satisfaction of landholders. Reports, data and any other proprietary information resulting from the monitoring would be kept by the farmer.</p>
<p><b>(iii) the activity cannot be carried out on other land that is not used for a priority agricultural land use, including for example, land elsewhere on the property, on an adjacent property or at another nearby location;</b></p>	<p>The Applicant has not however demonstrated why it is that the Proposed Activities must be carried out in the proposed location and not within other Petroleum Leases in the region which are not situated on Priority Agricultural Areas. The Applicant has noted that the majority of the areas of the Petroleum Leases which relate to the RIDA Application are mapped as priority agricultural areas and that activities on Priority Agricultural Land Use is not possible to avoid.<sup>51</sup> However, the Applicant does not provide any evidence that addresses this prescribed solution, instead the Applicant asserts without substantiation that ‘the areas not used for a [Priority Agricultural Land Use] on the impacted properties is limited and does not provide a practical option for locating well paths’.<sup>52</sup></p>

---

<sup>50</sup> RIDA Report, p 50.

<sup>51</sup> RIDA Report, p 64.

<sup>52</sup> RIDA Report, p 64.

	For example, the Applicant fails to set out any consideration of reasonable alternatives nor does it establish that the Proposed Activities are essential in that location for the viability of the Project as a whole.
<b>(iv) the construction and operation footprint of the activity on the part of the property used for a priority agricultural land use is minimised to the greatest extent possible;</b>	<p>The Applicant has failed to establish that the footprint of the Proposed Activities has been minimised to the greatest extent possible.</p> <p>RPI Statutory Guideline 02/14 states that '[t]o demonstrate compliance, the applicant may provide an explanation of how the construction and operational footprint of the activity has been minimised'.<sup>53</sup> There is no evidence of consideration on the part of the Applicant of alternative activities which would reduce the impact of the Proposed Activities. Statutory Guideline 02/14 further states that the 'application should distinguish between impacts associated with construction and those associated with operation'.<sup>54</sup> The Applicant does not distinguish between the impacts of construction and operation activities in its RIDA Application.</p> <p>The Applicant asserts without evidence that as the activities will not involve surface disturbance, the footprint of the Proposed Activities is therefore minimised.<sup>55</sup> This assessment by the Applicant is deficient as it does not include subsurface activities which, in the Submitter's view, do contribute to the overall footprint of the Proposed Activities. Further, the impacts to surface activities are not sufficiently understood, adequate monitoring of the impacts is not possible to avoid or mitigate the impacts, and therefore the impacts of the activities to Priority Agricultural Land Uses cannot be minimised.</p> <p>In making this assertion, the Applicant fails to provide any detailed and transparent data that provides the kind of information required by landholders to make informed decisions about the real impact the subsurface infrastructure will have on the farming operation. The Applicant makes broad unsubstantiated statements that no impact is expected.<sup>56</sup> Further the Applicant fails to make any</p>

<sup>53</sup> RPI Statutory Guideline 02/14, p 11. Accessed 26 January 2023, available at: <https://dsdmipprd.blob.core.windows.net/general/rpi-guideline-02-14-carrying-out-activities-in-a-paa.pdf>

<sup>54</sup> RPI Statutory Guideline 02/14, p 11.

<sup>55</sup> RIDA Report, p 65.

<sup>56</sup> See for example, RIDA Report, pp 18-19, and 25,

	<p>consideration of reasonable alternatives which would minimise impacts, for example, it has not demonstrated why each of the 14 deviated wells is necessary for the viability of the Project, and why the extent of the proposed well depths and length is required.</p> <p>As noted above, on completion of each well, the associated infrastructure will be capped and then left permanently <i>in situ</i>.<sup>57</sup> Landholders will then be permanently constrained from constructing water bores where the wells are constructed. Accordingly, the well depth and length are of significance, and contribute to the extent of the permanent impacts the Proposed Activities will have on the Subject Land.</p> <p>Examples provided by the Applicant of minimising the footprint of the Proposed Activities is not necessarily reflective of the experience of the host farmer, they are assumptions from outside of the agricultural point of reference. Merely minimising the size of well pads is not necessarily minimising the footprint of the operation and infrastructure. More specifically, in relation to activities adjacent to the Subject Land, pipeline infrastructure is proposed on one side of paddock, and an access way is proposed on the opposite side. This doubles the disturbance impacting the landholder, and greatly affects the subject farmer.</p> <p>At Table 4.2, the Applicant purports to outline the extent of disturbance and impact on Priority Agricultural Land Uses however does not detail quantities of gas, petroleum, produced water and soil or land removed.<sup>58</sup> This assessment does not account for non-surface impacts such as subsidence, methane migrations, noise and dust for example. Similarly, the Applicant's claims relating to impacts on overland flow are not substantiated by an independent expert specifically in relation to the Subject Land.<sup>59</sup> Nor do descriptions of Area Wide Planning and statements regarding subterranean activity directly address surface impacts of subterranean activities which leaves the measures listed to address these impacts inadequate.</p>
<b>(v) the activity will not constrain, restrict or prevent the ongoing</b>	<p>There is a significant risk and insufficient evidence to demonstrate that the activity will not constrain, restrict or prevent the ongoing conduct on the property for Priority Agricultural Land Uses.</p>

<sup>57</sup> RIDA Report, p 18 & 20.

<sup>58</sup> RIDA Report, p 28.

<sup>59</sup> RIDA Report, pp 30-37.

<p><b>conduct on the property of a priority agricultural land use, including, for example, everyday farm practices and an activity or infrastructure essential to the operation of a priority agricultural land use on the property;</b></p>	<p>The Applicant's assessment presents a best-case scenario, and therefore does not properly account for risks associated with the Project and how these will impact activities undertaken on the Subject Land and constrain, restrict or prevent the ongoing the operation of the Priority Agricultural Land Use. These risks include subsidence and impacts to groundwater and surface water caused by depressurisation of coal seams and related CSG activities, along with fugitive emissions being released which risk the health and safety of landholders and impact agricultural operations. These impacts are already being experienced by landholders within the region in relation to CSG activities.<sup>60</sup></p> <p>We <b>enclose at Appendix D</b> an expert analysis by groundwater expert Dr Steven Pells, which details the inadequate assessment of groundwater impacts and the potentially significant risks from these impacts. This uncertainty speaks clearly to the need to apply the precautionary principle in refusing this project due to the lack of scientific certainty of impacts and the potentially significant risks associated with the project. Dr Pells details information, not provided by the Applicant, that is required to understand the groundwater impacts posed by this project, where groundwater is an essential element of the long term viability of agricultural activities. This information includes:</p> <ul style="list-style-type: none"> <li>• figures showing the well trajectories, depicting their depth below ground;</li> <li>• details of geological investigations showing the geology expected to be encountered by the wells at the specific sites in question;</li> <li>• details of <i>in situ</i> testing used to assess hydrogeological parameters that characterise the local hydrogeology, such as the hydraulic conductivity of the ground, water quality, the location and extent of identified sub surface water resources and characterising their existing 'beneficial use', with particular regard to the important role of water resources in Priority Agricultural Areas;</li> <li>• details of the expected or licenced water take from each well;</li> <li>• analyses to assess the likely extent and rate of depressurisation;</li> <li>• details of any existing water bores in the region; and</li> <li>• an assessment of the expected impacts from the Proposed Activities on these groundwater resources.</li> </ul>
--	--

<sup>60</sup> See Queensland Government, *Underground Water Impact Report 2021 for the Surat Cumulative Management Area*, December 2021, Chapter 7, pp 99 – 112. [https://www.rdmw.qld.gov.au/\\_data/assets/pdf\\_file/0008/1584728/uwir-2021-report.pdf](https://www.rdmw.qld.gov.au/_data/assets/pdf_file/0008/1584728/uwir-2021-report.pdf) accessed 21 December 2022.



	<p>Dr Pells notes that his concerns are that the Project may have the following impacts:</p> <ol style="list-style-type: none"> <li>1. reduction of water levels in existing bores and therefore lower yields;</li> <li>2. reduced capacity for agricultural users to access groundwater;</li> <li>3. uncertainty about how far, and where, depressurisation will extend, noting that it is sensitive to geological formation types and the location of geological structures;</li> <li>4. potential reduction of recharge available to supply surface water resources; and</li> <li>5. change in groundwater seepage flow directions that could result in changes to water availability for existing surface water resources and / or flora and fauna.</li> </ol> <p>He notes that impacts to water resources can only be mitigated by cessation of operation of the CSG wells, but the time for recovery may take a duration in the order of decades to millennia.</p> <p><b>An expert analysis has been commissioned of the RIDA Application by Professor Paul Tregoning, which found:</b></p> <ul style="list-style-type: none"> <li>• The proposed frequency of monitoring using InSAR is insufficient and, in fact, does not even accord with the frequency used in the study provided in the reports.</li> <li>• InSAR analysis depends upon having “coherence” (i.e. relatively little change) between two images, so that small changes in distance from the ground to the satellite can be identified. It cannot penetrate vegetation and significant changes due to, for example, variations in ground cover due to cropping, can cause a lack of coherence between images. This can result in an inability to estimate changes in surface height.</li> <li>• it would be more informative to provide information on what the new slope of the terrain is likely to become rather than simply show the change in slope. Are there areas where predicted subsidence is going to cause terrain to have a new slope &lt; 0.03%, thereby making it subject to waterlogging due to inadequate drainage?</li> </ul>
--	--

	<p>At Arrow Energy, Surat Gas Project, <i>Subsidence monitoring and prediction</i>, 754-MELENP268280-AA, by Coffey Services, Dec 2021, page 52, Figure 47, it is confirmed that the Proposed Activity will cause subsidence of the land surface that will reach 100mm.</p> <p>As the Applicant's own report shows,<sup>61</sup> subsidence over pipelines is a real risk that cannot be removed. The Applicant's images show how devastating the impacts can be. Even where remediation is attempted to be undertaken, it is not possible to fully restore the damage that has been done to the soil and the delicate system of the Subject Land, and neighbouring land as the impacts of subsidence can never fully be reversed. Additionally, the Applicant's assessment does not count the cost to the farmer and their neighbours in the while remediation is undertaken along with other impacts on their yields, business and day to day activities.</p> <p>There is also a real risk of loss of capacity for landholders to use their land due to well integrity failures or other forms of contamination which have historically occurred in Queensland with as a result of CSG activities.<sup>62</sup></p> <p>As discussed above at 3(i) and (ii), the Applicant has not appropriately consulted with landholders as to the impacts of the Proposed Activities on their specific farming operations, and accordingly, assessment has not taken place from each of the landholder's perspective.</p> <p>The Data Farming Report provides analysis regarding slope and associated yields dependent on slope class. However, the Report fails to provide an in-depth study/analysis of ponding in paddocks and how this will impact yields. The Report is not peer reviewed and does not rely on any substantial evidence. For example, some landholders have experienced a change in ponding for 2020 that does not correspond to the Applicant's LIDAR data for 2020 (LIDAR baseline packages). Furthermore, the Applicant's LIDAR data has not been ground-truthed. See the bundle of documents at <b>Appendix C</b> for a</p>
--	--

<sup>61</sup> [https://planning.statedevelopment.qld.gov.au/\\_data/assets/pdf\\_file/0025/73348/RPI21-028-subsidence-resoration.pdf](https://planning.statedevelopment.qld.gov.au/_data/assets/pdf_file/0025/73348/RPI21-028-subsidence-resoration.pdf).

<sup>62</sup> <https://www.agl.com.au/content/dam/digital/agl/documents/about-agl/investors/2011/2011-agl-annual-report.pdf> at p 47; <https://www.brisbanetimes.com.au/national/queensland/gaping-holes-in-csg-wells-safety-procedures-20110625-1gk3k.html>; <https://www.theaustralian.com.au/news/arrow-energy-fined-for-qld-gas-leak/news-story/212271bea72a344fa73da56476974ca1>. All accessed 21 December 2022.

	<p>case study of the impacts of subsidence that can already be witnessed on the Narweena property, and the failures in the assessment of subsidence risk that this case study demonstrates.</p> <p>The Data Farming Report relies upon the Applicant's conclusions about subsidence, based on the Applicant's historical monitoring and baseline packages. This raises serious concerns with respect to the veracity of the data, given the Applicant is unlikely to have the expertise to provide this analysis, and the Applicant has a strong interest in providing analysis that is biased towards the likely approval of the RIDA Application.</p> <p>In the experience of those Submitters who farm, flat land yields well, and ponding land yields less. The argument the Applicant puts forward is that flat areas with less than 0.06% gradient slope will yield less than areas of paddocks with gradients greater than 0.06% due to drainage, stating:<sup>63</sup></p> <p><i>dryland cropping lands farmed with slopes at less than 0.06% will be subject to waterlogging in heavy rainfall years and ponding of rainfall during low rainfall periods. It is therefore considered that slopes on existing irrigated farmland less than 0.06% could be considered as essentially flat. Small changes in slope would seem unlikely to be detrimental to farmland in this category.</i></p> <p>For slopes greater than 0.09%, the Applicant states 'a change of slope of 15% is not anticipated to affect performance significantly'.<sup>64</sup></p> <p>The Applicant claims, from our understanding, that any subsidence under 100mm will not impact slope classes. Essentially, the Applicant seeks to argue on that during dry periods, the yield will be high across all paddocks, with or without CSG induced subsidence. When a wet period occurs, the ponding areas will yield less, however the Applicant argues that high yields in dryer periods will make-up for any loss of yield (in ponding areas) in wet periods. There is insufficient evidence to support these claims and to demonstrate that losses suffered during wet periods in the ponding areas are able to recovered in the dry periods. The Applicant also does not account for new CSG gas induced ponding areas.</p>
--	---

---

<sup>63</sup> RIDA Report, p 33.

<sup>64</sup> RIDA Report, p 33.

	<p>Ponding areas will be flatter than 0.06% generally, so flat areas that don't pond are the most productive parts of paddocks while flat areas that pond are among the least. Subsidence is a major problem in the dry and wet periods.</p> <p>To plant a whole paddock, there are many farmers who will dry-plant (before the rain comes). However, for the seed to germinate, you need rain. The issue then is whether the rain is steady and light or pronounced and heavy. If the rain is heavy, the ponding areas will collect the rain, and the seed will not germinate. Further CSG induced subsidence will mean a greater period of time needed for these ponded areas to dry out. This will mean a further loss of nitrogen in the soil in the ponded areas. If the rainfall is light, but steady enough to germinate the seed in the higher-dried areas, to produce a viable yield across the whole paddock, the steady rain would need to penetrate the ponded areas, without collecting water. However, this scenario would need to take place on soils with less clay, because even though the black clay may stay wet, it takes a lot of rain to get black clay soils wet after being dry.</p> <p>On completion of each well, the associated infrastructure will be capped and then left <i>in situ</i>, leaving a permanent impact on the Subject Land. These wells will also restrict and constrain landholders' capacity to place bores which will have to be drilled in a manner which avoids the subsurface wells. The Applicant places the burden of ensuring CSG infrastructure is avoided on the landholders who are then required to contact Before You Dig Australia (formerly Dial Before You Dig).<sup>65</sup> The Applicant does not provide information relating to the surface area which will be affected in this manner and has improperly asserted that it is not a relevant consideration.<sup>66</sup></p> <p>There is further no guarantee that these wells will remain inert into the future. The materials accompanying the RIDA Application fail to evidence that there will be no future negative impacts.</p> <p>Another key issue is the release of migratory emissions from the wells.</p> <p><b>Expert Dr Dimitri Lafleur has provided an analysis of the RIDA Application, finding that there has been substantially inadequate assessment of the potential for migratory methane emissions in</b></p>
--	--

<sup>65</sup> Response to Requirement Notice, p 15, [10].

<sup>66</sup> Response to Requirement Notice, p 15, [10].

	<p><b>this application.</b> He notes the Application is missing the following information and raises the following concerns:</p> <ul style="list-style-type: none"> <li>• <i>a cross section along the wellbores with the stratigraphy that the well drills through. There is no information that shows whether Arrow knows anything about the detailed stratigraphy between the Condamine alluvium and Walloon coal measures at and around the well sites;</i></li> <li>• <i>a detailed analysis of the groundwater impact in the drilling area. While the drilling itself does not impact the groundwater level, the additional dewatering in the area will;</i> <ul style="list-style-type: none"> <li>○ <i>It is expected that the Condamine Alluvium will lose water to the Walloon Coal measures aquifer. The annual take of the Condamine aquifer for irrigation is ~45GL/y <sup>67</sup>, with a maximum potential is 52GL/y.<sup>68</sup> In general the outflow exceeds the inflow, and is sensitive to above average rainfall and drought conditions. This means that Condamine alluvium groundwater levels will be additionally impacted by CSG dewatering.</i></li> <li>○ <i>The 100-year average flux from the Condamine Alluvium to the Walloon Coal Measures is modeled at a best estimate (P50) of 1.27GL/y [full uncertainty P5-P95 range 1.088 - 1.431GL/y ] but peaks at 1.979GL/y (P50) [full uncertainty range of 1.700-2.200GL/y] in 2060.<sup>69</sup> This means that the dewatering process in peak years accounts for close to 4.5% of the total current take (2GL/45GL).</i></li> <li>○ <i>The drawdown appears to be limited to less than 0.5m, but it is not clear what the time reference is.<sup>70</sup> However, the drawdown of the Walloon Coal Measures around the well sites appears to be very large (50-500m in 2030) <sup>71</sup> and it is not disclosed how that affects the Condamine Alluvium in the well area in 2030 and beyond.</i></li> </ul> </li> <li>• <i>The wells in PL198 and PL238 seem to be located in the area of the Horrane Faults structure. <sup>72</sup> The Horrane fault is an area of research interest in the next round of OGIA's modeling, it has not been</i></li> </ul>
--	--

<sup>67</sup> [https://www.resources.qld.gov.au/\\_data/assets/pdf\\_file/0019/403282/condamine-report-hydrogeological-investigation.pdf](https://www.resources.qld.gov.au/_data/assets/pdf_file/0019/403282/condamine-report-hydrogeological-investigation.pdf) p.16

<sup>68</sup> <https://dsdmipprd.blob.core.windows.net/general/RPI22-004-RIDA-supporting.pdf> p.52

<sup>69</sup> [https://www.rdmw.qld.gov.au/\\_data/assets/pdf\\_file/0003/1591725/modelling-groundwater-impacts-surat.pdf](https://www.rdmw.qld.gov.au/_data/assets/pdf_file/0003/1591725/modelling-groundwater-impacts-surat.pdf) p.40

<sup>70</sup> <https://dsdmipprd.blob.core.windows.net/general/RPI22-004-RIDA-supporting.pdf> p.53

<sup>71</sup> [https://planning.statedevelopment.qld.gov.au/\\_data/assets/pdf\\_file/0031/75496/rpi-22-004-subsidence-memo.pdf](https://planning.statedevelopment.qld.gov.au/_data/assets/pdf_file/0031/75496/rpi-22-004-subsidence-memo.pdf) p.24

<sup>72</sup> [https://www.rdmw.qld.gov.au/\\_data/assets/pdf\\_file/0009/1592334/geology-models-surat-bowen.pdf](https://www.rdmw.qld.gov.au/_data/assets/pdf_file/0009/1592334/geology-models-surat-bowen.pdf) p.18

	<p>modeled in detail yet.<sup>73</sup> It seems there is potential impact on drawdown from the Condamine alluvium through weathered formations along the Horrane fault in the Horrane fault area.<sup>74</sup> The Application is missing a detailed assessment of this risk, for example particularly:</p> <ul style="list-style-type: none"> <li>○ a vertical seismic section showing the wells paths and the presence (or absence) of the Horrane fault, and other faults;</li> <li>○ a thickness map showing the presence or absence of the transition layer, indicating which wellbore data is used etc;</li> <li>○ the additional Arrow CSG, and total cumulative CSG effect of the dewatering process in the well area, and the effect on the local drawdown of the Condamine alluvium using a hydrological model.</li> </ul> <p>Dr Lafleur further notes:</p> <ul style="list-style-type: none"> <li>• It is unclear if it is assessed whether upward gas migration is possible along the fault plane, and whether it is assessed if that could be a conduit into the condamine alluvium.</li> <li>• Wellbore RN160717A well show higher methane concentrations (although decline as gas field matures). The wellbore is located in the vicinity of PL198 and PL238<sup>75</sup>, and is located in the area of the Horrane fault, indicating that higher methane readings in well bores in the area is possible through a connectivity feature. While the readings are declining over time, this particular well shows much higher readings than others.</li> <li>• Over a widespread area the Walloon coal measures subcrop the Condamine alluvium. There is geological data that suggests that there is a transition layer in between (clays, weathered and unweathered sediments) that in general have low permeability. However, the thickness of the transition</li> </ul>
--	--

<sup>73</sup> [https://www.rdmw.qld.gov.au/data/assets/pdf\\_file/0007/1661884/analysis-groundwater-trends-impacts-csg-coal-mining.pdf](https://www.rdmw.qld.gov.au/data/assets/pdf_file/0007/1661884/analysis-groundwater-trends-impacts-csg-coal-mining.pdf) p.51

<sup>74</sup> [https://www.rdmw.qld.gov.au/data/assets/pdf\\_file/0003/1591725/modelling-groundwater-impacts-surat.pdf](https://www.rdmw.qld.gov.au/data/assets/pdf_file/0003/1591725/modelling-groundwater-impacts-surat.pdf) p.52

<sup>75</sup> [https://www.rdmw.qld.gov.au/data/assets/pdf\\_file/0007/1661884/analysis-groundwater-trends-impacts-csg-coal-mining.pdf](https://www.rdmw.qld.gov.au/data/assets/pdf_file/0007/1661884/analysis-groundwater-trends-impacts-csg-coal-mining.pdf) p.46



	<p>layer is not uniform and is absent in some places.<sup>76</sup> The idea that a transition layer impedes flow from the Walloon Coal Measures is conceptualized,<sup>77</sup> but it is hampered by a lack of data.</p> <ul style="list-style-type: none"> <li>• Can we rule out gas migration and methane emissions post CSG activity? <ul style="list-style-type: none"> <li>○ It is not clear whether it is understood what happens when CSG production ceases. The water pressure is much lower than prior to CSG development, and the gas desorbs from the coal cleats with the wells abandoned. Is this gas finding a way towards existing faults, or gaps in the stratigraphy (absence of the transition layer) and potentially seeps towards wellbores and the surface, into the atmosphere? (We are seeing the reverse in some well bores at the moment, with declining methane concentrations and higher CSG production.)</li> </ul> </li> </ul> <p>Further, the Applicant's approach to assessing the impact of the Proposed Activities on land use fails to account for the cumulative impacts, which is relevant in light of the scale of the Project and its impacts on the landscape through changes to groundwater and surface water flow, increased erosion and dust from clearing and installation of infrastructure, biosecurity, and how these impacts will affect agricultural practices.</p> <p>Under the EA obtained in relation to PLs 198, 238 and 252, the Applicant is authorised to use produced water in drilling and well hole activities, for dust suppression and construction and operation purposes.<sup>78</sup> Notwithstanding, the Applicant's assertion that it will not use CSG water for irrigation on the Subject Land,<sup>79</sup> the use of produced water on adjacent properties, or within the region can increase soil salinity which is not limited to the land where produced water is used. Landscapes are not static and accordingly, salinity can travel across property boundaries by osmosis, through ground and surface water flow and in flood events.</p>
--	--

<sup>76</sup> [https://www.resources.qld.gov.au/\\_data/assets/pdf\\_file/0019/403282/condamine-report-hydrogeological-investigation.pdf](https://www.resources.qld.gov.au/_data/assets/pdf_file/0019/403282/condamine-report-hydrogeological-investigation.pdf) p.39

<sup>77</sup> <https://dsdmipprd.blob.core.windows.net/general/RPI22-004-RIDA-supporting.pdf> p.51

<sup>78</sup> RIDA Report Appendix 1, EA Conditions, Schedule G.

<sup>79</sup> Response to Requirements Notice, p 54, [25].

	<p>The conduct of agricultural land practices extends beyond the physical operation of infrastructure on the surface of land and accordingly the landholder's capacity to continue Priority Agricultural Land Uses is dependent on other non-physical factors relating to the operation of farming practices. The Proposed Activities will have negative impacts to the financial viability of farming businesses through impacting the capacity of landholders to obtain comprehensive insurance and a decrease in property value which in turn can impact the ability of landholders to leverage the value of their property as security for their ventures.</p> <p>Noise, dust, vibrations from drilling and negative amenity impacts resulting from the Proposed Activities and activities on adjacent properties, have negative psychosocial impacts on landholders, their families and employees that impact the workplace health and safety.</p> <p>Therefore, the Proposed Activities will change the likelihood of, and effect on, constraints and threats that already exist for this region.</p> <p><b>Failure of case-by-case Assessment</b></p> <p>RPI Guideline 02/14 states the assessment process is to consider each proposed resource activity on its merits.<sup>80</sup> The Applicant asserts it uses the 'case by case' assessment to demonstrate that the activity can be approved on its merits.<sup>81</sup> However, the Applicant does not disclose the methodology and evidence gathered in undertaking this assessment. Accordingly, the Applicant has failed to substantiate whether a given activity is considered preliminary or advanced under the RPI Act, which has flow on affects in relation to the rights and interests afforded to landholders. Absent transparency in assessment, landholders are not afforded procedural fairness or the ability to hold the Applicant accountable for internal assessment.</p> <p>Information about the Applicant's assessment process was requested by some members of the Submitters. Only one landholder received a copy of the case by case assessment. The following is an analysis of the inadequacies of that case by case assessment:</p>
--	--

<sup>80</sup> RPI Statutory Guideline 02/14, p 3.

<sup>81</sup> RIDA Report, p 19.

	<ul style="list-style-type: none"> <li>• as detailed above at, Table 1, 3(i), the Applicant did not take all reasonable steps to consult and negotiate with the owners of the land about the expected impact of carrying out the activity;</li> <li>• the format of the assessment admits that the assessment is limited to the construction, placement, drilling and commissioning of deviated wells. This is inappropriate as it does not include impacts from operations, maintenance and decommissioning of the wells;</li> <li>• the case by case assessment fails to see the deviated portion as a complete operating well which incorrectly separates the subsurface deviated portion of the well from the effects of the operation of the well generally, and although physically occurring on the neighbouring property, will impact the Submitters' land use (for example impacts from noise);</li> <li>• the extent of the impacts considered in the construction, placement, drilling and commissioning is not detailed enough to demonstrate that all activities will have no impact, or only a minor impact, on the business or land use;</li> <li>• there is a lack of information relating to the Applicant's determination of what is to be considered a minor impact;</li> <li>• the Applicant relies on its own assessment which does not adequately consider or incorporate the views of landholders nor obtain data from landholders of the impacts of the Proposed Activities on the farmer's business and land use.</li> <li>• the questions asked and information sought by the farmers to determine impacts was never properly answered by the Applicant;</li> <li>• the Applicant position is that the activity does not affect any landholder's rights of redress against any future compensable liability, however this is not the case as landholders' right of redress is affected if those impacts (including operational) have not been considered, identified and appropriate benchmark measurements taken;</li> <li>• it does not properly or transparently address the Priority Agricultural Areas and Priority Agricultural Land Use impacts;</li> <li>• a commitment to addressing any future compensable liability in the event it occurs is overly vague and therefore not procedurally fair as landholders are not sufficiently informed of what that future process would be (for example, how any liability would be quantified, what impacts would be compensable, who would make the assessment as to quantum of compensation, and what timeframes would be associated with the assessment etc); and</li> </ul>
--	---

	<ul style="list-style-type: none"> <li>• where there is an assumption that these activities are ‘preliminary activities’ under the <i>Mineral and Energy Resources (Common Provisions) Act 2014</i> (Qld), there is no regulatory requirement for the Applicant to enter a conduct and compensation agreement to protect the landholder’s interests and provide a legislative avenue for seeking compensation. Therefore, the Applicant’s commitment to compensation is not affirmed in the regulatory framework, or by contract and is therefore unenforceable by the landholders.</li> </ul> <p><b>The Applicant’s response to the Requirements Notice, Item 20</b></p> <p>The Applicant’s response to Requirement Notice, Item 20 fails to sufficiently address measures to minimise impacts to Priority Agricultural Land Uses associated with the risk to landowners to secure new or refinance existing debt, insurance and other financial products resulting from the undertaking of the proposed activity on their properties as required by the Requirement Notice.<sup>82</sup></p> <p>The Applicant states that its:</p> <p><i>...experience to date is that compensation payments (generally negotiated to be an annual annuity) provides a reliable additional income source which can assist in meeting serviceability requirements in finance applications and capital outlays for farming infrastructure improvements.<sup>83</sup></i></p> <p>This opinion does not demonstrate or evidence any consultation with landholders, experts or other insurance industry stakeholders to substantiate the Applicants position. Further by definition, compensation payments should not be considered as ‘additional income’ as they are paid to reimburse landholders for a loss.</p> <p>The Submitters are aware of an historical example where a farmer near Kogan was denied finance because of CSG infrastructure. A farmer neighbouring the 4 farmers of this RIDA Application’s Subject Land (and a Submitter) was one of the first complaints made to the Applicant about subsidence this year (see <b>Appendix C</b>), and the way in which the Applicant handled that complaint demonstrates it is not</p>
--	---

<sup>82</sup> Response to Requirement Notice, p 31, [20].

<sup>83</sup> Response to Requirement Notice, p 31, [20].

	<p>equipped to do an acceptable investigation, or to answer reasonable questions that are raised to support their ‘investigation’. The Applicant’s investigation identified no subsidence issues caused by the Applicant, however this position was adopted through a desktop survey without any actual site visit or detailed conversation with the farmer which is not adequate in the circumstance.</p> <p>Further, the RPI Statutory Guideline 02/14 requires the application of the precautionary principle where there is scientific uncertainty about the impacts of an activity and the potential impacts are serious or irreversible.<sup>84</sup> Any assumption that subsidence is able to be remediated or compensated has no evidence to support it. Subsidence impacts are not listed in the Plan of Operations for the Project, and therefore there is no estimated rehabilitation costs for this impact considered in the financial assurance under the <i>Environmental Protection Act 1994</i> (Qld) framework.</p>
<b>(vi) the activity is not likely to have a significant impact on the priority agricultural area</b>	<p>We refer to and rely on comments immediately above at (v) in relation to the cumulative impacts of the Project and risks of the Project which will have a significant impact on the Subject Land.</p> <p>Cumulative impacts are a risk for Condamine Floodplain, particularly with respect to subsidence. There should be no Project activity on Priority Agricultural Areas, particularly on a floodplain.</p>
<b>(vii) the activity is not likely to have an impact on land owned by a person other than the applicant or the landowner mentioned in paragraph (a).</b>	<p>We refer to and rely on comments above at (v and vi) in relation to the cumulative impacts of the Project and risks of the Project which will have a significant impact on land neighbouring the Subject Land.</p>

---

<sup>84</sup> RPI Statutory Guideline 02/14, p 4. Accessed 26 January 2022, available at: <https://dsdmipprd.blob.core.windows.net/general/rpi-guideline-02-14-carrying-out-activities-in-a-paa.pdf>

## Priority Agricultural Areas – Required Outcome 2

- 33 The Proposed Activities are to be carried out on two or more properties,<sup>85</sup> accordingly the Applicant must demonstrate that required Outcome 2 and associated Prescribed Solutions are satisfied for each property within the Priority Agricultural Area.<sup>86</sup>
- 34 Required Outcome 2 is that the activity will not result in a material impact on the region because of the activity's impact on the use of land in the Priority Agricultural Area for 1 or more priority agricultural land uses.<sup>87</sup>
- 35 The prescribed solutions in relation Outcome 2, along with our submissions in response to the RIDA Application are outlined in the table **below**:<sup>88</sup>

TABLE 2: Priority Agricultural Areas – Required Outcome 2	
Prescribed Solutions <sup>89</sup>	Response
<p><b>(1)</b></p> <p><b>a. if the activity is to be carried out in a Priority Agricultural Area identified in a regional plan—the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan;</b></p>	<p>The Proposed Activities are inconsistent with regional outcomes and will not contribute to achieving the policies outlined in the Darling Downs Regional Plan.</p> <p>A large portion of the Project footprint is co-located with Priority Agricultural Areas located in the Darling Downs Region, including the Proposed Activities, the subject of the current RIDA Application.<sup>90</sup> See Figures 1 and 2 above.</p> <p>Under the Darling Downs Regional Plan, Regional Policy 1 is that Priority Agricultural Land Uses in Priority Agricultural Areas are to be prioritised over any other land uses.<sup>91</sup> If the RIDA Application were to be approved, the activities authorised would be in direct conflict with this Policy.</p>

<sup>85</sup> RIDA Report, p 14.

<sup>86</sup> RPI Regulation, Schedule 2, s 4.

<sup>87</sup> RPI Regulation, Schedule 2, s 4(2).

<sup>88</sup> RPI Regulation, Schedule 2, s 5(1).

<sup>89</sup> RPI Regulation, Schedule 2, s 5(1).

<sup>90</sup> See for comparison, DDR Plan, p. 18 and Arrow Energy, Surat Gas Project EIS, Executive Summary p 2.

<sup>91</sup> DDR Plan, Chapter 4.



	<p>The Applicant asserts that the Project will support the goals of the Darling Downs Regional Plan as it will:<sup>92</sup></p> <ul style="list-style-type: none"> <li>• enable opportunities for economic growth to ensure our regions are resilient and prosperous;</li> <li>• protect areas of regionally significant agricultural production from incompatible resource activities while maximising opportunities for co-existence of resource and agricultural land uses;</li> <li>• safeguard the areas required for the growth of towns;</li> <li>• drive the region’s economic diversity and opportunity; and</li> <li>• identify infrastructure outcomes that will support economic growth.</li> </ul> <p>The RIDA Application contains no evidence demonstrating how any of the above statements will be achieved by the Project, or how they relate to the Proposed Activities.</p> <p>By way of example, and in response to the assertions above, the RIDA Application does not:</p> <ul style="list-style-type: none"> <li>• indicate what employment opportunities created by the Proposed Activities, including specific number of jobs generated by the Project, and whether that work would be undertaken by local persons or fly in/fly out workers;</li> <li>• establish how the Project or Proposed Activities protects Priority Agricultural Land and Priority Agricultural Areas from incompatible resource activities or how the Proposed Activities are in fact compatible;</li> <li>• demonstrate how the Project or Proposed Activities contributes to or relates in any way to safeguarding areas for the growth of towns;</li> <li>• indicate how the Project or Proposed Activities support economic diversity and opportunity; or</li> <li>• provide any information relating to infrastructure outcomes and their link to economic growth in the region.</li> </ul>
--	---

<sup>92</sup> RIDA Report, s 59.

	<p>The Applicant has not developed the Project in consultation with landholders and there is no evidence provided that the Proposed Activities will provide any benefit to affected landholders and their existing businesses along with the agricultural sector more broadly.</p> <p>Conversely, the Project and Proposed Activities poses a threat to existing Priority Agricultural Land Uses through competing with existing farming operations. For example, CSG operations place an increased demand on groundwater sources, which threatens supply to existing groundwater bores held by landholders.</p> <p>In May 2022, the GasFields Commission Queensland, published a discussion paper titled ‘Regulatory review of CSG-induced subsidence’ which states:<sup>93</sup></p> <p><i>[T]he Office of Groundwater Impact Assessment’s modelling and research work has revealed that CSG-induced subsidence is occurring and will continue to occur as CSG development continues to expand in the Surat Basin.</i></p> <p>...</p> <p><i>However, there is limited information or research on whether CSG-induced subsidence will have a material economic impact on specific farming operations at a property, sub-regional and/or regional scale.</i></p> <p><i>Understanding the potential consequences of materiality of subsidence on farming operations is key to understanding the risk associated with CSG development in intensive farming areas.</i></p> <p>The discussion paper goes on to note that a research project has been established to fill this gap in information. Consequently, there is no current understanding of the impacts of the predicted subsidence on the properties in question, and the Applicant has not provided any attempt at such analysis within this RIDA Application. Instead, the Applicant has simply relied on their risk assessment rating which identifies likely negligible impacts with little supporting evidence.</p> <p>There is no socio-economic impact analysis contained in this RIDA Application quantifying these impacts, therefore, it cannot be determined whether the activity will have a material impact on the landholders.</p>
--	--

<sup>93</sup> GasFields Commission Queensland, “Regulatory review of coal seam gas-induced subsidence”, May 2022, p Accessed 26 January 2022, available at: <https://www.gfcq.org.au/wp-content/uploads/2022/05/20220516-GFCQ-Discussion-Paper-Regulatory-review-of-CSG-induced-subsidence-FINAL.pdf>

	<p>Phelan et al (2017) conducted an evaluation of the social externalities in regional communities affected by the Surat Gas Project.<sup>94</sup> That analysis found that:</p> <p><i>unresolved concerns of community residents about environmental and social issues and the loss of confidence in the local government, contribute to lower life-satisfaction, inhibit the community's ability to plan for the future, and lead to a weaker local economy.</i><sup>95</sup></p> <p>The Applicant refers to its Co-Existence Commitments.<sup>96</sup> As noted above in these submissions, the Co-Existence Commitments are not legally binding obligations held by the Applicant in relation to landholders of the Subject Land, and therefore absent further evidence of the Applicant assuming binding obligations (for example by way of a contract or other agreement or through conditions imposed through development consent) the Applicant's Co-existence Commitments should not be given weight. These Co-Existence Commitments were not developed in collaboration with farmers and in the view of the landholders impacted by the Proposed Activities do not apply to their experience.</p> <p>The Applicant refers to the Surat Community Reference Group and Intensely Farmed Land Committee. These community forums are not appropriate vehicles for ensuring that the Proposed Activities are consistent with regional policies and outcomes. As specifically noted in the Terms of Reference for the Arrow Surat Community Reference Group, the role of the Arrow Surat Community Reference Group is limited to an advisory function, and it does not hold decision-making powers on behalf of the Applicant nor can it commit to activities requiring expenditure.<sup>97</sup> While the advisory forums play a useful role, their non-binding nature means they cannot be relied upon to demonstrate that this prescribed solution is satisfied.</p>
--	--

<sup>94</sup> Anna (Any) Phelan, Les Dawes, Robert Costanza, Ida Kubiszewski, *Evaluation of social externalities in regional communities affected by coal seam gas projects: A case study from Southeast Queensland*, Ecological Economics, Volume 131, January 2017, Pages 300-311.

<sup>95</sup> Anna (Any) Phelan, Les Dawes, Robert Costanza, Ida Kubiszewski, *Evaluation of social externalities in regional communities affected by coal seam gas projects: A case study from Southeast Queensland*, Ecological Economics, Volume 131, January 2017, Pages 300-311.

<sup>96</sup> RIDA Report, p 58.

<sup>97</sup> Surat Community Reference Group Terms of Reference, September 2021, p 3, [9].

	<p>The Applicant has provided a copy of its draft Safety &amp; Coexistence Construction SIMOPS Matrix, however it has failed to indicate whether it has been tested in the field, as required by the Department.<sup>98</sup> Further as noted by the Applicant, this document is only intended to apply to surface activities - which they state are not occurring within this activity on the affected properties. The Applicant should be required to develop an appropriate Safety &amp; Coexistence Construction SIMOPS Matrix for the proposed subsurface activities.</p> <p>In light of the Applicant's failures to comply with the Requirement Notice, we respectfully request that the Chief Executive exercise the discretion to refuse to decide the RIDA Application until the requirement notice is complied with or alternatively decide that the RIDA Application is lapsed.<sup>99</sup></p> <p>We refer to and reiterate comments above at Table 1, 3(i) in relation to deficiencies in consultation, lack of provision of sufficient information regarding consultation claims and issues in relation to Area Wide Planning.</p> <p>The Applicant asserts that engagement with neighbouring landholders including the negotiation of conduct and compensation agreements 'take into account assessments of [the Applicant's] impact on the relevant area'.<sup>100</sup> The Applicant's reliance on this statement as evidence of supporting this requirement and prescribed solution is refuted by the Submitters. The Submitter's position has been communicated to the Applicant including by way of formal complaints relating the Applicant's failure to appropriately communicate with and adequately consult landholders.</p> <p>The Applicant further makes the claim that GasFields Commission Queensland and Office of Groundwater Impact Assessment have made recommendations to the government on regulatory reforms relating CSG induced subsidence,<sup>101</sup> again these recommendations are denied by these farmers as being adequate as they do not address the farmers' issues and have been made without the benefit of the farmers being able to respond in the process. Further, these recommendations will not benefit the Submitters as, if they are</p>
--	--

<sup>98</sup> DSDILGP, Requirement Notice, 5 August 2022, p 4, [2]; Response to Requirement Notice, p 7, [2].

<sup>99</sup> RPI Act, s 45.

<sup>100</sup> Response to Requirement Notice, p 8, [3].

<sup>101</sup> RIDA Report, p 32.

	<p>in fact ratified, they will not come into effect until after the approval of this RIDA Application and the associated Proposed Activities.</p> <p>Item 13 of the Requirement Notice required the Applicant to ‘discuss the Regional Outcomes and Policies concerning [Priority Agricultural Areas] as detailed in the Darling Downs Regional Plan with regards to agriculture having the primacy land use’.<sup>102</sup></p> <p>The Applicant fails to fulfil this requirement, and instead merely repeats the policies outlined in the Darling Downs Regional Plan.<sup>103</sup> The Applicant makes no attempt at discussing how the policies outlined under the Plan are to be implemented in relation to the Proposed Activities.</p> <p>The Darling Downs Regional Plan states that Priority Agricultural Land Uses will be given priority through the application of co-existence criteria.<sup>104</sup></p> <p><b>State Planning Policy</b></p> <p>The State Planning Policy, which sets out the State interests that apply to plan-making, and that should be given effect through each local government planning scheme,<sup>105</sup> identifies that both agriculture and, mining and extractive industries are express State interests in land use planning and development.<sup>106</sup> Under the State Planning Policy, supporting agricultural production involves ‘reducing the potential for conflict between agricultural land and other incompatible uses’.<sup>107</sup> Similarly in relation to mining and extractive industries, the State Planning Policy identifies that ‘[o]pportunities for mutually beneficial co-existence between coal, minerals, petroleum and gas resource development operations and other land uses are [to be] facilitated’ and that where possible land use conflicts are to be avoided.<sup>108</sup> The co-locating</p>
--	--

<sup>102</sup> Requirement Notice, p 6, [13].

<sup>103</sup> See for example, Darling Downs Regional Plan, p 3.

<sup>104</sup> Darling Downs Regional Plan, p 8.

<sup>105</sup> Queensland State Planning Policy, July 2017, p 3. Accessed 26 January 2023: <https://dsdmipprd.blob.core.windows.net/general/spp-july-2017.pdf>

<sup>106</sup> Queensland State Planning Policy, July 2017, p 17 - 18. Accessed 26 January 2023: <https://dsdmipprd.blob.core.windows.net/general/spp-july-2017.pdf>

<sup>107</sup> Queensland State Planning Policy, July 2017, p 29. Accessed 26 January 2023: <https://dsdmipprd.blob.core.windows.net/general/spp-july-2017.pdf>

<sup>108</sup> Queensland State Planning Policy, July 2017, p 34. Accessed 26 January 2023: <https://dsdmipprd.blob.core.windows.net/general/spp-july-2017.pdf>

	of the Project on Priority Agricultural Areas creates a situation where the agricultural industry is in direct conflict with mining and extractive resources, which does not conform with the State Planning Policy.
<b>b. the activity cannot be carried out on other land in the region that is not used for a priority agricultural land use, including, for example, land elsewhere on a property, on an adjacent property or at another nearby location</b>	We refer to and rely on comments above at Table 1, (iii) in relation to Priority Agricultural Areas – Required Outcome 1.
<b>c. the construction and operation footprint of the activity on the area in the region used for a priority agricultural land use is minimised to the greatest extent possible</b>	<p>We refer to and rely on comments above at Table 1, (iv) in relation to Priority Agricultural Areas – Required Outcome 1.</p> <p>We also refer to and adopt submissions made above at Table 1, (3)(v) in relation to failures of case by case assessment to address operational impacts.</p>
<b>d. the activity will not result in widespread or irreversible impacts on the future use of an area in the region for 1 or more priority agricultural land uses</b>	<p>The Applicant has not demonstrated that the Proposed Activities will not have widespread or irreversible impacts on the future use of the land for Priority Agricultural Land Uses.</p> <p>The Applicant's assessment presents a best-case scenario, and therefore does not properly account for risks associated with the Project and how these risks will impact activities undertaken on the Subject Land. Widespread and irreversible risks include increased salinity, contamination from flood damage, biosecurity impacts, impacts on the farmers workplace conditions that may make future land uses untenable, resulting in subsidence and impacts to groundwater or surface water caused by</p>

	<p>depressurisation of coal seams. These impacts are already being experienced by the landholders within the region in relation to CSG activities.<sup>109</sup></p> <p>There is also a real risk of losing future agricultural land use due to well integrity failures or other forms of contamination which have historically occurred in Queensland with as a result of CSG activities.<sup>110</sup> Instances of spills and contamination include at facilities owned and operated by the Applicant or related entities, including:</p> <ul style="list-style-type: none"> <li>● Moranbah Gas Project leak – April 2011;<sup>111</sup> and</li> <li>● Daandine gas leak – May 2011.<sup>112</sup></li> </ul> <p>The Applicant refers to its Co-Existence Commitment including the commitment to ‘no permanent alienation’.<sup>113</sup> As noted above, these commitments are not legally binding obligations held by the Applicant in relation to landholders, and therefore without further evidence of the Applicant assuming binding obligations (for example by way of a contract or other agreement), the Applicant’s Co-existence Commitments should not be given weight.</p> <p>The Applicant also fails to adequately address the risks outlined above. While the occurrence of some specific risks may be low, the impacts from those risks can be catastrophic. Accordingly, a precautionary approach should be taken in assessing whether this criterion has been established.</p> <p>Further, the Applicant’s approach to the assessment of the impact of the Proposed Activities on land use fails to account for the cumulative impacts of the Project as a whole. For example, the Applicant does not</p>
--	---

<sup>109</sup> See Queensland Government, *Underground Water Impact Report 2021 for the Surat Cumulative Management Area*, December 2021, Chapter 7, pp 99 – 112.

[https://www.rdmw.qld.gov.au/\\_data/assets/pdf\\_file/0008/1584728/uwir-2021-report.pdf](https://www.rdmw.qld.gov.au/_data/assets/pdf_file/0008/1584728/uwir-2021-report.pdf) accessed 21 December 2022.

<sup>110</sup> <https://www.agl.com.au/content/dam/digital/agl/documents/about-agl/investors/2011/2011-agl-annual-report.pdf> at p 47;

<https://www.brisbanetimes.com.au/national/queensland/gaping-holes-in-csg-wells-safety-procedures-20110625-1gk3k.html>;

<https://www.theaustralian.com.au/news/arrow-energy-fined-for-qld-gas-leak/news-story/212271bea72a344fa73da56476974ca1>. All accessed 21 December 2022.

<sup>111</sup> <https://www.agl.com.au/content/dam/digital/agl/documents/about-agl/investors/2011/2011-agl-annual-report.pdf> at p 47. Accessed 9 August 2022.

<sup>112</sup> [https://www.arrowenergy.com.au/\\_data/assets/pdf\\_file/0005/27797/Arrow\\_Energy\\_Gas\\_Release\\_Update.pdf](https://www.arrowenergy.com.au/_data/assets/pdf_file/0005/27797/Arrow_Energy_Gas_Release_Update.pdf) Accessed 9 August 2022. See also, <https://www.brisbanetimes.com.au/national/queensland/gaping-holes-in-csg-wells-safety-procedures-20110625-1gk3k.html> Both links accessed 9 August 2022.

<sup>113</sup> RIDA Report, p 60.

	<p>account for the cumulative and long-term effects of Project such as, changes to surface water flow, increased erosion and dust from clearing and installation of infrastructure and how these impacts will affect agricultural practices. Given the scale of the Project and its possible impacts to Priority Agricultural Areas within the region, it would be inappropriate to consider the Proposed Activities in isolation from the broader context of the Project.</p> <p>The Applicant states that it ‘has constructed and operated multiple gas field wells and pipelines over the past 15 years or more and is confident that this project will have no great impact on the area and certainly would not foresee any widespread or irreversible impact from its operation’.<sup>114</sup> That statement is aspirational and unvalidated and does not evidence that this Prescribed Solution is demonstrated.</p>
<b>e. the activity will not constrain, restrict or prevent the ongoing use of an area in the region for 1 or more priority agricultural land uses, including, for example, infrastructure essential to the operation of a priority agricultural land use</b>	<p>We refer to and rely on comments above at Table 1, (v) in relation to Priority Agricultural Areas – Required Outcome 1.</p>

36 The Proposed Activities are to be carried out in a Priority Agricultural Area that includes a regionally significant water source and the Proposed Activities to be carried out under petroleum leases under the *Petroleum and Gas (Production and Safety) Act 2004* (Qld) are likely to produce CSG water,<sup>115</sup> therefore further prescribed solutions apply.<sup>116</sup>

---

<sup>114</sup> RIDA Report, p 60.

<sup>115</sup> RIDA Report, pp 61-62.

<sup>116</sup> RPI Regulation, Schedule 2, s 5(3).



37 Those prescribed solutions, along with our submissions in response to the RIDA Application, are outlined in the table **below**:

<b>TABLE 3 – Priority Agricultural Areas – Required Outcome 2</b>	
<b>Prescribed Solution<sup>117</sup></b>	<b>Response</b>
<p><b>(3) The application must demonstrate the applicant has in place a strategy or plan for managing the CSG water or associated water that provides for the net replenishment of the regionally significant water source.</b></p>	<p>The Applicant has failed to demonstrate compliance with this requirement as the plan for managing CSG water does not provide for net replenishment.</p> <p>‘Net replenishment’ of a regionally significant water source is ‘the replacement to the water source, whether directly or indirectly, of all water that is no longer available for a Priority Agricultural Land Use in a Priority Agricultural Area because carrying out a resource activity in the area produces CSG water or associated water’.<sup>118</sup></p> <p>Contrary to the Applicant’s assertion, the Water Management Plan at Appendix 7 to the RIDA Application does not provide for the net replenishment of the regionally significant water source.<sup>119</sup></p> <p>There is no reference in the Water Management Plan to ‘net replenishment’ rather, the scope of the Water Management Plan addresses:</p> <ul style="list-style-type: none"> <li>• the characterisation of CSG water and the existing environment;</li> <li>• a description of current and proposed CSG water management including the use, treatment, storage and beneficial use of water; and</li> <li>• a description of procedures, controls and monitoring programs that minimise risks of CSG water management causing environmental harm.</li> </ul> <p>The Applicant estimates that approximately 400 GL of water will be produced over the life of the Project.<sup>120</sup></p>

<sup>117</sup> RPI Regulation, Schedule 2, s 5(3).

<sup>118</sup> RPI Regulation, Schedule 2 s 5(3).

<sup>119</sup> RIDA Report, Appendix 7.

<sup>120</sup> RIDA Report, Appendix 7, p 13.

	<p>However, the Applicant does not meaningfully attempt to quantify or demonstrate how it will achieve net replenishment as required by the prescribed solution.</p> <p>For example, neither the Water Management Plan, nor the RIDA Application more broadly:</p> <ul style="list-style-type: none"> <li>• provides information regarding projected extraction from the various water sources of the Proposed Activities or the Project;</li> <li>• provides modelling for how beneficial use could or will contribute to net replenishment;</li> <li>• sets minimum targets for water substitution, or</li> <li>• provides evidence that there is an appetite of existing licence holders to substitute their ground water allocations for treated CSG water.</li> </ul> <p>Instead, the Water Management Plan details a variety of proposals which would have vastly different impacts on the replenishment of the water source (eg. compare beneficial uses which may contribute to net replenishment with the discharge of water at sea via an ocean outfall pipeline which would not).<sup>121</sup></p> <p>The approach by the Applicant fails to demonstrate a plan or strategy for dealing with CSG water or associated water that provides for the net replenishment. Instead, the Applicant defers the resolution of the offset, and water management requirements.</p> <p>This is concerning as it denies landholders the opportunity to provide meaningful submissions on the Applicant proposal at the approvals stage of the Project. It also offers landholders little legal recourse or enforceable rights in relation to impacts the Project may have on their rights and interests in relation to water during the life of the Project.</p> <p>The Applicant proposes to defer modelling of the final flux impact to immediately prior to the completion of the Project.<sup>122</sup> By deferring consideration of the issue, the Applicant fails to demonstrate this criterion is established and further denies stakeholders the ability to assess and comment on the Applicant's proposal.</p>
--	--

<sup>121</sup> RIDA Report, Appendix 7, pp 21 – 22.

<sup>122</sup> RIDA Report, p 62.

	<p>It also creates a risk that net replenishment may not be achieved for a number of years (considering the 35-year proposed life of the Project) which would leave landholders dependent on groundwater sources without access to water.<sup>123</sup></p> <p>The Submitters hold concerns with respect to the Condamine River Alluvial aquifer that is crossed by one of the deviated wells. The Condamine River Alluvial aquifer is a regionally significant water source,<sup>124</sup> and the Applicant has not undertaken risk assessment of impacts to that water source as a result of the Proposed Activities.</p> <p>The Requirement Notice required the Applicant to provide information relating to whether the purchase of allocations would adversely impact Priority Agricultural Land Uses. The original RIDA Report relied on ‘discussion on how the Substitution Scheme has been designed to supply water to the area as a mitigation measure to potential impacts to the Condamine Alluvium.’<sup>125</sup></p> <p>The Requirement Notice then required the Applicant to discuss how offsetting impacts will not adversely impact the undertaking of current Priority Agricultural Land Uses within the Subject Land and notes that if water allocation purchases are progressed, a separate application for a RIDA to manage the expected regional impacts to the Priority Agricultural Land may be required.<sup>126</sup></p> <p>The Applicant’s response is that it will provide treated water to Condamine alluvium groundwater licence holders through the Condamine alluvium substitution scheme network.<sup>127</sup> That scheme will offset potential impacts from drawdown on the Condamine Alluvium aquifers as a result of the Applicant’s CSG and produced water extraction and maximise the beneficial use of treated coal seam water. The Applicant asserts that it is not currently, nor does it have plans to progress a purchase of allocation scheme and that section 8 of the</p>
--	---

<sup>123</sup> Arrow Energy, Surat Gas Project EIS, Executive Summary, [1.3.3]. Accessed 14 December 2022:

[https://www.arrowenergy.com.au/\\_data/assets/pdf\\_file/0006/28671/Executive20Summary.pdf](https://www.arrowenergy.com.au/_data/assets/pdf_file/0006/28671/Executive20Summary.pdf)

<sup>124</sup> See Dafny E., Silburn D.M., 2013. *The hydrogeology of the Condamine River Alluvial Aquifer (Australia) - critical review*. University of Southern Queensland, Toowoomba, Australia. Accessed 26 January 2023, available at: <https://core.ac.uk/download/pdf/18421619.pdf>

<sup>125</sup> Requirement Notice, p 9, [22].

<sup>126</sup> Requirement Notice, p 9, [22].

<sup>127</sup> Response to Requirement Notice, pp 34-45, [22].

	<p>RIDA Report will be updated. However, the RIDA Report provided on the Department's website does not provide this updated information.<sup>128</sup></p> <p>As noted by the Applicant, future Underground Water Impact Reports may predict different locations of predicted impacts.<sup>129</sup> Nevertheless, the Applicant has designed its substitution scheme based of Underground Water Impact Reports which affect different parts of the western edge of the Condamine Alluvium.<sup>130</sup></p> <p>If there is insufficient interest in the substitution scheme to meet the substitution target, the Applicant may offset its impact to the Condamine Alluvium by purchasing allocations for the Condamine Alluvium to reduce extraction of groundwater from the Alluvium.<sup>131</sup> This is another aspirational commitment to address a very serious issue for Priority Agricultural Areas that relies on the net replenishment of the Condamine Alluvium, as regionally significant water source. Absent definitively outline of how net replenishment will occur, this Prescribed Solution has and is not an adequate implementation of the precautionary principle.</p>
--	--

- 38 The Applicant does not own the Subject Land and has not entered into a voluntary agreement with the relevant owners of each of the properties where the Applicant proposes to under across the properties,<sup>132</sup> accordingly, the Applicant must also demonstrate that Required Outcome 1 and associated Prescribed Solutions are satisfied for each of the properties within the Priority Agricultural Area.<sup>133</sup> As noted by the Applicant, those are addressed in relation to individual properties under Required Outcome 1.<sup>134</sup> We therefore refer to and rely on our submissions at Table 1 to address those matters.

---

<sup>128</sup> RIDA Report.

<sup>129</sup> RIDA Report, p 54.

<sup>130</sup> RIDA Report, p 54.

<sup>131</sup> RIDA Report, p 54.

<sup>132</sup> RIDA Report, p 14.

<sup>133</sup> RPI Regulation, Schedule 2, s 2.

<sup>134</sup> RIDA Report, p 62.

### Strategic Cropping Areas – Required Outcome 1

39 Required Outcome 1 is that the activity will not result in any impact on Strategic Cropping Land.<sup>135</sup> The Applicant concedes that the construction and operation of the Proposed Activities will be carried out on Strategic Cropping Land.<sup>136</sup>

### Strategic Cropping Areas – Required Outcome 2

40 Where Required Outcome 1 is not met, Required Outcome 2 is that the Applicant must demonstrate that the activities will not result in a material impact on Strategic Cropping Land.<sup>137</sup> The prescribed solutions relating to Required Outcome 2 and our responses to the Applicant's RIDA Application are detailed in the table **below**:

TABLE 4 – Strategic Cropping Areas – Required Outcome 2	
Prescribed Solutions <sup>138</sup>	Response
<b>a. if the applicant is not the owner of the land and has not entered into a voluntary agreement with the owner—the applicant has taken all reasonable steps to consult and negotiate with the owner of the land about the expected impact of carrying out the activity on strategic cropping land;</b>	We refer to and rely on comments above at Table 1, (i) in relation to Priority Agricultural Areas – Required Outcome 1.

<sup>135</sup> RPI Regulation, Schedule 2, s 8.

<sup>136</sup> RIDA Report, p 66.

<sup>137</sup> RPI Regulation, Schedule 2, s 10.

<sup>138</sup> RPI Regulation, Schedule 2, s 11.

<p><b>b. the activity can not be carried out on land that is not strategic cropping land, including, for example, land elsewhere on the property (SCL), on adjacent land or at another nearby location;</b></p>	<p>The Applicant has not satisfied this Prescribed Solution as it has not demonstrated why it is that the Proposed Activities must be carried out in the proposed location and not within other Petroleum Leases in the region. RPI Statutory Guideline 03/14 states that to demonstrate compliance, compliance, ‘the applicant should detail what alternative sites were investigated, and why the alternative sites are not suitable’.<sup>139</sup> The Applicant has noted that the vast majority of the areas of the Petroleum Leases which relate to the RIDA Application are mapped as Strategic Cropping Land and accordingly could not be avoided.<sup>140</sup></p> <p>However, the Applicant fails to set out any consideration of reasonable alternatives nor does it establish that the Proposed Activities are essential in that location for the viability of the Project as a whole.</p>
<p><b>c. the construction and operation footprint of the activity on strategic cropping land on the property (SCL) is minimised to the greatest extent possible;</b></p>	<p>We refer to and rely on comments above at Table 1, (iv) in relation to Priority Agricultural Areas – Required Outcome 1.</p>
<p><b>d. if the activity will have a permanent impact on strategic cropping land on a property (SCL)—no more than 2% of the strategic cropping land on the property (SCL) will be impacted.</b></p>	<p>The Applicant has not made any attempt to assess the current suitability of the Subject Land for cropping in relation to its soil, climate and landscape features. Without undertaking this enquiry, it is difficult to understand how the Applicant can demonstrate the Proposed Activities will not adversely impact Strategic Cropping Land in the area.</p> <p>Further on completion of each well, the associated infrastructure will be capped and then left <i>in situ</i>, leaving a permanent impact on the Subject Land. These wells will also restrict and constrain landholders’ capacity to place bores which will have to be drilled in a manner which avoids the subsurface wells. The Applicant places the burden of ensuring CSG infrastructure is avoided on the landholders who are then required to contact Before You Dig Australia (formerly Dial Before You Dig).<sup>141</sup> The Applicant does not provide information relating to the</p>

<sup>139</sup> RPI Statutory Guideline 03/14, p 7.

<sup>140</sup> RIDA Report, p 70.

<sup>141</sup> Response to Requirement Notice, p 15, [10].

	<p>surface area which will be affected in this manner and has improperly asserted that it is not a relevant consideration.<sup>142</sup></p> <p>The Applicant's assessment presents a best-case scenario, and therefore does not properly account for risks associated with the Project and how these risks will impact on Strategic Cropping Land. These risks include subsidence, impacts to groundwater and surface water caused by depressurisation of coal seams and related CSG activities. These impacts are already being experienced by landholders within the region in relation to CSG activities.<sup>143</sup></p> <p>There is also a real risk of loss of capacity for landholders to use their land for cropping due to well integrity failures or other forms of contamination which have historically occurred with as a result of CSG activities in Queensland.<sup>144</sup></p> <p>We note the Applicant's 'Co-existence Commitments' including its proposal 'to minimise operational footprint to less than 2%'.<sup>145</sup> While we encourage the Applicant to abide by this commitment to minimise the impact of the Project on landholders, this and other commitments do not go beyond indicating the Applicant's general intention. The Co-existence Commitments in and of themselves, do not afford landholders and the public enforceable legal rights to ensure the commitments are upheld.</p> <p>Further, the Applicant's approach to assessment of land affected by the Proposed Activities and the impact on the suitability for cropping capacity further fails to account for the impacts of the Project as a whole. For example, it does not account for the cumulative and long-term effects of Project such as, changes to surface and ground water flow, increased erosion and dust from clearing and installation of infrastructure and subsidence.</p>
--	--

<sup>142</sup> Response to Requirement Notice, p 15, [10].

<sup>143</sup> See Queensland Government, *Underground Water Impact Report 2021 for the Surat Cumulative Management Area*, December 2021, Chapter 7, pp 99 – 112.  
[https://www.rdmw.qld.gov.au/\\_data/assets/pdf\\_file/0008/1584728/uwir-2021-report.pdf](https://www.rdmw.qld.gov.au/_data/assets/pdf_file/0008/1584728/uwir-2021-report.pdf) accessed 21 December 2022.

<sup>144</sup> <https://www.agl.com.au/content/dam/digital/agl/documents/about-agl/investors/2011/2011-agl-annual-report.pdf> at p 47;  
<https://www.brisbanetimes.com.au/national/queensland/gaping-holes-in-csg-wells-safety-procedures-20110625-1gk3k.html>;  
<https://www.theaustralian.com.au/news/arrow-energy-fined-for-qld-gas-leak/news-story/212271bea72a344fa73da56476974ca1>. All accessed 21 December 2022.

<sup>145</sup> RIDA Report, p 9.

	<p>Under the EA, the Applicant is authorised to use produced water in drilling and well hole activities, for dust suppression and construction and operation purposes.<sup>146</sup> Notwithstanding, the Applicant's assertion that it will not use CSG water for irrigation on the Subject Land,<sup>147</sup> the use of produced water on adjacent properties, or within the region can increase soil salinity which is not limited to the land where produced water is used. Landscapes are not static and accordingly, salinity can travel across property boundaries by osmosis, through ground and surface water flow and in flood events.</p> <p>Any level of impact to farmers and their ability to enjoy Strategic Cropping Land is significant and needs consideration and avoidance as far as possible. Farm work is challenging under current conditions, particularly with the added level of climate change impacts, and good quality agricultural land is under threat across the State. A farmer having to experience any impact to his operation and expected to work with subsidence is unrealistic. The Applicant has suggested using laser levelling which raises the question of who would bear that cost, as well as other considerations such as the timeframes over which subsidence takes place which may mean levelling may need to be undertaken more than once to ensure continuity of use. This is particularly of concern where the Applicant has stated that subsidence will continue until at least 2060, and possibly beyond then where their modelling ceases at this point.<sup>148</sup></p>
--	--

### Strategic Cropping Areas – Outcome 3

- 41 The Proposed Activities do not comply with Required Outcome 1 and are to take place on two or more properties,<sup>149</sup> accordingly the Applicant is required to comply with Required Outcome 3, which is that the activity will not result in a material impact on Strategic Cropping Land in the area.<sup>150</sup>
- 42 The prescribed solutions relating to Outcome 3 and our responses to the Applicant's RIDA Application are detailed in the table below:

<sup>146</sup> RIDA Report Appendix 1, EA Conditions, Schedule G.

<sup>147</sup> Response to Requirements Notice, p 54, [25].

<sup>148</sup> RIDA Report, p 32.

<sup>149</sup> RIDA Report, p 66.

<sup>150</sup> RPI Regulation, Schedule 2, s 12.



<b>TABLE 5 – Strategic Cropping Areas – Outcome 3</b>	
<b>Prescribed Solution<sup>151</sup></b>	<b>Response</b>
<b>(1)</b> <b>(a) the activity can not be carried out on other land in the area that is not strategic cropping land, including, for example, land elsewhere on the property (SCL), on adjacent land or at another nearby location;</b>	We refer to and rely on comments above at Table 1, (iii) in relation to Priority Agricultural Areas – Required Outcome 1.
<b>(b) if there is a regional plan for the area in which the activity is to be carried out—the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan;</b>	We refer to and rely on comments above at Table 2, (1) a. in relation to Priority Agricultural Areas – Required Outcome 2.
<b>(c) the construction and operation footprint of the activity on strategic cropping land is minimised to the greatest extent possible;</b>	We refer to and rely on comments above at Table 1, (iv) in relation to Priority Agricultural Areas – Required Outcome 1.

<sup>151</sup> RPI Regulation, Schedule 2, s 13.

<p><b>(d) either—</b>  <b>(i) the activity will not have a permanent impact on the strategic cropping land in the area; or</b>  <b>(ii) the mitigation measures proposed to be carried out if the chief executive decides to grant the approval and impose a strategic cropping land mitigation condition.</b></p>	<p>The Applicant contends that the Proposed Activities will not have a permanent impact on the Strategic Cropping Land in the area because the Applicant will not require access to nor surface disturbance of the Subject Land.<sup>152</sup></p> <p>This is a misinterpretation of the Prescribed Solution and fails to account for risks associated with the Proposed Activities. In relation to those considerations, we refer to and rely on our comments above at Table 1, (3)(ii) above in relation to Priority Agricultural Areas - Required Outcome 1.</p> <p>Further, the Applicant has indicated that infrastructure relating to the Proposed Activities will remain <i>in situ</i> after the life of the Project, which we submit amounts to a permanent impact on the Subject Land.<sup>153</sup></p> <p>The Applicant has not considered mitigation measures which could be carried out, which we submit are relevant considerations in the circumstances, and therefore has not demonstrated this criterion.<sup>154</sup></p>
--	---

---

<sup>152</sup> RIDA Report, p 69.

<sup>153</sup> RIDA Report, p 18 & 20.

<sup>154</sup> RIDA Report, p 69.

## General Comments

### *Lack of time to assess information*

- 43 The short timeframes afforded to landholders and other stakeholders to make submissions in relation to RIDA applications generally means that the interested public are not afforded procedural fairness and the opportunity to properly assess a given application. This is particularly the case where stakeholders might want to obtain expert or legal advice in relation to submissions.
- 44 The notice period for the present RIDA Application, commenced on 13 December 2022. Under the RPI Regulations, the minimum notification period for a notifiable assessment application is 15 business days after the notice was published.<sup>155</sup> The submission period for this RIDA Application closed on 27 January 2023. While this period is longer than required under the RPI Regulation, it does encompass the summer holiday and New Year period which has severely limited the capacity of those making this submission to access legal and expert advice due to office closures and general unavailability of the required persons over this period.
- 45 The purpose of the RPI Act is to provide a balance between competing interests in areas of regional interest.<sup>156</sup> The RIDA process offers one of the few opportunities for landholders to make submissions and have input into governmental decision-making processes in relation to resource activities and their impacts to agricultural interests. For this to be effective, the public must be given sufficient, appropriate time to revise the application materials, obtain any assistance needed and to draft a submission, which has not occurred by notifying the activity over the Christmas and New Year summer holiday period.
- 46 The short timeframes to provide submissions is compounded by the volume of materials which accompanies a RIDA Application. In support of the RIDA Application, the Applicant has provided a supporting report 'Kupunn Springvale Coal Seam Gas (CSG) Deviated Well Paths Regional Interests Development Approval' which is 421 pages long and includes extensive technical materials on a range of topics in support of the RIDA Application.<sup>157</sup> The Applicant further supplied four further reports accompanying the RIDA Application.<sup>158</sup>
- 47 Throughout the RIDA Report, the Applicant refers to and relies on external documents not formally submitted along with the RIDA Application. In some instances, the Applicant has provided links to its website where some of these documents can be accessed, however some of these documents are not readily publicly available.
- 48 The table below outlines materials relied on by Applicant in making the RIDA Application and relied on in the RIDA Report itself. Where we have been able to access the documents publicly, and their page length is noted.

---

<sup>155</sup> RPI Regulation, r 13.

<sup>156</sup> RPI Act, s 3.

<sup>157</sup> RIDA Report.

<sup>158</sup> <https://planning.statedevelopment.qld.gov.au/planning-issues-and-interests/areas-of-regional-interest/regional-planning-interests-applications> Accessed 22 December 2022.

<b>TABLE 6</b>			
<b>#</b>	<b>Document</b>	<b>Pages</b>	<b>Accessible</b>
1.	Arrow Energy, 2012. SGP Environmental Impact Statement.	Contents page alone is 26 pages long	Yes
2.	Arrow Energy, 2013. Supplementary Report to the EIS.	64 pages	Yes
3.	Arrow Energy, 2018. Stage 1 Water Monitoring and Management Plan.	160 pages (not including appendixes)	Yes
4.	Arrow Energy, 2019. Updated Water Monitoring and Management Plan.	905 pages	Yes
5.	Code of Environmental Practice Onshore Pipelines, Australian Pipeline Industry Association, June 2013.		No
6.	Coffey, 2018. SGP Stage 1 CSG WMMP: Subsidence Technical Memorandum. Report to Arrow Energy. Coffey Environments Australia Pty Ltd (Coffey), 2018.	48 pages	Yes
7.	Coffey, 2021. Surat Gas Project – Subsidence Monitoring and Prediction. Report to Arrow Energy. Coffey Environments Australia Pty Ltd (Coffey), 2021.		Yes
8.	Data Farming, 2021. Ground Movements in Agricultural Production. Report to Arrow Energy. Data Farming, 2021.	38 pages	Yes
9.	RPI Act Statutory Guideline (11/16) Department of State Development, Infrastructure, Local Government and Planning, 2014.	14 Pages	Yes
10.	Arrow Energy's Well Integrity Management Systems (AEWIMS). <sup>159</sup>		No
11.	Department of Environment and Heritage Protection, 2012. Coal Seam Gas Water Management Policy. <sup>160</sup>	6 Pages	Yes
12.	Arrow Energy, 2017. Surat Gas Project CSG Water Management Strategy. <sup>161</sup>		No

<sup>159</sup> RIDA Report, p 20.

<sup>160</sup> RIDA Report, Appendix 7, p 4, 7, 29, 31, 38.

<sup>161</sup> RIDA Report, p 20, 21.

13.	Department of Environment and Science, 2016. Manual for Assessing Consequence Categories and Hydraulic Performance of Structures. <sup>162</sup>	34 Pages	Yes
14.	Arrow Energy, 2013. Coal Seam Gas Water and Salt Management Strategy. <sup>163</sup>	25 Pages	Yes
15.	Department of State Development, Infrastructure and Planning, 2013. Darling Downs Regional Plan. <sup>164</sup>	60 Pages	Yes
16.	ANZECC & ARMCANZ, 2000. Australian and New Zealand Guidelines for Fresh and Marine Water Quality. <sup>165</sup>	314 Pages	Yes
17.	QGC Pty Ltd, 2012. Surat Basin Stratigraphic Framework, Appendix D – Surat Basin Geological Model. <sup>166</sup>	49 Pages	Yes
18.	Coffey Geotechnics, 2014. Monitoring and management of subsidence induced by coal seam gas extraction, knowledge report. <sup>167</sup>	141 Pages	Yes
19.	Procedure for Land Access and Approval to Undertake Activities (Arrow Energy) as described on page 20 of the Plan of Operations lodged in December 2020.		No
20.	Arrow Energy, 2018. Surat Groundwater Dependent Ecosystems Connectivity Study.		No

49 The voluminous and technical nature of these materials accompanying the RIDA Application and the short timeframes afforded to the public fails to provide stakeholders with a meaningful opportunity to assess the materials and provide submissions in relation to the Proposed Activities.

### ***Compartmentalised approach to assessment***

- 50 The Proposed Activities under this RIDA Application comprise a small portion of the overall Project. The Applicant has already obtained three other RIDAs, namely:<sup>168</sup>
- RPI 16/007 Arrow Energy Tipton, which was approved on 14 February 2017;
  - RPI 18/011 Arrow Glenelg which was approved on 26 November 2018 (noting that our clients consider this RIDA breached notification requirements and the application was of a poor quality); and
  - RPI 18/012 Arrow Tipton CGPF which was approved on 5 July 2018.

<sup>162</sup> RIDA Report, p 27, 31, 38, 43.

<sup>163</sup> RIDA Report, p 20

<sup>164</sup> RIDA Report, p 7, 22, 23, 58, 67.

<sup>165</sup> RIDA Report, Appendix 7, p 43.

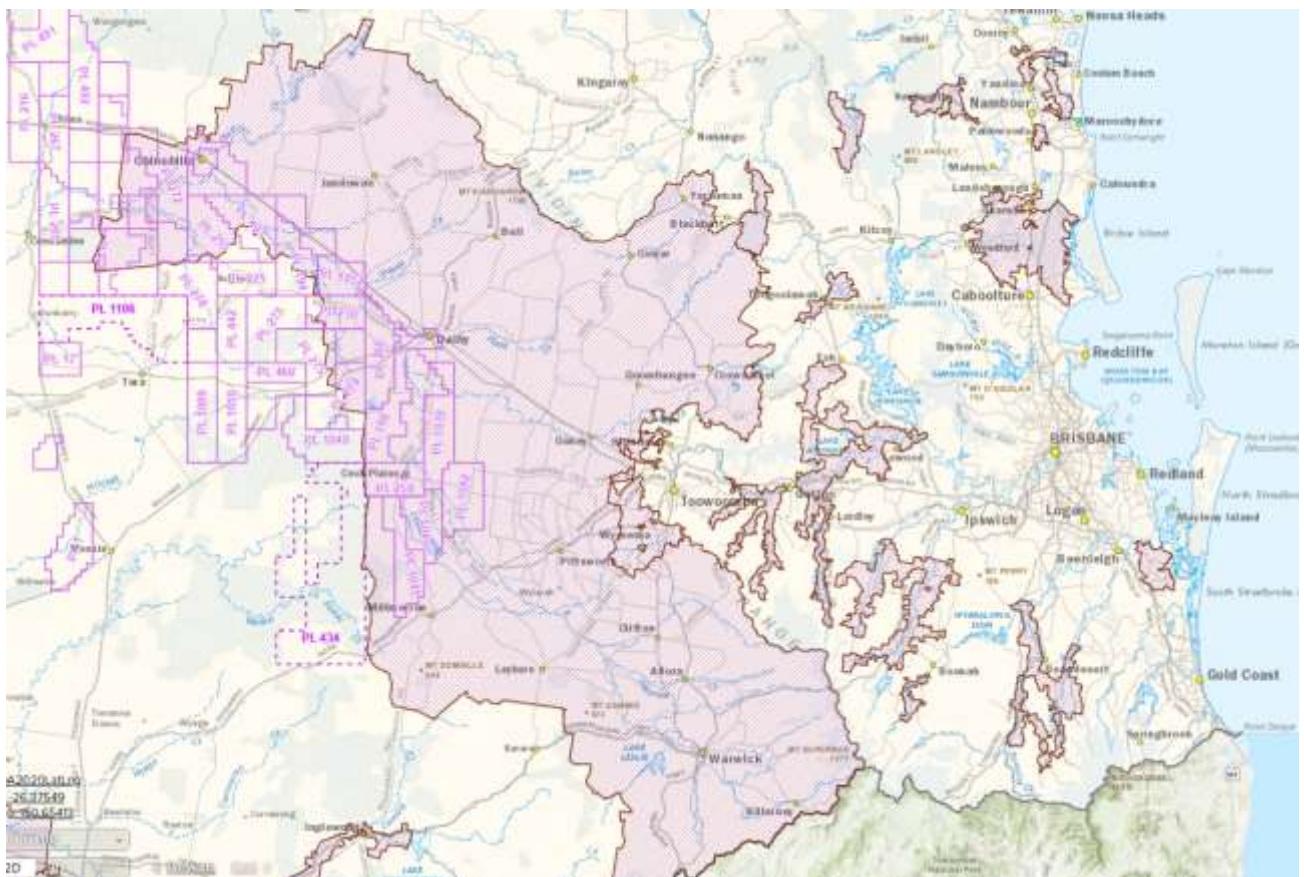
<sup>166</sup> Subsidence Monitoring and Prediction Report, p 2.

<sup>167</sup> Subsidence Monitoring and Prediction Report, p 56.

<sup>168</sup> For more information on these RIDAs see: <https://planning.statedevelopment.qld.gov.au/planning-issues-and-interests/areas-of-regional-interest/regional-planning-interests-applications>

- 51 The Applicant also has a further RIDA Application, RPI21/028 Wells and gathering lines, which is yet to be determined.<sup>169</sup>
- 52 This is therefore the fifth application made by the Applicant under the RPI Act. It is likely the Applicant will have to make further RIDA applications in relation to the Project, as large areas of the Project will take place on areas subject to the RPI Act, including other Priority Agricultural Areas and Strategic Cropping Areas.<sup>170</sup>
- 53 This piecemeal approach to approvals under the RPI Act is problematic as it fails to account for the cumulative effects of the Project on areas intended to be protected under the RPI Act. The result is the Proposed Activities are assessed in isolation from the broader context of the Project and its effect on the environment and communities which depend on a healthy environment.
- 54 The Project proposed by the Applicant overlaps with a large portion of the designated Priority Agricultural Areas in the Darling Downs region. The following map depicts petroleum leases applied for and held by the Applicant (in pink) along with Priority Agricultural Areas (outlined in maroon). It demonstrates the significant amount of Priority Agricultural Areas covers by Petroleum Leases and likely to be affected by the Applicant's extractive activities.

*Figure 3: A map of priority agricultural areas in southern Queensland, along with the Petroleum Leases held by the Applicant (Source: GeoRes).*



<sup>169</sup> <https://planning.statedevelopment.qld.gov.au/planning-issues-and-interests/areas-of-regional-interest/regional-planning-interests-applications>

<sup>170</sup> See for comparison, Darling Downs Regional Plan, p 18, and Arrow Energy, Surat Gas Project EIS, Executive Summary p 2.





evidence should be obtained in consultation with the subject farmers which to date the Applicant has consistently failed to do.

- 58 Further the evidence the Applicant provides in the RIDA Application does not satisfy the RPI Statutory Guideline 02/14 which states that (emphasis in original):

*To determine whether an activity is likely to have a significant impact, consideration needs to be given to the probability of the negative effects of the impact occurring. For example, to be 'likely' it is not necessary for a significant impact to have a greater than 50 per cent chance of happening; it is sufficient if a significant impact on the area of regional interest is a real and not a remote chance or possibility.*

*If there is scientific uncertainty about the impacts of an activity and the potential impacts are serious or irreversible, the precautionary principle is applicable. Accordingly, a lack of scientific certainty about the potential impacts of an activity will not in itself justify declaring the activity unlikely to have a significant impact on the area of regional interest.*

- 59 The risks associated with the Proposed Activities are not properly described or assessed. For example, the agricultural industry generally is currently being faced with enormous biosecurity risks (for example Foot-and-Mouth Disease and Fall Armyworm) and the gas industry represents one of the greatest contributors to this risk for these farming businesses expected to host the gas infrastructure. Due to their extremely mobile nature, the gas industry greatly increases movement across a vast area which is problematic considering dust for example is a vector for pathogens. The biosecurity measures proposed by the Applicant are based on internal procedures, rather than being third party verified and these procedures are not to the standard that individual farmers need and expect

### ***Failure to provide information or sufficient detail***

- 60 The RIDA Application relies on information of general application and is not appropriately tailored to the specifics of the Proposed Activities and the Subject Land. For example, in relation to consultation, the Applicant has provided its general policy as to how consultation ought to be carried out but specifics relating to whether this policy was complied with in relation to the Subject Land is not disclosed.<sup>171</sup> Further, the Applicant has failed to describe definitively how the Project will be undertaken. In relation to net replenishment of produced water, rather than outlining specifically how water will be managed, the Applicant make broad statements relating to the principals in relation to water management.<sup>172</sup> As discussed above, the Applicant further defers decision making in relation to this issue to the end of the Project life.
- 61 By failing to provide sufficiently specific information, or by making specific information confidential, landholders and other stakeholders are denied a meaningful opportunity to make comments on how a Project is carried out or provide submissions on the veracity of the Applicant's assertions.
- 62 As noted in Table 5 above, the Applicant refers to and relies on external materials which are not publicly available to stakeholders. In some instances, landholders have requested some of these documents, or other information reasonably required to make submissions. Information or documents requested by Submitters from the Applicant but not provided include:

---

<sup>171</sup> RIDA Report, Appendix 10.

<sup>172</sup> RIDA Report, Appendix 7.



- a. Arrow Energy's Well Integrity Management Systems (AEWIMS);
- b. expert advice on groundwater, subsidence, biosecurity, and agricultural economic impacts of the Proposed Activities on the Subject Land;
- c. details relating to the pre-activities weed and pathogen surveys or similar biosecurity assessment;
- d. property specific assessment of the impacts of the Proposed Activities on each of the properties comprising the Subject Land, including seeking a copy of the case-by-case assessment methodology and its legislative context (noting that the Applicant's response was that the legislative context is in the *Mineral and Energy Resources (Common Provisions) Act 2014* (Qld) only with no case-by-case assessment methodology provided);
- e. information relating to how the Applicant has assessed whether the Proposed Activities are characterised as preliminary or advanced activities;
- f. information on risks and proposed contingencies, including particularly with respect to deviated wells;
- g. the Applicant's insurance policy, to assess the risk the landholders face with any gaps in the insurance obtained for the gas activities; and
- h. a copy of the proposed Deviated Well Agreement.

#### ***Failure to consider relevant matters***

- 63 The Applicant fails to consider significant relevant matters in assessing the impacts of the Proposed Activities on regional interests such as the specifics of the agricultural businesses operated on the Subject Land. These impacts to agricultural businesses include increased insurance costs or inability to obtain coverage for specific risks created by the Proposed Activities, decreased land and property valuations, risks to ability to leverage capital in the Subject Land through securing of new or refinancing of existing debt, detrimental noise and amenity factors, and psychosocial impacts that effect the workplace health and safety for farmers.
- 64 The assessment by the Applicant generally does not address the impacts of the Project on human well-being generally, nor the negative contributions to climate change through Greenhouse Gas emissions and how these factors will impact the Subject Land. These are particularly relevant where Queensland farmers are already experiencing negative impacts created by climate change.

#### ***Reliance on outdated or superseded information***

- 65 As noted in Table 5 above, the Applicant at times relies on materials which may now be outdated or contain information that has since changed. For example, in the Subsidence Monitoring Prediction Report (10 December 2021) accompanying the RIDA Application, the Applicant relies on documents and other reports dating back to 2012.<sup>173</sup> In the decade following those reports, there has been further research into subsidence in the Surat Basin, including into subsidence

---

<sup>173</sup> Subsidence Monitoring Prediction Report, p 2.

induced by CSG activities.<sup>174</sup> Some of these enquiries, including by the GasFields Commission Queensland are ongoing.

- 66 There is ongoing and significant development in the Surat Basin, including by the Applicant through the commencement of Stage 1 of the Project involving the installation of 600 gas wells into the region.<sup>175</sup> The impacts of these activities are yet to be determined.
- 67 The Applicant has also referenced and relied on the Australian and New Zealand Guidelines for Fresh and Marine Water Quality, which was released in 2000.<sup>176</sup> This publication has since been superseded by the revised Water Quality Guidelines, released in 2018 as an online resource.<sup>177</sup>
- 68 In these circumstances, and taking a precautionary approach, it would be inappropriate to approve the RIDA Application without first obtaining updated information.

### ***Inappropriateness of prescribed solutions***

- 69 The Submitters hold concerns relating to the assumptions underlying the prescribed solutions, specifically for Priority Agricultural Areas, Required Outcome 1, Prescribed Solution 3(3)(a)(ii),<sup>178</sup> and for Strategic Cropping Areas, Required Outcome 2, Prescribed Solution 11(d).<sup>179</sup>
- 70 These prescribed solutions are premised on the notion that a 2% loss in Priority Agricultural Land Use or productive capacity, or impact to 2% of the Strategic Cropping Land on the property is an acceptable loss to be borne by landholders who are not compensated for this loss. 2% of represents a not insignificant imposition on farming operations, and is particularly concerning imposition on landholders particularly in contexts where there is no right to veto.

### ***Issues relating to the Applicant's reliance on exemptions***

- 71 There is no transparency relating to when the Applicant has relied on exemptions under section 22 of the RPI Act, and how these exemptions were assessed or verified. This is a substantial failing of the RPI Act which must be rectified. The reliance on exemptions impacts the legal rights of landholders yet there are no mechanisms under the law for landholders to know when an exemption is being relied upon and the reasons the Applicant considers the exemption applies.

---

<sup>174</sup> GasFields Commission Queensland, "Regulatory review of coal seam gas-induced subsidence" Discussion Paper, p 8. <https://www.gfcq.org.au/wp-content/uploads/2022/05/20220516-GFCQ-Discussion-Paper-Regulatory-review-of-CSG-induced-subsidence-FINAL.pdf> Accessed 22 December 2022.

<sup>175</sup> Arrow Energy, Media Release 'Start planned for Arrow's Surat Gas Project', 17 April 2022. <https://www.arrowenergy.com.au/media/media-releases/current-releases/arrow-sanctions-start-to-sgp> Accessed 22 December 2022.

<sup>176</sup> RIDA Report, Appendix 7, p 43.

<sup>177</sup> ANZECC & ARMCANZ, "ANZECC & ARMCANZ (2000) Water Quality Guidelines" <https://www.waterquality.gov.au/anz-guidelines/resources/previous-guidelines/anzecc-armcanz-2000> retrieved 22 December 2022.

<sup>178</sup> RPI Regulation, Schedule 2, s 3(3)(a).

<sup>179</sup> RPI Regulation, Schedule 2, s 11(d).

### ***Issues relating to characterisation of activities as Preliminary or Advanced***

72 The rights of landholders around resource activities such as the Proposed Activities are dependent on an assessment of whether an activity is considered to be preliminary or advanced under ss 15a and 15b of the *Mineral and Energy Resources (Common Provisions) Act 2014* (Qld). We raise strong concerns with the inappropriate and insufficiently evidenced reliance on an assumption that deviated drilling is a preliminary activity, such that landholders are limited in their ability to negotiate with and obtain information with respect to the Proposed Activities and to defend their interests against impacts of the Proposed Activities. The work of the GasFields Commission into subsidence through their recent Discussion Paper evidenced the clear risks underground drilling of any kind may have on surface activities, a real and significant risk that has not been adequately assessed for many decades of gas activities in Queensland. This issue alone is evidence that the Department is not taking the risks of the gas industry sufficiently seriously in their regulatory activities, to the detriment of landholders and the environment. We strongly request that the Department reconsiders the assumption that deviated drilling activities are a preliminary activity and investigates all proponents who are making this claim, to ensure that landholders rights to negotiated.

### ***Deviated well agreements do not protect farmers***

73 Deviated Well Agreements are a weaker form of agreement that provides no right to compensation, as is provided through a Conduct and Compensation Agreement. These Deviated Well Agreements offer very little negotiation power to landholders, and cannot be considered a solution to risk reduction. We recommend that the decision-maker seeks a legal analysis of the inadequacies of the Deviated Well Agreements approach for landholders to address these failings.

### ***Core issues with the RPI Act in avoiding and mitigating impacts of CSG on areas of regional interest***

74 The issues raised in this submission are serious and of concern not just for this application but raise strong concerns with how gas activities are being regulated across Queensland under the RPI Act, and the failures of that Act to truly manage the co-existence of the resource and agricultural sectors where the resource sector is seriously jeopardising the long-term future of the agricultural sector where the two intersect.

### ***Human rights are impacted by the decision on this RIDA and a decision to approve would be incompatible with the rights protected***

75 As the decision-maker for the RIDA application, and a public entity, the chief executive is required under section 58(1)(a) of the *Human Rights Act 2019* (Qld) (**HR Act**) to make a decision that is compatible with human rights.<sup>180</sup> To comply with this provision, the decision on the RIDA Application must either not limit human rights, or must only limit human rights to an extent that is demonstrably justifiable by reference to s 13 of the HR Act.<sup>181</sup>

76 Section 13(1) of the HR Act provides that a human right may only be subject to reasonable limits 'that can be demonstrably justified in a free and democratic society based on human dignity, equality and freedom'.

---

<sup>180</sup> *Human Rights Act 2019* (Qld) s 58.

<sup>181</sup> See *Owen D'Arcy v Chief Executive, Queensland Corrective Services* [2021] QSC 273 at [125].

- 77 Section 13(2) of the HR Act lists a number of factors that may be relevant in deciding whether a limit is reasonable and justifiable, including the nature of the right, the nature and purpose of the limitation, whether there are any less restrictive ways to achieve the purpose, and the importance of preserving the human right, taking into account the nature and extent of the limitation.
- 78 As discussed further below, the Proposed Activities will limit the fundamental human rights of the Submitters, namely their right to property.<sup>182</sup>
- 79 A decision to approve the RIDA Application is incompatible with the right to property as it will limit this right ‘to an extent that is not reasonable and demonstrably justifiable’.<sup>183</sup>

#### Nature and Scope of the Right to Property

- 80 Section 24(2) of the HR Act provides that ‘a person must not be arbitrarily deprived of the person’s property’. Contravention of the right to property involves three elements:
- a. The first element, ‘property’, encompasses ‘real and personal property such as land, chattels and other economic interests’.<sup>184</sup>
  - b. The second element, ‘deprivation’, has been broadly interpreted. It can include both a formal expropriation, involving forced displacement or extinguishment of title, as well as a de facto expropriation involving a substantial restriction in fact of a person’s use or enjoyment of their property.<sup>185</sup>
  - c. The third element, that the deprivation be ‘arbitrary’, is concerned with capriciousness, unpredictability, injustice and unreasonableness, in the sense of not being proportionate to the legitimate aim sought.<sup>186</sup> A deprivation of property, when considered broadly and generally,<sup>187</sup> will be arbitrary if it extends beyond what is reasonably necessary to pursue economic development.
- 81 In *Waratah Coal Pty Ltd v Youth Verdict Ltd (No 6)* [2022] QLC 21, President Kingham found that the noise and dust and subsidence impacts of the proposed Waratah Coal mine on the land amounted to a significant restriction on the owners use or enjoyment of the property. Her Honour concluded that approving the Galilee Coal Project would amount to an arbitrary deprivation of property, placing particular emphasis on the fact that the noise and dust levels were predicted to exceed the draft environmental authority levels, and that there was significant uncertainty about how to either limit or respond to subsidence impacts.<sup>188</sup>

---

<sup>182</sup> *Human Rights Act 2019* (Qld) s 24(2).

<sup>183</sup> *Human Rights Act 2019* (Qld) s 8.

<sup>184</sup> *PJB v Melbourne Health* (2011) 39 VR 373 at [87].

<sup>185</sup> *PJB v Melbourne Health* (2011) 39 VR 373 at [89] citing *Zwierzynski v Poland* (2004) 38 EHHR 6.

<sup>186</sup> *WBM v Chief Commissioner of Police* (2012) 43 VR 446 at 472 [114],[117] (Warren CJ) approved in *Thompson v Minogue* [2021] VSCA 358 at [55].

<sup>187</sup> *Thompson v Minogue* [2021] VSCA 358 at [56].

<sup>188</sup> *Waratah Coal Pty Ltd v Youth Verdict Ltd (No 6)* [2022] QLC 21at [1667]-[1671]

### Approval of the Project would limit the right to property of the Submitters

82 As has been detailed throughout this submission, the Proposed Activities will impact the Submitters' use and enjoyment of their properties as follows:

- There is an increased risk of subsidence as a result of the Proposed Activities, which will alter existing ground slopes and overland flow on the Subject Land, limiting the effective drainage of surface water for agricultural activities and increasing flood risk.
- There is a risk of well integrity failure, which may lead to groundwater contamination, gas leakage, and fluid spills and seepage at the surface.
- There will likely be dust and noise produced by land clearing and installation of infrastructure associated with the Project, which will impact amenity and enjoyment of the Submitters' properties.
- On completion of each well, the associated infrastructure will be capped and then left *in situ*. This will restrict and constrain the Submitters' capacity to place bores on their properties, which will have to be drilled in a manner which avoids the subsurface wells.
- The Applicant plans to use produced water on properties adjacent to the Subject Land and generally within the region. This can cause increased soil salinity on the Subject Land by osmosis, through ground and surface water flow and in flood events, which in turn would impact on the productive capacity of the soil.
- The forced requirement on landholders to accept the Applicant entering their property under the provision of RIDAs that have not been adequately considered with respect to the impacts on the landholders and that have not been demonstrated to have been properly complied with to date.
- The deprivation of the farmers property based on the assumption that, in the example of subsidence, it is acceptable to permit a certain impact to be suffered by the farmers on the property even if the details of the impact are unknown. Also made under the assumption that any impacts will be remediable, compensable and provable by the farmer, where no evidence has been provided by the Applicant to attest to this.
- Additionally, the impact on the farmers own productive capacity on the property and additional costs due to adverse physical and economic impacts on property and property values attributable to activities and risk exposures associated with unconventional gas eg. monitoring, mitigation, time, insurance, financial taking time away from the core business prior to the installation. Loss of property value attributable to impacts of the industry and practices is not addressed by 'compensation'. Dr Oswald Marinoni<sup>189</sup> of CSIRO identified that farmers are losing an average of \$2.17 million due to CSG activities. The value in their land is lost over a 20 year period where CSG activity occurs, most significantly due to loss of agricultural production from access tracks and infrastructure lease areas.
- Infrastructure and associated noise, dust, light, traffic, loss of privacy, impact to economic viability, impact on business methods, encroachment on time, compromise families' ability to enjoy the use of their property. Lack of baseline testing, industry exclusive access to data, and inequitable position of the landholder means that pursuing remedies for impacts after signing a Conduct and Compensation Agreement is nearly impossible and cost prohibitive.

---

<sup>189</sup> Marinoni & Navarro Garcia, 2016. A novel model to estimate the impact of Coal Seam Gas extraction on agro-economic returns. *Land Use Policy*, 59, pp 351–365.

83 In these circumstances, the approval of the RIDA Application would clearly contribute to a substantial restriction on the Submitters' use of their properties, amounting to a de facto deprivation of property.

The limitation of the right is arbitrary

84 The limitation of the Submitters property rights that will be caused by the Proposed Activities clearly extends beyond what is reasonably necessary to pursue economic development of the kind proposed by the Applicant.

85 There is a real risk of loss of productive capacity of the Subject Land for Priority Agricultural Land Use by the Submitters as a result of the Proposed Activities.

86 The Proposed Activities will also have negative impacts to the financial viability of the Submitters' agricultural practices by impacting their ability to obtain comprehensive insurance and by decreasing property value, which in turn would impact their ability to leverage the value of their property as security for other ventures.

87 As the Applicant argues that that there will be no surface impacts as a result of the Project, the Proposed Activities are characterised as preliminary activities. This means that in most instances we understand that Conduct and Compensation Agreements have not been negotiated with the Submitters, and they will not be compensated for the financial loss they are likely to experience as a result of the Proposed Activities.

88 This all goes to demonstrate that the deprivation of property that will be contributed to by the Project cannot be viewed as anything but arbitrary.

The limitation cannot be demonstrably justified

89 Taking into account the nature of the right and the extent of the limitation, it cannot be demonstrably justified. The right to property is a fundamental and 'ancient' feature of the common law.<sup>190</sup> Property rights can take on particular importance when considering the rights of people with 'strong, personal and continuing connection' to their land.<sup>191</sup> This is certainly the case for the Submitters, for whom the Subject Land represents not only the main source of their livelihoods, but also their homes.

90 Even if the RPI Act permits the activity and the impacts based on the provision of a RIDA, this is not necessarily an example of the activity and impact being permitted under the regulatory framework, and therefore not unlawful, or arbitrary. To determine whether an activity is likely to have a significant impact, consideration needs to be given to the probability of the negative effects of the impact occurring. For example, to be 'likely' it is not necessary for a significant impact to have a greater than 50 per cent chance of happening; it is sufficient if a significant

---

<sup>190</sup> *PJB v Melbourne Health* (2011) 39 VR 373 at [95]-[95].

<sup>191</sup> *PJB v Melbourne Health* (2011) 39 VR 373 at [273].

impact on the area of regional interest is a real and not a remote chance or possibility. If there is scientific uncertainty about the impacts of an activity and the potential impacts are serious or irreversible, the precautionary principle should be applicable. Accordingly, a lack of scientific certainty about the potential impacts of an activity cannot in itself justify declaring the activity unlikely to have a significant impact on the area of regional interest. For example, an activity may be considered unlikely to have a significant impact on a Priority Agricultural Areas may be where the activity will not:

- a. result in a decrease in the agricultural product supplied from the Priority Agricultural Areas or region; or
- b. result in a decrease in the Priority Agricultural Areas' or region's ability to undertake a particular Priority Agricultural Land Use in the future.

## Conclusion

91 For the reasons stated above, particularly that the Applicant has failed to demonstrate the Prescribed Solutions to the Required Outcomes under the RPI Act and the RPI Regulation, we strongly recommend that this application be refused.

92 We thank you for the opportunity to make submissions. Should you require any clarification on any matters raised in this submission please let us know.

Yours sincerely,



**Maeve Parker**  
Solicitor  
Southern and Central Queensland



**Revel Pointon**  
Managing Lawyer  
Southern and Central Queensland

## With input provided by and on behalf of:

**Shay Dougall**  
Heeney St,  
Chinchilla QLD 4413

**Russell Young**  
'Barellan' M/S 35,  
Dalby Qld 4405

**Doug Browne**  
101 Browne's Road,  
Dalby QLD 4405

**John Karrasch**  
'Narweena' Hennings  
Road,  
Dalby Qld 4405

**Celia Karp**  
584 Springvale Road,  
Dalby QLD 4405

**Tabitha Karp**  
584 Springvale Road,  
Dalby QLD 4405

**Russell Bennie**  
'Hinton' Miss Jurgs  
Road,  
Dalby QLD 4405

**Lock the Gate  
Alliance Limited**  
PO Box 55,  
Helensvale QLD 4212

Ref: S4540